

Appendix I Junction Capacity Test – Existing / Committed Layouts

| |
|--|
| Junctions 9 |
| PICADY 9 - Priority Intersection Module |
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Filename: East Site Access 23.08.18.j9

Path: \\Pba.int\bri\Projects\39209 West of Park Farm, Thornbury\Technical\Transport\Junction Assessments\PICADY\Site Accesses

Report generation date: 23/08/2018 17:16:15

»2028 Test Case, AM

»2028 Test Case, PM

Summary of junction performance

| | AM | | | | | PM | | | | |
|----------------|-------------|-----------|------|-----|---------------------------|-------------|-----------|------|-----|---------------------------|
| | Queue (Veh) | Delay (s) | RFC | LOS | Network Residual Capacity | Queue (Veh) | Delay (s) | RFC | LOS | Network Residual Capacity |
| 2028 Test Case | | | | | | | | | | |
| Stream B-C | 0.0 | 8.60 | 0.01 | A | 34 % [Stream B-A] | 0.0 | 7.37 | 0.00 | A | 107 % [Stream B-A] |
| Stream B-A | 0.8 | 16.93 | 0.44 | C | | 0.1 | 10.91 | 0.10 | B | |
| Stream C-AB | 0.0 | 5.70 | 0.00 | A | | 0.0 | 6.17 | 0.01 | A | |

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

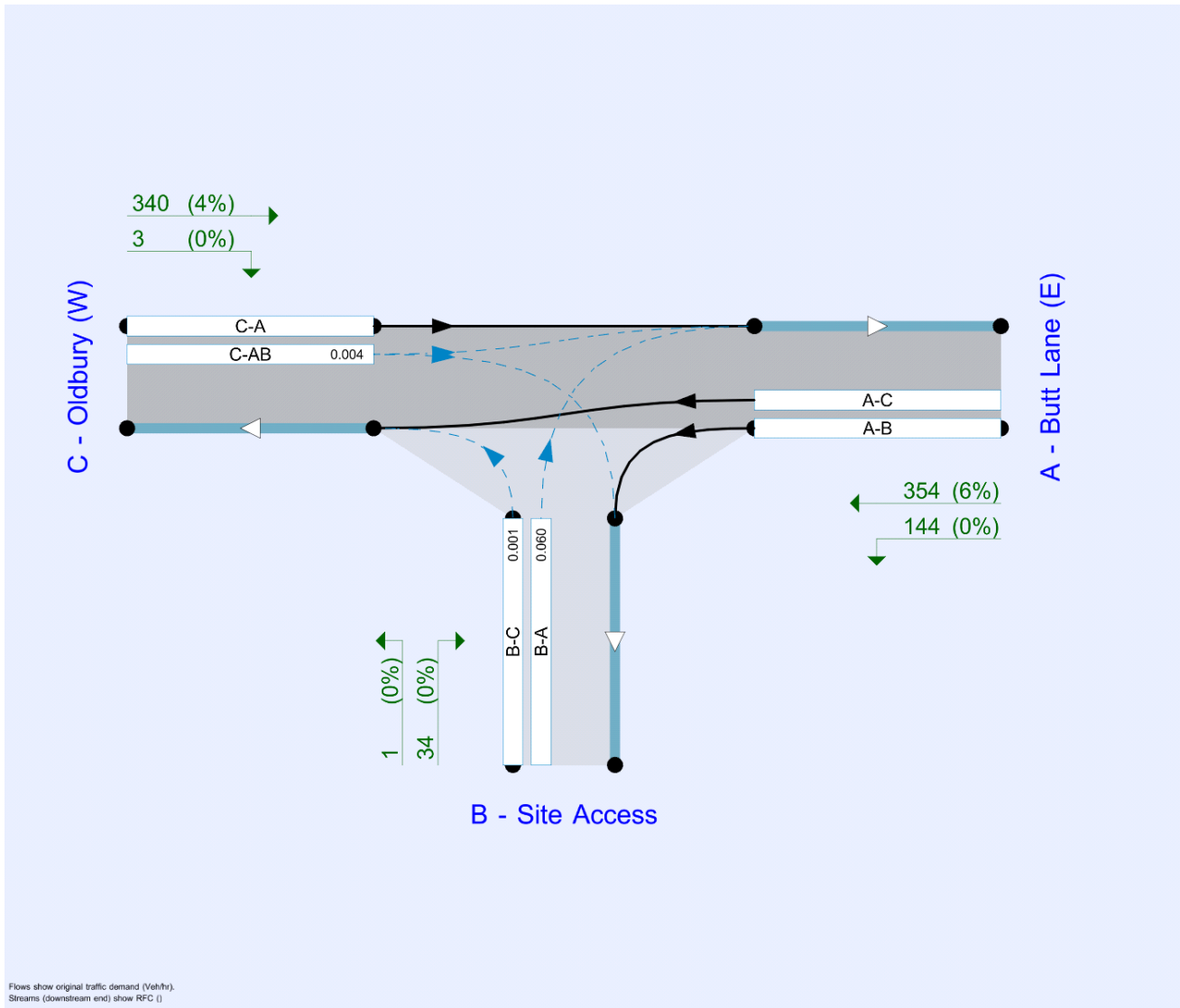
File summary

File Description

| | |
|--------------------|------------|
| Title | (untitled) |
| Location | |
| Site number | |
| Date | 30/11/2017 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | PBA\sleake |
| 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 | Veh | Veh | perHour | s | -Min | perMin |



The junction diagram reflects the last run of Junctions.

Analysis Options

| Vehicle length (m) | Calculate Queue Percentiles | Calculate detailed queueing delay | Calculate residual capacity | Residual capacity criteria type | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|--------------------|-----------------------------|-----------------------------------|-----------------------------|---------------------------------|---------------|-----------------------------|-----------------------|
| 5.75 | | | ✓ | Delay | 0.85 | 36.00 | 20.00 |

Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D2 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

Analysis Set Details

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

2028 Test Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 2.77 | A |

Junction Network Options

| Driving side | Lighting | Network residual capacity (%) | First arm reaching threshold |
|--------------|----------------|-------------------------------|------------------------------|
| Left | Normal/unknown | 34 | Stream B-A |

Arms

Arms

| Arm | Name | Description | Arm type |
|-----|---------------|-------------|----------|
| A | Butt Lane (E) | | Major |
| B | Site Access | | Minor |
| C | Oldbury (W) | | Major |

Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Width for right turn (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|-----------------|--------------------------|----------------------------|--------------------|--------------------------|-------------------------------|---------|----------------------|
| C - Oldbury (W) | 6.50 | | ✓ | 3.50 | 140.6 | ✓ | 7.00 |

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

Minor Arm Geometry

| Arm | Minor arm type | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate flare length | Flare length (PCU) | Visibility to left (m) | Visibility to right (m) |
|-----------------|---------------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| B - Site Access | One lane plus flare | 10.00 | 4.69 | 3.25 | 3.25 | 3.25 | ✓ | 1.00 | 33 | 27 |

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1 | B-A | 545 | 0.097 | 0.245 | 0.154 | 0.351 |
| 1 | B-C | 613 | 0.092 | 0.232 | - | - |
| 1 | C-B | 748 | 0.284 | 0.284 | - | - |

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

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

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - Butt Lane (E) | | ONE HOUR | ✓ | 347 | 100.000 |
| B - Site Access | | ONE HOUR | ✓ | 155 | 100.000 |
| C - Oldbury (W) | | ONE HOUR | ✓ | 381 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| From | To | | | |
|-------------------|-------------------|-----------------|-----------------|--|
| | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) | |
| A - Butt Lane (E) | 0 | 26 | 321 | |
| B - Site Access | 151 | 0 | 4 | |
| C - Oldbury (W) | 380 | 1 | 0 | |

Proportions

| From | To | | | |
|-------------------|-------------------|-----------------|-----------------|--|
| | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) | |
| A - Butt Lane (E) | 0.00 | 0.07 | 0.93 | |
| B - Site Access | 0.97 | 0.00 | 0.03 | |
| C - Oldbury (W) | 1.00 | 0.00 | 0.00 | |

Vehicle Mix

Heavy Vehicle Percentages

| From | To | | | |
|-------------------|-------------------|-----------------|-----------------|--|
| | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) | |
| A - Butt Lane (E) | 0 | 0 | 8 | |
| B - Site Access | 0 | 0 | 0 | |
| C - Oldbury (W) | 8 | 0 | 0 | |

Average PCU Per Veh

| From | To | | | |
|-------------------|-------------------|-----------------|-----------------|--|
| | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) | |
| A - Butt Lane (E) | 1.000 | 1.000 | 1.076 | |
| B - Site Access | 1.000 | 1.000 | 1.000 | |
| C - Oldbury (W) | 1.080 | 1.000 | 1.000 | |

Detailed Demand Data

Demand for each time segment

| Arm | Time Segment | Demand (Veh/hr) | Demand in PCU (PCU/hr) |
|-------------------|--------------|-----------------|------------------------|
| A - Butt Lane (E) | 07:45-08:00 | 261 | 280 |
| | 08:00-08:15 | 312 | 334 |
| | 08:15-08:30 | 382 | 409 |
| | 08:30-08:45 | 382 | 409 |
| | 08:45-09:00 | 312 | 334 |
| | 09:00-09:15 | 261 | 280 |
| B - Site Access | 07:45-08:00 | 117 | 117 |
| | 08:00-08:15 | 139 | 139 |
| | 08:15-08:30 | 171 | 171 |
| | 08:30-08:45 | 171 | 171 |
| | 08:45-09:00 | 139 | 139 |
| | 09:00-09:15 | 117 | 117 |
| C - Oldbury (W) | 07:45-08:00 | 287 | 310 |
| | 08:00-08:15 | 343 | 370 |
| | 08:15-08:30 | 419 | 453 |
| | 08:30-08:45 | 419 | 453 |
| | 08:45-09:00 | 343 | 370 |
| | 09:00-09:15 | 287 | 310 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-C | 0.01 | 8.60 | 0.0 | A | 4 | 6 |
| B-A | 0.44 | 16.93 | 0.8 | C | 139 | 208 |
| C-AB | 0.00 | 5.70 | 0.0 | A | 0.92 | 1 |
| C-A | | | | | 349 | 523 |
| A-B | | | | | 24 | 36 |
| A-C | | | | | 295 | 442 |

Main Results for each time segment

07:45 - 08:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 3 | 0.75 | 505 | 0.006 | 3 | 0.0 | 0.0 | 7.170 | A |
| B-A | 114 | 28 | 431 | 0.264 | 112 | 0.0 | 0.4 | 11.238 | B |
| C-AB | 0.75 | 0.19 | 669 | 0.001 | 0.75 | 0.0 | 0.0 | 5.388 | A |
| C-A | 286 | 72 | | | 286 | | | | |
| A-B | 20 | 5 | | | 20 | | | | |
| A-C | 242 | 60 | | | 242 | | | | |

08:00 - 08:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 4 | 0.90 | 475 | 0.008 | 4 | 0.0 | 0.0 | 7.633 | A |
| B-A | 136 | 34 | 409 | 0.332 | 135 | 0.4 | 0.5 | 13.114 | B |
| C-AB | 0.90 | 0.22 | 653 | 0.001 | 0.90 | 0.0 | 0.0 | 5.516 | A |
| C-A | 342 | 85 | | | 342 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 289 | 72 | | | 289 | | | | |

08:15 - 08:30

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 4 | 1 | 424 | 0.010 | 4 | 0.0 | 0.0 | 8.579 | A |
| B-A | 166 | 42 | 379 | 0.439 | 165 | 0.5 | 0.8 | 16.772 | C |
| C-AB | 1 | 0.28 | 632 | 0.002 | 1 | 0.0 | 0.0 | 5.704 | A |
| C-A | 418 | 105 | | | 418 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 353 | 88 | | | 353 | | | | |

08:30 - 08:45

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 4 | 1 | 423 | 0.010 | 4 | 0.0 | 0.0 | 8.602 | A |
| B-A | 166 | 42 | 379 | 0.439 | 166 | 0.8 | 0.8 | 16.935 | C |
| C-AB | 1 | 0.28 | 632 | 0.002 | 1 | 0.0 | 0.0 | 5.704 | A |
| C-A | 418 | 105 | | | 418 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 353 | 88 | | | 353 | | | | |

08:45 - 09:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 4 | 0.90 | 474 | 0.008 | 4 | 0.0 | 0.0 | 7.656 | A |
| B-A | 136 | 34 | 409 | 0.332 | 137 | 0.8 | 0.5 | 13.266 | B |
| C-AB | 0.90 | 0.22 | 653 | 0.001 | 0.90 | 0.0 | 0.0 | 5.516 | A |
| C-A | 342 | 85 | | | 342 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 289 | 72 | | | 289 | | | | |

09:00 - 09:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 3 | 0.75 | 504 | 0.006 | 3 | 0.0 | 0.0 | 7.186 | A |
| B-A | 114 | 28 | 431 | 0.264 | 114 | 0.5 | 0.4 | 11.379 | B |
| C-AB | 0.75 | 0.19 | 669 | 0.001 | 0.75 | 0.0 | 0.0 | 5.388 | A |
| C-A | 286 | 72 | | | 286 | | | | |
| A-B | 20 | 5 | | | 20 | | | | |
| A-C | 242 | 60 | | | 242 | | | | |

2028 Test Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 0.44 | A |

Junction Network Options

| Driving side | Lighting | Network residual capacity (%) | First arm reaching threshold |
|--------------|----------------|-------------------------------|------------------------------|
| Left | Normal/unknown | 107 | Stream B-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 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - Butt Lane (E) | | ONE HOUR | ✓ | 498 | 100.000 |
| B - Site Access | | ONE HOUR | ✓ | 35 | 100.000 |
| C - Oldbury (W) | | ONE HOUR | ✓ | 343 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| From | To | | | |
|-------------------|-------------------|-----------------|-----------------|--|
| | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) | |
| A - Butt Lane (E) | 0 | 144 | 354 | |
| B - Site Access | 34 | 0 | 1 | |
| C - Oldbury (W) | 340 | 3 | 0 | |

Proportions

| From | To | | | |
|-------------------|-------------------|-----------------|-----------------|--|
| | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) | |
| A - Butt Lane (E) | 0.00 | 0.29 | 0.71 | |
| B - Site Access | 0.97 | 0.00 | 0.03 | |
| C - Oldbury (W) | 0.99 | 0.01 | 0.00 | |

Vehicle Mix

Heavy Vehicle Percentages

| From | To | | | |
|-------------------|-------------------|-----------------|-----------------|--|
| | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) | |
| A - Butt Lane (E) | 0 | 0 | 6 | |
| B - Site Access | 0 | 0 | 0 | |
| C - Oldbury (W) | 4 | 0 | 0 | |

Average PCU Per Veh

| From | To | | | |
|-------------------|-------------------|-----------------|-----------------|--|
| | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) | |
| A - Butt Lane (E) | 1.000 | 1.000 | 1.057 | |
| B - Site Access | 1.000 | 1.000 | 1.000 | |
| C - Oldbury (W) | 1.035 | 1.000 | 1.000 | |

Detailed Demand Data

Demand for each time segment

| Arm | Time Segment | Demand (Veh/hr) | Demand in PCU (PCU/hr) |
|-------------------|--------------|-----------------|------------------------|
| A - Butt Lane (E) | 16:45-17:00 | 375 | 390 |
| | 17:00-17:15 | 448 | 466 |
| | 17:15-17:30 | 548 | 571 |
| | 17:30-17:45 | 548 | 571 |
| | 17:45-18:00 | 448 | 466 |
| | 18:00-18:15 | 375 | 390 |
| B - Site Access | 16:45-17:00 | 26 | 26 |
| | 17:00-17:15 | 31 | 31 |
| | 17:15-17:30 | 39 | 39 |
| | 17:30-17:45 | 39 | 39 |
| | 17:45-18:00 | 31 | 31 |
| | 18:00-18:15 | 26 | 26 |
| C - Oldbury (W) | 16:45-17:00 | 258 | 267 |
| | 17:00-17:15 | 308 | 319 |
| | 17:15-17:30 | 378 | 391 |
| | 17:30-17:45 | 378 | 391 |
| | 17:45-18:00 | 308 | 319 |
| | 18:00-18:15 | 258 | 267 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-C | 0.00 | 7.37 | 0.0 | A | 0.92 | 1 |
| B-A | 0.10 | 10.91 | 0.1 | B | 31 | 47 |
| C-AB | 0.01 | 6.17 | 0.0 | A | 3 | 4 |
| C-A | | | | | 312 | 468 |
| A-B | | | | | 132 | 198 |
| A-C | | | | | 325 | 487 |

Main Results for each time segment

16:45 - 17:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 0.75 | 0.19 | 529 | 0.001 | 0.75 | 0.0 | 0.0 | 6.808 | A |
| B-A | 26 | 6 | 423 | 0.060 | 25 | 0.0 | 0.1 | 9.037 | A |
| C-AB | 2 | 0.56 | 637 | 0.004 | 2 | 0.0 | 0.0 | 5.666 | A |
| C-A | 256 | 64 | | | 256 | | | | |
| A-B | 108 | 27 | | | 108 | | | | |
| A-C | 267 | 67 | | | 267 | | | | |

17:00 - 17:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 0.90 | 0.22 | 513 | 0.002 | 0.90 | 0.0 | 0.0 | 7.032 | A |
| B-A | 31 | 8 | 400 | 0.076 | 30 | 0.1 | 0.1 | 9.741 | A |
| C-AB | 3 | 0.67 | 616 | 0.004 | 3 | 0.0 | 0.0 | 5.868 | A |
| C-A | 306 | 76 | | | 306 | | | | |
| A-B | 129 | 32 | | | 129 | | | | |
| A-C | 318 | 80 | | | 318 | | | | |

17:15 - 17:30

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 1 | 0.28 | 489 | 0.002 | 1 | 0.0 | 0.0 | 7.371 | A |
| B-A | 37 | 9 | 367 | 0.102 | 37 | 0.1 | 0.1 | 10.904 | B |
| C-AB | 3 | 0.83 | 586 | 0.006 | 3 | 0.0 | 0.0 | 6.173 | A |
| C-A | 374 | 94 | | | 374 | | | | |
| A-B | 159 | 40 | | | 159 | | | | |
| A-C | 390 | 97 | | | 390 | | | | |

17:30 - 17:45

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 1 | 0.28 | 489 | 0.002 | 1 | 0.0 | 0.0 | 7.372 | A |
| B-A | 37 | 9 | 367 | 0.102 | 37 | 0.1 | 0.1 | 10.911 | B |
| C-AB | 3 | 0.83 | 586 | 0.006 | 3 | 0.0 | 0.0 | 6.173 | A |
| C-A | 374 | 94 | | | 374 | | | | |
| A-B | 159 | 40 | | | 159 | | | | |
| A-C | 390 | 97 | | | 390 | | | | |

17:45 - 18:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 0.90 | 0.22 | 513 | 0.002 | 0.90 | 0.0 | 0.0 | 7.033 | A |
| B-A | 31 | 8 | 400 | 0.076 | 31 | 0.1 | 0.1 | 9.752 | A |
| C-AB | 3 | 0.67 | 616 | 0.004 | 3 | 0.0 | 0.0 | 5.871 | A |
| C-A | 306 | 76 | | | 306 | | | | |
| A-B | 129 | 32 | | | 129 | | | | |
| A-C | 318 | 80 | | | 318 | | | | |

18:00 - 18:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 0.75 | 0.19 | 529 | 0.001 | 0.75 | 0.0 | 0.0 | 6.812 | A |
| B-A | 26 | 6 | 423 | 0.060 | 26 | 0.1 | 0.1 | 9.051 | A |
| C-AB | 2 | 0.56 | 637 | 0.004 | 2 | 0.0 | 0.0 | 5.668 | A |
| C-A | 256 | 64 | | | 256 | | | | |
| A-B | 108 | 27 | | | 108 | | | | |
| A-C | 267 | 67 | | | 267 | | | | |

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: Junction 1_10.10.19_PCU FLAT1hr.j9

Path: J:\39209 West of Park Farm, Thornbury\Technical\Transport\Junction Assessments\SGC test
Oct 19

Report generation date: 10/10/2019 13:25:11

-
- »2017 Base, AM
 - »2017 Base, PM
 - »2028 Ref, AM
 - »2028 Ref, PM
 - »2028 Test Case, AM
 - »2028 Test Case, PM

Summary of junction performance

| | AM | | | | PM | | | |
|-----------------------|-------------|-----------|------|-----|-------------|-----------|------|-----|
| | Queue (PCU) | Delay (s) | RFC | LOS | Queue (PCU) | Delay (s) | RFC | LOS |
| 2017 Base | | | | | | | | |
| Stream B-CD | 0.3 | 7.94 | 0.25 | A | 0.3 | 7.73 | 0.22 | A |
| Stream B-A | 0.5 | 14.07 | 0.35 | B | 0.4 | 12.90 | 0.30 | B |
| Stream AB-CD | 0.4 | 8.22 | 0.27 | A | 0.4 | 7.56 | 0.28 | A |
| Stream D-AB | 0.5 | 8.09 | 0.33 | A | 0.3 | 6.67 | 0.24 | A |
| Stream D-C | 0.2 | 11.82 | 0.14 | B | 0.1 | 11.27 | 0.13 | B |
| Stream CD-AB | 0.4 | 7.98 | 0.27 | A | 0.3 | 7.84 | 0.23 | A |
| 2028 Ref | | | | | | | | |
| Stream B-CD | 2.6 | 22.06 | 0.72 | C | 0.8 | 11.19 | 0.44 | B |
| Stream B-A | 1.8 | 34.38 | 0.65 | D | 1.0 | 24.93 | 0.50 | C |
| Stream AB-CD | 2.6 | 16.60 | 0.69 | C | 1.1 | 10.06 | 0.49 | B |
| Stream D-AB | 1.1 | 12.28 | 0.53 | B | 1.1 | 11.18 | 0.52 | B |
| Stream D-C | 0.5 | 22.46 | 0.35 | C | 0.5 | 17.69 | 0.32 | C |
| Stream CD-AB | 0.9 | 9.29 | 0.42 | A | 1.5 | 12.71 | 0.56 | B |
| 2028 Test Case | | | | | | | | |
| Stream B-CD | 155.7 | 1043.77 | 1.32 | F | 23.3 | 281.88 | 1.14 | F |
| Stream B-A | 77.7 | 1056.11 | 1.32 | F | 14.4 | 314.06 | 1.11 | F |
| Stream AB-CD | 3.1 | 17.56 | 0.71 | C | 1.3 | 10.75 | 0.54 | B |
| Stream D-AB | 30.8 | 284.33 | 1.43 | F | 53.0 | 444.23 | 1.13 | F |
| Stream D-C | 8.8 | 415.70 | 1.31 | F | 12.7 | 520.20 | 1.08 | F |
| Stream CD-AB | 1.1 | 10.05 | 0.48 | B | 6.4 | 33.80 | 0.84 | D |

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

| | |
|-------------|--|
| Title | Gloucester Road / Butt Lane / Morton Way |
| Location | |
| Site number | |
| Date | 23/04/2018 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | PBA\jasaunders |
| 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

| Calculate Queue Percentiles | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|-----------------------------|-----------------------------|---------------|-----------------------------|-----------------------|
| | | 0.85 | 36.00 | 20.00 |

Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|
| D1 | 2017 Base | AM | FLAT | 08:00 | 09:00 | 60 | 15 |
| D2 | 2017 Base | PM | FLAT | 17:00 | 18:00 | 60 | 15 |
| D3 | 2028 Ref | AM | FLAT | 08:00 | 09:00 | 60 | 15 |
| D4 | 2028 Ref | PM | FLAT | 17:00 | 18:00 | 60 | 15 |
| D5 | 2028 Test Case | AM | FLAT | 08:00 | 09:00 | 60 | 15 |
| D6 | 2028 Test Case | PM | FLAT | 17:00 | 18:00 | 60 | 15 |

Analysis Set Details

| ID | Network flow scaling factor (%) |
|----|---------------------------------|
| A1 | 100.000 |

2017 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|--------------------|----------------------|--------------------|--------------|
| 1 | untitled | Left-Right Stagger | Two-way | 3.85 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Arms

Arms

| Arm | Name | Description | Arm type |
|-----|-------------------------|-------------|----------|
| A | Gloucester Road (south) | | Major |
| B | Butt Lane | | Minor |
| C | Gloucester Road (north) | | Major |
| D | Morton Way | | Minor |

Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Width for right turn (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|-----------------------------|--------------------------|----------------------------|--------------------|--------------------------|-------------------------------|---------|----------------------|
| A - Gloucester Road (south) | 6.43 | | ✓ | 3.25 | 107.9 | ✓ | 2.00 |
| C - Gloucester Road (north) | 6.43 | | ✓ | 3.25 | 130.0 | ✓ | 2.00 |

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

Minor Arm Geometry

| Arm | Minor arm type | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate flare length | Flare length (PCU) | Visibility to left (m) | Visibility to right (m) |
|----------------|---------------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| B - Butt Lane | One lane plus flare | 10.00 | 8.00 | 6.75 | 6.50 | 6.00 | | 4.00 | 71 | 130 |
| D - Morton Way | One lane plus flare | 10.00 | 8.50 | 7.00 | 6.75 | 6.75 | ✓ | 3.00 | 54 | 83 |

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for A-D | Slope for B-C | Slope for B-D | Slope for C-A | Slope for C-B | Slope for C-D | Slope for D-A | Slope for D-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 1 | AB-D | 709 | - | - | - | - | - | 0.270 | 0.270 | 0.270 | - | - |
| 1 | B-A | 597 | 0.107 | 0.270 | 0.270 | - | - | 0.170 | 0.386 | - | 0.170 | 0.386 |
| 1 | B-CD | 769 | 0.116 | 0.292 | 0.292 | - | - | - | - | - | - | - |
| 1 | CD-B | 723 | 0.275 | 0.275 | 0.275 | - | - | - | - | - | - | - |
| 1 | D-AB | 812 | - | - | - | - | - | 0.309 | 0.309 | 0.122 | - | - |
| 1 | D-C | 526 | - | 0.149 | 0.339 | 0.149 | 0.339 | 0.237 | 0.237 | 0.094 | - | - |

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

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

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|
| D1 | 2017 Base | AM | FLAT | 08:00 | 09:00 | 60 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------|------------|--------------|-------------------------|--------------------|
| A - Gloucester Road (south) | | ✓ | 343 | 100.000 |
| B - Butt Lane | | ✓ | 292 | 100.000 |
| C - Gloucester Road (north) | | ✓ | 353 | 100.000 |
| D - Morton Way | | ✓ | 277 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| From | A - Gloucester Road (south) | 0 | 116 | 142 | 85 |
| | B - Butt Lane | 137 | 0 | 73 | 82 |
| | C - Gloucester Road (north) | 242 | 79 | 0 | 32 |
| | D - Morton Way | 133 | 93 | 51 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| From | A - Gloucester Road (south) | 0 | 0 | 4 | 6 |
| | B - Butt Lane | 0 | 0 | 4 | 4 |
| | C - Gloucester Road (north) | 1 | 7 | 0 | 0 |
| | D - Morton Way | 0 | 7 | 0 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-CD | 0.25 | 7.94 | 0.3 | A |
| B-A | 0.35 | 14.07 | 0.5 | B |
| A-B | | | | |
| A-C | | | | |
| A-D | | | | |
| AB-CD | 0.27 | 8.22 | 0.4 | A |
| AB-C | | | | |
| D-AB | 0.33 | 8.09 | 0.5 | A |
| D-C | 0.14 | 11.82 | 0.2 | B |
| C-D | | | | |
| C-A | | | | |
| C-B | | | | |
| CD-AB | 0.27 | 7.98 | 0.4 | A |
| CD-A | | | | |

Main Results for each time segment

08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 155 | 629 | 0.247 | 154 | 0.3 | 7.865 | A |
| B-A | 137 | 394 | 0.348 | 135 | 0.5 | 13.784 | B |
| A-B | 116 | | | 116 | | | |
| A-C | 142 | | | 142 | | | |
| A-D | 85 | | | 85 | | | |
| AB-CD | 171 | 632 | 0.271 | 170 | 0.4 | 8.157 | A |
| AB-C | 210 | | | 210 | | | |
| D-AB | 226 | 683 | 0.331 | 224 | 0.5 | 8.017 | A |
| D-C | 51 | 357 | 0.143 | 50 | 0.2 | 11.732 | B |
| C-D | 32 | | | 32 | | | |
| C-A | 242 | | | 242 | | | |
| C-B | 79 | | | 79 | | | |
| CD-AB | 180 | 662 | 0.272 | 178 | 0.4 | 7.914 | A |
| CD-A | 365 | | | 365 | | | |

08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 155 | 627 | 0.247 | 155 | 0.3 | 7.936 | A |
| B-A | 137 | 393 | 0.349 | 137 | 0.5 | 14.063 | B |
| A-B | 116 | | | 116 | | | |
| A-C | 142 | | | 142 | | | |
| A-D | 85 | | | 85 | | | |
| AB-CD | 172 | 632 | 0.272 | 172 | 0.4 | 8.221 | A |
| AB-C | 210 | | | 210 | | | |
| D-AB | 226 | 683 | 0.331 | 226 | 0.5 | 8.092 | A |
| D-C | 51 | 356 | 0.143 | 51 | 0.2 | 11.815 | B |
| C-D | 32 | | | 32 | | | |
| C-A | 242 | | | 242 | | | |
| C-B | 79 | | | 79 | | | |
| CD-AB | 181 | 662 | 0.273 | 181 | 0.4 | 7.976 | A |
| CD-A | 366 | | | 366 | | | |

08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 155 | 627 | 0.247 | 155 | 0.3 | 7.936 | A |
| B-A | 137 | 393 | 0.349 | 137 | 0.5 | 14.066 | B |
| A-B | 116 | | | 116 | | | |
| A-C | 142 | | | 142 | | | |
| A-D | 85 | | | 85 | | | |
| AB-CD | 172 | 632 | 0.272 | 172 | 0.4 | 8.221 | A |
| AB-C | 210 | | | 210 | | | |
| D-AB | 226 | 683 | 0.331 | 226 | 0.5 | 8.092 | A |
| D-C | 51 | 356 | 0.143 | 51 | 0.2 | 11.816 | B |
| C-D | 32 | | | 32 | | | |
| C-A | 242 | | | 242 | | | |
| C-B | 79 | | | 79 | | | |
| CD-AB | 181 | 662 | 0.273 | 181 | 0.4 | 7.977 | A |
| CD-A | 366 | | | 366 | | | |

08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 155 | 627 | 0.247 | 155 | 0.3 | 7.936 | A |
| B-A | 137 | 393 | 0.349 | 137 | 0.5 | 14.069 | B |
| A-B | 116 | | | 116 | | | |
| A-C | 142 | | | 142 | | | |
| A-D | 85 | | | 85 | | | |
| AB-CD | 172 | 632 | 0.272 | 172 | 0.4 | 8.223 | A |
| AB-C | 210 | | | 210 | | | |
| D-AB | 226 | 683 | 0.331 | 226 | 0.5 | 8.092 | A |
| D-C | 51 | 356 | 0.143 | 51 | 0.2 | 11.816 | B |
| C-D | 32 | | | 32 | | | |
| C-A | 242 | | | 242 | | | |
| C-B | 79 | | | 79 | | | |
| CD-AB | 181 | 662 | 0.273 | 181 | 0.4 | 7.977 | A |
| CD-A | 366 | | | 366 | | | |

2017 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|--------------------|----------------------|--------------------|--------------|
| 1 | untitled | Left-Right Stagger | Two-way | 3.38 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|
| D2 | 2017 Base | PM | FLAT | 17:00 | 18:00 | 60 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------|------------|--------------|-------------------------|--------------------|
| A - Gloucester Road (south) | | ✓ | 446 | 100.000 |
| B - Butt Lane | | ✓ | 250 | 100.000 |
| C - Gloucester Road (north) | | ✓ | 238 | 100.000 |
| D - Morton Way | | ✓ | 223 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| From | A - Gloucester Road (south) | 0 | 81 | 261 | 104 |
| | B - Butt Lane | 120 | 0 | 52 | 78 |
| | C - Gloucester Road (north) | 138 | 45 | 0 | 55 |
| | D - Morton Way | 82 | 93 | 48 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| From | To | | | |
|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| A - Gloucester Road (south) | 0 | 0 | 0 | 1 |
| B - Butt Lane | 1 | 0 | 0 | 1 |
| C - Gloucester Road (north) | 1 | 2 | 0 | 0 |
| D - Morton Way | 0 | 3 | 0 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-CD | 0.22 | 7.73 | 0.3 | A |
| B-A | 0.30 | 12.90 | 0.4 | B |
| A-B | | | | |
| A-C | | | | |
| A-D | | | | |
| AB-CD | 0.28 | 7.56 | 0.4 | A |
| AB-C | | | | |
| D-AB | 0.24 | 6.67 | 0.3 | A |
| D-C | 0.13 | 11.27 | 0.1 | B |
| C-D | | | | |
| C-A | | | | |
| C-B | | | | |
| CD-AB | 0.23 | 7.84 | 0.3 | A |
| CD-A | | | | |

Main Results for each time segment

17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 130 | 601 | 0.216 | 129 | 0.3 | 7.673 | A |
| B-A | 120 | 402 | 0.298 | 118 | 0.4 | 12.723 | B |
| A-B | 81 | | | 81 | | | |
| A-C | 261 | | | 261 | | | |
| A-D | 104 | | | 104 | | | |
| AB-CD | 189 | 670 | 0.281 | 187 | 0.4 | 7.503 | A |
| AB-C | 305 | | | 305 | | | |
| D-AB | 175 | 724 | 0.242 | 174 | 0.3 | 6.640 | A |
| D-C | 48 | 368 | 0.130 | 47 | 0.1 | 11.201 | B |
| C-D | 55 | | | 55 | | | |
| C-A | 138 | | | 138 | | | |
| C-B | 45 | | | 45 | | | |
| CD-AB | 140 | 613 | 0.229 | 139 | 0.3 | 7.793 | A |
| CD-A | 217 | | | 217 | | | |

17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 130 | 599 | 0.217 | 130 | 0.3 | 7.727 | A |
| B-A | 120 | 401 | 0.299 | 120 | 0.4 | 12.894 | B |
| A-B | 81 | | | 81 | | | |
| A-C | 261 | | | 261 | | | |
| A-D | 104 | | | 104 | | | |
| AB-CD | 189 | 671 | 0.282 | 189 | 0.4 | 7.559 | A |
| AB-C | 306 | | | 306 | | | |
| D-AB | 175 | 724 | 0.242 | 175 | 0.3 | 6.673 | A |
| D-C | 48 | 367 | 0.131 | 48 | 0.1 | 11.270 | B |
| C-D | 55 | | | 55 | | | |
| C-A | 138 | | | 138 | | | |
| C-B | 45 | | | 45 | | | |
| CD-AB | 141 | 613 | 0.230 | 141 | 0.3 | 7.841 | A |
| CD-A | 217 | | | 217 | | | |

17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 130 | 599 | 0.217 | 130 | 0.3 | 7.728 | A |
| B-A | 120 | 401 | 0.299 | 120 | 0.4 | 12.897 | B |
| A-B | 81 | | | 81 | | | |
| A-C | 261 | | | 261 | | | |
| A-D | 104 | | | 104 | | | |
| AB-CD | 189 | 671 | 0.282 | 189 | 0.4 | 7.563 | A |
| AB-C | 306 | | | 306 | | | |
| D-AB | 175 | 724 | 0.242 | 175 | 0.3 | 6.673 | A |
| D-C | 48 | 367 | 0.131 | 48 | 0.1 | 11.270 | B |
| C-D | 55 | | | 55 | | | |
| C-A | 138 | | | 138 | | | |
| C-B | 45 | | | 45 | | | |
| CD-AB | 141 | 613 | 0.230 | 141 | 0.3 | 7.843 | A |
| CD-A | 217 | | | 217 | | | |

17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 130 | 599 | 0.217 | 130 | 0.3 | 7.728 | A |
| B-A | 120 | 401 | 0.299 | 120 | 0.4 | 12.897 | B |
| A-B | 81 | | | 81 | | | |
| A-C | 261 | | | 261 | | | |
| A-D | 104 | | | 104 | | | |
| AB-CD | 189 | 671 | 0.282 | 189 | 0.4 | 7.560 | A |
| AB-C | 306 | | | 306 | | | |
| D-AB | 175 | 724 | 0.242 | 175 | 0.3 | 6.673 | A |
| D-C | 48 | 367 | 0.131 | 48 | 0.1 | 11.271 | B |
| C-D | 55 | | | 55 | | | |
| C-A | 138 | | | 138 | | | |
| C-B | 45 | | | 45 | | | |
| CD-AB | 141 | 613 | 0.230 | 141 | 0.3 | 7.842 | A |
| CD-A | 217 | | | 217 | | | |

2028 Ref, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|--------------------|----------------------|--------------------|--------------|
| 1 | untitled | Left-Right Stagger | Two-way | 10.33 | B |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|
| D3 | 2028 Ref | AM | FLAT | 08:00 | 09:00 | 60 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------|------------|--------------|-------------------------|--------------------|
| A - Gloucester Road (south) | | ✓ | 370 | 100.000 |
| B - Butt Lane | | ✓ | 623 | 100.000 |
| C - Gloucester Road (north) | | ✓ | 440 | 100.000 |
| D - Morton Way | | ✓ | 416 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| From | A - Gloucester Road (south) | 0 | 132 | 146 | 92 |
| | B - Butt Lane | 195 | 0 | 115 | 313 |
| | C - Gloucester Road (north) | 256 | 94 | 0 | 90 |
| | D - Morton Way | 161 | 170 | 85 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| From | To | | | | |
|-----------------------------|----|-----------------------------|---------------|-----------------------------|----------------|
| | | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| A - Gloucester Road (south) | | 0 | 0 | 4 | 6 |
| B - Butt Lane | | 0 | 0 | 3 | 1 |
| C - Gloucester Road (north) | | 1 | 6 | 0 | 0 |
| D - Morton Way | | 0 | 4 | 0 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-CD | 0.72 | 22.06 | 2.6 | C |
| B-A | 0.65 | 34.38 | 1.8 | D |
| A-B | | | | |
| A-C | | | | |
| A-D | | | | |
| AB-CD | 0.69 | 16.60 | 2.6 | C |
| AB-C | | | | |
| D-AB | 0.53 | 12.28 | 1.1 | B |
| D-C | 0.35 | 22.46 | 0.5 | C |
| C-D | | | | |
| C-A | | | | |
| C-B | | | | |
| CD-AB | 0.42 | 9.29 | 0.9 | A |
| CD-A | | | | |

Main Results for each time segment

08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 428 | 603 | 0.710 | 419 | 2.3 | 19.000 | C |
| B-A | 195 | 305 | 0.640 | 189 | 1.6 | 29.577 | D |
| A-B | 132 | | | 132 | | | |
| A-C | 146 | | | 146 | | | |
| A-D | 92 | | | 92 | | | |
| AB-CD | 479 | 710 | 0.674 | 469 | 2.4 | 14.952 | B |
| AB-C | 178 | | | 178 | | | |
| D-AB | 331 | 633 | 0.523 | 327 | 1.1 | 11.819 | B |
| D-C | 85 | 252 | 0.338 | 83 | 0.5 | 21.114 | C |
| C-D | 90 | | | 90 | | | |
| C-A | 256 | | | 256 | | | |
| C-B | 94 | | | 94 | | | |
| CD-AB | 295 | 701 | 0.421 | 292 | 0.8 | 9.108 | A |
| CD-A | 381 | | | 381 | | | |

08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 428 | 594 | 0.720 | 427 | 2.5 | 21.743 | C |
| B-A | 195 | 300 | 0.651 | 194 | 1.8 | 33.904 | D |
| A-B | 132 | | | 132 | | | |
| A-C | 146 | | | 146 | | | |
| A-D | 92 | | | 92 | | | |
| AB-CD | 490 | 715 | 0.685 | 489 | 2.6 | 16.439 | C |
| AB-C | 176 | | | 176 | | | |
| D-AB | 331 | 630 | 0.525 | 331 | 1.1 | 12.263 | B |
| D-C | 85 | 246 | 0.346 | 85 | 0.5 | 22.351 | C |
| C-D | 90 | | | 90 | | | |
| C-A | 256 | | | 256 | | | |
| C-B | 94 | | | 94 | | | |
| CD-AB | 298 | 703 | 0.425 | 298 | 0.9 | 9.283 | A |
| CD-A | 383 | | | 383 | | | |

08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 428 | 593 | 0.721 | 428 | 2.5 | 21.981 | C |
| B-A | 195 | 299 | 0.652 | 195 | 1.8 | 34.264 | D |
| A-B | 132 | | | 132 | | | |
| A-C | 146 | | | 146 | | | |
| A-D | 92 | | | 92 | | | |
| AB-CD | 490 | 715 | 0.686 | 490 | 2.6 | 16.563 | C |
| AB-C | 176 | | | 176 | | | |
| D-AB | 331 | 630 | 0.526 | 331 | 1.1 | 12.278 | B |
| D-C | 85 | 245 | 0.346 | 85 | 0.5 | 22.437 | C |
| C-D | 90 | | | 90 | | | |
| C-A | 256 | | | 256 | | | |
| C-B | 94 | | | 94 | | | |
| CD-AB | 298 | 703 | 0.425 | 298 | 0.9 | 9.289 | A |
| CD-A | 383 | | | 383 | | | |

08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 428 | 593 | 0.722 | 428 | 2.6 | 22.055 | C |
| B-A | 195 | 299 | 0.652 | 195 | 1.8 | 34.382 | D |
| A-B | 132 | | | 132 | | | |
| A-C | 146 | | | 146 | | | |
| A-D | 92 | | | 92 | | | |
| AB-CD | 490 | 715 | 0.686 | 490 | 2.6 | 16.598 | C |
| AB-C | 175 | | | 175 | | | |
| D-AB | 331 | 630 | 0.526 | 331 | 1.1 | 12.283 | B |
| D-C | 85 | 245 | 0.347 | 85 | 0.5 | 22.460 | C |
| C-D | 90 | | | 90 | | | |
| C-A | 256 | | | 256 | | | |
| C-B | 94 | | | 94 | | | |
| CD-AB | 298 | 703 | 0.425 | 298 | 0.9 | 9.288 | A |
| CD-A | 383 | | | 383 | | | |

2028 Ref, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|--------------------|----------------------|--------------------|--------------|
| 1 | untitled | Left-Right Stagger | Two-way | 7.04 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|
| D4 | 2028 Ref | PM | FLAT | 17:00 | 18:00 | 60 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------|------------|--------------|-------------------------|--------------------|
| A - Gloucester Road (south) | | ✓ | 516 | 100.000 |
| B - Butt Lane | | ✓ | 402 | 100.000 |
| C - Gloucester Road (north) | | ✓ | 303 | 100.000 |
| D - Morton Way | | ✓ | 445 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| From | A - Gloucester Road (south) | 0 | 120 | 272 | 124 |
| | B - Butt Lane | 145 | 0 | 72 | 185 |
| | C - Gloucester Road (north) | 143 | 74 | 0 | 86 |
| | D - Morton Way | 95 | 253 | 97 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| From | To | | | |
|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| A - Gloucester Road (south) | 0 | 0 | 0 | 1 |
| B - Butt Lane | 1 | 0 | 0 | 1 |
| C - Gloucester Road (north) | 1 | 1 | 0 | 0 |
| D - Morton Way | 0 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-CD | 0.44 | 11.19 | 0.8 | B |
| B-A | 0.50 | 24.93 | 1.0 | C |
| A-B | | | | |
| A-C | | | | |
| A-D | | | | |
| AB-CD | 0.49 | 10.06 | 1.1 | B |
| AB-C | | | | |
| D-AB | 0.52 | 11.18 | 1.1 | B |
| D-C | 0.32 | 17.69 | 0.5 | C |
| C-D | | | | |
| C-A | | | | |
| C-B | | | | |
| CD-AB | 0.56 | 12.71 | 1.5 | B |
| CD-A | | | | |

Main Results for each time segment

17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 257 | 586 | 0.439 | 254 | 0.8 | 10.827 | B |
| B-A | 145 | 293 | 0.494 | 141 | 0.9 | 23.314 | C |
| A-B | 120 | | | 120 | | | |
| A-C | 272 | | | 272 | | | |
| A-D | 124 | | | 124 | | | |
| AB-CD | 347 | 710 | 0.489 | 343 | 1.1 | 9.789 | A |
| AB-C | 303 | | | 303 | | | |
| D-AB | 348 | 675 | 0.516 | 344 | 1.0 | 10.850 | B |
| D-C | 97 | 303 | 0.320 | 95 | 0.5 | 17.162 | C |
| C-D | 86 | | | 86 | | | |
| C-A | 143 | | | 143 | | | |
| C-B | 74 | | | 74 | | | |
| CD-AB | 366 | 656 | 0.557 | 360 | 1.4 | 12.144 | B |
| CD-A | 195 | | | 195 | | | |

17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 257 | 581 | 0.442 | 257 | 0.8 | 11.171 | B |
| B-A | 145 | 290 | 0.499 | 145 | 1.0 | 24.849 | C |
| A-B | 120 | | | 120 | | | |
| A-C | 272 | | | 272 | | | |
| A-D | 124 | | | 124 | | | |
| AB-CD | 350 | 712 | 0.492 | 350 | 1.1 | 10.054 | B |
| AB-C | 302 | | | 302 | | | |
| D-AB | 348 | 673 | 0.517 | 348 | 1.1 | 11.174 | B |
| D-C | 97 | 301 | 0.323 | 97 | 0.5 | 17.670 | C |
| C-D | 86 | | | 86 | | | |
| C-A | 143 | | | 143 | | | |
| C-B | 74 | | | 74 | | | |
| CD-AB | 370 | 658 | 0.562 | 370 | 1.4 | 12.685 | B |
| CD-A | 195 | | | 195 | | | |

17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 257 | 581 | 0.442 | 257 | 0.8 | 11.181 | B |
| B-A | 145 | 290 | 0.499 | 145 | 1.0 | 24.927 | C |
| A-B | 120 | | | 120 | | | |
| A-C | 272 | | | 272 | | | |
| A-D | 124 | | | 124 | | | |
| AB-CD | 350 | 712 | 0.492 | 350 | 1.1 | 10.063 | B |
| AB-C | 302 | | | 302 | | | |
| D-AB | 348 | 673 | 0.517 | 348 | 1.1 | 11.180 | B |
| D-C | 97 | 301 | 0.323 | 97 | 0.5 | 17.682 | C |
| C-D | 86 | | | 86 | | | |
| C-A | 143 | | | 143 | | | |
| C-B | 74 | | | 74 | | | |
| CD-AB | 370 | 658 | 0.562 | 370 | 1.4 | 12.703 | B |
| CD-A | 195 | | | 195 | | | |

17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 257 | 581 | 0.442 | 257 | 0.8 | 11.186 | B |
| B-A | 145 | 290 | 0.499 | 145 | 1.0 | 24.925 | C |
| A-B | 120 | | | 120 | | | |
| A-C | 272 | | | 272 | | | |
| A-D | 124 | | | 124 | | | |
| AB-CD | 350 | 712 | 0.492 | 350 | 1.1 | 10.063 | B |
| AB-C | 302 | | | 302 | | | |
| D-AB | 348 | 673 | 0.517 | 348 | 1.1 | 11.181 | B |
| D-C | 97 | 301 | 0.323 | 97 | 0.5 | 17.688 | C |
| C-D | 86 | | | 86 | | | |
| C-A | 143 | | | 143 | | | |
| C-B | 74 | | | 74 | | | |
| CD-AB | 370 | 658 | 0.562 | 370 | 1.5 | 12.708 | B |
| CD-A | 195 | | | 195 | | | |

2028 Test Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|--------------------|----------------------|--------------------|--------------|
| 1 | untitled | Left-Right Stagger | Two-way | 313.47 | F |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|
| D5 | 2028 Test Case | AM | FLAT | 08:00 | 09:00 | 60 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------|------------|--------------|-------------------------|--------------------|
| A - Gloucester Road (south) | | ✓ | 391 | 100.000 |
| B - Butt Lane | | ✓ | 943 | 100.000 |
| C - Gloucester Road (north) | | ✓ | 455 | 100.000 |
| D - Morton Way | | ✓ | 436 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| From | A - Gloucester Road (south) | 0 | 153 | 146 | 92 |
| | B - Butt Lane | 313 | 0 | 200 | 430 |
| | C - Gloucester Road (north) | 256 | 109 | 0 | 90 |
| | D - Morton Way | 161 | 190 | 85 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| From | To | | | |
|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| A - Gloucester Road (south) | 0 | 0 | 4 | 6 |
| B - Butt Lane | 0 | 0 | 2 | 1 |
| C - Gloucester Road (north) | 1 | 5 | 0 | 0 |
| D - Morton Way | 0 | 3 | 0 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-CD | 1.32 | 1043.77 | 155.7 | F |
| B-A | 1.32 | 1056.11 | 77.7 | F |
| A-B | | | | |
| A-C | | | | |
| A-D | | | | |
| AB-CD | 0.71 | 17.56 | 3.1 | C |
| AB-C | | | | |
| D-AB | 1.43 | 284.33 | 30.8 | F |
| D-C | 1.31 | 415.70 | 8.8 | F |
| C-D | | | | |
| C-A | | | | |
| C-B | | | | |
| CD-AB | 0.48 | 10.05 | 1.1 | B |
| CD-A | | | | |

Main Results for each time segment

08:00 - 08:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 630 | 480 | 1.313 | 468 | 40.4 | 168.895 | F |
| B-A | 313 | 238 | 1.313 | 228 | 21.3 | 191.091 | F |
| A-B | 153 | | | 153 | | | |
| A-C | 146 | | | 146 | | | |
| A-D | 92 | | | 92 | | | |
| AB-CD | 515 | 734 | 0.702 | 504 | 2.7 | 15.607 | C |
| AB-C | 191 | | | 191 | | | |
| D-AB | 351 | 609 | 0.576 | 346 | 1.3 | 13.633 | B |
| D-C | 85 | 195 | 0.437 | 82 | 0.7 | 31.262 | D |
| C-D | 90 | | | 90 | | | |
| C-A | 256 | | | 256 | | | |
| C-B | 109 | | | 109 | | | |
| CD-AB | 345 | 717 | 0.481 | 340 | 1.1 | 9.792 | A |
| CD-A | 366 | | | 366 | | | |

08:15 - 08:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 630 | 476 | 1.324 | 475 | 79.0 | 466.283 | F |
| B-A | 313 | 239 | 1.308 | 238 | 39.9 | 488.504 | F |
| A-B | 153 | | | 153 | | | |
| A-C | 146 | | | 146 | | | |
| A-D | 92 | | | 92 | | | |
| AB-CD | 524 | 738 | 0.710 | 523 | 3.0 | 17.349 | C |
| AB-C | 189 | | | 189 | | | |
| D-AB | 351 | 566 | 0.621 | 350 | 1.6 | 16.853 | C |
| D-C | 85 | 146 | 0.583 | 83 | 1.2 | 55.496 | F |
| C-D | 90 | | | 90 | | | |
| C-A | 256 | | | 256 | | | |
| C-B | 109 | | | 109 | | | |
| CD-AB | 348 | 719 | 0.485 | 348 | 1.1 | 10.053 | B |
| CD-A | 367 | | | 367 | | | |

08:30 - 08:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 630 | 477 | 1.321 | 476 | 117.3 | 754.019 | F |
| B-A | 313 | 238 | 1.313 | 238 | 58.7 | 769.935 | F |
| A-B | 153 | | | 153 | | | |
| A-C | 146 | | | 146 | | | |
| A-D | 92 | | | 92 | | | |
| AB-CD | 526 | 739 | 0.712 | 526 | 3.0 | 17.546 | C |
| AB-C | 188 | | | 188 | | | |
| D-AB | 351 | 431 | 0.814 | 343 | 3.7 | 38.158 | E |
| D-C | 85 | 100 | 0.847 | 78 | 2.9 | 132.719 | F |
| C-D | 90 | | | 90 | | | |
| C-A | 256 | | | 256 | | | |
| C-B | 109 | | | 109 | | | |
| CD-AB | 342 | 715 | 0.478 | 342 | 1.1 | 9.991 | A |
| CD-A | 366 | | | 366 | | | |

08:45 - 09:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 630 | 476 | 1.323 | 476 | 155.7 | 1043.767 | F |
| B-A | 313 | 237 | 1.319 | 237 | 77.7 | 1056.113 | F |
| A-B | 153 | | | 153 | | | |
| A-C | 146 | | | 146 | | | |
| A-D | 92 | | | 92 | | | |
| AB-CD | 525 | 739 | 0.711 | 525 | 3.1 | 17.558 | C |
| AB-C | 189 | | | 189 | | | |
| D-AB | 351 | 246 | 1.428 | 242 | 30.8 | 284.326 | F |
| D-C | 85 | 65 | 1.306 | 62 | 8.8 | 415.705 | F |
| C-D | 90 | | | 90 | | | |
| C-A | 256 | | | 256 | | | |
| C-B | 109 | | | 109 | | | |
| CD-AB | 263 | 675 | 0.390 | 265 | 0.7 | 9.111 | A |
| CD-A | 344 | | | 344 | | | |

2028 Test Case, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|----------|-------------|--|
| Last Run | Last Run | Stream D-AB | Capacity of Minor Stream D-AB has been reduced in timesegment(s) 1,2,3,4 due to traffic queuing at the center of the junction. |

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|--------------------|----------------------|--------------------|--------------|
| 1 | untitled | Left-Right Stagger | Two-way | 120.96 | F |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|
| D6 | 2028 Test Case | PM | FLAT | 17:00 | 18:00 | 60 | 15 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|-----------------------------|------------|--------------|-------------------------|--------------------|
| A - Gloucester Road (south) | | ✓ | 638 | 100.000 |
| B - Butt Lane | | ✓ | 472 | 100.000 |
| C - Gloucester Road (north) | | ✓ | 382 | 100.000 |
| D - Morton Way | | ✓ | 540 | 100.000 |

Origin-Destination Data

Demand (PCU/hr)

| | | To | | | |
|------|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| From | A - Gloucester Road (south) | 0 | 242 | 272 | 124 |
| | B - Butt Lane | 174 | 0 | 91 | 207 |
| | C - Gloucester Road (north) | 143 | 153 | 0 | 86 |
| | D - Morton Way | 95 | 348 | 97 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| From | To | | | |
|-----------------------------|-----------------------------|---------------|-----------------------------|----------------|
| | A - Gloucester Road (south) | B - Butt Lane | C - Gloucester Road (north) | D - Morton Way |
| A - Gloucester Road (south) | 0 | 0 | 0 | 1 |
| B - Butt Lane | 1 | 0 | 0 | 0 |
| C - Gloucester Road (north) | 1 | 1 | 0 | 0 |
| D - Morton Way | 0 | 1 | 0 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (PCU) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-CD | 1.14 | 281.88 | 23.3 | F |
| B-A | 1.11 | 314.06 | 14.4 | F |
| A-B | | | | |
| A-C | | | | |
| A-D | | | | |
| AB-CD | 0.54 | 10.75 | 1.3 | B |
| AB-C | | | | |
| D-AB | 1.13 | 444.23 | 53.0 | F |
| D-C | 1.08 | 520.20 | 12.7 | F |
| C-D | | | | |
| C-A | | | | |
| C-B | | | | |
| CD-AB | 0.84 | 33.80 | 6.4 | D |
| CD-A | | | | |

Main Results for each time segment

17:00 - 17:15

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 298 | 463 | 0.644 | 291 | 1.7 | 20.264 | C |
| B-A | 174 | 214 | 0.811 | 162 | 3.1 | 59.624 | F |
| A-B | 242 | | | 242 | | | |
| A-C | 272 | | | 272 | | | |
| A-D | 124 | | | 124 | | | |
| AB-CD | 383 | 711 | 0.538 | 377 | 1.3 | 10.703 | B |
| AB-C | 304 | | | 304 | | | |
| D-AB | 443 | 410 | 1.081 | 384 | 14.8 | 90.018 | F |
| D-C | 97 | 90 | 1.081 | 76 | 5.3 | 176.830 | F |
| C-D | 86 | | | 86 | | | |
| C-A | 143 | | | 143 | | | |
| C-B | 153 | | | 153 | | | |
| CD-AB | 584 | 704 | 0.829 | 563 | 5.1 | 24.275 | C |
| CD-A | 96 | | | 96 | | | |

17:15 - 17:30

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 298 | 307 | 0.972 | 275 | 7.4 | 83.170 | F |
| B-A | 174 | 187 | 0.932 | 164 | 5.5 | 121.577 | F |
| A-B | 242 | | | 242 | | | |
| A-C | 272 | | | 272 | | | |
| A-D | 124 | | | 124 | | | |
| AB-CD | 365 | 703 | 0.520 | 365 | 1.3 | 10.753 | B |
| AB-C | 306 | | | 306 | | | |
| D-AB | 443 | 396 | 1.117 | 392 | 27.6 | 215.858 | F |
| D-C | 97 | 93 | 1.038 | 87 | 7.7 | 317.943 | F |
| C-D | 86 | | | 86 | | | |
| C-A | 143 | | | 143 | | | |
| C-B | 153 | | | 153 | | | |
| CD-AB | 596 | 709 | 0.841 | 593 | 5.9 | 31.832 | D |
| CD-A | 91 | | | 91 | | | |

17:30 - 17:45

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 298 | 285 | 1.044 | 274 | 13.3 | 162.931 | F |
| B-A | 174 | 171 | 1.019 | 160 | 8.9 | 197.406 | F |
| A-B | 242 | | | 242 | | | |
| A-C | 272 | | | 272 | | | |
| A-D | 124 | | | 124 | | | |
| AB-CD | 364 | 702 | 0.519 | 365 | 1.3 | 10.731 | B |
| AB-C | 306 | | | 306 | | | |
| D-AB | 443 | 394 | 1.123 | 392 | 40.3 | 329.656 | F |
| D-C | 97 | 91 | 1.064 | 87 | 10.2 | 418.264 | F |
| C-D | 86 | | | 86 | | | |
| C-A | 143 | | | 143 | | | |
| C-B | 153 | | | 153 | | | |
| CD-AB | 597 | 709 | 0.842 | 596 | 6.3 | 33.266 | D |
| CD-A | 91 | | | 91 | | | |

17:45 - 18:00

| Stream | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC | Throughput (PCU/hr) | End queue (PCU) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-CD | 298 | 262 | 1.140 | 258 | 23.3 | 281.879 | F |
| B-A | 174 | 156 | 1.114 | 152 | 14.4 | 314.062 | F |
| A-B | 242 | | | 242 | | | |
| A-C | 272 | | | 272 | | | |
| A-D | 124 | | | 124 | | | |
| AB-CD | 347 | 694 | 0.500 | 348 | 1.2 | 10.466 | B |
| AB-C | 307 | | | 307 | | | |
| D-AB | 443 | 393 | 1.126 | 392 | 53.0 | 444.235 | F |
| D-C | 97 | 90 | 1.082 | 87 | 12.7 | 520.200 | F |
| C-D | 86 | | | 86 | | | |
| C-A | 143 | | | 143 | | | |
| C-B | 153 | | | 153 | | | |
| CD-AB | 597 | 709 | 0.841 | 596 | 6.4 | 33.803 | D |
| CD-A | 91 | | | 91 | | | |

| |
|--|
| Junctions 9 |
| PICADY 9 - Priority Intersection Module |
| Version: 9.0.2.5947 © Copyright TRL Limited, 2017 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk |
| 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: Junction 2_18.07.26.j9

Path: J:\39209 West of Park Farm, Thornbury\Technical\Transport\Junction Assessments\PICADY\2017 Base

Report generation date: 30/07/2018 15:55:10

- »2017, AM
- »2017, PM
- »2028 Ref, AM
- »2028 Ref, PM
- »2028 Test Case, AM
- »2028 Test Case, PM

Summary of junction performance

| | AM | | | | PM | | | |
|----------------|-------------|-----------|------|-----|-------------|-----------|------|-----|
| | Queue (Veh) | Delay (s) | RFC | LOS | Queue (Veh) | Delay (s) | RFC | LOS |
| 2017 | | | | | | | | |
| Stream B-C | 0.5 | 7.02 | 0.33 | A | 0.4 | 6.59 | 0.30 | A |
| Stream B-A | 0.0 | 9.07 | 0.01 | A | 0.0 | 8.81 | 0.01 | A |
| Stream C-AB | 0.5 | 6.89 | 0.32 | A | 0.4 | 6.49 | 0.31 | A |
| 2028 Ref | | | | | | | | |
| Stream B-C | 0.9 | 9.26 | 0.49 | A | 0.6 | 7.58 | 0.39 | A |
| Stream B-A | 0.0 | 10.91 | 0.01 | B | 0.0 | 10.21 | 0.01 | B |
| Stream C-AB | 0.7 | 7.80 | 0.40 | A | 0.7 | 7.84 | 0.43 | A |
| 2028 Test Case | | | | | | | | |
| Stream B-C | 1.3 | 11.04 | 0.58 | B | 0.7 | 7.74 | 0.40 | A |
| Stream B-A | 0.0 | 12.17 | 0.01 | B | 0.0 | 10.77 | 0.01 | B |
| Stream C-AB | 0.7 | 8.00 | 0.41 | A | 0.9 | 8.72 | 0.48 | A |

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

File summary

File Description

| | |
|--------------------|----------------|
| Title | (untitled) |
| Location | |
| Site number | |
| Date | 23/04/2018 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | PBA\jasaunders |
| 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 | Veh | Veh | perHour | s | -Min | perMin |

Analysis Options

| Calculate Queue Percentiles | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|-----------------------------|-----------------------------|---------------|-----------------------------|-----------------------|
| | | 0.85 | 36.00 | 20.00 |

Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D1 | 2017 | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D2 | 2017 | PM | ONE HOUR | 16:45 | 18:15 | 5 |
| D3 | 2028 Ref | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D4 | 2028 Ref | PM | ONE HOUR | 16:45 | 18:15 | 5 |
| D5 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D6 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |

Analysis Set Details

| ID | Network flow scaling factor (%) |
|----|---------------------------------|
| A1 | 100.000 |

2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 3.10 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Arms

Arms

| Arm | Name | Description | Arm type |
|-----|-----------------|-------------|----------|
| A | A38 (west) | | Major |
| B | Gloucester Road | | Minor |
| C | A38 (east) | | Major |

Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Width of kerbed central reserve (m) | Has right turn bay | Width for right turn (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------------|--------------------------|----------------------------|-------------------------------------|--------------------|--------------------------|-------------------------------|---------|----------------------|
| C - A38 (east) | 7.88 | ✓ | 4.66 | ✓ | 4.59 | 250.0 | ✓ | 11.00 |

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

Minor Arm Geometry

| Arm | Minor arm type | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate flare length | Flare length (PCU) | Visibility to left (m) | Visibility to right (m) |
|---------------------|---------------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| B - Gloucester Road | One lane plus flare | 9.45 | 5.25 | 4.35 | 3.93 | 3.40 | | 1.00 | 50 | 250 |

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1 | B-A | 638 | 0.097 | 0.244 | 0.154 | 0.349 |
| 1 | B-C | 886 | 0.125 | 0.315 | - | - |
| 1 | C-B | 906 | 0.322 | 0.322 | - | - |

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

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

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D1 | 2017 | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|-------------------------|--------------------|
| A - A38 (west) | | ✓ | 282 | 100.000 |
| B - Gloucester Road | | ✓ | 229 | 100.000 |
| C - A38 (east) | | ✓ | 502 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| From | To | | |
|---------------------|----------------|---------------------|----------------|
| | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| A - A38 (west) | 0 | 2 | 280 |
| B - Gloucester Road | 2 | 0 | 227 |
| C - A38 (east) | 280 | 222 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| From | To | | |
|---------------------|----------------|---------------------|----------------|
| | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| A - A38 (west) | 0 | 0 | 1 |
| B - Gloucester Road | 0 | 0 | 2 |
| C - A38 (east) | 4 | 4 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.33 | 7.02 | 0.5 | A |
| B-A | 0.01 | 9.07 | 0.0 | A |
| C-AB | 0.32 | 6.89 | 0.5 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

07:45 - 07:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 172 | 803 | 0.214 | 169 | 0.3 | 5.647 | A |
| B-A | 2 | 486 | 0.003 | 1 | 0.0 | 7.429 | A |
| C-AB | 168 | 807 | 0.208 | 165 | 0.3 | 5.590 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 212 | | | 212 | | | |

07:50 - 07:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 172 | 803 | 0.214 | 172 | 0.3 | 5.703 | A |
| B-A | 2 | 485 | 0.003 | 2 | 0.0 | 7.450 | A |
| C-AB | 168 | 807 | 0.208 | 168 | 0.3 | 5.633 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 212 | | | 212 | | | |

07:55 - 08:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 172 | 803 | 0.214 | 172 | 0.3 | 5.703 | A |
| B-A | 2 | 485 | 0.003 | 2 | 0.0 | 7.450 | A |
| C-AB | 168 | 807 | 0.208 | 168 | 0.3 | 5.633 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 212 | | | 212 | | | |

08:00 - 08:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 183 | 798 | 0.230 | 183 | 0.3 | 5.847 | A |
| B-A | 2 | 474 | 0.003 | 2 | 0.0 | 7.624 | A |
| C-AB | 179 | 803 | 0.223 | 179 | 0.3 | 5.771 | A |
| C-A | 226 | | | 226 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 226 | | | 226 | | | |

08:05 - 08:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 205 | 790 | 0.260 | 205 | 0.3 | 6.145 | A |
| B-A | 2 | 453 | 0.004 | 2 | 0.0 | 7.987 | A |
| C-AB | 201 | 794 | 0.253 | 200 | 0.3 | 6.054 | A |
| C-A | 253 | | | 253 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 253 | | | 253 | | | |

08:10 - 08:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 225 | 782 | 0.287 | 224 | 0.4 | 6.437 | A |
| B-A | 2 | 433 | 0.005 | 2 | 0.0 | 8.349 | A |
| C-AB | 220 | 786 | 0.279 | 219 | 0.4 | 6.339 | A |
| C-A | 277 | | | 277 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 277 | | | 277 | | | |

08:15 - 08:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 240 | 776 | 0.310 | 240 | 0.4 | 6.700 | A |
| B-A | 2 | 417 | 0.005 | 2 | 0.0 | 8.675 | A |
| C-AB | 235 | 780 | 0.301 | 235 | 0.4 | 6.587 | A |
| C-A | 296 | | | 296 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 296 | | | 296 | | | |

08:20 - 08:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 251 | 772 | 0.326 | 251 | 0.5 | 6.903 | A |
| B-A | 2 | 405 | 0.005 | 2 | 0.0 | 8.926 | A |
| C-AB | 246 | 776 | 0.317 | 245 | 0.5 | 6.778 | A |
| C-A | 310 | | | 310 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 310 | | | 310 | | | |

08:25 - 08:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 257 | 770 | 0.334 | 257 | 0.5 | 7.016 | A |
| B-A | 2 | 399 | 0.006 | 2 | 0.0 | 9.065 | A |
| C-AB | 251 | 774 | 0.325 | 251 | 0.5 | 6.882 | A |
| C-A | 317 | | | 317 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 317 | | | 317 | | | |

08:30 - 08:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 257 | 770 | 0.334 | 257 | 0.5 | 7.021 | A |
| B-A | 2 | 399 | 0.006 | 2 | 0.0 | 9.068 | A |
| C-AB | 251 | 774 | 0.325 | 251 | 0.5 | 6.888 | A |
| C-A | 317 | | | 317 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 317 | | | 317 | | | |

08:35 - 08:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 251 | 772 | 0.326 | 251 | 0.5 | 6.920 | A |
| B-A | 2 | 405 | 0.005 | 2 | 0.0 | 8.934 | A |
| C-AB | 246 | 776 | 0.317 | 246 | 0.5 | 6.794 | A |
| C-A | 310 | | | 310 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 310 | | | 310 | | | |

08:40 - 08:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 240 | 776 | 0.310 | 241 | 0.5 | 6.731 | A |
| B-A | 2 | 416 | 0.005 | 2 | 0.0 | 8.687 | A |
| C-AB | 235 | 780 | 0.301 | 235 | 0.4 | 6.613 | A |
| C-A | 296 | | | 296 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 296 | | | 296 | | | |

08:45 - 08:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 225 | 782 | 0.287 | 225 | 0.4 | 6.471 | A |
| B-A | 2 | 432 | 0.005 | 2 | 0.0 | 8.364 | A |
| C-AB | 220 | 786 | 0.279 | 220 | 0.4 | 6.363 | A |
| C-A | 277 | | | 277 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 277 | | | 277 | | | |

08:50 - 08:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 205 | 790 | 0.260 | 206 | 0.4 | 6.173 | A |
| B-A | 2 | 452 | 0.004 | 2 | 0.0 | 8.000 | A |
| C-AB | 201 | 794 | 0.253 | 201 | 0.3 | 6.080 | A |
| C-A | 253 | | | 253 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 253 | | | 253 | | | |

08:55 - 09:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 183 | 798 | 0.230 | 184 | 0.3 | 5.867 | A |
| B-A | 2 | 473 | 0.003 | 2 | 0.0 | 7.635 | A |
| C-AB | 179 | 803 | 0.223 | 180 | 0.3 | 5.787 | A |
| C-A | 226 | | | 226 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 226 | | | 226 | | | |

09:00 - 09:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 172 | 803 | 0.214 | 172 | 0.3 | 5.710 | A |
| B-A | 2 | 484 | 0.003 | 2 | 0.0 | 7.456 | A |
| C-AB | 168 | 807 | 0.208 | 168 | 0.3 | 5.641 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 212 | | | 212 | | | |

09:05 - 09:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 172 | 803 | 0.214 | 172 | 0.3 | 5.707 | A |
| B-A | 2 | 485 | 0.003 | 2 | 0.0 | 7.454 | A |
| C-AB | 168 | 807 | 0.208 | 168 | 0.3 | 5.636 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 212 | | | 212 | | | |

09:10 - 09:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 172 | 803 | 0.214 | 172 | 0.3 | 5.706 | A |
| B-A | 2 | 485 | 0.003 | 2 | 0.0 | 7.451 | A |
| C-AB | 168 | 807 | 0.208 | 168 | 0.3 | 5.633 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 212 | | | 212 | | | |

2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 2.89 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D2 | 2017 | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|-------------------------|--------------------|
| A - A38 (west) | | ✓ | 238 | 100.000 |
| B - Gloucester Road | | ✓ | 213 | 100.000 |
| C - A38 (east) | | ✓ | 528 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 5 | 233 |
| | B - Gloucester Road | 4 | 0 | 209 |
| | C - A38 (east) | 306 | 222 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 0 | 2 |
| | B - Gloucester Road | 0 | 0 | 2 |
| | C - A38 (east) | 4 | 1 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.30 | 6.59 | 0.4 | A |
| B-A | 0.01 | 8.81 | 0.0 | A |
| C-AB | 0.31 | 6.49 | 0.4 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

16:45 - 16:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 158 | 812 | 0.195 | 155 | 0.2 | 5.461 | A |
| B-A | 3 | 493 | 0.006 | 3 | 0.0 | 7.339 | A |
| C-AB | 168 | 835 | 0.201 | 165 | 0.2 | 5.352 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 4 | | | 4 | | | |
| A-C | 176 | | | 176 | | | |

16:50 - 16:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 158 | 812 | 0.195 | 158 | 0.2 | 5.507 | A |
| B-A | 3 | 492 | 0.006 | 3 | 0.0 | 7.357 | A |
| C-AB | 168 | 835 | 0.201 | 168 | 0.2 | 5.399 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 4 | | | 4 | | | |
| A-C | 176 | | | 176 | | | |

16:55 - 17:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 158 | 812 | 0.195 | 158 | 0.2 | 5.507 | A |
| B-A | 3 | 492 | 0.006 | 3 | 0.0 | 7.358 | A |
| C-AB | 168 | 835 | 0.201 | 168 | 0.3 | 5.399 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 4 | | | 4 | | | |
| A-C | 176 | | | 176 | | | |

17:00 - 17:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 169 | 808 | 0.209 | 169 | 0.3 | 5.626 | A |
| B-A | 3 | 482 | 0.007 | 3 | 0.0 | 7.518 | A |
| C-AB | 179 | 831 | 0.216 | 179 | 0.3 | 5.519 | A |
| C-A | 247 | | | 247 | | | |
| A-B | 4 | | | 4 | | | |
| A-C | 188 | | | 188 | | | |

17:05 - 17:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 189 | 801 | 0.236 | 188 | 0.3 | 5.875 | A |
| B-A | 4 | 462 | 0.008 | 4 | 0.0 | 7.849 | A |
| C-AB | 201 | 823 | 0.244 | 200 | 0.3 | 5.771 | A |
| C-A | 277 | | | 277 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 211 | | | 211 | | | |

17:10 - 17:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 207 | 794 | 0.260 | 206 | 0.3 | 6.119 | A |
| B-A | 4 | 444 | 0.009 | 4 | 0.0 | 8.175 | A |
| C-AB | 220 | 817 | 0.269 | 219 | 0.4 | 6.015 | A |
| C-A | 303 | | | 303 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 231 | | | 231 | | | |

17:15 - 17:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 221 | 789 | 0.280 | 221 | 0.4 | 6.332 | A |
| B-A | 4 | 429 | 0.010 | 4 | 0.0 | 8.466 | A |
| C-AB | 235 | 811 | 0.290 | 235 | 0.4 | 6.234 | A |
| C-A | 324 | | | 324 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 247 | | | 247 | | | |

17:20 - 17:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 231 | 785 | 0.295 | 231 | 0.4 | 6.498 | A |
| B-A | 4 | 419 | 0.011 | 4 | 0.0 | 8.688 | A |
| C-AB | 246 | 808 | 0.304 | 245 | 0.4 | 6.392 | A |
| C-A | 339 | | | 339 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 258 | | | 258 | | | |

17:25 - 17:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 237 | 783 | 0.302 | 237 | 0.4 | 6.582 | A |
| B-A | 5 | 413 | 0.011 | 5 | 0.0 | 8.809 | A |
| C-AB | 251 | 806 | 0.312 | 251 | 0.4 | 6.488 | A |
| C-A | 347 | | | 347 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 264 | | | 264 | | | |

17:30 - 17:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 237 | 783 | 0.302 | 237 | 0.4 | 6.587 | A |
| B-A | 5 | 413 | 0.011 | 5 | 0.0 | 8.811 | A |
| C-AB | 251 | 806 | 0.312 | 251 | 0.4 | 6.493 | A |
| C-A | 347 | | | 347 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 264 | | | 264 | | | |

17:35 - 17:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 231 | 785 | 0.295 | 231 | 0.4 | 6.504 | A |
| B-A | 4 | 418 | 0.011 | 4 | 0.0 | 8.696 | A |
| C-AB | 246 | 808 | 0.304 | 246 | 0.4 | 6.411 | A |
| C-A | 339 | | | 339 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 258 | | | 258 | | | |

17:40 - 17:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 221 | 789 | 0.280 | 222 | 0.4 | 6.350 | A |
| B-A | 4 | 429 | 0.010 | 4 | 0.0 | 8.478 | A |
| C-AB | 235 | 811 | 0.290 | 235 | 0.4 | 6.255 | A |
| C-A | 324 | | | 324 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 247 | | | 247 | | | |

17:45 - 17:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 207 | 794 | 0.260 | 207 | 0.4 | 6.142 | A |
| B-A | 4 | 444 | 0.009 | 4 | 0.0 | 8.188 | A |
| C-AB | 220 | 817 | 0.269 | 220 | 0.4 | 6.038 | A |
| C-A | 303 | | | 303 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 231 | | | 231 | | | |

17:50 - 17:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 189 | 801 | 0.236 | 190 | 0.3 | 5.896 | A |
| B-A | 4 | 462 | 0.008 | 4 | 0.0 | 7.859 | A |
| C-AB | 201 | 823 | 0.244 | 201 | 0.3 | 5.794 | A |
| C-A | 277 | | | 277 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 211 | | | 211 | | | |

17:55 - 18:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 169 | 808 | 0.209 | 169 | 0.3 | 5.644 | A |
| B-A | 3 | 482 | 0.007 | 3 | 0.0 | 7.524 | A |
| C-AB | 179 | 831 | 0.216 | 180 | 0.3 | 5.535 | A |
| C-A | 247 | | | 247 | | | |
| A-B | 4 | | | 4 | | | |
| A-C | 188 | | | 188 | | | |

18:00 - 18:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 158 | 812 | 0.195 | 159 | 0.2 | 5.512 | A |
| B-A | 3 | 492 | 0.006 | 3 | 0.0 | 7.360 | A |
| C-AB | 168 | 835 | 0.201 | 168 | 0.3 | 5.404 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 4 | | | 4 | | | |
| A-C | 176 | | | 176 | | | |

18:05 - 18:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 158 | 812 | 0.195 | 158 | 0.2 | 5.510 | A |
| B-A | 3 | 492 | 0.006 | 3 | 0.0 | 7.361 | A |
| C-AB | 168 | 835 | 0.201 | 168 | 0.3 | 5.402 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 4 | | | 4 | | | |
| A-C | 176 | | | 176 | | | |

18:10 - 18:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 158 | 812 | 0.195 | 158 | 0.2 | 5.509 | A |
| B-A | 3 | 492 | 0.006 | 3 | 0.0 | 7.358 | A |
| C-AB | 168 | 835 | 0.201 | 168 | 0.3 | 5.402 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 4 | | | 4 | | | |
| A-C | 176 | | | 176 | | | |

2028 Ref, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 4.21 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D3 | 2028 Ref | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|-------------------------|--------------------|
| A - A38 (west) | | ✓ | 314 | 100.000 |
| B - Gloucester Road | | ✓ | 334 | 100.000 |
| C - A38 (east) | | ✓ | 582 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 2 | 312 |
| | B - Gloucester Road | 2 | 0 | 332 |
| | C - A38 (east) | 312 | 270 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 0 | 1 |
| | B - Gloucester Road | 0 | 0 | 1 |
| | C - A38 (east) | 4 | 3 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.49 | 9.26 | 0.9 | A |
| B-A | 0.01 | 10.91 | 0.0 | B |
| C-AB | 0.40 | 7.80 | 0.7 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

07:45 - 07:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 251 | 802 | 0.314 | 246 | 0.4 | 6.420 | A |
| B-A | 2 | 454 | 0.003 | 1 | 0.0 | 7.957 | A |
| C-AB | 204 | 804 | 0.254 | 200 | 0.3 | 5.926 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

07:50 - 07:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 251 | 802 | 0.314 | 251 | 0.4 | 6.537 | A |
| B-A | 2 | 452 | 0.003 | 2 | 0.0 | 7.998 | A |
| C-AB | 204 | 804 | 0.254 | 204 | 0.3 | 6.001 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

07:55 - 08:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 251 | 802 | 0.314 | 251 | 0.5 | 6.540 | A |
| B-A | 2 | 452 | 0.003 | 2 | 0.0 | 7.999 | A |
| C-AB | 204 | 804 | 0.254 | 204 | 0.3 | 6.001 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

08:00 - 08:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 268 | 797 | 0.337 | 268 | 0.5 | 6.793 | A |
| B-A | 2 | 437 | 0.004 | 2 | 0.0 | 8.266 | A |
| C-AB | 218 | 799 | 0.273 | 218 | 0.4 | 6.191 | A |
| C-A | 252 | | | 252 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 252 | | | 252 | | | |

08:05 - 08:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 300 | 787 | 0.381 | 299 | 0.6 | 7.350 | A |
| B-A | 2 | 408 | 0.004 | 2 | 0.0 | 8.855 | A |
| C-AB | 244 | 790 | 0.309 | 243 | 0.4 | 6.578 | A |
| C-A | 282 | | | 282 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 282 | | | 282 | | | |

08:10 - 08:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 328 | 779 | 0.422 | 327 | 0.7 | 7.946 | A |
| B-A | 2 | 381 | 0.005 | 2 | 0.0 | 9.489 | A |
| C-AB | 267 | 781 | 0.342 | 266 | 0.5 | 6.978 | A |
| C-A | 309 | | | 309 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 309 | | | 309 | | | |

08:15 - 08:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 351 | 772 | 0.455 | 350 | 0.8 | 8.508 | A |
| B-A | 2 | 358 | 0.006 | 2 | 0.0 | 10.105 | B |
| C-AB | 286 | 774 | 0.369 | 285 | 0.6 | 7.342 | A |
| C-A | 330 | | | 330 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 330 | | | 330 | | | |

08:20 - 08:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 368 | 767 | 0.479 | 367 | 0.9 | 8.936 | A |
| B-A | 2 | 341 | 0.006 | 2 | 0.0 | 10.610 | B |
| C-AB | 299 | 769 | 0.389 | 298 | 0.6 | 7.616 | A |
| C-A | 345 | | | 345 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 346 | | | 346 | | | |

08:25 - 08:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 376 | 764 | 0.492 | 375 | 0.9 | 9.237 | A |
| B-A | 2 | 332 | 0.007 | 2 | 0.0 | 10.904 | B |
| C-AB | 306 | 767 | 0.399 | 305 | 0.6 | 7.791 | A |
| C-A | 353 | | | 353 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 353 | | | 353 | | | |

08:30 - 08:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 376 | 764 | 0.492 | 376 | 0.9 | 9.257 | A |
| B-A | 2 | 332 | 0.007 | 2 | 0.0 | 10.915 | B |
| C-AB | 306 | 767 | 0.399 | 306 | 0.7 | 7.797 | A |
| C-A | 353 | | | 353 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 353 | | | 353 | | | |

08:35 - 08:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 368 | 767 | 0.479 | 368 | 0.9 | 9.032 | A |
| B-A | 2 | 341 | 0.007 | 2 | 0.0 | 10.642 | B |
| C-AB | 299 | 769 | 0.389 | 299 | 0.6 | 7.656 | A |
| C-A | 345 | | | 345 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 346 | | | 346 | | | |

08:40 - 08:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 351 | 772 | 0.455 | 352 | 0.9 | 8.614 | A |
| B-A | 2 | 357 | 0.006 | 2 | 0.0 | 10.150 | B |
| C-AB | 286 | 774 | 0.369 | 286 | 0.6 | 7.392 | A |
| C-A | 330 | | | 330 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 330 | | | 330 | | | |

08:45 - 08:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 328 | 779 | 0.422 | 330 | 0.8 | 8.052 | A |
| B-A | 2 | 380 | 0.005 | 2 | 0.0 | 9.533 | A |
| C-AB | 267 | 781 | 0.342 | 268 | 0.5 | 7.030 | A |
| C-A | 309 | | | 309 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 309 | | | 309 | | | |

08:50 - 08:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 300 | 787 | 0.381 | 302 | 0.6 | 7.440 | A |
| B-A | 2 | 407 | 0.004 | 2 | 0.0 | 8.887 | A |
| C-AB | 244 | 790 | 0.309 | 245 | 0.5 | 6.625 | A |
| C-A | 282 | | | 282 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 282 | | | 282 | | | |

08:55 - 09:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 268 | 797 | 0.337 | 270 | 0.5 | 6.848 | A |
| B-A | 2 | 436 | 0.004 | 2 | 0.0 | 8.285 | A |
| C-AB | 218 | 799 | 0.273 | 219 | 0.4 | 6.217 | A |
| C-A | 252 | | | 252 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 252 | | | 252 | | | |

09:00 - 09:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 251 | 802 | 0.314 | 252 | 0.5 | 6.560 | A |
| B-A | 2 | 451 | 0.003 | 2 | 0.0 | 8.007 | A |
| C-AB | 204 | 804 | 0.254 | 205 | 0.3 | 6.014 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

09:05 - 09:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 251 | 802 | 0.314 | 251 | 0.5 | 6.543 | A |
| B-A | 2 | 451 | 0.003 | 2 | 0.0 | 8.002 | A |
| C-AB | 204 | 804 | 0.254 | 204 | 0.3 | 6.003 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

09:10 - 09:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 251 | 802 | 0.314 | 251 | 0.5 | 6.542 | A |
| B-A | 2 | 451 | 0.003 | 2 | 0.0 | 8.000 | A |
| C-AB | 204 | 804 | 0.254 | 204 | 0.3 | 6.005 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

2028 Ref, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 3.74 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D4 | 2028 Ref | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|-------------------------|--------------------|
| A - A38 (west) | | ✓ | 262 | 100.000 |
| B - Gloucester Road | | ✓ | 270 | 100.000 |
| C - A38 (east) | | ✓ | 638 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 6 | 256 |
| | B - Gloucester Road | 4 | 0 | 266 |
| | C - A38 (east) | 337 | 301 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 0 | 2 |
| | B - Gloucester Road | 0 | 0 | 2 |
| | C - A38 (east) | 4 | 1 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.39 | 7.58 | 0.6 | A |
| B-A | 0.01 | 10.21 | 0.0 | B |
| C-AB | 0.43 | 7.84 | 0.7 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

16:45 - 16:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 201 | 808 | 0.249 | 198 | 0.3 | 5.864 | A |
| B-A | 3 | 461 | 0.007 | 3 | 0.0 | 7.862 | A |
| C-AB | 228 | 831 | 0.274 | 224 | 0.4 | 5.887 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

16:50 - 16:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 201 | 808 | 0.249 | 201 | 0.3 | 5.936 | A |
| B-A | 3 | 459 | 0.007 | 3 | 0.0 | 7.897 | A |
| C-AB | 228 | 831 | 0.274 | 228 | 0.4 | 5.965 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

16:55 - 17:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 201 | 808 | 0.249 | 201 | 0.3 | 5.936 | A |
| B-A | 3 | 459 | 0.007 | 3 | 0.0 | 7.897 | A |
| C-AB | 228 | 831 | 0.274 | 228 | 0.4 | 5.965 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

17:00 - 17:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 215 | 804 | 0.267 | 215 | 0.4 | 6.108 | A |
| B-A | 3 | 446 | 0.007 | 3 | 0.0 | 8.131 | A |
| C-AB | 243 | 827 | 0.294 | 243 | 0.4 | 6.152 | A |
| C-A | 272 | | | 272 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 207 | | | 207 | | | |

17:05 - 17:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 241 | 795 | 0.302 | 240 | 0.4 | 6.478 | A |
| B-A | 4 | 421 | 0.009 | 4 | 0.0 | 8.628 | A |
| C-AB | 272 | 819 | 0.332 | 271 | 0.5 | 6.561 | A |
| C-A | 305 | | | 305 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 231 | | | 231 | | | |

17:10 - 17:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 263 | 788 | 0.334 | 262 | 0.5 | 6.834 | A |
| B-A | 4 | 398 | 0.010 | 4 | 0.0 | 9.141 | A |
| C-AB | 298 | 812 | 0.367 | 297 | 0.6 | 6.979 | A |
| C-A | 333 | | | 333 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 253 | | | 253 | | | |

17:15 - 17:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 282 | 782 | 0.360 | 281 | 0.5 | 7.166 | A |
| B-A | 4 | 379 | 0.011 | 4 | 0.0 | 9.617 | A |
| C-AB | 319 | 806 | 0.396 | 318 | 0.6 | 7.362 | A |
| C-A | 357 | | | 357 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 271 | | | 271 | | | |

17:20 - 17:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 295 | 778 | 0.379 | 294 | 0.6 | 7.422 | A |
| B-A | 4 | 365 | 0.012 | 4 | 0.0 | 9.992 | A |
| C-AB | 333 | 802 | 0.416 | 333 | 0.7 | 7.662 | A |
| C-A | 373 | | | 373 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 283 | | | 283 | | | |

17:25 - 17:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 301 | 776 | 0.388 | 301 | 0.6 | 7.567 | A |
| B-A | 5 | 357 | 0.013 | 5 | 0.0 | 10.204 | B |
| C-AB | 341 | 799 | 0.427 | 341 | 0.7 | 7.832 | A |
| C-A | 382 | | | 382 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 290 | | | 290 | | | |

17:30 - 17:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 301 | 776 | 0.388 | 301 | 0.6 | 7.580 | A |
| B-A | 5 | 357 | 0.013 | 5 | 0.0 | 10.210 | B |
| C-AB | 341 | 799 | 0.427 | 341 | 0.7 | 7.844 | A |
| C-A | 382 | | | 382 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 290 | | | 290 | | | |

17:35 - 17:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 295 | 778 | 0.379 | 295 | 0.6 | 7.451 | A |
| B-A | 4 | 364 | 0.012 | 4 | 0.0 | 10.009 | B |
| C-AB | 333 | 802 | 0.416 | 333 | 0.7 | 7.697 | A |
| C-A | 373 | | | 373 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 283 | | | 283 | | | |

17:40 - 17:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 282 | 782 | 0.360 | 282 | 0.6 | 7.206 | A |
| B-A | 4 | 378 | 0.011 | 4 | 0.0 | 9.645 | A |
| C-AB | 319 | 806 | 0.396 | 319 | 0.7 | 7.414 | A |
| C-A | 357 | | | 357 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 271 | | | 271 | | | |

17:45 - 17:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 263 | 788 | 0.334 | 264 | 0.5 | 6.881 | A |
| B-A | 4 | 397 | 0.010 | 4 | 0.0 | 9.168 | A |
| C-AB | 298 | 812 | 0.367 | 299 | 0.6 | 7.038 | A |
| C-A | 333 | | | 333 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 253 | | | 253 | | | |

17:50 - 17:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 241 | 795 | 0.302 | 241 | 0.4 | 6.508 | A |
| B-A | 4 | 420 | 0.009 | 4 | 0.0 | 8.653 | A |
| C-AB | 272 | 819 | 0.332 | 273 | 0.5 | 6.614 | A |
| C-A | 305 | | | 305 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 231 | | | 231 | | | |

17:55 - 18:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 215 | 804 | 0.267 | 216 | 0.4 | 6.136 | A |
| B-A | 3 | 445 | 0.007 | 3 | 0.0 | 8.147 | A |
| C-AB | 243 | 827 | 0.294 | 244 | 0.4 | 6.190 | A |
| C-A | 272 | | | 272 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 207 | | | 207 | | | |

18:00 - 18:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 201 | 808 | 0.249 | 202 | 0.3 | 5.948 | A |
| B-A | 3 | 459 | 0.007 | 3 | 0.0 | 7.904 | A |
| C-AB | 228 | 831 | 0.274 | 228 | 0.4 | 5.976 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

18:05 - 18:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 201 | 808 | 0.249 | 201 | 0.3 | 5.940 | A |
| B-A | 3 | 459 | 0.007 | 3 | 0.0 | 7.898 | A |
| C-AB | 228 | 831 | 0.274 | 228 | 0.4 | 5.969 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

18:10 - 18:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 201 | 808 | 0.249 | 201 | 0.3 | 5.939 | A |
| B-A | 3 | 459 | 0.007 | 3 | 0.0 | 7.900 | A |
| C-AB | 228 | 831 | 0.274 | 228 | 0.4 | 5.966 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

2028 Test Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 5.03 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D5 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|-------------------------|--------------------|
| A - A38 (west) | | ✓ | 314 | 100.000 |
| B - Gloucester Road | | ✓ | 390 | 100.000 |
| C - A38 (east) | | ✓ | 592 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 2 | 312 |
| | B - Gloucester Road | 2 | 0 | 388 |
| | C - A38 (east) | 312 | 280 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 0 | 1 |
| | B - Gloucester Road | 0 | 0 | 1 |
| | C - A38 (east) | 4 | 3 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.58 | 11.04 | 1.3 | B |
| B-A | 0.01 | 12.17 | 0.0 | B |
| C-AB | 0.41 | 8.00 | 0.7 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

07:45 - 07:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 294 | 802 | 0.366 | 287 | 0.6 | 6.911 | A |
| B-A | 2 | 443 | 0.003 | 1 | 0.0 | 8.159 | A |
| C-AB | 212 | 804 | 0.264 | 208 | 0.3 | 5.997 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

07:50 - 07:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 294 | 802 | 0.366 | 294 | 0.6 | 7.080 | A |
| B-A | 2 | 440 | 0.003 | 2 | 0.0 | 8.216 | A |
| C-AB | 212 | 804 | 0.264 | 212 | 0.4 | 6.078 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

07:55 - 08:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 294 | 802 | 0.366 | 294 | 0.6 | 7.083 | A |
| B-A | 2 | 440 | 0.003 | 2 | 0.0 | 8.217 | A |
| C-AB | 212 | 804 | 0.264 | 212 | 0.4 | 6.078 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

08:00 - 08:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 313 | 797 | 0.393 | 313 | 0.6 | 7.422 | A |
| B-A | 2 | 423 | 0.004 | 2 | 0.0 | 8.540 | A |
| C-AB | 226 | 799 | 0.283 | 226 | 0.4 | 6.268 | A |
| C-A | 252 | | | 252 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 252 | | | 252 | | | |

08:05 - 08:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 351 | 787 | 0.446 | 349 | 0.8 | 8.180 | A |
| B-A | 2 | 390 | 0.005 | 2 | 0.0 | 9.275 | A |
| C-AB | 253 | 790 | 0.321 | 252 | 0.5 | 6.686 | A |
| C-A | 282 | | | 282 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 282 | | | 282 | | | |

08:10 - 08:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 384 | 779 | 0.493 | 382 | 0.9 | 9.023 | A |
| B-A | 2 | 358 | 0.006 | 2 | 0.0 | 10.110 | B |
| C-AB | 277 | 781 | 0.355 | 276 | 0.5 | 7.110 | A |
| C-A | 309 | | | 309 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 309 | | | 309 | | | |

08:15 - 08:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 411 | 772 | 0.532 | 409 | 1.1 | 9.852 | A |
| B-A | 2 | 330 | 0.006 | 2 | 0.0 | 10.963 | B |
| C-AB | 296 | 774 | 0.383 | 296 | 0.6 | 7.502 | A |
| C-A | 330 | | | 330 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 330 | | | 330 | | | |

08:20 - 08:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 430 | 767 | 0.560 | 428 | 1.2 | 10.554 | B |
| B-A | 2 | 310 | 0.007 | 2 | 0.0 | 11.699 | B |
| C-AB | 310 | 769 | 0.403 | 309 | 0.7 | 7.807 | A |
| C-A | 345 | | | 345 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 346 | | | 346 | | | |

08:25 - 08:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 439 | 764 | 0.575 | 438 | 1.3 | 10.985 | B |
| B-A | 2 | 299 | 0.008 | 2 | 0.0 | 12.145 | B |
| C-AB | 317 | 767 | 0.413 | 317 | 0.7 | 7.983 | A |
| C-A | 353 | | | 353 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 353 | | | 353 | | | |

08:30 - 08:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 439 | 764 | 0.575 | 439 | 1.3 | 11.041 | B |
| B-A | 2 | 298 | 0.008 | 2 | 0.0 | 12.170 | B |
| C-AB | 317 | 767 | 0.413 | 317 | 0.7 | 7.996 | A |
| C-A | 353 | | | 353 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 353 | | | 353 | | | |

08:35 - 08:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 430 | 767 | 0.560 | 430 | 1.3 | 10.705 | B |
| B-A | 2 | 308 | 0.007 | 2 | 0.0 | 11.764 | B |
| C-AB | 310 | 769 | 0.403 | 310 | 0.7 | 7.844 | A |
| C-A | 345 | | | 345 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 346 | | | 346 | | | |

08:40 - 08:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 411 | 772 | 0.532 | 412 | 1.2 | 10.072 | B |
| B-A | 2 | 328 | 0.006 | 2 | 0.0 | 11.052 | B |
| C-AB | 296 | 774 | 0.383 | 297 | 0.6 | 7.555 | A |
| C-A | 330 | | | 330 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 330 | | | 330 | | | |

08:45 - 08:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 384 | 779 | 0.493 | 386 | 1.0 | 9.233 | A |
| B-A | 2 | 355 | 0.006 | 2 | 0.0 | 10.191 | B |
| C-AB | 277 | 781 | 0.355 | 278 | 0.6 | 7.168 | A |
| C-A | 309 | | | 309 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 309 | | | 309 | | | |

08:50 - 08:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 351 | 787 | 0.446 | 353 | 0.8 | 8.341 | A |
| B-A | 2 | 388 | 0.005 | 2 | 0.0 | 9.333 | A |
| C-AB | 253 | 790 | 0.321 | 254 | 0.5 | 6.739 | A |
| C-A | 282 | | | 282 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 282 | | | 282 | | | |

08:55 - 09:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 313 | 797 | 0.393 | 315 | 0.7 | 7.516 | A |
| B-A | 2 | 422 | 0.004 | 2 | 0.0 | 8.570 | A |
| C-AB | 226 | 799 | 0.283 | 227 | 0.4 | 6.304 | A |
| C-A | 252 | | | 252 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 252 | | | 252 | | | |

09:00 - 09:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 294 | 802 | 0.366 | 295 | 0.6 | 7.115 | A |
| B-A | 2 | 439 | 0.003 | 2 | 0.0 | 8.227 | A |
| C-AB | 212 | 804 | 0.264 | 212 | 0.4 | 6.091 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

09:05 - 09:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 294 | 802 | 0.366 | 294 | 0.6 | 7.091 | A |
| B-A | 2 | 439 | 0.003 | 2 | 0.0 | 8.219 | A |
| C-AB | 212 | 804 | 0.264 | 212 | 0.4 | 6.082 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

09:10 - 09:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 294 | 802 | 0.366 | 294 | 0.6 | 7.092 | A |
| B-A | 2 | 440 | 0.003 | 2 | 0.0 | 8.220 | A |
| C-AB | 212 | 804 | 0.264 | 212 | 0.4 | 6.079 | A |
| C-A | 236 | | | 236 | | | |
| A-B | 2 | | | 2 | | | |
| A-C | 236 | | | 236 | | | |

2028 Test Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 4.19 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D6 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|-------------------------|--------------------|
| A - A38 (west) | | ✓ | 262 | 100.000 |
| B - Gloucester Road | | ✓ | 279 | 100.000 |
| C - A38 (east) | | ✓ | 679 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 6 | 256 |
| | B - Gloucester Road | 4 | 0 | 275 |
| | C - A38 (east) | 337 | 342 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|----------------|---------------------|----------------|
| | | A - A38 (west) | B - Gloucester Road | C - A38 (east) |
| From | A - A38 (west) | 0 | 0 | 2 |
| | B - Gloucester Road | 0 | 0 | 2 |
| | C - A38 (east) | 4 | 1 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.40 | 7.74 | 0.7 | A |
| B-A | 0.01 | 10.77 | 0.0 | B |
| C-AB | 0.48 | 8.72 | 0.9 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

16:45 - 16:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 208 | 808 | 0.258 | 204 | 0.3 | 5.926 | A |
| B-A | 3 | 449 | 0.007 | 3 | 0.0 | 8.065 | A |
| C-AB | 259 | 831 | 0.312 | 254 | 0.4 | 6.178 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

16:50 - 16:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 208 | 808 | 0.258 | 208 | 0.3 | 6.004 | A |
| B-A | 3 | 447 | 0.007 | 3 | 0.0 | 8.108 | A |
| C-AB | 259 | 831 | 0.312 | 259 | 0.4 | 6.286 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

16:55 - 17:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 208 | 808 | 0.258 | 208 | 0.3 | 6.004 | A |
| B-A | 3 | 447 | 0.007 | 3 | 0.0 | 8.108 | A |
| C-AB | 259 | 831 | 0.312 | 259 | 0.4 | 6.289 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

17:00 - 17:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 222 | 803 | 0.277 | 222 | 0.4 | 6.188 | A |
| B-A | 3 | 433 | 0.007 | 3 | 0.0 | 8.371 | A |
| C-AB | 276 | 827 | 0.334 | 276 | 0.5 | 6.523 | A |
| C-A | 272 | | | 272 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 207 | | | 207 | | | |

17:05 - 17:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 249 | 795 | 0.313 | 248 | 0.4 | 6.563 | A |
| B-A | 4 | 406 | 0.009 | 4 | 0.0 | 8.935 | A |
| C-AB | 309 | 819 | 0.378 | 308 | 0.6 | 7.027 | A |
| C-A | 305 | | | 305 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 231 | | | 231 | | | |

17:10 - 17:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 272 | 788 | 0.345 | 271 | 0.5 | 6.951 | A |
| B-A | 4 | 382 | 0.010 | 4 | 0.0 | 9.524 | A |
| C-AB | 338 | 812 | 0.417 | 337 | 0.7 | 7.562 | A |
| C-A | 333 | | | 333 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 253 | | | 253 | | | |

17:15 - 17:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 291 | 782 | 0.372 | 290 | 0.6 | 7.303 | A |
| B-A | 4 | 361 | 0.012 | 4 | 0.0 | 10.077 | B |
| C-AB | 362 | 806 | 0.449 | 361 | 0.8 | 8.090 | A |
| C-A | 357 | | | 357 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 271 | | | 271 | | | |

17:20 - 17:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 305 | 778 | 0.391 | 304 | 0.6 | 7.567 | A |
| B-A | 4 | 347 | 0.013 | 4 | 0.0 | 10.517 | B |
| C-AB | 379 | 802 | 0.473 | 378 | 0.9 | 8.467 | A |
| C-A | 373 | | | 373 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 283 | | | 283 | | | |

17:25 - 17:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 311 | 776 | 0.401 | 311 | 0.7 | 7.734 | A |
| B-A | 5 | 339 | 0.013 | 5 | 0.0 | 10.766 | B |
| C-AB | 387 | 799 | 0.485 | 387 | 0.9 | 8.702 | A |
| C-A | 382 | | | 382 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 290 | | | 290 | | | |

17:30 - 17:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 311 | 776 | 0.401 | 311 | 0.7 | 7.742 | A |
| B-A | 5 | 339 | 0.013 | 5 | 0.0 | 10.775 | B |
| C-AB | 387 | 799 | 0.485 | 387 | 0.9 | 8.716 | A |
| C-A | 382 | | | 382 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 290 | | | 290 | | | |

17:35 - 17:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 305 | 778 | 0.391 | 305 | 0.7 | 7.607 | A |
| B-A | 4 | 346 | 0.013 | 4 | 0.0 | 10.540 | B |
| C-AB | 379 | 802 | 0.473 | 379 | 0.9 | 8.526 | A |
| C-A | 373 | | | 373 | | | |
| A-B | 7 | | | 7 | | | |
| A-C | 283 | | | 283 | | | |

17:40 - 17:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 291 | 782 | 0.372 | 292 | 0.6 | 7.349 | A |
| B-A | 4 | 360 | 0.012 | 4 | 0.0 | 10.113 | B |
| C-AB | 362 | 806 | 0.449 | 363 | 0.8 | 8.154 | A |
| C-A | 357 | | | 357 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 271 | | | 271 | | | |

17:45 - 17:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 272 | 788 | 0.345 | 273 | 0.5 | 7.003 | A |
| B-A | 4 | 381 | 0.010 | 4 | 0.0 | 9.563 | A |
| C-AB | 338 | 812 | 0.417 | 340 | 0.7 | 7.653 | A |
| C-A | 333 | | | 333 | | | |
| A-B | 6 | | | 6 | | | |
| A-C | 253 | | | 253 | | | |

17:50 - 17:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 249 | 795 | 0.313 | 250 | 0.5 | 6.610 | A |
| B-A | 4 | 405 | 0.009 | 4 | 0.0 | 8.968 | A |
| C-AB | 309 | 819 | 0.378 | 311 | 0.6 | 7.105 | A |
| C-A | 305 | | | 305 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 231 | | | 231 | | | |

17:55 - 18:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 222 | 803 | 0.277 | 223 | 0.4 | 6.212 | A |
| B-A | 3 | 432 | 0.007 | 3 | 0.0 | 8.391 | A |
| C-AB | 276 | 827 | 0.334 | 278 | 0.5 | 6.572 | A |
| C-A | 272 | | | 272 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 207 | | | 207 | | | |

18:00 - 18:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 208 | 808 | 0.258 | 209 | 0.4 | 6.016 | A |
| B-A | 3 | 447 | 0.007 | 3 | 0.0 | 8.117 | A |
| C-AB | 259 | 831 | 0.312 | 260 | 0.5 | 6.304 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

18:05 - 18:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 208 | 808 | 0.258 | 208 | 0.4 | 6.005 | A |
| B-A | 3 | 447 | 0.007 | 3 | 0.0 | 8.110 | A |
| C-AB | 259 | 831 | 0.312 | 259 | 0.5 | 6.291 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

18:10 - 18:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 208 | 808 | 0.258 | 208 | 0.4 | 6.007 | A |
| B-A | 3 | 447 | 0.007 | 3 | 0.0 | 8.111 | A |
| C-AB | 259 | 831 | 0.312 | 259 | 0.5 | 6.290 | A |
| C-A | 255 | | | 255 | | | |
| A-B | 5 | | | 5 | | | |
| A-C | 194 | | | 194 | | | |

| |
|--|
| Junctions 9 |
| ARCADY 9 - Roundabout Module |
| Version: 9.0.2.5947 © Copyright TRL Limited, 2017 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk |
| 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: Junction 3_18.07.26.j9

Path: J:\39209 West of Park Farm, Thornbury\Technical\Transport\Junction Assessments\ARCADY\2017 Base

Report generation date: 30/07/2018 16:01:42

- »2017 Base, AM
- »2017 Base, PM
- »2028 Reference Case, AM
- »2028 Reference Case, PM
- »2028 Test Case, AM
- »2028 Test Case, PM

Summary of junction performance

| | AM | | | | PM | | | |
|----------------------------|-------------|-----------|------|-----|-------------|-----------|------|-----|
| | Queue (Veh) | Delay (s) | RFC | LOS | Queue (Veh) | Delay (s) | RFC | LOS |
| 2017 Base | | | | | | | | |
| 1 - Morton Way | 0.2 | 3.02 | 0.19 | A | 0.1 | 2.76 | 0.12 | A |
| 2 - Grovesend Road (east) | 0.4 | 3.65 | 0.30 | A | 0.6 | 3.89 | 0.37 | A |
| 3 - Midland Way | 0.1 | 2.93 | 0.10 | A | 0.3 | 3.39 | 0.20 | A |
| 4 - Grovesend Road (west) | 0.3 | 3.37 | 0.22 | A | 0.3 | 3.72 | 0.21 | A |
| 2028 Reference Case | | | | | | | | |
| 1 - Morton Way | 1.5 | 6.23 | 0.61 | A | 0.5 | 3.64 | 0.32 | A |
| 2 - Grovesend Road (east) | 0.8 | 5.10 | 0.46 | A | 1.6 | 6.75 | 0.63 | A |
| 3 - Midland Way | 0.2 | 3.34 | 0.16 | A | 0.6 | 5.24 | 0.38 | A |
| 4 - Grovesend Road (west) | 0.4 | 3.94 | 0.27 | A | 0.4 | 5.47 | 0.31 | A |
| 2028 Test Case | | | | | | | | |
| 1 - Morton Way | 2.0 | 7.52 | 0.67 | A | 0.5 | 3.70 | 0.33 | A |
| 2 - Grovesend Road (east) | 0.9 | 5.26 | 0.47 | A | 2.0 | 7.56 | 0.67 | A |
| 3 - Midland Way | 0.2 | 3.38 | 0.16 | A | 0.7 | 5.67 | 0.41 | A |
| 4 - Grovesend Road (west) | 0.4 | 3.98 | 0.27 | A | 0.5 | 5.85 | 0.32 | A |

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

File summary

File Description

| | |
|--------------------|---|
| Title | Grovesend Road / Morton Way / Midland Way |
| Location | |
| Site number | |
| Date | 23/04/2018 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | PBA\jasaunders |
| 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 | Veh | Veh | perHour | s | -Min | perMin |

Analysis Options

| Calculate Queue Percentiles | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|-----------------------------|-----------------------------|---------------|-----------------------------|-----------------------|
| | | 0.85 | 36.00 | 20.00 |

Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D1 | 2017 Base | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D2 | 2017 Base | PM | ONE HOUR | 16:45 | 18:15 | 5 |
| D3 | 2028 Reference Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D4 | 2028 Reference Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |
| D5 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D6 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |

Analysis Set Details

| ID | Network flow scaling factor (%) |
|----|---------------------------------|
| A1 | 100.000 |

2017 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|------------|--------------------|--------------|
| 1 | untitled | Standard Roundabout | 1, 2, 3, 4 | 3.34 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Arms

Arms

| Arm | Name | Description |
|-----|-----------------------|-------------|
| 1 | Morton Way | |
| 2 | Grovesend Road (east) | |
| 3 | Midland Way | |
| 4 | Grovesend Road (west) | |

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) | Exit only |
|---------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|-----------|
| 1 - Morton Way | 3.60 | 6.10 | 19.4 | 50.0 | 40.0 | 15.5 | |
| 2 - Grovesend Road (east) | 3.60 | 6.70 | 9.3 | 20.0 | 40.0 | 27.5 | |
| 3 - Midland Way | 3.60 | 5.65 | 15.2 | 86.0 | 40.0 | 13.5 | |
| 4 - Grovesend Road (west) | 3.45 | 6.00 | 20.3 | 16.0 | 40.0 | 32.0 | |

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|---------------------------|-------------|--------------------------|
| 1 - Morton Way | 0.677 | 1757 |
| 2 - Grovesend Road (east) | 0.616 | 1558 |
| 3 - Midland Way | 0.664 | 1669 |
| 4 - Grovesend Road (west) | 0.609 | 1565 |

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

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) |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D1 | 2017 Base | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------------|------------|--------------|-------------------------|--------------------|
| 1 - Morton Way | | ✓ | 251 | 100.000 |
| 2 - Grovesend Road (east) | | ✓ | 379 | 100.000 |
| 3 - Midland Way | | ✓ | 124 | 100.000 |
| 4 - Grovesend Road (west) | | ✓ | 260 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 150 | 75 | 26 |
| | 2 - Grovesend Road (east) | 103 | 0 | 124 | 152 |
| | 3 - Midland Way | 35 | 77 | 0 | 12 |
| | 4 - Grovesend Road (west) | 23 | 197 | 40 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 3 | 0 | 4 |
| | 2 - Grovesend Road (east) | 5 | 0 | 0 | 5 |
| | 3 - Midland Way | 3 | 8 | 0 | 0 |
| | 4 - Grovesend Road (west) | 4 | 4 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|---------------------------|---------|---------------|-----------------|---------|
| 1 - Morton Way | 0.19 | 3.02 | 0.2 | A |
| 2 - Grovesend Road (east) | 0.30 | 3.65 | 0.4 | A |
| 3 - Midland Way | 0.10 | 2.93 | 0.1 | A |
| 4 - Grovesend Road (west) | 0.22 | 3.37 | 0.3 | A |

Main Results for each time segment

07:45 - 07:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 190 | 235 | 1559 | 0.122 | 188 | 0.1 | 2.623 | A |
| 2 - Grovesend Road (east) | 287 | 106 | 1446 | 0.198 | 284 | 0.2 | 3.089 | A |
| 3 - Midland Way | 94 | 211 | 1441 | 0.065 | 93 | 0.1 | 2.669 | A |
| 4 - Grovesend Road (west) | 197 | 161 | 1412 | 0.139 | 195 | 0.2 | 2.957 | A |

07:50 - 07:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 190 | 238 | 1557 | 0.122 | 190 | 0.1 | 2.632 | A |
| 2 - Grovesend Road (east) | 287 | 107 | 1446 | 0.198 | 287 | 0.2 | 3.105 | A |
| 3 - Midland Way | 94 | 213 | 1440 | 0.065 | 94 | 0.1 | 2.674 | A |
| 4 - Grovesend Road (west) | 197 | 163 | 1412 | 0.139 | 197 | 0.2 | 2.963 | A |

07:55 - 08:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 190 | 238 | 1557 | 0.122 | 190 | 0.1 | 2.632 | A |
| 2 - Grovesend Road (east) | 287 | 107 | 1446 | 0.198 | 287 | 0.2 | 3.105 | A |
| 3 - Midland Way | 94 | 213 | 1440 | 0.065 | 94 | 0.1 | 2.674 | A |
| 4 - Grovesend Road (west) | 197 | 163 | 1412 | 0.139 | 197 | 0.2 | 2.963 | A |

08:00 - 08:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 203 | 253 | 1546 | 0.131 | 203 | 0.1 | 2.679 | A |
| 2 - Grovesend Road (east) | 306 | 114 | 1442 | 0.212 | 306 | 0.3 | 3.170 | A |
| 3 - Midland Way | 100 | 227 | 1431 | 0.070 | 100 | 0.1 | 2.705 | A |
| 4 - Grovesend Road (west) | 210 | 174 | 1405 | 0.150 | 210 | 0.2 | 3.012 | A |

08:05 - 08:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 227 | 284 | 1525 | 0.149 | 227 | 0.2 | 2.772 | A |
| 2 - Grovesend Road (east) | 343 | 127 | 1433 | 0.239 | 342 | 0.3 | 3.297 | A |
| 3 - Midland Way | 112 | 254 | 1413 | 0.079 | 112 | 0.1 | 2.766 | A |
| 4 - Grovesend Road (west) | 235 | 194 | 1392 | 0.169 | 235 | 0.2 | 3.110 | A |

08:10 - 08:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 248 | 310 | 1507 | 0.165 | 248 | 0.2 | 2.860 | A |
| 2 - Grovesend Road (east) | 375 | 139 | 1426 | 0.263 | 374 | 0.4 | 3.421 | A |
| 3 - Midland Way | 123 | 278 | 1397 | 0.088 | 123 | 0.1 | 2.824 | A |
| 4 - Grovesend Road (west) | 257 | 212 | 1381 | 0.186 | 257 | 0.2 | 3.203 | A |

08:15 - 08:20

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 266 | 332 | 1492 | 0.178 | 265 | 0.2 | 2.935 | A |
| 2 - Grovesend Road (east) | 401 | 149 | 1420 | 0.282 | 401 | 0.4 | 3.528 | A |
| 3 - Midland Way | 131 | 297 | 1384 | 0.095 | 131 | 0.1 | 2.872 | A |
| 4 - Grovesend Road (west) | 275 | 227 | 1371 | 0.201 | 275 | 0.2 | 3.283 | A |

08:20 - 08:25

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 278 | 347 | 1481 | 0.188 | 278 | 0.2 | 2.991 | A |
| 2 - Grovesend Road (east) | 420 | 156 | 1416 | 0.296 | 419 | 0.4 | 3.611 | A |
| 3 - Midland Way | 137 | 311 | 1375 | 0.100 | 137 | 0.1 | 2.907 | A |
| 4 - Grovesend Road (west) | 288 | 238 | 1365 | 0.211 | 288 | 0.3 | 3.342 | A |

08:25 - 08:30

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 284 | 356 | 1475 | 0.193 | 284 | 0.2 | 3.021 | A |
| 2 - Grovesend Road (east) | 429 | 160 | 1414 | 0.304 | 429 | 0.4 | 3.654 | A |
| 3 - Midland Way | 140 | 318 | 1371 | 0.102 | 140 | 0.1 | 2.926 | A |
| 4 - Grovesend Road (west) | 294 | 243 | 1361 | 0.216 | 294 | 0.3 | 3.373 | A |

08:30 - 08:35

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 284 | 356 | 1475 | 0.193 | 284 | 0.2 | 3.021 | A |
| 2 - Grovesend Road (east) | 429 | 160 | 1414 | 0.304 | 429 | 0.4 | 3.655 | A |
| 3 - Midland Way | 140 | 318 | 1370 | 0.102 | 140 | 0.1 | 2.926 | A |
| 4 - Grovesend Road (west) | 294 | 243 | 1361 | 0.216 | 294 | 0.3 | 3.373 | A |

08:35 - 08:40

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 278 | 348 | 1481 | 0.188 | 278 | 0.2 | 2.995 | A |
| 2 - Grovesend Road (east) | 420 | 156 | 1416 | 0.296 | 420 | 0.4 | 3.613 | A |
| 3 - Midland Way | 137 | 311 | 1375 | 0.100 | 137 | 0.1 | 2.908 | A |
| 4 - Grovesend Road (west) | 288 | 238 | 1365 | 0.211 | 288 | 0.3 | 3.345 | A |

08:40 - 08:45

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 266 | 333 | 1491 | 0.178 | 266 | 0.2 | 2.937 | A |
| 2 - Grovesend Road (east) | 401 | 149 | 1420 | 0.283 | 402 | 0.4 | 3.534 | A |
| 3 - Midland Way | 131 | 298 | 1384 | 0.095 | 131 | 0.1 | 2.873 | A |
| 4 - Grovesend Road (west) | 275 | 228 | 1371 | 0.201 | 275 | 0.3 | 3.288 | A |

08:45 - 08:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 248 | 311 | 1506 | 0.165 | 249 | 0.2 | 2.864 | A |
| 2 - Grovesend Road (east) | 375 | 140 | 1426 | 0.263 | 375 | 0.4 | 3.427 | A |
| 3 - Midland Way | 123 | 278 | 1397 | 0.088 | 123 | 0.1 | 2.825 | A |
| 4 - Grovesend Road (west) | 257 | 213 | 1380 | 0.186 | 258 | 0.2 | 3.206 | A |

08:50 - 08:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 227 | 284 | 1525 | 0.149 | 227 | 0.2 | 2.776 | A |
| 2 - Grovesend Road (east) | 343 | 128 | 1433 | 0.239 | 343 | 0.3 | 3.306 | A |
| 3 - Midland Way | 112 | 254 | 1412 | 0.079 | 112 | 0.1 | 2.770 | A |
| 4 - Grovesend Road (west) | 235 | 195 | 1392 | 0.169 | 235 | 0.2 | 3.116 | A |

08:55 - 09:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 203 | 254 | 1546 | 0.131 | 203 | 0.2 | 2.681 | A |
| 2 - Grovesend Road (east) | 306 | 114 | 1441 | 0.212 | 307 | 0.3 | 3.176 | A |
| 3 - Midland Way | 100 | 227 | 1430 | 0.070 | 100 | 0.1 | 2.706 | A |
| 4 - Grovesend Road (west) | 210 | 174 | 1405 | 0.150 | 210 | 0.2 | 3.017 | A |

09:00 - 09:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 190 | 238 | 1557 | 0.122 | 190 | 0.1 | 2.633 | A |
| 2 - Grovesend Road (east) | 287 | 107 | 1446 | 0.199 | 287 | 0.3 | 3.107 | A |
| 3 - Midland Way | 94 | 213 | 1440 | 0.065 | 94 | 0.1 | 2.676 | A |
| 4 - Grovesend Road (west) | 197 | 163 | 1411 | 0.139 | 197 | 0.2 | 2.964 | A |

09:05 - 09:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 190 | 238 | 1557 | 0.122 | 190 | 0.1 | 2.633 | A |
| 2 - Grovesend Road (east) | 287 | 107 | 1446 | 0.198 | 287 | 0.2 | 3.106 | A |
| 3 - Midland Way | 94 | 213 | 1440 | 0.065 | 94 | 0.1 | 2.674 | A |
| 4 - Grovesend Road (west) | 197 | 163 | 1412 | 0.139 | 197 | 0.2 | 2.963 | A |

09:10 - 09:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 190 | 238 | 1557 | 0.122 | 190 | 0.1 | 2.635 | A |
| 2 - Grovesend Road (east) | 287 | 107 | 1446 | 0.198 | 287 | 0.2 | 3.108 | A |
| 3 - Midland Way | 94 | 213 | 1440 | 0.065 | 94 | 0.1 | 2.676 | A |
| 4 - Grovesend Road (west) | 197 | 163 | 1412 | 0.139 | 197 | 0.2 | 2.965 | A |

2017 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|------------|--------------------|--------------|
| 1 | untitled | Standard Roundabout | 1, 2, 3, 4 | 3.59 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D2 | 2017 Base | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------------|------------|--------------|-------------------------|--------------------|
| 1 - Morton Way | | ✓ | 154 | 100.000 |
| 2 - Grovesend Road (east) | | ✓ | 484 | 100.000 |
| 3 - Midland Way | | ✓ | 238 | 100.000 |
| 4 - Grovesend Road (west) | | ✓ | 223 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 100 | 29 | 25 |
| | 2 - Grovesend Road (east) | 195 | 0 | 114 | 175 |
| | 3 - Midland Way | 55 | 160 | 0 | 23 |
| | 4 - Grovesend Road (west) | 47 | 163 | 13 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 1 | 0 | 0 |
| | 2 - Grovesend Road (east) | 2 | 0 | 0 | 5 |
| | 3 - Midland Way | 2 | 3 | 0 | 0 |
| | 4 - Grovesend Road (west) | 4 | 5 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|---------------------------|---------|---------------|-----------------|---------|
| 1 - Morton Way | 0.12 | 2.76 | 0.1 | A |
| 2 - Grovesend Road (east) | 0.37 | 3.89 | 0.6 | A |
| 3 - Midland Way | 0.20 | 3.39 | 0.3 | A |
| 4 - Grovesend Road (west) | 0.21 | 3.72 | 0.3 | A |

Main Results for each time segment

16:45 - 16:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 117 | 252 | 1569 | 0.074 | 116 | 0.1 | 2.475 | A |
| 2 - Grovesend Road (east) | 366 | 50 | 1490 | 0.246 | 363 | 0.3 | 3.184 | A |
| 3 - Midland Way | 180 | 296 | 1431 | 0.126 | 179 | 0.1 | 2.871 | A |
| 4 - Grovesend Road (west) | 169 | 307 | 1315 | 0.128 | 167 | 0.1 | 3.137 | A |

16:50 - 16:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 117 | 254 | 1567 | 0.074 | 117 | 0.1 | 2.480 | A |
| 2 - Grovesend Road (east) | 366 | 51 | 1489 | 0.246 | 366 | 0.3 | 3.205 | A |
| 3 - Midland Way | 180 | 299 | 1429 | 0.126 | 180 | 0.1 | 2.882 | A |
| 4 - Grovesend Road (west) | 169 | 310 | 1313 | 0.129 | 169 | 0.1 | 3.146 | A |

16:55 - 17:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 117 | 254 | 1567 | 0.074 | 117 | 0.1 | 2.480 | A |
| 2 - Grovesend Road (east) | 366 | 51 | 1489 | 0.246 | 366 | 0.3 | 3.205 | A |
| 3 - Midland Way | 180 | 299 | 1429 | 0.126 | 180 | 0.1 | 2.882 | A |
| 4 - Grovesend Road (west) | 169 | 310 | 1313 | 0.129 | 169 | 0.1 | 3.146 | A |

17:00 - 17:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 124 | 271 | 1556 | 0.080 | 124 | 0.1 | 2.514 | A |
| 2 - Grovesend Road (east) | 391 | 54 | 1487 | 0.263 | 391 | 0.4 | 3.283 | A |
| 3 - Midland Way | 192 | 319 | 1416 | 0.136 | 192 | 0.2 | 2.942 | A |
| 4 - Grovesend Road (west) | 180 | 331 | 1301 | 0.139 | 180 | 0.2 | 3.212 | A |

17:05 - 17:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 139 | 303 | 1533 | 0.091 | 139 | 0.1 | 2.581 | A |
| 2 - Grovesend Road (east) | 438 | 61 | 1483 | 0.295 | 437 | 0.4 | 3.440 | A |
| 3 - Midland Way | 215 | 357 | 1390 | 0.155 | 215 | 0.2 | 3.062 | A |
| 4 - Grovesend Road (west) | 202 | 370 | 1277 | 0.158 | 201 | 0.2 | 3.346 | A |

17:10 - 17:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 152 | 332 | 1513 | 0.101 | 152 | 0.1 | 2.644 | A |
| 2 - Grovesend Road (east) | 479 | 66 | 1480 | 0.324 | 478 | 0.5 | 3.593 | A |
| 3 - Midland Way | 235 | 390 | 1368 | 0.172 | 235 | 0.2 | 3.178 | A |
| 4 - Grovesend Road (west) | 221 | 405 | 1256 | 0.176 | 220 | 0.2 | 3.475 | A |

17:15 - 17:20

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 163 | 355 | 1497 | 0.109 | 163 | 0.1 | 2.698 | A |
| 2 - Grovesend Road (east) | 512 | 71 | 1477 | 0.347 | 512 | 0.5 | 3.728 | A |
| 3 - Midland Way | 252 | 418 | 1350 | 0.187 | 252 | 0.2 | 3.279 | A |
| 4 - Grovesend Road (west) | 236 | 434 | 1239 | 0.190 | 236 | 0.2 | 3.587 | A |

17:20 - 17:25

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 171 | 372 | 1485 | 0.115 | 170 | 0.1 | 2.737 | A |
| 2 - Grovesend Road (east) | 536 | 74 | 1475 | 0.363 | 536 | 0.6 | 3.828 | A |
| 3 - Midland Way | 264 | 437 | 1337 | 0.197 | 263 | 0.2 | 3.354 | A |
| 4 - Grovesend Road (west) | 247 | 454 | 1227 | 0.201 | 247 | 0.2 | 3.671 | A |

17:25 - 17:30

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 174 | 380 | 1479 | 0.118 | 174 | 0.1 | 2.758 | A |
| 2 - Grovesend Road (east) | 548 | 76 | 1474 | 0.372 | 548 | 0.6 | 3.886 | A |
| 3 - Midland Way | 270 | 447 | 1330 | 0.203 | 269 | 0.3 | 3.394 | A |
| 4 - Grovesend Road (west) | 253 | 464 | 1221 | 0.207 | 252 | 0.3 | 3.716 | A |

17:30 - 17:35

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 174 | 381 | 1479 | 0.118 | 174 | 0.1 | 2.758 | A |
| 2 - Grovesend Road (east) | 548 | 76 | 1474 | 0.372 | 548 | 0.6 | 3.887 | A |
| 3 - Midland Way | 270 | 447 | 1330 | 0.203 | 270 | 0.3 | 3.395 | A |
| 4 - Grovesend Road (west) | 253 | 464 | 1221 | 0.207 | 253 | 0.3 | 3.716 | A |

17:35 - 17:40

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 171 | 372 | 1485 | 0.115 | 171 | 0.1 | 2.740 | A |
| 2 - Grovesend Road (east) | 536 | 74 | 1475 | 0.363 | 536 | 0.6 | 3.836 | A |
| 3 - Midland Way | 264 | 438 | 1336 | 0.197 | 264 | 0.2 | 3.355 | A |
| 4 - Grovesend Road (west) | 247 | 454 | 1227 | 0.201 | 247 | 0.3 | 3.673 | A |

17:40 - 17:45

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 163 | 356 | 1496 | 0.109 | 163 | 0.1 | 2.699 | A |
| 2 - Grovesend Road (east) | 512 | 71 | 1477 | 0.347 | 513 | 0.5 | 3.737 | A |
| 3 - Midland Way | 252 | 419 | 1349 | 0.187 | 252 | 0.2 | 3.284 | A |
| 4 - Grovesend Road (west) | 236 | 434 | 1239 | 0.191 | 236 | 0.2 | 3.590 | A |

17:45 - 17:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 152 | 333 | 1513 | 0.101 | 152 | 0.1 | 2.648 | A |
| 2 - Grovesend Road (east) | 479 | 66 | 1480 | 0.324 | 480 | 0.5 | 3.600 | A |
| 3 - Midland Way | 235 | 391 | 1367 | 0.172 | 236 | 0.2 | 3.182 | A |
| 4 - Grovesend Road (west) | 221 | 406 | 1256 | 0.176 | 221 | 0.2 | 3.482 | A |

17:50 - 17:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 139 | 304 | 1533 | 0.091 | 139 | 0.1 | 2.583 | A |
| 2 - Grovesend Road (east) | 438 | 61 | 1483 | 0.295 | 438 | 0.4 | 3.449 | A |
| 3 - Midland Way | 215 | 358 | 1390 | 0.155 | 215 | 0.2 | 3.066 | A |
| 4 - Grovesend Road (west) | 202 | 371 | 1276 | 0.158 | 202 | 0.2 | 3.350 | A |

17:55 - 18:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 124 | 272 | 1555 | 0.080 | 125 | 0.1 | 2.518 | A |
| 2 - Grovesend Road (east) | 391 | 54 | 1487 | 0.263 | 392 | 0.4 | 3.290 | A |
| 3 - Midland Way | 192 | 320 | 1415 | 0.136 | 193 | 0.2 | 2.947 | A |
| 4 - Grovesend Road (west) | 180 | 332 | 1300 | 0.139 | 180 | 0.2 | 3.215 | A |

18:00 - 18:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 117 | 255 | 1567 | 0.074 | 117 | 0.1 | 2.481 | A |
| 2 - Grovesend Road (east) | 366 | 51 | 1489 | 0.246 | 367 | 0.3 | 3.207 | A |
| 3 - Midland Way | 180 | 299 | 1429 | 0.126 | 180 | 0.1 | 2.886 | A |
| 4 - Grovesend Road (west) | 169 | 311 | 1313 | 0.129 | 169 | 0.1 | 3.147 | A |

18:05 - 18:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 117 | 254 | 1567 | 0.074 | 117 | 0.1 | 2.482 | A |
| 2 - Grovesend Road (east) | 366 | 51 | 1489 | 0.246 | 367 | 0.3 | 3.208 | A |
| 3 - Midland Way | 180 | 299 | 1429 | 0.126 | 180 | 0.1 | 2.885 | A |
| 4 - Grovesend Road (west) | 169 | 310 | 1313 | 0.129 | 169 | 0.1 | 3.148 | A |

18:10 - 18:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 117 | 254 | 1567 | 0.074 | 117 | 0.1 | 2.482 | A |
| 2 - Grovesend Road (east) | 366 | 51 | 1489 | 0.246 | 366 | 0.3 | 3.208 | A |
| 3 - Midland Way | 180 | 299 | 1429 | 0.126 | 180 | 0.1 | 2.885 | A |
| 4 - Grovesend Road (west) | 169 | 310 | 1313 | 0.129 | 169 | 0.1 | 3.146 | A |

2028 Reference Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|------------|--------------------|--------------|
| 1 | untitled | Standard Roundabout | 1, 2, 3, 4 | 5.21 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D3 | 2028 Reference Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------------|------------|--------------|-------------------------|--------------------|
| 1 - Morton Way | | ✓ | 785 | 100.000 |
| 2 - Grovesend Road (east) | | ✓ | 522 | 100.000 |
| 3 - Midland Way | | ✓ | 183 | 100.000 |
| 4 - Grovesend Road (west) | | ✓ | 294 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 504 | 240 | 41 |
| | 2 - Grovesend Road (east) | 215 | 0 | 138 | 169 |
| | 3 - Midland Way | 84 | 86 | 0 | 13 |
| | 4 - Grovesend Road (west) | 30 | 219 | 45 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 1 | 0 | 3 |
| | 2 - Grovesend Road (east) | 3 | 0 | 0 | 5 |
| | 3 - Midland Way | 1 | 8 | 0 | 0 |
| | 4 - Grovesend Road (west) | 4 | 4 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|---------------------------|---------|---------------|-----------------|---------|
| 1 - Morton Way | 0.61 | 6.23 | 1.5 | A |
| 2 - Grovesend Road (east) | 0.46 | 5.10 | 0.8 | A |
| 3 - Midland Way | 0.16 | 3.34 | 0.2 | A |
| 4 - Grovesend Road (west) | 0.27 | 3.94 | 0.4 | A |

Main Results for each time segment

07:45 - 07:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 594 | 262 | 1560 | 0.381 | 587 | 0.6 | 3.676 | A |
| 2 - Grovesend Road (east) | 395 | 244 | 1372 | 0.288 | 390 | 0.4 | 3.650 | A |
| 3 - Midland Way | 139 | 318 | 1391 | 0.100 | 137 | 0.1 | 2.869 | A |
| 4 - Grovesend Road (west) | 223 | 288 | 1337 | 0.167 | 220 | 0.2 | 3.217 | A |

07:50 - 07:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 594 | 265 | 1558 | 0.382 | 594 | 0.6 | 3.735 | A |
| 2 - Grovesend Road (east) | 395 | 247 | 1370 | 0.288 | 395 | 0.4 | 3.691 | A |
| 3 - Midland Way | 139 | 322 | 1388 | 0.100 | 139 | 0.1 | 2.879 | A |
| 4 - Grovesend Road (west) | 223 | 291 | 1335 | 0.167 | 223 | 0.2 | 3.235 | A |

07:55 - 08:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 594 | 265 | 1558 | 0.382 | 594 | 0.6 | 3.735 | A |
| 2 - Grovesend Road (east) | 395 | 247 | 1370 | 0.288 | 395 | 0.4 | 3.691 | A |
| 3 - Midland Way | 139 | 322 | 1388 | 0.100 | 139 | 0.1 | 2.879 | A |
| 4 - Grovesend Road (west) | 223 | 292 | 1335 | 0.167 | 223 | 0.2 | 3.235 | A |

08:00 - 08:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 634 | 283 | 1545 | 0.410 | 633 | 0.7 | 3.942 | A |
| 2 - Grovesend Road (east) | 422 | 263 | 1360 | 0.310 | 421 | 0.4 | 3.830 | A |
| 3 - Midland Way | 148 | 343 | 1374 | 0.108 | 148 | 0.1 | 2.934 | A |
| 4 - Grovesend Road (west) | 238 | 311 | 1323 | 0.179 | 237 | 0.2 | 3.314 | A |

08:05 - 08:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 710 | 316 | 1522 | 0.466 | 708 | 0.9 | 4.409 | A |
| 2 - Grovesend Road (east) | 472 | 294 | 1342 | 0.352 | 471 | 0.5 | 4.128 | A |
| 3 - Midland Way | 165 | 383 | 1348 | 0.123 | 165 | 0.1 | 3.044 | A |
| 4 - Grovesend Road (west) | 266 | 347 | 1301 | 0.204 | 265 | 0.3 | 3.474 | A |

08:10 - 08:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 777 | 346 | 1501 | 0.517 | 774 | 1.0 | 4.936 | A |
| 2 - Grovesend Road (east) | 516 | 322 | 1325 | 0.390 | 515 | 0.6 | 4.439 | A |
| 3 - Midland Way | 181 | 420 | 1324 | 0.137 | 181 | 0.2 | 3.149 | A |
| 4 - Grovesend Road (west) | 291 | 380 | 1281 | 0.227 | 290 | 0.3 | 3.632 | A |

08:15 - 08:20

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 831 | 370 | 1484 | 0.560 | 829 | 1.2 | 5.475 | A |
| 2 - Grovesend Road (east) | 553 | 344 | 1312 | 0.421 | 552 | 0.7 | 4.736 | A |
| 3 - Midland Way | 194 | 449 | 1305 | 0.149 | 194 | 0.2 | 3.240 | A |
| 4 - Grovesend Road (west) | 311 | 407 | 1265 | 0.246 | 311 | 0.3 | 3.771 | A |

08:20 - 08:25

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 869 | 387 | 1472 | 0.591 | 867 | 1.4 | 5.929 | A |
| 2 - Grovesend Road (east) | 578 | 360 | 1302 | 0.444 | 577 | 0.8 | 4.961 | A |
| 3 - Midland Way | 203 | 470 | 1291 | 0.157 | 203 | 0.2 | 3.307 | A |
| 4 - Grovesend Road (west) | 326 | 426 | 1253 | 0.260 | 325 | 0.3 | 3.879 | A |

08:25 - 08:30

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 889 | 396 | 1466 | 0.607 | 888 | 1.5 | 6.209 | A |
| 2 - Grovesend Road (east) | 591 | 369 | 1297 | 0.456 | 591 | 0.8 | 5.094 | A |
| 3 - Midland Way | 207 | 481 | 1284 | 0.161 | 207 | 0.2 | 3.344 | A |
| 4 - Grovesend Road (west) | 333 | 436 | 1247 | 0.267 | 333 | 0.4 | 3.936 | A |

08:30 - 08:35

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 889 | 396 | 1465 | 0.607 | 889 | 1.5 | 6.233 | A |
| 2 - Grovesend Road (east) | 591 | 369 | 1297 | 0.456 | 591 | 0.8 | 5.101 | A |
| 3 - Midland Way | 207 | 481 | 1283 | 0.162 | 207 | 0.2 | 3.344 | A |
| 4 - Grovesend Road (west) | 333 | 436 | 1247 | 0.267 | 333 | 0.4 | 3.938 | A |

08:35 - 08:40

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 869 | 388 | 1472 | 0.591 | 870 | 1.5 | 5.991 | A |
| 2 - Grovesend Road (east) | 578 | 361 | 1301 | 0.444 | 578 | 0.8 | 4.983 | A |
| 3 - Midland Way | 203 | 471 | 1290 | 0.157 | 203 | 0.2 | 3.312 | A |
| 4 - Grovesend Road (west) | 326 | 426 | 1253 | 0.260 | 326 | 0.4 | 3.884 | A |

08:40 - 08:45

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 831 | 371 | 1483 | 0.560 | 833 | 1.3 | 5.555 | A |
| 2 - Grovesend Road (east) | 553 | 346 | 1311 | 0.422 | 553 | 0.7 | 4.762 | A |
| 3 - Midland Way | 194 | 451 | 1304 | 0.149 | 194 | 0.2 | 3.243 | A |
| 4 - Grovesend Road (west) | 311 | 408 | 1264 | 0.246 | 312 | 0.3 | 3.779 | A |

08:45 - 08:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 777 | 347 | 1500 | 0.518 | 779 | 1.1 | 5.012 | A |
| 2 - Grovesend Road (east) | 516 | 324 | 1324 | 0.390 | 518 | 0.7 | 4.471 | A |
| 3 - Midland Way | 181 | 421 | 1323 | 0.137 | 181 | 0.2 | 3.156 | A |
| 4 - Grovesend Road (west) | 291 | 382 | 1280 | 0.227 | 291 | 0.3 | 3.644 | A |

08:50 - 08:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 710 | 317 | 1521 | 0.467 | 712 | 0.9 | 4.464 | A |
| 2 - Grovesend Road (east) | 472 | 296 | 1341 | 0.352 | 473 | 0.6 | 4.157 | A |
| 3 - Midland Way | 165 | 385 | 1347 | 0.123 | 166 | 0.1 | 3.050 | A |
| 4 - Grovesend Road (west) | 266 | 349 | 1300 | 0.204 | 266 | 0.3 | 3.482 | A |

08:55 - 09:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 634 | 283 | 1545 | 0.410 | 636 | 0.7 | 3.972 | A |
| 2 - Grovesend Road (east) | 422 | 264 | 1360 | 0.310 | 423 | 0.5 | 3.847 | A |
| 3 - Midland Way | 148 | 344 | 1374 | 0.108 | 148 | 0.1 | 2.939 | A |
| 4 - Grovesend Road (west) | 238 | 312 | 1323 | 0.180 | 238 | 0.2 | 3.322 | A |

09:00 - 09:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 594 | 265 | 1558 | 0.382 | 595 | 0.6 | 3.745 | A |
| 2 - Grovesend Road (east) | 395 | 247 | 1370 | 0.289 | 396 | 0.4 | 3.699 | A |
| 3 - Midland Way | 139 | 322 | 1388 | 0.100 | 139 | 0.1 | 2.883 | A |
| 4 - Grovesend Road (west) | 223 | 292 | 1335 | 0.167 | 223 | 0.2 | 3.240 | A |

09:05 - 09:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 594 | 265 | 1558 | 0.382 | 594 | 0.6 | 3.739 | A |
| 2 - Grovesend Road (east) | 395 | 247 | 1370 | 0.288 | 395 | 0.4 | 3.694 | A |
| 3 - Midland Way | 139 | 322 | 1388 | 0.100 | 139 | 0.1 | 2.879 | A |
| 4 - Grovesend Road (west) | 223 | 292 | 1335 | 0.167 | 223 | 0.2 | 3.238 | A |

09:10 - 09:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 594 | 265 | 1558 | 0.382 | 594 | 0.6 | 3.739 | A |
| 2 - Grovesend Road (east) | 395 | 247 | 1370 | 0.288 | 395 | 0.4 | 3.694 | A |
| 3 - Midland Way | 139 | 322 | 1388 | 0.100 | 139 | 0.1 | 2.882 | A |
| 4 - Grovesend Road (west) | 223 | 292 | 1335 | 0.167 | 223 | 0.2 | 3.238 | A |

2028 Reference Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|------------|--------------------|--------------|
| 1 | untitled | Standard Roundabout | 1, 2, 3, 4 | 5.56 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D4 | 2028 Reference Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------------|------------|--------------|-------------------------|--------------------|
| 1 - Morton Way | | ✓ | 415 | 100.000 |
| 2 - Grovesend Road (east) | | ✓ | 789 | 100.000 |
| 3 - Midland Way | | ✓ | 376 | 100.000 |
| 4 - Grovesend Road (west) | | ✓ | 256 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 275 | 104 | 36 |
| | 2 - Grovesend Road (east) | 471 | 0 | 125 | 193 |
| | 3 - Midland Way | 175 | 176 | 0 | 25 |
| | 4 - Grovesend Road (west) | 63 | 179 | 14 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 0 | 0 | 0 |
| | 2 - Grovesend Road (east) | 1 | 0 | 0 | 5 |
| | 3 - Midland Way | 1 | 3 | 0 | 0 |
| | 4 - Grovesend Road (west) | 4 | 5 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|---------------------------|---------|---------------|-----------------|---------|
| 1 - Morton Way | 0.32 | 3.64 | 0.5 | A |
| 2 - Grovesend Road (east) | 0.63 | 6.75 | 1.6 | A |
| 3 - Midland Way | 0.38 | 5.24 | 0.6 | A |
| 4 - Grovesend Road (west) | 0.31 | 5.47 | 0.4 | A |

Main Results for each time segment

16:45 - 16:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 314 | 276 | 1558 | 0.202 | 311 | 0.2 | 2.878 | A |
| 2 - Grovesend Road (east) | 597 | 115 | 1462 | 0.409 | 589 | 0.7 | 4.089 | A |
| 3 - Midland Way | 285 | 523 | 1292 | 0.220 | 281 | 0.3 | 3.550 | A |
| 4 - Grovesend Road (west) | 194 | 614 | 1135 | 0.171 | 191 | 0.2 | 3.805 | A |

16:50 - 16:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 314 | 279 | 1556 | 0.202 | 314 | 0.3 | 2.898 | A |
| 2 - Grovesend Road (east) | 597 | 117 | 1461 | 0.409 | 597 | 0.7 | 4.167 | A |
| 3 - Midland Way | 285 | 530 | 1287 | 0.221 | 285 | 0.3 | 3.589 | A |
| 4 - Grovesend Road (west) | 194 | 622 | 1130 | 0.171 | 194 | 0.2 | 3.843 | A |

16:55 - 17:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 314 | 279 | 1556 | 0.202 | 314 | 0.3 | 2.898 | A |
| 2 - Grovesend Road (east) | 597 | 117 | 1461 | 0.409 | 597 | 0.7 | 4.168 | A |
| 3 - Midland Way | 285 | 530 | 1287 | 0.221 | 285 | 0.3 | 3.589 | A |
| 4 - Grovesend Road (west) | 194 | 622 | 1130 | 0.171 | 194 | 0.2 | 3.843 | A |

17:00 - 17:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 335 | 298 | 1543 | 0.217 | 335 | 0.3 | 2.980 | A |
| 2 - Grovesend Road (east) | 637 | 124 | 1456 | 0.438 | 636 | 0.8 | 4.385 | A |
| 3 - Midland Way | 304 | 565 | 1264 | 0.240 | 303 | 0.3 | 3.743 | A |
| 4 - Grovesend Road (west) | 207 | 663 | 1106 | 0.187 | 207 | 0.2 | 4.000 | A |

17:05 - 17:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 375 | 333 | 1518 | 0.247 | 375 | 0.3 | 3.145 | A |
| 2 - Grovesend Road (east) | 713 | 139 | 1447 | 0.493 | 711 | 0.9 | 4.873 | A |
| 3 - Midland Way | 340 | 631 | 1220 | 0.279 | 339 | 0.4 | 4.081 | A |
| 4 - Grovesend Road (west) | 231 | 741 | 1060 | 0.218 | 231 | 0.3 | 4.341 | A |

17:10 - 17:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 411 | 364 | 1496 | 0.274 | 410 | 0.4 | 3.312 | A |
| 2 - Grovesend Road (east) | 781 | 152 | 1439 | 0.542 | 778 | 1.1 | 5.421 | A |
| 3 - Midland Way | 372 | 691 | 1181 | 0.315 | 371 | 0.5 | 4.444 | A |
| 4 - Grovesend Road (west) | 253 | 811 | 1019 | 0.249 | 253 | 0.3 | 4.692 | A |

17:15 - 17:20

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 439 | 390 | 1478 | 0.297 | 439 | 0.4 | 3.460 | A |
| 2 - Grovesend Road (east) | 835 | 163 | 1433 | 0.583 | 833 | 1.3 | 5.968 | A |
| 3 - Midland Way | 398 | 739 | 1148 | 0.347 | 397 | 0.5 | 4.785 | A |
| 4 - Grovesend Road (west) | 271 | 868 | 985 | 0.275 | 270 | 0.4 | 5.032 | A |

17:20 - 17:25

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 460 | 408 | 1466 | 0.314 | 459 | 0.5 | 3.574 | A |
| 2 - Grovesend Road (east) | 874 | 170 | 1428 | 0.612 | 872 | 1.5 | 6.434 | A |
| 3 - Midland Way | 416 | 773 | 1125 | 0.370 | 416 | 0.6 | 5.066 | A |
| 4 - Grovesend Road (west) | 283 | 908 | 961 | 0.295 | 283 | 0.4 | 5.308 | A |

17:25 - 17:30

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 470 | 418 | 1459 | 0.322 | 470 | 0.5 | 3.639 | A |
| 2 - Grovesend Road (east) | 894 | 174 | 1426 | 0.627 | 892 | 1.6 | 6.716 | A |
| 3 - Midland Way | 426 | 792 | 1113 | 0.383 | 425 | 0.6 | 5.233 | A |
| 4 - Grovesend Road (west) | 290 | 930 | 949 | 0.306 | 290 | 0.4 | 5.461 | A |

17:30 - 17:35

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 470 | 418 | 1459 | 0.322 | 470 | 0.5 | 3.640 | A |
| 2 - Grovesend Road (east) | 894 | 174 | 1426 | 0.627 | 893 | 1.6 | 6.746 | A |
| 3 - Midland Way | 426 | 793 | 1113 | 0.383 | 426 | 0.6 | 5.238 | A |
| 4 - Grovesend Road (west) | 290 | 931 | 948 | 0.306 | 290 | 0.4 | 5.469 | A |

17:35 - 17:40

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 460 | 409 | 1465 | 0.314 | 460 | 0.5 | 3.580 | A |
| 2 - Grovesend Road (east) | 874 | 171 | 1428 | 0.612 | 874 | 1.6 | 6.507 | A |
| 3 - Midland Way | 416 | 775 | 1124 | 0.370 | 417 | 0.6 | 5.092 | A |
| 4 - Grovesend Road (west) | 283 | 911 | 960 | 0.295 | 284 | 0.4 | 5.326 | A |

17:40 - 17:45

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 439 | 391 | 1477 | 0.297 | 440 | 0.4 | 3.472 | A |
| 2 - Grovesend Road (east) | 835 | 163 | 1433 | 0.583 | 837 | 1.4 | 6.074 | A |
| 3 - Midland Way | 398 | 743 | 1146 | 0.347 | 399 | 0.5 | 4.824 | A |
| 4 - Grovesend Road (west) | 271 | 872 | 983 | 0.276 | 271 | 0.4 | 5.064 | A |

17:45 - 17:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 411 | 366 | 1495 | 0.275 | 411 | 0.4 | 3.322 | A |
| 2 - Grovesend Road (east) | 781 | 153 | 1439 | 0.542 | 783 | 1.2 | 5.515 | A |
| 3 - Midland Way | 372 | 695 | 1178 | 0.316 | 373 | 0.5 | 4.480 | A |
| 4 - Grovesend Road (west) | 253 | 816 | 1016 | 0.249 | 254 | 0.3 | 4.729 | A |

17:50 - 17:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 375 | 335 | 1517 | 0.247 | 376 | 0.3 | 3.157 | A |
| 2 - Grovesend Road (east) | 713 | 139 | 1447 | 0.493 | 716 | 1.0 | 4.944 | A |
| 3 - Midland Way | 340 | 635 | 1217 | 0.279 | 341 | 0.4 | 4.111 | A |
| 4 - Grovesend Road (west) | 231 | 746 | 1057 | 0.219 | 232 | 0.3 | 4.365 | A |

17:55 - 18:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 335 | 299 | 1542 | 0.217 | 336 | 0.3 | 2.987 | A |
| 2 - Grovesend Road (east) | 637 | 125 | 1456 | 0.438 | 640 | 0.8 | 4.426 | A |
| 3 - Midland Way | 304 | 568 | 1262 | 0.241 | 305 | 0.3 | 3.761 | A |
| 4 - Grovesend Road (west) | 207 | 666 | 1104 | 0.187 | 207 | 0.2 | 4.017 | A |

18:00 - 18:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 314 | 280 | 1556 | 0.202 | 315 | 0.3 | 2.900 | A |
| 2 - Grovesend Road (east) | 597 | 117 | 1461 | 0.409 | 599 | 0.7 | 4.182 | A |
| 3 - Midland Way | 285 | 531 | 1287 | 0.221 | 285 | 0.3 | 3.594 | A |
| 4 - Grovesend Road (west) | 194 | 623 | 1130 | 0.172 | 194 | 0.2 | 3.850 | A |

18:05 - 18:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 314 | 279 | 1556 | 0.202 | 314 | 0.3 | 2.901 | A |
| 2 - Grovesend Road (east) | 597 | 117 | 1461 | 0.409 | 598 | 0.7 | 4.170 | A |
| 3 - Midland Way | 285 | 530 | 1287 | 0.221 | 285 | 0.3 | 3.592 | A |
| 4 - Grovesend Road (west) | 194 | 622 | 1130 | 0.172 | 194 | 0.2 | 3.844 | A |

18:10 - 18:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 314 | 279 | 1556 | 0.202 | 314 | 0.3 | 2.901 | A |
| 2 - Grovesend Road (east) | 597 | 117 | 1461 | 0.409 | 597 | 0.7 | 4.171 | A |
| 3 - Midland Way | 285 | 530 | 1287 | 0.221 | 285 | 0.3 | 3.592 | A |
| 4 - Grovesend Road (west) | 194 | 622 | 1130 | 0.171 | 194 | 0.2 | 3.844 | A |

2028 Test Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|------------|--------------------|--------------|
| 1 | untitled | Standard Roundabout | 1, 2, 3, 4 | 5.90 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D5 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------------|------------|--------------|-------------------------|--------------------|
| 1 - Morton Way | | ✓ | 873 | 100.000 |
| 2 - Grovesend Road (east) | | ✓ | 536 | 100.000 |
| 3 - Midland Way | | ✓ | 185 | 100.000 |
| 4 - Grovesend Road (west) | | ✓ | 294 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 580 | 251 | 42 |
| | 2 - Grovesend Road (east) | 229 | 0 | 138 | 169 |
| | 3 - Midland Way | 86 | 86 | 0 | 13 |
| | 4 - Grovesend Road (west) | 30 | 219 | 45 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 1 | 0 | 3 |
| | 2 - Grovesend Road (east) | 2 | 0 | 0 | 5 |
| | 3 - Midland Way | 1 | 8 | 0 | 0 |
| | 4 - Grovesend Road (west) | 4 | 4 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|---------------------------|---------|---------------|-----------------|---------|
| 1 - Morton Way | 0.67 | 7.52 | 2.0 | A |
| 2 - Grovesend Road (east) | 0.47 | 5.26 | 0.9 | A |
| 3 - Midland Way | 0.16 | 3.38 | 0.2 | A |
| 4 - Grovesend Road (west) | 0.27 | 3.98 | 0.4 | A |

Main Results for each time segment

07:45 - 07:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 661 | 262 | 1560 | 0.424 | 652 | 0.7 | 3.932 | A |
| 2 - Grovesend Road (east) | 406 | 253 | 1370 | 0.296 | 401 | 0.4 | 3.697 | A |
| 3 - Midland Way | 140 | 329 | 1385 | 0.101 | 139 | 0.1 | 2.887 | A |
| 4 - Grovesend Road (west) | 223 | 300 | 1331 | 0.167 | 220 | 0.2 | 3.233 | A |

07:50 - 07:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 661 | 265 | 1558 | 0.424 | 661 | 0.7 | 4.013 | A |
| 2 - Grovesend Road (east) | 406 | 256 | 1368 | 0.297 | 406 | 0.4 | 3.740 | A |
| 3 - Midland Way | 140 | 333 | 1382 | 0.101 | 140 | 0.1 | 2.898 | A |
| 4 - Grovesend Road (west) | 223 | 304 | 1329 | 0.167 | 223 | 0.2 | 3.252 | A |

07:55 - 08:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 661 | 265 | 1558 | 0.424 | 661 | 0.7 | 4.015 | A |
| 2 - Grovesend Road (east) | 406 | 256 | 1368 | 0.297 | 406 | 0.4 | 3.740 | A |
| 3 - Midland Way | 140 | 333 | 1382 | 0.101 | 140 | 0.1 | 2.898 | A |
| 4 - Grovesend Road (west) | 223 | 304 | 1329 | 0.167 | 223 | 0.2 | 3.252 | A |

08:00 - 08:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 705 | 283 | 1545 | 0.456 | 704 | 0.8 | 4.273 | A |
| 2 - Grovesend Road (east) | 433 | 273 | 1358 | 0.319 | 433 | 0.5 | 3.887 | A |
| 3 - Midland Way | 149 | 355 | 1368 | 0.109 | 149 | 0.1 | 2.954 | A |
| 4 - Grovesend Road (west) | 238 | 324 | 1317 | 0.180 | 237 | 0.2 | 3.333 | A |

08:05 - 08:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 789 | 316 | 1522 | 0.519 | 787 | 1.0 | 4.880 | A |
| 2 - Grovesend Road (east) | 485 | 305 | 1339 | 0.362 | 483 | 0.6 | 4.203 | A |
| 3 - Midland Way | 167 | 397 | 1340 | 0.125 | 167 | 0.1 | 3.068 | A |
| 4 - Grovesend Road (west) | 266 | 362 | 1294 | 0.205 | 265 | 0.3 | 3.498 | A |

08:10 - 08:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 864 | 346 | 1501 | 0.576 | 861 | 1.3 | 5.590 | A |
| 2 - Grovesend Road (east) | 530 | 333 | 1321 | 0.401 | 529 | 0.7 | 4.536 | A |
| 3 - Midland Way | 183 | 434 | 1316 | 0.139 | 183 | 0.2 | 3.178 | A |
| 4 - Grovesend Road (west) | 291 | 396 | 1273 | 0.228 | 290 | 0.3 | 3.661 | A |

08:15 - 08:20

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 924 | 370 | 1484 | 0.623 | 921 | 1.6 | 6.348 | A |
| 2 - Grovesend Road (east) | 567 | 357 | 1307 | 0.434 | 566 | 0.7 | 4.850 | A |
| 3 - Midland Way | 196 | 465 | 1296 | 0.151 | 196 | 0.2 | 3.272 | A |
| 4 - Grovesend Road (west) | 311 | 424 | 1256 | 0.248 | 311 | 0.3 | 3.805 | A |

08:20 - 08:25

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 967 | 387 | 1472 | 0.657 | 964 | 1.8 | 7.029 | A |
| 2 - Grovesend Road (east) | 594 | 373 | 1297 | 0.458 | 593 | 0.8 | 5.108 | A |
| 3 - Midland Way | 205 | 486 | 1281 | 0.160 | 205 | 0.2 | 3.343 | A |
| 4 - Grovesend Road (west) | 326 | 444 | 1244 | 0.262 | 325 | 0.3 | 3.917 | A |

08:25 - 08:30

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 989 | 396 | 1465 | 0.675 | 987 | 2.0 | 7.468 | A |
| 2 - Grovesend Road (east) | 607 | 382 | 1292 | 0.470 | 607 | 0.9 | 5.246 | A |
| 3 - Midland Way | 210 | 498 | 1274 | 0.165 | 209 | 0.2 | 3.381 | A |
| 4 - Grovesend Road (west) | 333 | 454 | 1238 | 0.269 | 333 | 0.4 | 3.975 | A |

08:30 - 08:35

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 989 | 396 | 1465 | 0.675 | 988 | 2.0 | 7.523 | A |
| 2 - Grovesend Road (east) | 607 | 383 | 1292 | 0.470 | 607 | 0.9 | 5.257 | A |
| 3 - Midland Way | 210 | 498 | 1274 | 0.165 | 210 | 0.2 | 3.382 | A |
| 4 - Grovesend Road (west) | 333 | 454 | 1238 | 0.269 | 333 | 0.4 | 3.978 | A |

08:35 - 08:40

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 967 | 388 | 1471 | 0.657 | 967 | 2.0 | 7.163 | A |
| 2 - Grovesend Road (east) | 594 | 374 | 1296 | 0.458 | 594 | 0.9 | 5.126 | A |
| 3 - Midland Way | 205 | 487 | 1281 | 0.160 | 205 | 0.2 | 3.345 | A |
| 4 - Grovesend Road (west) | 326 | 444 | 1244 | 0.262 | 326 | 0.4 | 3.922 | A |

08:40 - 08:45

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 924 | 371 | 1483 | 0.623 | 927 | 1.7 | 6.517 | A |
| 2 - Grovesend Road (east) | 567 | 359 | 1306 | 0.434 | 568 | 0.8 | 4.887 | A |
| 3 - Midland Way | 196 | 467 | 1294 | 0.151 | 196 | 0.2 | 3.279 | A |
| 4 - Grovesend Road (west) | 311 | 425 | 1256 | 0.248 | 312 | 0.3 | 3.813 | A |

08:45 - 08:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 864 | 347 | 1500 | 0.576 | 868 | 1.4 | 5.731 | A |
| 2 - Grovesend Road (east) | 530 | 336 | 1320 | 0.402 | 532 | 0.7 | 4.576 | A |
| 3 - Midland Way | 183 | 436 | 1314 | 0.139 | 183 | 0.2 | 3.185 | A |
| 4 - Grovesend Road (west) | 291 | 397 | 1272 | 0.229 | 291 | 0.3 | 3.670 | A |

08:50 - 08:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 789 | 317 | 1521 | 0.519 | 793 | 1.1 | 4.969 | A |
| 2 - Grovesend Road (east) | 485 | 307 | 1337 | 0.362 | 486 | 0.6 | 4.235 | A |
| 3 - Midland Way | 167 | 399 | 1339 | 0.125 | 168 | 0.1 | 3.073 | A |
| 4 - Grovesend Road (west) | 266 | 363 | 1293 | 0.206 | 266 | 0.3 | 3.509 | A |

08:55 - 09:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 705 | 283 | 1545 | 0.457 | 708 | 0.9 | 4.319 | A |
| 2 - Grovesend Road (east) | 433 | 274 | 1357 | 0.319 | 434 | 0.5 | 3.907 | A |
| 3 - Midland Way | 149 | 357 | 1367 | 0.109 | 150 | 0.1 | 2.958 | A |
| 4 - Grovesend Road (west) | 238 | 325 | 1317 | 0.180 | 238 | 0.2 | 3.341 | A |

09:00 - 09:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 661 | 265 | 1557 | 0.424 | 662 | 0.8 | 4.030 | A |
| 2 - Grovesend Road (east) | 406 | 256 | 1368 | 0.297 | 406 | 0.4 | 3.749 | A |
| 3 - Midland Way | 140 | 334 | 1382 | 0.101 | 140 | 0.1 | 2.899 | A |
| 4 - Grovesend Road (west) | 223 | 304 | 1329 | 0.168 | 223 | 0.2 | 3.254 | A |

09:05 - 09:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 661 | 265 | 1558 | 0.424 | 661 | 0.7 | 4.016 | A |
| 2 - Grovesend Road (east) | 406 | 256 | 1368 | 0.297 | 406 | 0.4 | 3.740 | A |
| 3 - Midland Way | 140 | 333 | 1382 | 0.101 | 140 | 0.1 | 2.900 | A |
| 4 - Grovesend Road (west) | 223 | 304 | 1329 | 0.167 | 223 | 0.2 | 3.254 | A |

09:10 - 09:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 661 | 265 | 1558 | 0.424 | 661 | 0.7 | 4.015 | A |
| 2 - Grovesend Road (east) | 406 | 256 | 1368 | 0.297 | 406 | 0.4 | 3.743 | A |
| 3 - Midland Way | 140 | 333 | 1382 | 0.101 | 140 | 0.1 | 2.898 | A |
| 4 - Grovesend Road (west) | 223 | 304 | 1329 | 0.167 | 223 | 0.2 | 3.254 | A |

2028 Test Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|---------------------|------------|--------------------|--------------|
| 1 | untitled | Standard Roundabout | 1, 2, 3, 4 | 6.09 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D6 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|---------------------------|------------|--------------|-------------------------|--------------------|
| 1 - Morton Way | | ✓ | 430 | 100.000 |
| 2 - Grovesend Road (east) | | ✓ | 840 | 100.000 |
| 3 - Midland Way | | ✓ | 389 | 100.000 |
| 4 - Grovesend Road (west) | | ✓ | 257 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 287 | 107 | 36 |
| | 2 - Grovesend Road (east) | 522 | 0 | 125 | 193 |
| | 3 - Midland Way | 188 | 176 | 0 | 25 |
| | 4 - Grovesend Road (west) | 64 | 179 | 14 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | | |
|------|---------------------------|----------------|---------------------------|-----------------|---------------------------|
| | | 1 - Morton Way | 2 - Grovesend Road (east) | 3 - Midland Way | 4 - Grovesend Road (west) |
| From | 1 - Morton Way | 0 | 0 | 0 | 0 |
| | 2 - Grovesend Road (east) | 1 | 0 | 0 | 5 |
| | 3 - Midland Way | 1 | 3 | 0 | 0 |
| | 4 - Grovesend Road (west) | 4 | 5 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|---------------------------|---------|---------------|-----------------|---------|
| 1 - Morton Way | 0.33 | 3.70 | 0.5 | A |
| 2 - Grovesend Road (east) | 0.67 | 7.56 | 2.0 | A |
| 3 - Midland Way | 0.41 | 5.67 | 0.7 | A |
| 4 - Grovesend Road (west) | 0.32 | 5.85 | 0.5 | A |

Main Results for each time segment

16:45 - 16:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 326 | 276 | 1558 | 0.209 | 322 | 0.3 | 2.905 | A |
| 2 - Grovesend Road (east) | 636 | 118 | 1462 | 0.435 | 627 | 0.8 | 4.269 | A |
| 3 - Midland Way | 295 | 561 | 1268 | 0.232 | 291 | 0.3 | 3.671 | A |
| 4 - Grovesend Road (west) | 195 | 662 | 1108 | 0.176 | 192 | 0.2 | 3.921 | A |

16:50 - 16:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 326 | 279 | 1556 | 0.209 | 326 | 0.3 | 2.925 | A |
| 2 - Grovesend Road (east) | 636 | 119 | 1461 | 0.435 | 636 | 0.8 | 4.361 | A |
| 3 - Midland Way | 295 | 569 | 1263 | 0.233 | 295 | 0.3 | 3.717 | A |
| 4 - Grovesend Road (west) | 195 | 671 | 1103 | 0.176 | 195 | 0.2 | 3.963 | A |

16:55 - 17:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 326 | 279 | 1556 | 0.209 | 326 | 0.3 | 2.925 | A |
| 2 - Grovesend Road (east) | 636 | 119 | 1461 | 0.435 | 636 | 0.8 | 4.363 | A |
| 3 - Midland Way | 295 | 569 | 1263 | 0.233 | 295 | 0.3 | 3.717 | A |
| 4 - Grovesend Road (west) | 195 | 671 | 1103 | 0.176 | 195 | 0.2 | 3.963 | A |

17:00 - 17:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 347 | 298 | 1543 | 0.225 | 347 | 0.3 | 3.010 | A |
| 2 - Grovesend Road (east) | 679 | 127 | 1456 | 0.466 | 678 | 0.9 | 4.607 | A |
| 3 - Midland Way | 314 | 606 | 1238 | 0.254 | 314 | 0.3 | 3.894 | A |
| 4 - Grovesend Road (west) | 208 | 715 | 1077 | 0.193 | 207 | 0.2 | 4.140 | A |

17:05 - 17:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 389 | 333 | 1518 | 0.256 | 388 | 0.3 | 3.183 | A |
| 2 - Grovesend Road (east) | 760 | 142 | 1447 | 0.525 | 757 | 1.1 | 5.193 | A |
| 3 - Midland Way | 352 | 677 | 1191 | 0.295 | 351 | 0.4 | 4.282 | A |
| 4 - Grovesend Road (west) | 232 | 799 | 1027 | 0.226 | 232 | 0.3 | 4.518 | A |

17:10 - 17:15

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 425 | 364 | 1496 | 0.284 | 425 | 0.4 | 3.357 | A |
| 2 - Grovesend Road (east) | 831 | 155 | 1439 | 0.578 | 828 | 1.3 | 5.857 | A |
| 3 - Midland Way | 385 | 740 | 1148 | 0.335 | 384 | 0.5 | 4.701 | A |
| 4 - Grovesend Road (west) | 254 | 874 | 983 | 0.259 | 254 | 0.3 | 4.932 | A |

17:15 - 17:20

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 455 | 390 | 1478 | 0.308 | 455 | 0.4 | 3.514 | A |
| 2 - Grovesend Road (east) | 889 | 166 | 1433 | 0.621 | 886 | 1.6 | 6.542 | A |
| 3 - Midland Way | 412 | 792 | 1114 | 0.370 | 411 | 0.6 | 5.120 | A |
| 4 - Grovesend Road (west) | 272 | 935 | 947 | 0.287 | 271 | 0.4 | 5.325 | A |

17:20 - 17:25

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 476 | 408 | 1466 | 0.325 | 476 | 0.5 | 3.634 | A |
| 2 - Grovesend Road (east) | 930 | 174 | 1428 | 0.651 | 928 | 1.8 | 7.142 | A |
| 3 - Midland Way | 431 | 829 | 1089 | 0.395 | 430 | 0.6 | 5.451 | A |
| 4 - Grovesend Road (west) | 285 | 979 | 921 | 0.309 | 284 | 0.4 | 5.648 | A |

17:25 - 17:30

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 487 | 417 | 1459 | 0.334 | 487 | 0.5 | 3.702 | A |
| 2 - Grovesend Road (east) | 951 | 178 | 1425 | 0.667 | 950 | 1.9 | 7.519 | A |
| 3 - Midland Way | 441 | 849 | 1076 | 0.409 | 440 | 0.7 | 5.654 | A |
| 4 - Grovesend Road (west) | 291 | 1002 | 907 | 0.321 | 291 | 0.5 | 5.836 | A |

17:30 - 17:35

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 487 | 418 | 1459 | 0.334 | 487 | 0.5 | 3.703 | A |
| 2 - Grovesend Road (east) | 951 | 178 | 1425 | 0.667 | 951 | 2.0 | 7.564 | A |
| 3 - Midland Way | 441 | 850 | 1075 | 0.410 | 440 | 0.7 | 5.667 | A |
| 4 - Grovesend Road (west) | 291 | 1003 | 906 | 0.321 | 291 | 0.5 | 5.849 | A |

17:35 - 17:40

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 476 | 409 | 1465 | 0.325 | 476 | 0.5 | 3.643 | A |
| 2 - Grovesend Road (east) | 930 | 174 | 1428 | 0.652 | 931 | 1.9 | 7.262 | A |
| 3 - Midland Way | 431 | 832 | 1088 | 0.396 | 431 | 0.7 | 5.488 | A |
| 4 - Grovesend Road (west) | 285 | 982 | 919 | 0.310 | 285 | 0.5 | 5.675 | A |

17:40 - 17:45

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 455 | 391 | 1477 | 0.308 | 456 | 0.5 | 3.524 | A |
| 2 - Grovesend Road (east) | 889 | 166 | 1432 | 0.621 | 892 | 1.7 | 6.702 | A |
| 3 - Midland Way | 412 | 797 | 1111 | 0.371 | 413 | 0.6 | 5.163 | A |
| 4 - Grovesend Road (west) | 272 | 940 | 944 | 0.288 | 273 | 0.4 | 5.371 | A |

17:45 - 17:50

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 425 | 366 | 1495 | 0.285 | 426 | 0.4 | 3.368 | A |
| 2 - Grovesend Road (east) | 831 | 156 | 1439 | 0.578 | 835 | 1.4 | 5.999 | A |
| 3 - Midland Way | 385 | 746 | 1145 | 0.336 | 386 | 0.5 | 4.753 | A |
| 4 - Grovesend Road (west) | 254 | 880 | 979 | 0.260 | 255 | 0.4 | 4.976 | A |

17:50 - 17:55

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 389 | 335 | 1517 | 0.256 | 389 | 0.3 | 3.196 | A |
| 2 - Grovesend Road (east) | 760 | 142 | 1447 | 0.525 | 763 | 1.1 | 5.290 | A |
| 3 - Midland Way | 352 | 682 | 1187 | 0.296 | 353 | 0.4 | 4.321 | A |
| 4 - Grovesend Road (west) | 232 | 804 | 1024 | 0.227 | 233 | 0.3 | 4.555 | A |

17:55 - 18:00

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 347 | 299 | 1542 | 0.225 | 348 | 0.3 | 3.018 | A |
| 2 - Grovesend Road (east) | 679 | 127 | 1456 | 0.466 | 682 | 0.9 | 4.668 | A |
| 3 - Midland Way | 314 | 609 | 1236 | 0.254 | 315 | 0.3 | 3.917 | A |
| 4 - Grovesend Road (west) | 208 | 719 | 1075 | 0.193 | 208 | 0.2 | 4.159 | A |

18:00 - 18:05

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 326 | 280 | 1556 | 0.209 | 326 | 0.3 | 2.927 | A |
| 2 - Grovesend Road (east) | 636 | 119 | 1461 | 0.435 | 637 | 0.8 | 4.378 | A |
| 3 - Midland Way | 295 | 570 | 1262 | 0.233 | 295 | 0.3 | 3.724 | A |
| 4 - Grovesend Road (west) | 195 | 672 | 1102 | 0.177 | 195 | 0.2 | 3.971 | A |

18:05 - 18:10

| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 326 | 279 | 1556 | 0.209 | 326 | 0.3 | 2.928 | A |
| 2 - Grovesend Road (east) | 636 | 119 | 1461 | 0.435 | 636 | 0.8 | 4.366 | A |
| 3 - Midland Way | 295 | 569 | 1263 | 0.233 | 295 | 0.3 | 3.718 | A |
| 4 - Grovesend Road (west) | 195 | 671 | 1103 | 0.176 | 195 | 0.2 | 3.963 | A |

18:10 - 18:15

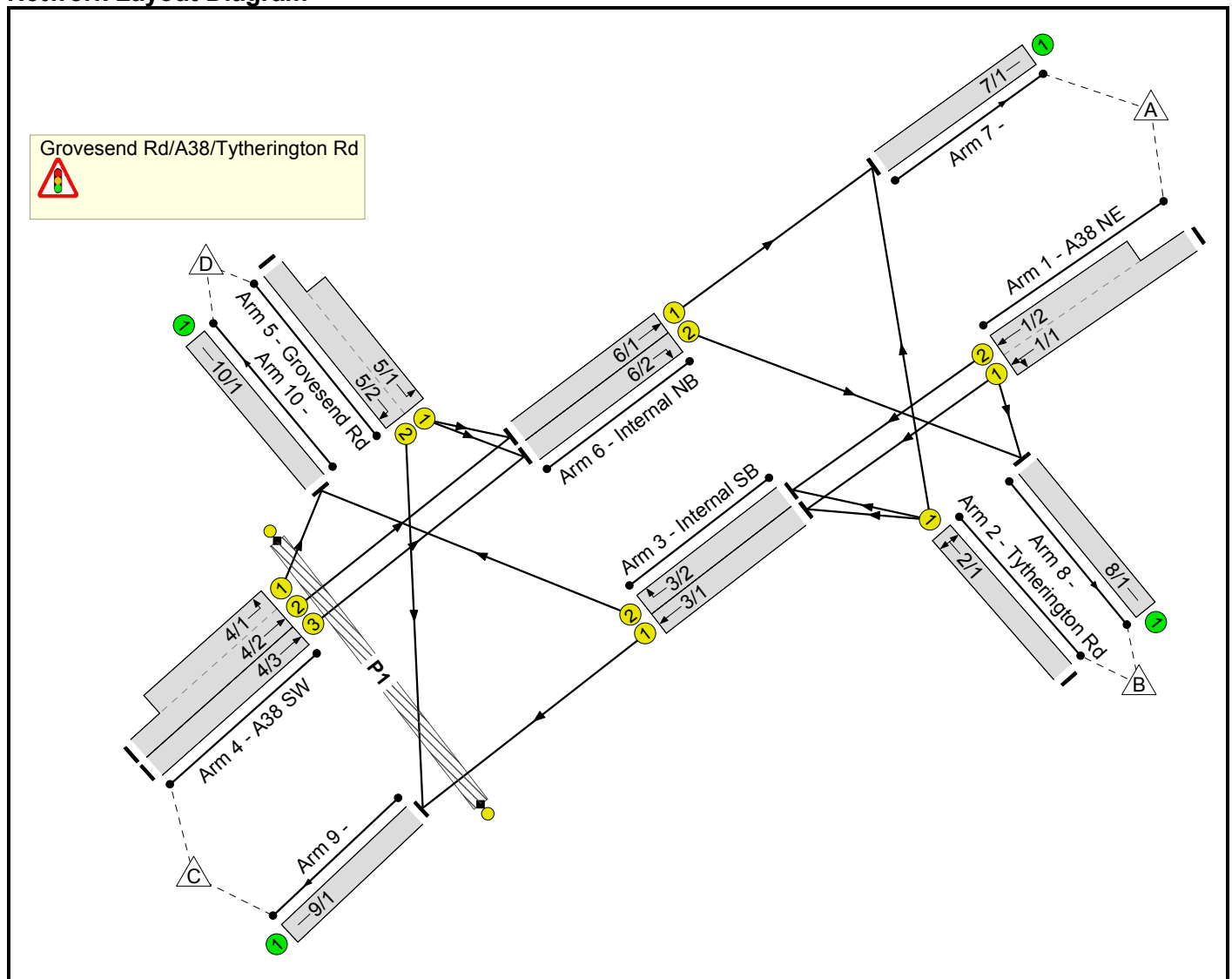
| Arm | Total Demand (Veh/hr) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|---------------------------|-----------------------|---------------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| 1 - Morton Way | 326 | 279 | 1556 | 0.209 | 326 | 0.3 | 2.925 | A |
| 2 - Grovesend Road (east) | 636 | 119 | 1461 | 0.435 | 636 | 0.8 | 4.364 | A |
| 3 - Midland Way | 295 | 569 | 1263 | 0.233 | 295 | 0.3 | 3.720 | A |
| 4 - Grovesend Road (west) | 195 | 671 | 1103 | 0.176 | 195 | 0.2 | 3.965 | A |

Full Input Data And Results
Full Input Data And Results

User and Project Details

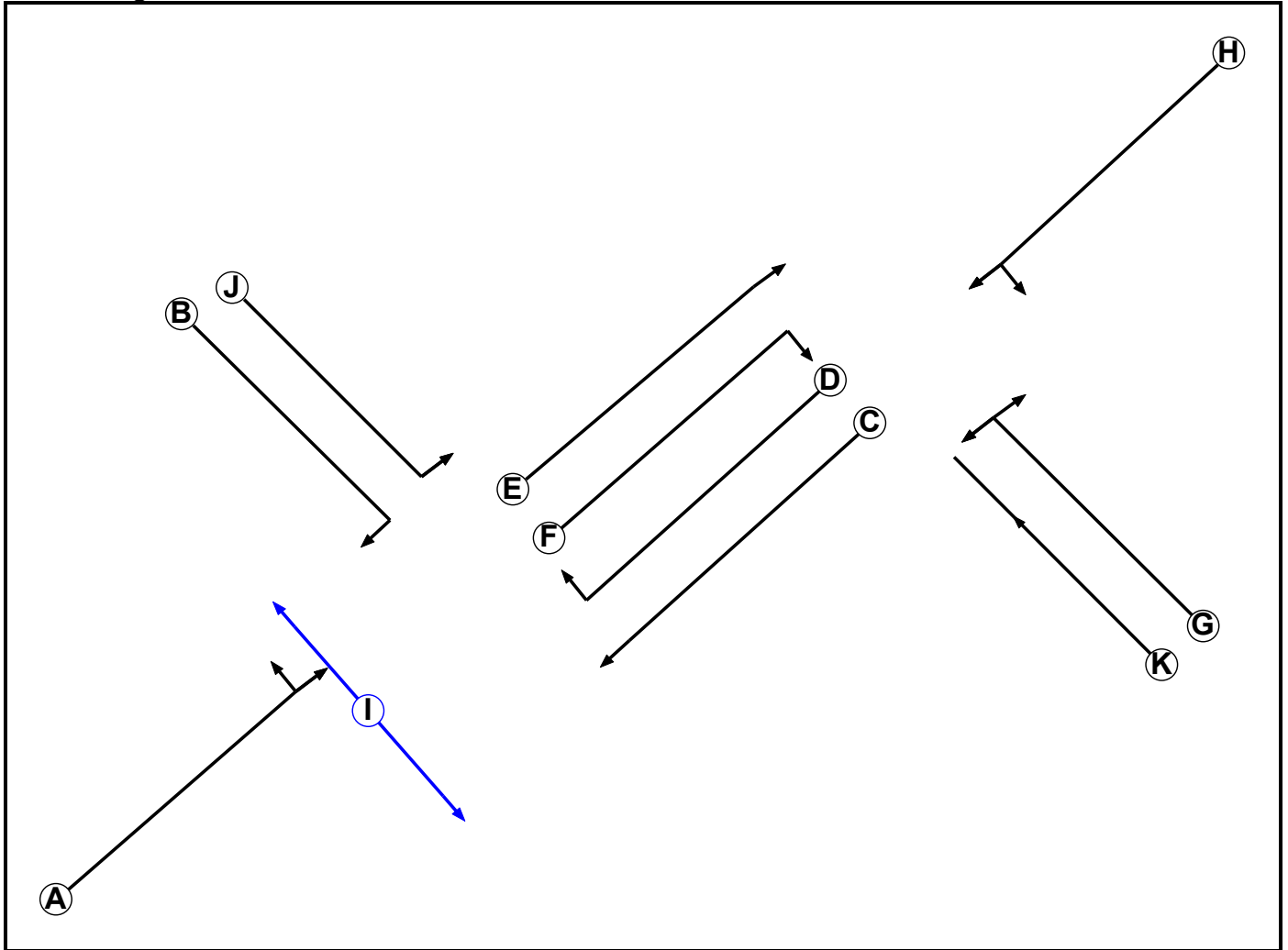
| | |
|---------------------------|---|
| Project: | Land West of Park Farm, Thornbury |
| Title: | |
| Location: | |
| Additional detail: | |
| File name: | 003_A38_Grovesend Rd_Tytherington Rd_v2.lsg3x |
| Author: | |
| Company: | Peter Brett Associates |
| Address: | 10 Queen Square BS1 4NT |

Network Layout Diagram



Scenario 1: '2015 Base AM' (FG1: '2015 Base AM', Plan 1: 'Network Control Plan 1')

Phase Diagram



Phase Input Data

| Phase Name | Phase Type | Stage Stream | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|--------------|------------|----------|
| A | Traffic | 2 | | 7 | 7 |
| B | Traffic | 2 | | 7 | 7 |
| C | Traffic | 2 | | 7 | 7 |
| D | Traffic | 2 | | 7 | 7 |
| E | Traffic | 1 | | 7 | 7 |
| F | Traffic | 1 | | 7 | 7 |
| G | Traffic | 1 | | 7 | 7 |
| H | Traffic | 1 | | 7 | 7 |
| I | Pedestrian | 2 | | 6 | 6 |
| J | Traffic | 2 | | 7 | 7 |
| K | Traffic | 1 | | 7 | 7 |

Phase Intergrens Matrix

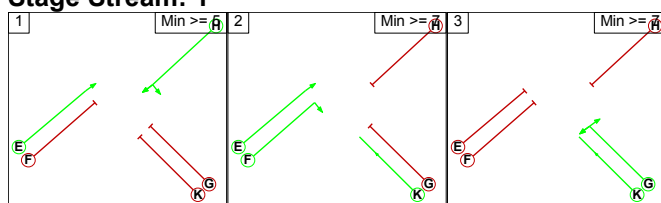
| | | Starting Phase | | | | | | | | | | |
|-------------------|---|----------------|----|----|----|---|---|---|---|----|---|---|
| | | A | B | C | D | E | F | G | H | I | J | K |
| Terminating Phase | A | | 7 | - | 6 | - | - | - | - | 6 | 7 | - |
| | B | 6 | | 5 | 5 | - | - | - | - | 10 | - | - |
| | C | - | 5 | | - | - | - | - | - | 9 | - | - |
| | D | 5 | 5 | - | | - | - | - | - | 9 | - | - |
| | E | - | - | - | - | | - | 5 | - | - | - | - |
| | F | - | - | - | - | - | | 5 | 5 | - | - | - |
| | G | - | - | - | - | 7 | 7 | | 5 | - | - | - |
| | H | - | - | - | - | - | 6 | 5 | | - | - | 5 |
| | I | 17 | 17 | 17 | 17 | - | - | - | - | | - | - |
| | J | 5 | - | - | - | - | - | - | - | - | | - |
| | K | - | - | - | - | - | - | - | 5 | - | - | |

Phases in Stage

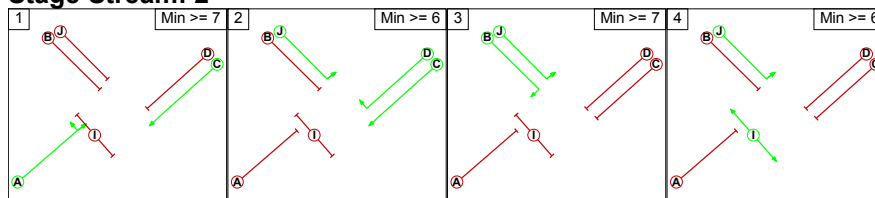
| Stream | Stage No. | Phases in Stage |
|--------|-----------|-----------------|
| 1 | 1 | E H |
| 1 | 2 | E F K |
| 1 | 3 | G K |
| 2 | 1 | A C |
| 2 | 2 | C D J |
| 2 | 3 | B J |
| 2 | 4 | I J |

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Full Input Data And Results

Stage Stream: 2

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Prohibited Stage Change

Stage Stream: 1

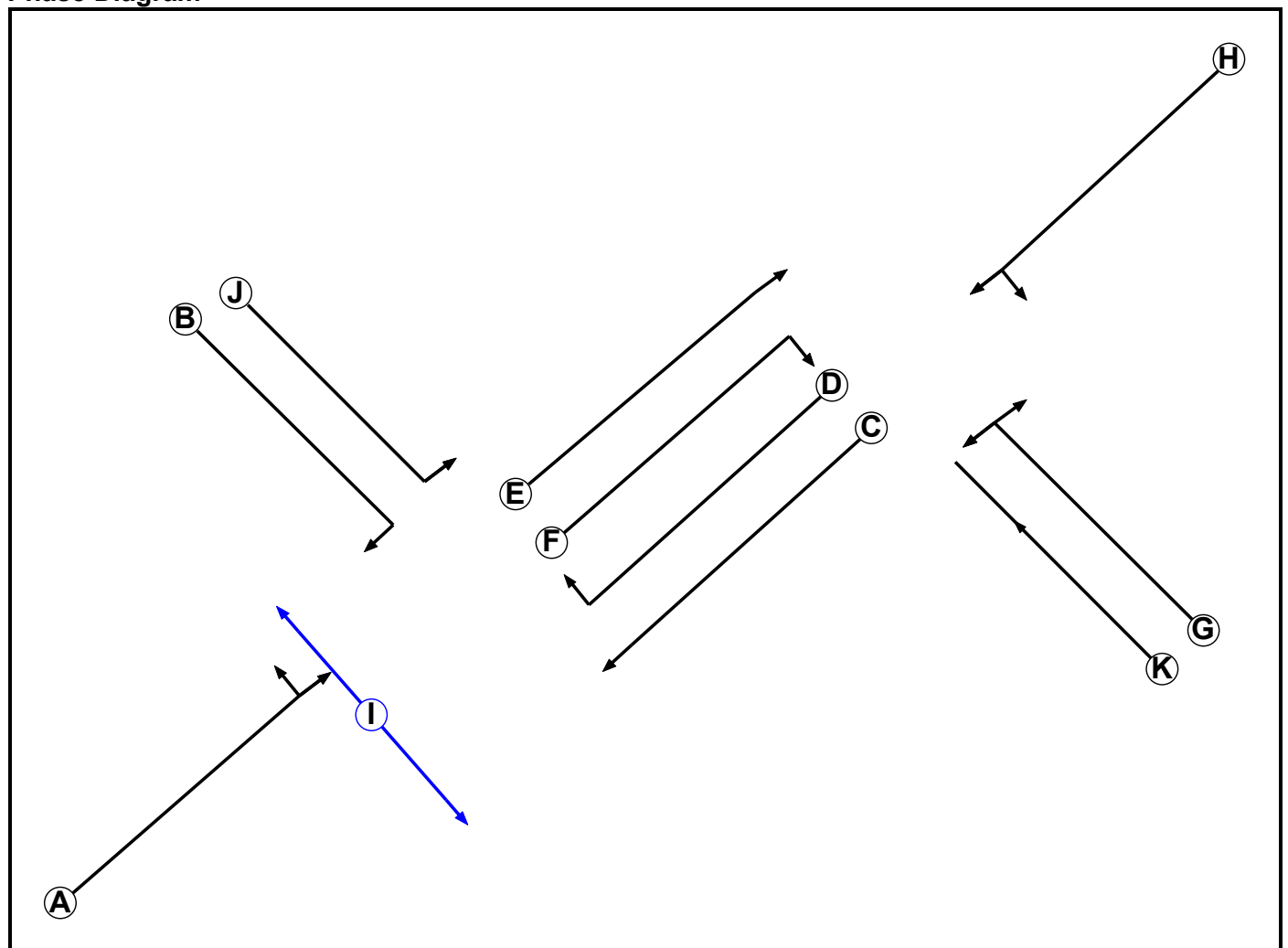
| | | To Stage | | |
|------------|---|----------|---|---|
| | | 1 | 2 | 3 |
| From Stage | 1 | | 6 | 5 |
| | 2 | 5 | | 5 |
| | 3 | 7 | 7 | |

Stage Stream: 2

| | | To Stage | | | |
|------------|---|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| From Stage | 1 | | 7 | 7 | 9 |
| | 2 | 5 | | 5 | 9 |
| | 3 | 6 | 5 | | 10 |
| | 4 | 17 | 17 | 17 | |

Scenario 2: '2015 Base PM' (FG2: '2015 Base PM', Plan 1: 'Network Control Plan 1')

Phase Diagram



Full Input Data And Results

Phase Input Data

| Phase Name | Phase Type | Stage Stream | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|--------------|------------|----------|
| A | Traffic | 2 | | 7 | 7 |
| B | Traffic | 2 | | 7 | 7 |
| C | Traffic | 2 | | 7 | 7 |
| D | Traffic | 2 | | 7 | 7 |
| E | Traffic | 1 | | 7 | 7 |
| F | Traffic | 1 | | 7 | 7 |
| G | Traffic | 1 | | 7 | 7 |
| H | Traffic | 1 | | 7 | 7 |
| I | Pedestrian | 2 | | 6 | 6 |
| J | Traffic | 2 | | 7 | 7 |
| K | Traffic | 1 | | 7 | 7 |

Phase Intergreens Matrix

| | | Starting Phase | | | | | | | | | | |
|-------------------|---|----------------|----|----|----|---|---|---|---|----|---|---|
| | | A | B | C | D | E | F | G | H | I | J | K |
| Terminating Phase | A | - | 7 | - | 6 | - | - | - | - | 6 | 7 | - |
| | B | 6 | - | 5 | 5 | - | - | - | - | 10 | - | - |
| | C | - | 5 | - | - | - | - | - | - | 9 | - | - |
| | D | 5 | 5 | - | - | - | - | - | - | 9 | - | - |
| | E | - | - | - | - | - | 5 | - | - | - | - | - |
| | F | - | - | - | - | - | 5 | 5 | - | - | - | - |
| | G | - | - | - | - | 7 | 7 | - | 5 | - | - | - |
| | H | - | - | - | - | - | 6 | 5 | - | - | 5 | - |
| | I | 17 | 17 | 17 | 17 | - | - | - | - | - | - | - |
| | J | 5 | - | - | - | - | - | - | - | - | - | - |
| | K | - | - | - | - | - | - | - | 5 | - | - | - |

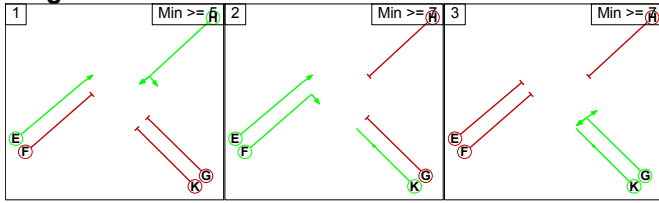
Phases in Stage

| Stream | Stage No. | Phases in Stage |
|--------|-----------|-----------------|
| 1 | 1 | E H |
| 1 | 2 | E F K |
| 1 | 3 | G K |
| 2 | 1 | A C |
| 2 | 2 | C D J |
| 2 | 3 | B J |
| 2 | 4 | I J |

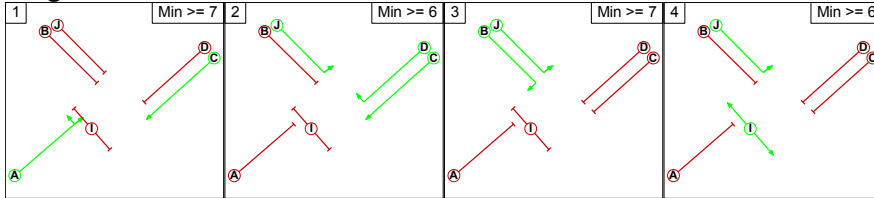
Full Input Data And Results

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Stage Stream: 2

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Prohibited Stage Change

Stage Stream: 1

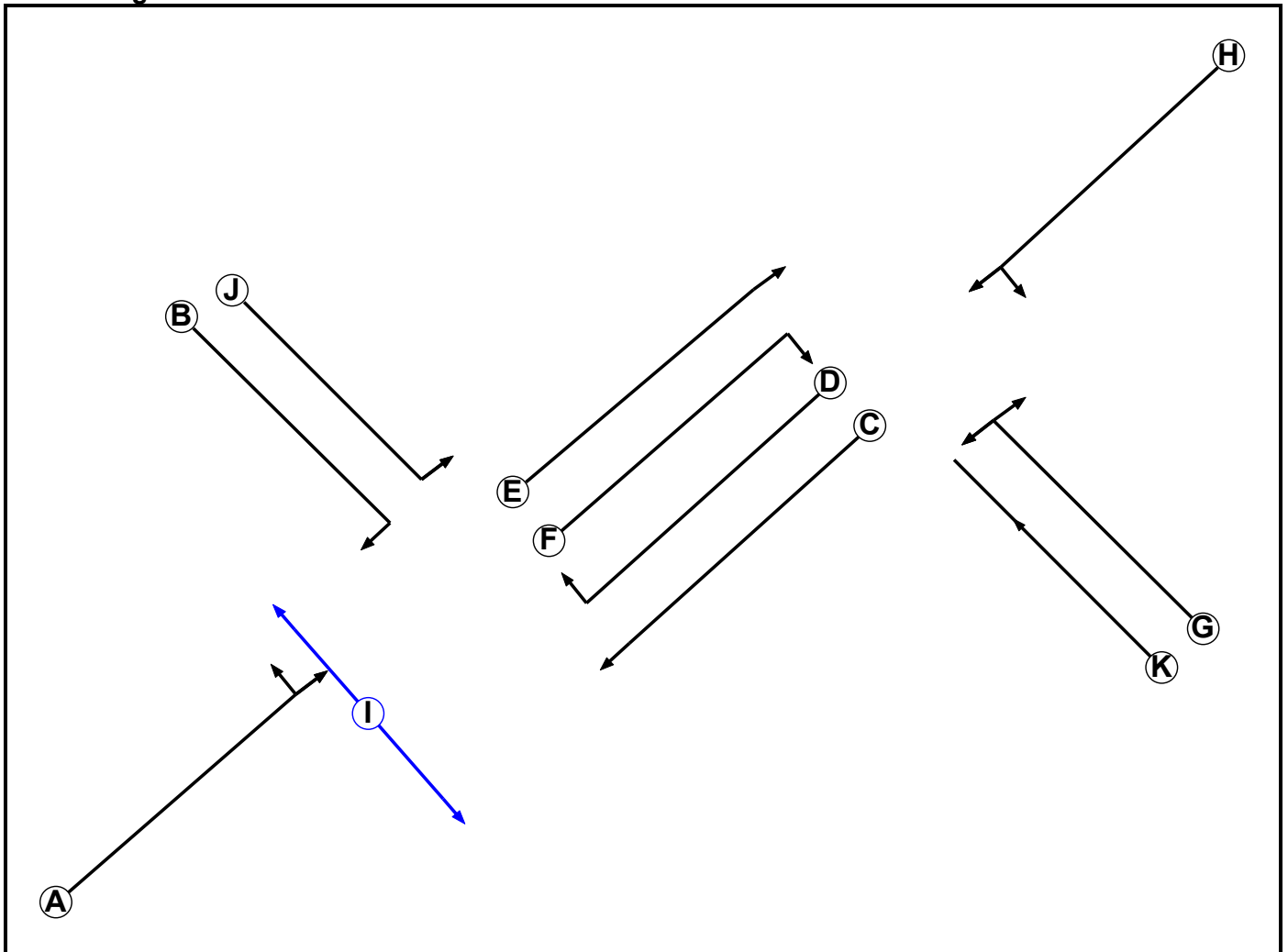
| | | To Stage | | |
|------------|---|----------|---|---|
| | | 1 | 2 | 3 |
| From Stage | 1 | | 6 | 5 |
| | 2 | 5 | | 5 |
| | 3 | 7 | 7 | |

Stage Stream: 2

| | | To Stage | | | |
|------------|---|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| From Stage | 1 | | 7 | 7 | 9 |
| | 2 | 5 | | 5 | 9 |
| | 3 | 6 | 5 | | 10 |
| | 4 | 17 | 17 | 17 | |

Scenario 3: '2028 Ref Case AM' (FG3: '2028 Ref Case AM', Plan 1: 'Network Control Plan 1')

Phase Diagram



Phase Input Data

| Phase Name | Phase Type | Stage Stream | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|--------------|------------|----------|
| A | Traffic | 2 | | 7 | 7 |
| B | Traffic | 2 | | 7 | 7 |
| C | Traffic | 2 | | 7 | 7 |
| D | Traffic | 2 | | 7 | 7 |
| E | Traffic | 1 | | 7 | 7 |
| F | Traffic | 1 | | 7 | 7 |
| G | Traffic | 1 | | 7 | 7 |
| H | Traffic | 1 | | 7 | 7 |
| I | Pedestrian | 2 | | 6 | 6 |
| J | Traffic | 2 | | 7 | 7 |
| K | Traffic | 1 | | 7 | 7 |

Phase Intergrens Matrix

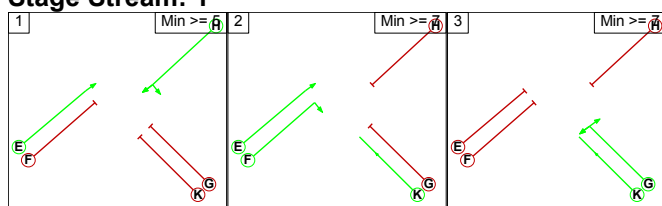
| | | Starting Phase | | | | | | | | | | |
|-------------------|---|----------------|----|----|----|---|---|---|---|----|---|---|
| | | A | B | C | D | E | F | G | H | I | J | K |
| Terminating Phase | A | | 7 | - | 6 | - | - | - | - | 6 | 7 | - |
| | B | 6 | | 5 | 5 | - | - | - | - | 10 | - | - |
| | C | - | 5 | | - | - | - | - | - | 9 | - | - |
| | D | 5 | 5 | - | | - | - | - | - | 9 | - | - |
| | E | - | - | - | - | | - | 5 | - | - | - | - |
| | F | - | - | - | - | - | | 5 | 5 | - | - | - |
| | G | - | - | - | - | 7 | 7 | | 5 | - | - | - |
| | H | - | - | - | - | - | 6 | 5 | | - | - | 5 |
| | I | 17 | 17 | 17 | 17 | - | - | - | - | | - | - |
| | J | 5 | - | - | - | - | - | - | - | - | | - |
| | K | - | - | - | - | - | - | - | 5 | - | - | |

Phases in Stage

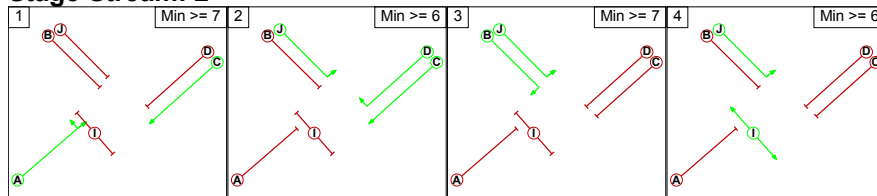
| Stream | Stage No. | Phases in Stage |
|--------|-----------|-----------------|
| 1 | 1 | E H |
| 1 | 2 | E F K |
| 1 | 3 | G K |
| 2 | 1 | A C |
| 2 | 2 | C D J |
| 2 | 3 | B J |
| 2 | 4 | I J |

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Full Input Data And Results

Stage Stream: 2

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Prohibited Stage Change

Stage Stream: 1

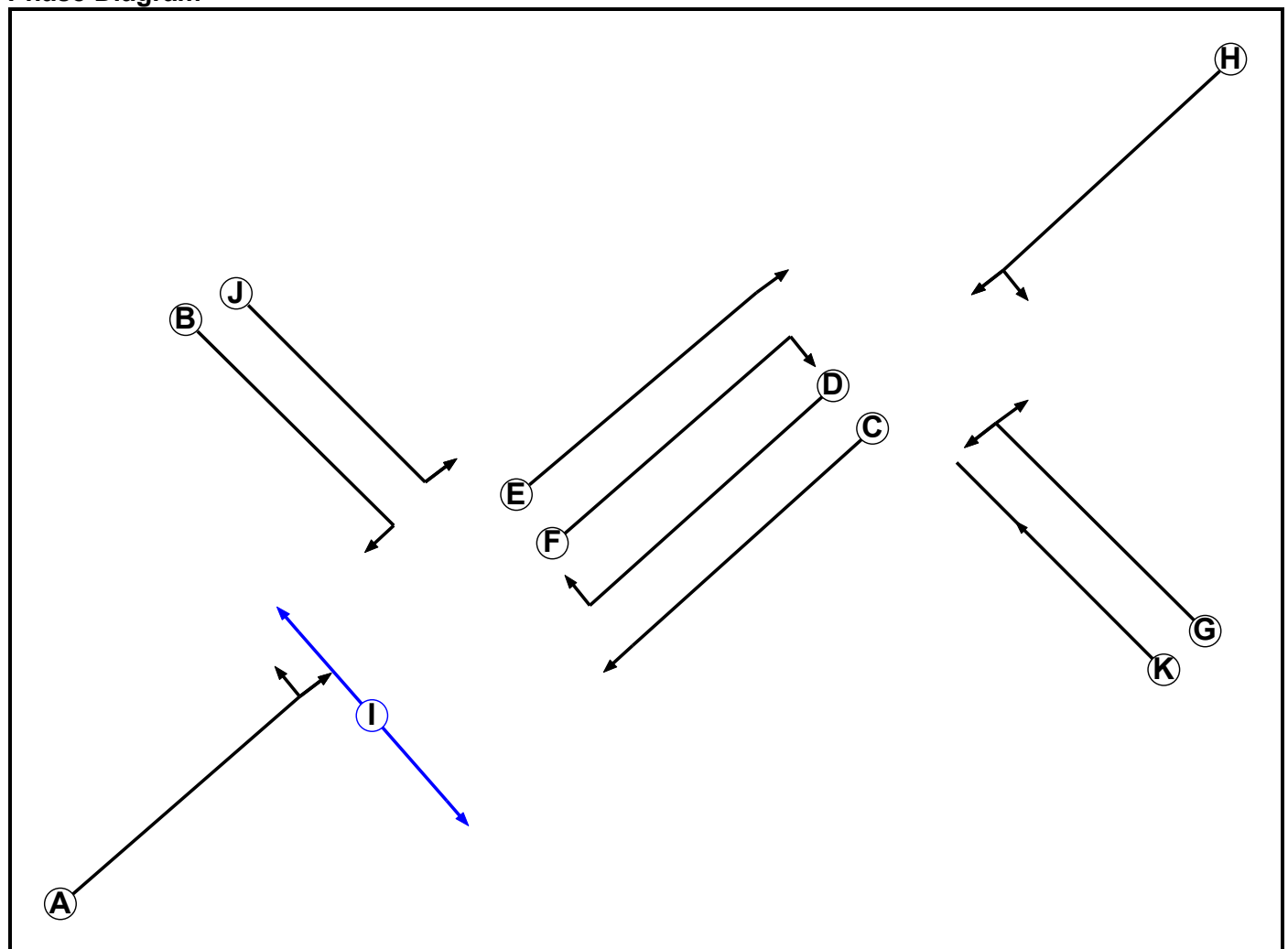
| | | To Stage | | |
|------------|---|----------|---|---|
| | | 1 | 2 | 3 |
| From Stage | 1 | | 6 | 5 |
| | 2 | 5 | | 5 |
| | 3 | 7 | 7 | |

Stage Stream: 2

| | | To Stage | | | |
|------------|---|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| From Stage | 1 | | 7 | 7 | 9 |
| | 2 | 5 | | 5 | 9 |
| | 3 | 6 | 5 | | 10 |
| | 4 | 17 | 17 | 17 | |

Scenario 4: '2028 Ref Case PM' (FG4: '2028 Ref Case PM', Plan 1: 'Network Control Plan 1')

Phase Diagram



Full Input Data And Results

Phase Input Data

| Phase Name | Phase Type | Stage Stream | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|--------------|------------|----------|
| A | Traffic | 2 | | 7 | 7 |
| B | Traffic | 2 | | 7 | 7 |
| C | Traffic | 2 | | 7 | 7 |
| D | Traffic | 2 | | 7 | 7 |
| E | Traffic | 1 | | 7 | 7 |
| F | Traffic | 1 | | 7 | 7 |
| G | Traffic | 1 | | 7 | 7 |
| H | Traffic | 1 | | 7 | 7 |
| I | Pedestrian | 2 | | 6 | 6 |
| J | Traffic | 2 | | 7 | 7 |
| K | Traffic | 1 | | 7 | 7 |

Phase Intergreens Matrix

| | | Starting Phase | | | | | | | | | | |
|-------------------|---|----------------|----|----|----|---|---|---|---|----|---|---|
| | | A | B | C | D | E | F | G | H | I | J | K |
| Terminating Phase | A | - | 7 | - | 6 | - | - | - | - | 6 | 7 | - |
| | B | 6 | - | 5 | 5 | - | - | - | - | 10 | - | - |
| | C | - | 5 | - | - | - | - | - | - | 9 | - | - |
| | D | 5 | 5 | - | - | - | - | - | - | 9 | - | - |
| | E | - | - | - | - | - | 5 | - | - | - | - | - |
| | F | - | - | - | - | - | 5 | 5 | - | - | - | - |
| | G | - | - | - | - | 7 | 7 | - | 5 | - | - | - |
| | H | - | - | - | - | - | 6 | 5 | - | - | 5 | - |
| | I | 17 | 17 | 17 | 17 | - | - | - | - | - | - | - |
| | J | 5 | - | - | - | - | - | - | - | - | - | - |
| | K | - | - | - | - | - | - | - | 5 | - | - | - |

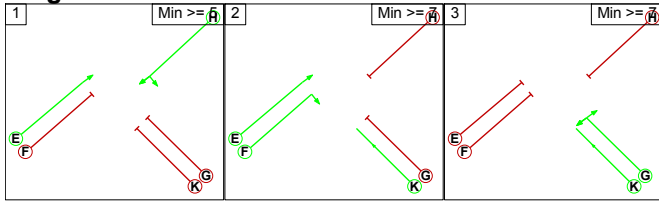
Phases in Stage

| Stream | Stage No. | Phases in Stage |
|--------|-----------|-----------------|
| 1 | 1 | E H |
| 1 | 2 | E F K |
| 1 | 3 | G K |
| 2 | 1 | A C |
| 2 | 2 | C D J |
| 2 | 3 | B J |
| 2 | 4 | I J |

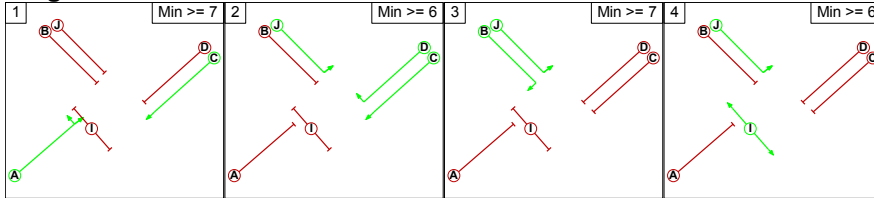
Full Input Data And Results

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Stage Stream: 2

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Prohibited Stage Change

Stage Stream: 1

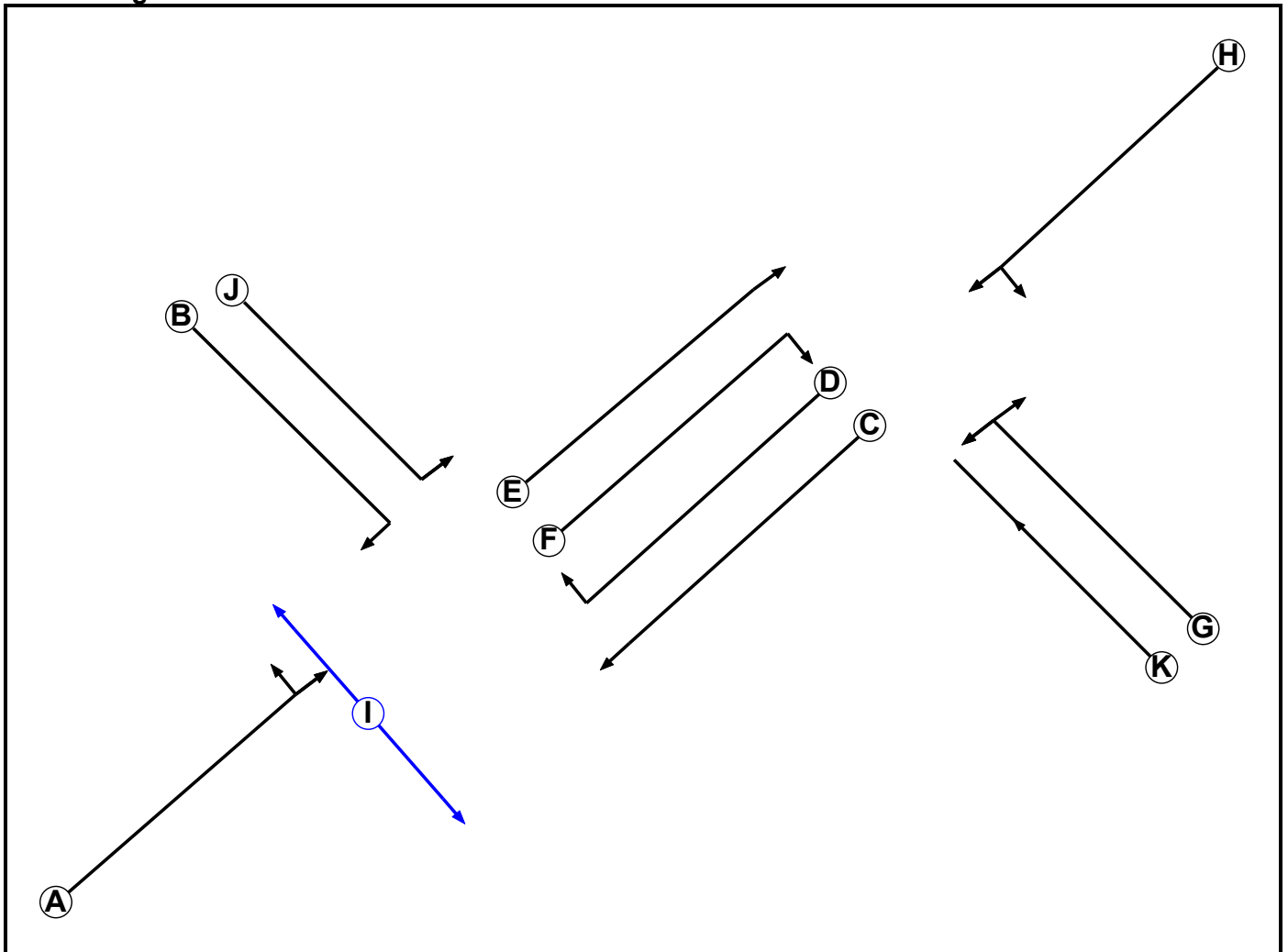
| | | To Stage | | |
|------------|---|----------|---|---|
| | | 1 | 2 | 3 |
| From Stage | 1 | | 6 | 5 |
| | 2 | 5 | | 5 |
| | 3 | 7 | 7 | |

Stage Stream: 2

| | | To Stage | | | |
|------------|---|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| From Stage | 1 | | 7 | 7 | 9 |
| | 2 | 5 | | 5 | 9 |
| | 3 | 6 | 5 | | 10 |
| | 4 | 17 | 17 | 17 | |

Scenario 5: '2028 Test Case AM' (FG5: '2028 Test Case AM', Plan 1: 'Network Control Plan 1')

Phase Diagram



Phase Input Data

| Phase Name | Phase Type | Stage Stream | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|--------------|------------|----------|
| A | Traffic | 2 | | 7 | 7 |
| B | Traffic | 2 | | 7 | 7 |
| C | Traffic | 2 | | 7 | 7 |
| D | Traffic | 2 | | 7 | 7 |
| E | Traffic | 1 | | 7 | 7 |
| F | Traffic | 1 | | 7 | 7 |
| G | Traffic | 1 | | 7 | 7 |
| H | Traffic | 1 | | 7 | 7 |
| I | Pedestrian | 2 | | 6 | 6 |
| J | Traffic | 2 | | 7 | 7 |
| K | Traffic | 1 | | 7 | 7 |

Phase Intergrens Matrix

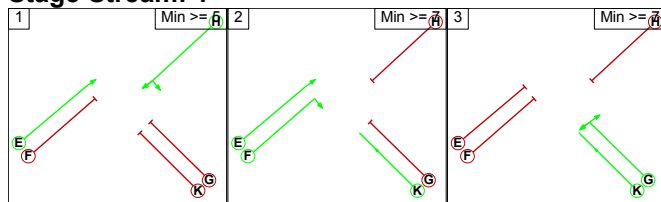
| | | Starting Phase | | | | | | | | | | |
|-------------------|---|----------------|----|----|----|---|---|---|---|----|---|---|
| | | A | B | C | D | E | F | G | H | I | J | K |
| Terminating Phase | A | | 7 | - | 6 | - | - | - | - | 6 | 7 | - |
| | B | 6 | | 5 | 5 | - | - | - | - | 10 | - | - |
| | C | - | 5 | | - | - | - | - | - | 9 | - | - |
| | D | 5 | 5 | - | | - | - | - | - | 9 | - | - |
| | E | - | - | - | - | | 5 | - | - | - | - | - |
| | F | - | - | - | - | - | | 5 | 5 | - | - | - |
| | G | - | - | - | - | 7 | 7 | | 5 | - | - | - |
| | H | - | - | - | - | - | 6 | 5 | | - | 5 | - |
| | I | 17 | 17 | 17 | 17 | - | - | - | - | | - | - |
| | J | 5 | - | - | - | - | - | - | - | - | | - |
| | K | - | - | - | - | - | - | - | 5 | - | - | |

Phases in Stage

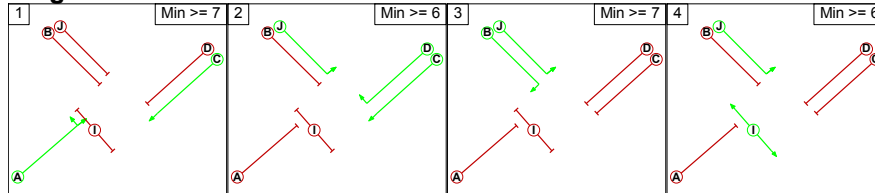
| Stream | Stage No. | Phases in Stage |
|--------|-----------|-----------------|
| 1 | 1 | E H |
| 1 | 2 | E F K |
| 1 | 3 | G K |
| 2 | 1 | A C |
| 2 | 2 | C D J |
| 2 | 3 | B J |
| 2 | 4 | I J |

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Full Input Data And Results

Stage Stream: 2

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Prohibited Stage Change

Stage Stream: 1

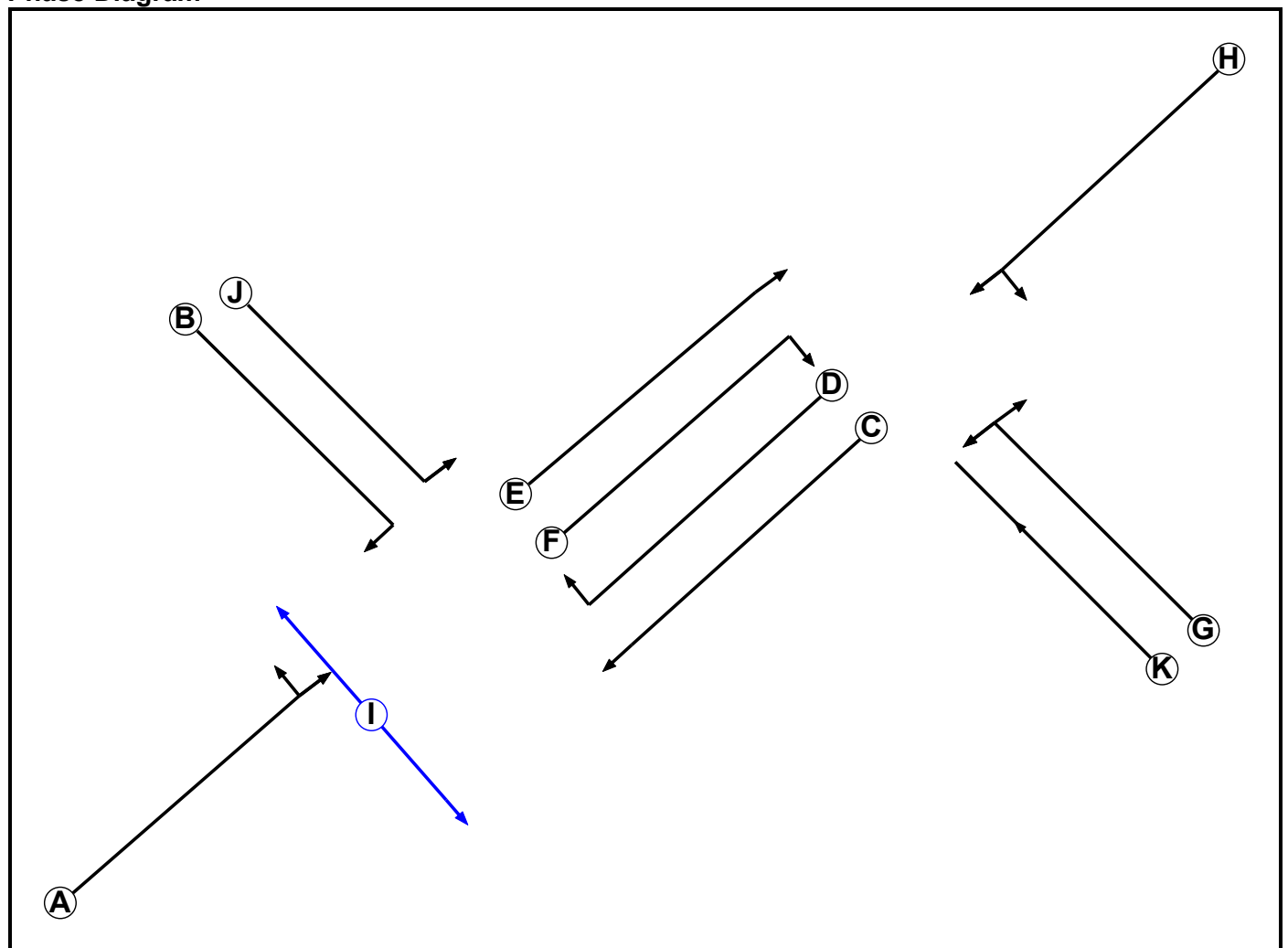
| | | To Stage | | |
|------------|---|----------|---|---|
| | | 1 | 2 | 3 |
| From Stage | 1 | | 6 | 5 |
| | 2 | 5 | | 5 |
| | 3 | 7 | 7 | |

Stage Stream: 2

| | | To Stage | | | |
|------------|---|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| From Stage | 1 | | 7 | 7 | 9 |
| | 2 | 5 | | 5 | 9 |
| | 3 | 6 | 5 | | 10 |
| | 4 | 17 | 17 | 17 | |

Scenario 6: '2028 Test Case PM' (FG6: '2028 Test Case PM', Plan 1: 'Network Control Plan 1')

Phase Diagram



Full Input Data And Results

Phase Input Data

| Phase Name | Phase Type | Stage Stream | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|--------------|------------|----------|
| A | Traffic | 2 | | 7 | 7 |
| B | Traffic | 2 | | 7 | 7 |
| C | Traffic | 2 | | 7 | 7 |
| D | Traffic | 2 | | 7 | 7 |
| E | Traffic | 1 | | 7 | 7 |
| F | Traffic | 1 | | 7 | 7 |
| G | Traffic | 1 | | 7 | 7 |
| H | Traffic | 1 | | 7 | 7 |
| I | Pedestrian | 2 | | 6 | 6 |
| J | Traffic | 2 | | 7 | 7 |
| K | Traffic | 1 | | 7 | 7 |

Phase Intergreens Matrix

| | | Starting Phase | | | | | | | | | | |
|-------------------|---|----------------|----|----|----|---|---|---|---|----|---|---|
| | | A | B | C | D | E | F | G | H | I | J | K |
| Terminating Phase | A | - | 7 | - | 6 | - | - | - | - | 6 | 7 | - |
| | B | 6 | - | 5 | 5 | - | - | - | - | 10 | - | - |
| | C | - | 5 | - | - | - | - | - | - | 9 | - | - |
| | D | 5 | 5 | - | - | - | - | - | - | 9 | - | - |
| | E | - | - | - | - | - | 5 | - | - | - | - | - |
| | F | - | - | - | - | - | 5 | 5 | - | - | - | - |
| | G | - | - | - | - | 7 | 7 | - | 5 | - | - | - |
| | H | - | - | - | - | - | 6 | 5 | - | - | 5 | - |
| | I | 17 | 17 | 17 | 17 | - | - | - | - | - | - | - |
| | J | 5 | - | - | - | - | - | - | - | - | - | - |
| | K | - | - | - | - | - | - | - | 5 | - | - | - |

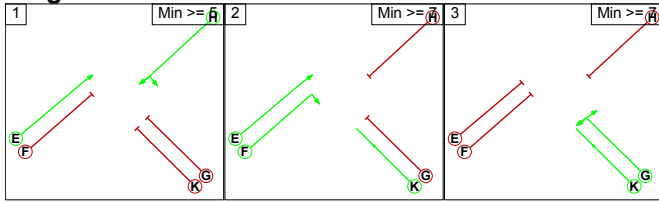
Phases in Stage

| Stream | Stage No. | Phases in Stage |
|--------|-----------|-----------------|
| 1 | 1 | E H |
| 1 | 2 | E F K |
| 1 | 3 | G K |
| 2 | 1 | A C |
| 2 | 2 | C D J |
| 2 | 3 | B J |
| 2 | 4 | I J |

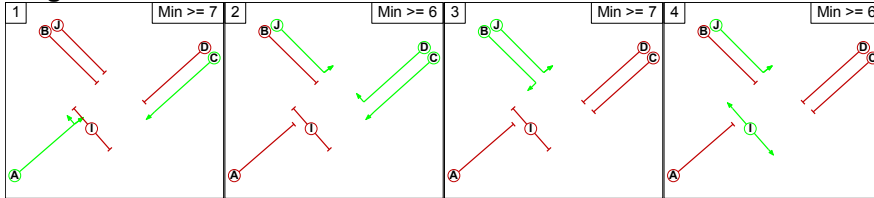
Full Input Data And Results

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Stage Stream: 2

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-----------------------------------|-------------|-------|------|-------|------------|
| There are no Phase Delays defined | | | | | |

Prohibited Stage Change

Stage Stream: 1

| | | To Stage | | |
|------------|---|----------|---|---|
| | | 1 | 2 | 3 |
| From Stage | 1 | | 6 | 5 |
| | 2 | 5 | | 5 |
| | 3 | 7 | 7 | |

Stage Stream: 2

| | | To Stage | | | |
|------------|---|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| From Stage | 1 | | 7 | 7 | 9 |
| | 2 | 5 | | 5 | 9 |
| | 3 | 6 | 5 | | 10 |
| | 4 | 17 | 17 | 17 | |

Full Input Data And Results

Give-Way Lane Input Data

Junction: Grovesend Rd/A38/Tytherington Rd

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

| Junction: Grovesend Rd/A38/Tytherington Rd | | | | | | | | | | | | |
|--|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|--------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| 1/1 (A38 NE) | U | H | 2 | 3 | 60.0 | Geom | - | 3.25 | 0.00 | Y | Arm 3 Ahead | Inf |
| | | | | | | | | | | | Arm 8 Left | Inf |
| 1/2 (A38 NE) | U | H | 2 | 3 | 10.4 | Geom | - | 4.00 | 0.00 | N | Arm 3 Ahead | Inf |
| 2/1 (Tytherington Rd) | U | G | 2 | 3 | 60.0 | Geom | - | 3.20 | 0.00 | Y | Arm 3 Left | Inf |
| | | | | | | | | | | | Arm 7 Right | 8.00 |
| 3/1 (Internal SB) | U | C | 2 | 3 | 13.6 | Geom | - | 3.25 | 0.00 | Y | Arm 9 Ahead | Inf |
| 3/2 (Internal SB) | U | D | 2 | 3 | 13.6 | Geom | - | 3.25 | 0.00 | N | Arm 10 Right | 16.00 |
| 4/1 (A38 SW) | U | A | 2 | 3 | 12.5 | Geom | - | 3.25 | 0.00 | Y | Arm 10 Left | 12.00 |
| 4/2 (A38 SW) | U | A | 2 | 3 | 60.0 | Geom | - | 3.25 | 0.00 | Y | Arm 6 Ahead | Inf |
| 4/3 (A38 SW) | U | A | 2 | 3 | 36.0 | Geom | - | 3.25 | 0.00 | N | Arm 6 Ahead | Inf |
| 5/1 (Grovesend Rd) | U | J | 2 | 3 | 9.9 | Geom | - | 3.25 | 0.00 | Y | Arm 6 Left | 12.00 |
| 5/2 (Grovesend Rd) | U | B | 2 | 3 | 60.0 | Geom | - | 3.25 | 0.00 | Y | Arm 9 Right | 16.00 |
| 6/1 (Internal NB) | U | E | 2 | 3 | 14.8 | Geom | - | 3.25 | 0.00 | Y | Arm 7 Ahead | Inf |
| 6/2 (Internal NB) | U | F | 2 | 3 | 14.8 | Geom | - | 3.25 | 0.00 | N | Arm 8 Right | 15.00 |
| 7/1 | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| 8/1 | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| 9/1 | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| 10/1 | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |

Traffic Flow Groups

| Flow Group | Start Time | End Time | Duration | Formula |
|------------------------|------------|----------|----------|---------|
| 1: '2015 Base AM' | 08:00 | 09:00 | 01:00 | |
| 2: '2015 Base PM' | 17:00 | 18:00 | 01:00 | |
| 3: '2028 Ref Case AM' | 08:00 | 09:00 | 01:00 | |
| 4: '2028 Ref Case PM' | 17:00 | 18:00 | 01:00 | |
| 5: '2028 Test Case AM' | 08:00 | 09:00 | 01:00 | |
| 6: '2028 Test Case PM' | 17:00 | 18:00 | 01:00 | |

Full Input Data And Results

Scenario 1: '2015 Base AM' (FG1: '2015 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | | |
|--------|-------------|-----|-----|-----|-----|------|
| | | A | B | C | D | Tot. |
| Origin | A | 0 | 20 | 200 | 170 | 390 |
| | B | 25 | 0 | 45 | 229 | 299 |
| | C | 182 | 61 | 0 | 129 | 372 |
| | D | 94 | 125 | 238 | 0 | 457 |
| | Tot. | 301 | 206 | 483 | 528 | 1518 |

Traffic Lane Flows

| Lane | Scenario 1: 2015 Base AM |
|---|-----------------------------|
| Junction: Grovesend Rd/A38/Tytherington Rd | |
| 1/1 (with short) | 390(In) 220(Out) |
| 1/2 (short) | 170 |
| 2/1 | 299 |
| 3/1 | 245 |
| 3/2 | 399 |
| 4/1 (short) | 129 |
| 4/2 (with short) | 311(In) 182(Out) |
| 4/3 | 61 |
| 5/1 (short) | 219 |
| 5/2 (with short) | 457(In) 238(Out) |
| 6/1 | 276 |
| 6/2 | 186 |
| 7/1 | 301 |
| 8/1 | 206 |
| 9/1 | 483 |
| 10/1 | 528 |

Full Input Data And Results

Lane Saturation Flows

| Junction: Grovesend Rd/A38/Tytherington Rd | | | | | | | | |
|--|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 NE) | 3.25 | 0.00 | Y | Arm 3 Ahead | Inf | 90.9 % | 1940 | 1940 |
| | | | | Arm 8 Left | Inf | 9.1 % | | |
| 1/2 (A38 NE) | 4.00 | 0.00 | N | Arm 3 Ahead | Inf | 100.0 % | 2155 | 2155 |
| 2/1 (Tytherington Rd) | 3.20 | 0.00 | Y | Arm 3 Left | Inf | 91.6 % | 1905 | 1905 |
| | | | | Arm 7 Right | 8.00 | 8.4 % | | |
| 3/1 (Internal SB) | 3.25 | 0.00 | Y | Arm 9 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 3/2 (Internal SB) | 3.25 | 0.00 | N | Arm 10 Right | 16.00 | 100.0 % | 1902 | 1902 |
| 4/1 (A38 SW) | 3.25 | 0.00 | Y | Arm 10 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 4/2 (A38 SW) | 3.25 | 0.00 | Y | Arm 6 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 4/3 (A38 SW) | 3.25 | 0.00 | N | Arm 6 Ahead | Inf | 100.0 % | 2080 | 2080 |
| 5/1 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 6 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 5/2 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 9 Right | 16.00 | 100.0 % | 1774 | 1774 |
| 6/1 (Internal NB) | 3.25 | 0.00 | Y | Arm 7 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 6/2 (Internal NB) | 3.25 | 0.00 | N | Arm 8 Right | 15.00 | 100.0 % | 1891 | 1891 |
| 7/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 8/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 9/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 10/1 | Infinite Saturation Flow | | | | | | Inf | Inf |

Scenario 2: '2015 Base PM' (FG2: '2015 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | | |
|--------|-------------|-----|-----|-----|------|-----|
| | A | B | C | D | Tot. | |
| Origin | A | 0 | 14 | 166 | 103 | 283 |
| B | 22 | 0 | 35 | 148 | 205 | |
| C | 228 | 26 | 0 | 238 | 492 | |
| D | 141 | 179 | 138 | 0 | 458 | |
| Tot. | 391 | 219 | 339 | 489 | 1438 | |

Full Input Data And Results

Traffic Lane Flows

| Lane | Scenario 2: 2015 Base PM |
|---|-----------------------------|
| Junction: Grovesend Rd/A38/Tytherington Rd | |
| 1/1 (with short) | 283(In) 180(Out) |
| 1/2 (short) | 103 |
| 2/1 | 205 |
| 3/1 | 201 |
| 3/2 | 251 |
| 4/1 (short) | 238 |
| 4/2 (with short) | 466(In) 228(Out) |
| 4/3 | 26 |
| 5/1 (short) | 320 |
| 5/2 (with short) | 458(In) 138(Out) |
| 6/1 | 369 |
| 6/2 | 205 |
| 7/1 | 391 |
| 8/1 | 219 |
| 9/1 | 339 |
| 10/1 | 489 |

Full Input Data And Results

Lane Saturation Flows

| Junction: Grovesend Rd/A38/Tytherington Rd | | | | | | | | |
|--|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 NE) | 3.25 | 0.00 | Y | Arm 3 Ahead | Inf | 92.2 % | 1940 | 1940 |
| | | | | Arm 8 Left | Inf | 7.8 % | | |
| 1/2 (A38 NE) | 4.00 | 0.00 | N | Arm 3 Ahead | Inf | 100.0 % | 2155 | 2155 |
| 2/1 (Tytherington Rd) | 3.20 | 0.00 | Y | Arm 3 Left | Inf | 89.3 % | 1897 | 1897 |
| | | | | Arm 7 Right | 8.00 | 10.7 % | | |
| 3/1 (Internal SB) | 3.25 | 0.00 | Y | Arm 9 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 3/2 (Internal SB) | 3.25 | 0.00 | N | Arm 10 Right | 16.00 | 100.0 % | 1902 | 1902 |
| 4/1 (A38 SW) | 3.25 | 0.00 | Y | Arm 10 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 4/2 (A38 SW) | 3.25 | 0.00 | Y | Arm 6 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 4/3 (A38 SW) | 3.25 | 0.00 | N | Arm 6 Ahead | Inf | 100.0 % | 2080 | 2080 |
| 5/1 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 6 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 5/2 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 9 Right | 16.00 | 100.0 % | 1774 | 1774 |
| 6/1 (Internal NB) | 3.25 | 0.00 | Y | Arm 7 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 6/2 (Internal NB) | 3.25 | 0.00 | N | Arm 8 Right | 15.00 | 100.0 % | 1891 | 1891 |
| 7/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 8/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 9/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 10/1 | Infinite Saturation Flow | | | | | | Inf | Inf |

Scenario 3: '2028 Ref Case AM' (FG3: '2028 Ref Case AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | | |
|--------|-------------|-----|-----|-----|------|------|
| | A | B | C | D | Tot. | |
| Origin | A | 0 | 20 | 200 | 175 | 395 |
| | B | 25 | 0 | 45 | 238 | 308 |
| | C | 182 | 61 | 0 | 216 | 459 |
| | D | 109 | 152 | 533 | 0 | 794 |
| | Tot. | 316 | 233 | 778 | 629 | 1956 |

Full Input Data And Results

Traffic Lane Flows

| Lane | Scenario 3: 2028 Ref Case AM |
|---|---------------------------------|
| Junction: Grovesend Rd/A38/Tytherington Rd | |
| 1/1 (with short) | 395(In) 220(Out) |
| 1/2 (short) | 175 |
| 2/1 | 308 |
| 3/1 | 245 |
| 3/2 | 413 |
| 4/1 (short) | 216 |
| 4/2 (with short) | 398(In) 182(Out) |
| 4/3 | 61 |
| 5/1 (short) | 261 |
| 5/2 (with short) | 794(In) 533(Out) |
| 6/1 | 291 |
| 6/2 | 213 |
| 7/1 | 316 |
| 8/1 | 233 |
| 9/1 | 778 |
| 10/1 | 629 |

Full Input Data And Results

Lane Saturation Flows

| Junction: Grovesend Rd/A38/Tytherington Rd | | | | | | | | |
|--|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 NE) | 3.25 | 0.00 | Y | Arm 3 Ahead | Inf | 90.9 % | 1940 | 1940 |
| | | | | Arm 8 Left | Inf | 9.1 % | | |
| 1/2 (A38 NE) | 4.00 | 0.00 | N | Arm 3 Ahead | Inf | 100.0 % | 2155 | 2155 |
| 2/1 (Tytherington Rd) | 3.20 | 0.00 | Y | Arm 3 Left | Inf | 91.9 % | 1906 | 1906 |
| | | | | Arm 7 Right | 8.00 | 8.1 % | | |
| 3/1 (Internal SB) | 3.25 | 0.00 | Y | Arm 9 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 3/2 (Internal SB) | 3.25 | 0.00 | N | Arm 10 Right | 16.00 | 100.0 % | 1902 | 1902 |
| 4/1 (A38 SW) | 3.25 | 0.00 | Y | Arm 10 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 4/2 (A38 SW) | 3.25 | 0.00 | Y | Arm 6 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 4/3 (A38 SW) | 3.25 | 0.00 | N | Arm 6 Ahead | Inf | 100.0 % | 2080 | 2080 |
| 5/1 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 6 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 5/2 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 9 Right | 16.00 | 100.0 % | 1774 | 1774 |
| 6/1 (Internal NB) | 3.25 | 0.00 | Y | Arm 7 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 6/2 (Internal NB) | 3.25 | 0.00 | N | Arm 8 Right | 15.00 | 100.0 % | 1891 | 1891 |
| 7/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 8/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 9/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 10/1 | Infinite Saturation Flow | | | | | | Inf | Inf |

Scenario 4: '2028 Ref Case PM' (FG4: '2028 Ref Case PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | | |
|--------|-------------|-----|-----|-----|------|------|
| | A | B | C | D | Tot. | |
| Origin | A | 0 | 14 | 166 | 117 | 297 |
| | B | 22 | 0 | 35 | 171 | 228 |
| | C | 228 | 26 | 0 | 457 | 711 |
| | D | 151 | 194 | 277 | 0 | 622 |
| | Tot. | 401 | 234 | 478 | 745 | 1858 |

Full Input Data And Results

Traffic Lane Flows

| Lane | Scenario 4: 2028 Ref Case PM |
|---|---------------------------------|
| Junction: Grovesend Rd/A38/Tytherington Rd | |
| 1/1 (with short) | 297(In) 180(Out) |
| 1/2 (short) | 117 |
| 2/1 | 228 |
| 3/1 | 201 |
| 3/2 | 288 |
| 4/1 (short) | 457 |
| 4/2 (with short) | 685(In) 228(Out) |
| 4/3 | 26 |
| 5/1 (short) | 345 |
| 5/2 (with short) | 622(In) 277(Out) |
| 6/1 | 379 |
| 6/2 | 220 |
| 7/1 | 401 |
| 8/1 | 234 |
| 9/1 | 478 |
| 10/1 | 745 |

Full Input Data And Results

Lane Saturation Flows

| Junction: Grovesend Rd/A38/Tytherington Rd | | | | | | | | |
|--|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 NE) | 3.25 | 0.00 | Y | Arm 3 Ahead | Inf | 92.2 % | 1940 | 1940 |
| | | | | Arm 8 Left | Inf | 7.8 % | | |
| 1/2 (A38 NE) | 4.00 | 0.00 | N | Arm 3 Ahead | Inf | 100.0 % | 2155 | 2155 |
| 2/1 (Tytherington Rd) | 3.20 | 0.00 | Y | Arm 3 Left | Inf | 90.4 % | 1901 | 1901 |
| | | | | Arm 7 Right | 8.00 | 9.6 % | | |
| 3/1 (Internal SB) | 3.25 | 0.00 | Y | Arm 9 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 3/2 (Internal SB) | 3.25 | 0.00 | N | Arm 10 Right | 16.00 | 100.0 % | 1902 | 1902 |
| 4/1 (A38 SW) | 3.25 | 0.00 | Y | Arm 10 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 4/2 (A38 SW) | 3.25 | 0.00 | Y | Arm 6 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 4/3 (A38 SW) | 3.25 | 0.00 | N | Arm 6 Ahead | Inf | 100.0 % | 2080 | 2080 |
| 5/1 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 6 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 5/2 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 9 Right | 16.00 | 100.0 % | 1774 | 1774 |
| 6/1 (Internal NB) | 3.25 | 0.00 | Y | Arm 7 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 6/2 (Internal NB) | 3.25 | 0.00 | N | Arm 8 Right | 15.00 | 100.0 % | 1891 | 1891 |
| 7/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 8/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 9/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 10/1 | Infinite Saturation Flow | | | | | | Inf | Inf |

Scenario 5: '2028 Test Case AM' (FG5: '2028 Test Case AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | | |
|--------|-------------|-----|-----|-----|------|--|
| | A | B | C | D | Tot. | |
| Origin | 0 | 20 | 200 | 175 | 395 | |
| A | 25 | 0 | 45 | 240 | 310 | |
| B | 182 | 61 | 0 | 229 | 472 | |
| C | 109 | 167 | 622 | 0 | 898 | |
| D | 316 | 248 | 867 | 644 | 2075 | |
| Tot. | | | | | | |

Full Input Data And Results

Traffic Lane Flows

| Lane | Scenario 5: 2028 Test Case AM |
|---|----------------------------------|
| Junction: Grovesend Rd/A38/Tytherington Rd | |
| 1/1 (with short) | 395(In) 220(Out) |
| 1/2 (short) | 175 |
| 2/1 | 310 |
| 3/1 | 245 |
| 3/2 | 415 |
| 4/1 (short) | 229 |
| 4/2 (with short) | 411(In) 182(Out) |
| 4/3 | 61 |
| 5/1 (short) | 276 |
| 5/2 (with short) | 898(In) 622(Out) |
| 6/1 | 291 |
| 6/2 | 228 |
| 7/1 | 316 |
| 8/1 | 248 |
| 9/1 | 867 |
| 10/1 | 644 |

Full Input Data And Results

Lane Saturation Flows

| Junction: Grovesend Rd/A38/Tytherington Rd | | | | | | | | |
|--|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 NE) | 3.25 | 0.00 | Y | Arm 3 Ahead | Inf | 90.9 % | 1940 | 1940 |
| | | | | Arm 8 Left | Inf | 9.1 % | | |
| 1/2 (A38 NE) | 4.00 | 0.00 | N | Arm 3 Ahead | Inf | 100.0 % | 2155 | 2155 |
| 2/1 (Tytherington Rd) | 3.20 | 0.00 | Y | Arm 3 Left | Inf | 91.9 % | 1906 | 1906 |
| | | | | Arm 7 Right | 8.00 | 8.1 % | | |
| 3/1 (Internal SB) | 3.25 | 0.00 | Y | Arm 9 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 3/2 (Internal SB) | 3.25 | 0.00 | N | Arm 10 Right | 16.00 | 100.0 % | 1902 | 1902 |
| 4/1 (A38 SW) | 3.25 | 0.00 | Y | Arm 10 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 4/2 (A38 SW) | 3.25 | 0.00 | Y | Arm 6 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 4/3 (A38 SW) | 3.25 | 0.00 | N | Arm 6 Ahead | Inf | 100.0 % | 2080 | 2080 |
| 5/1 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 6 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 5/2 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 9 Right | 16.00 | 100.0 % | 1774 | 1774 |
| 6/1 (Internal NB) | 3.25 | 0.00 | Y | Arm 7 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 6/2 (Internal NB) | 3.25 | 0.00 | N | Arm 8 Right | 15.00 | 100.0 % | 1891 | 1891 |
| 7/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 8/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 9/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 10/1 | Infinite Saturation Flow | | | | | | Inf | Inf |

Scenario 6: '2028 Test Case PM' (FG6: '2028 Test Case PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | | |
|--------|-------------|-----|-----|-----|------|-----|
| | A | B | C | D | Tot. | |
| Origin | A | 0 | 14 | 166 | 117 | 297 |
| B | 22 | 0 | 35 | 181 | 238 | |
| C | 228 | 26 | 0 | 515 | 769 | |
| D | 151 | 197 | 293 | 0 | 641 | |
| Tot. | 401 | 237 | 494 | 813 | 1945 | |

Full Input Data And Results

Traffic Lane Flows

| Lane | Scenario 6: 2028 Test Case PM |
|---|----------------------------------|
| Junction: Grovesend Rd/A38/Tytherington Rd | |
| 1/1 (with short) | 297(In) 180(Out) |
| 1/2 (short) | 117 |
| 2/1 | 238 |
| 3/1 | 201 |
| 3/2 | 298 |
| 4/1 (short) | 515 |
| 4/2 (with short) | 743(In) 228(Out) |
| 4/3 | 26 |
| 5/1 (short) | 348 |
| 5/2 (with short) | 641(In) 293(Out) |
| 6/1 | 379 |
| 6/2 | 223 |
| 7/1 | 401 |
| 8/1 | 237 |
| 9/1 | 494 |
| 10/1 | 813 |

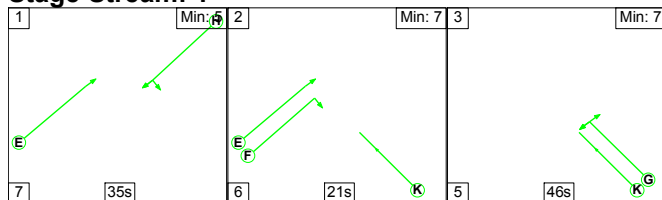
Lane Saturation Flows

| Junction: Grovesend Rd/A38/Tytherington Rd | | | | | | | | |
|--|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 NE) | 3.25 | 0.00 | Y | Arm 3 Ahead | Inf | 92.2 % | 1940 | 1940 |
| | | | | Arm 8 Left | Inf | 7.8 % | | |
| 1/2 (A38 NE) | 4.00 | 0.00 | N | Arm 3 Ahead | Inf | 100.0 % | 2155 | 2155 |
| 2/1 (Tytherington Rd) | 3.20 | 0.00 | Y | Arm 3 Left | Inf | 90.8 % | 1902 | 1902 |
| | | | | Arm 7 Right | 8.00 | 9.2 % | | |
| 3/1 (Internal SB) | 3.25 | 0.00 | Y | Arm 9 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 3/2 (Internal SB) | 3.25 | 0.00 | N | Arm 10 Right | 16.00 | 100.0 % | 1902 | 1902 |
| 4/1 (A38 SW) | 3.25 | 0.00 | Y | Arm 10 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 4/2 (A38 SW) | 3.25 | 0.00 | Y | Arm 6 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 4/3 (A38 SW) | 3.25 | 0.00 | N | Arm 6 Ahead | Inf | 100.0 % | 2080 | 2080 |
| 5/1 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 6 Left | 12.00 | 100.0 % | 1724 | 1724 |
| 5/2 (Grovesend Rd) | 3.25 | 0.00 | Y | Arm 9 Right | 16.00 | 100.0 % | 1774 | 1774 |
| 6/1 (Internal NB) | 3.25 | 0.00 | Y | Arm 7 Ahead | Inf | 100.0 % | 1940 | 1940 |
| 6/2 (Internal NB) | 3.25 | 0.00 | N | Arm 8 Right | 15.00 | 100.0 % | 1891 | 1891 |
| 7/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 8/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 9/1 | Infinite Saturation Flow | | | | | | Inf | Inf |
| 10/1 | Infinite Saturation Flow | | | | | | Inf | Inf |

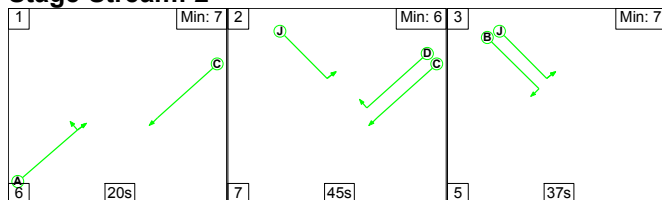
Scenario 1: '2015 Base AM' (FG1: '2015 Base AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Stage Timings

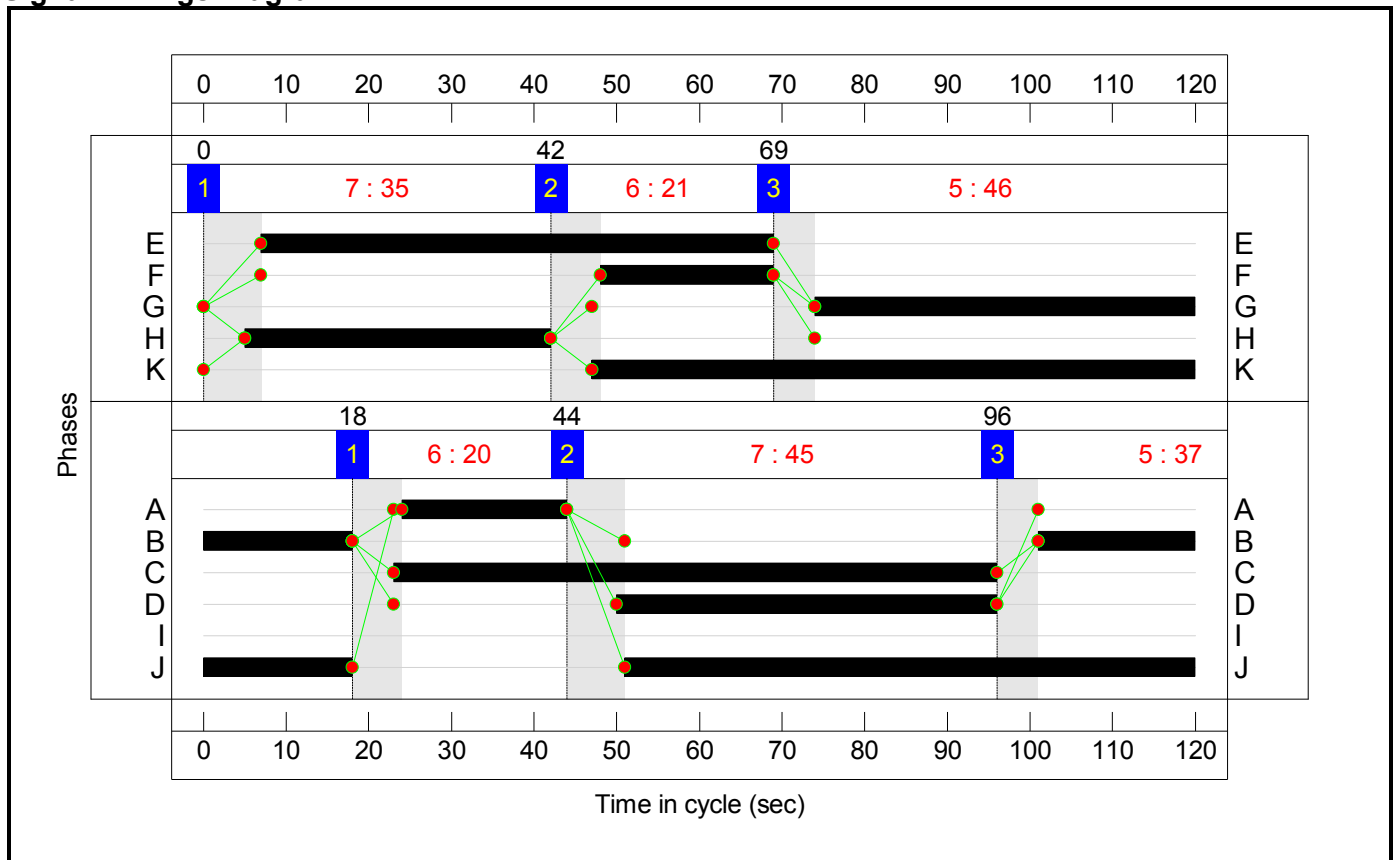
Stage Stream: 1

| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 35 | 21 | 46 |
| Change Point | 0 | 42 | 69 |

Stage Stream: 2

| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 20 | 45 | 37 |
| Change Point | 18 | 44 | 96 |

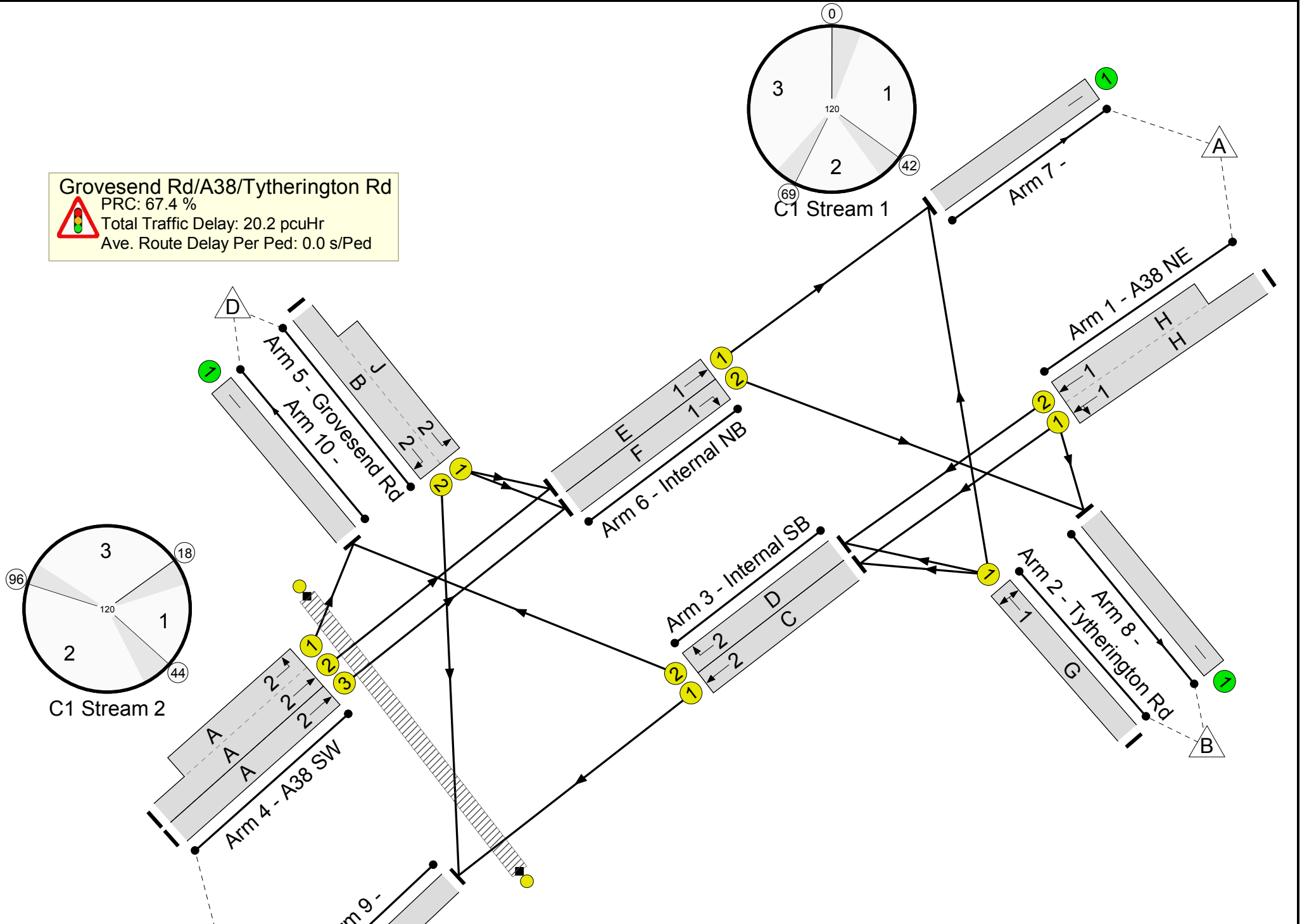
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Grovesend Rd/A38/Tytherington Rd
 PRC: 67.4 %
 Total Traffic Delay: 20.2 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|----------------------------------|----------------------------|-----------|-------------------|----------------------------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|--------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 53.8% |
| Grovesend Rd/A38/Tytherington Rd | - | - | N/A | - | - | | - | - | - | - | - | - | 53.8% |
| 1/1+1/2 | A38 NE Ahead Left | U | 1 | N/A | H | | 1 | 37 | - | 390 | 1940:2155 | 490+379 | 44.9 : 44.9% |
| 2/1 | Tytherington Rd Left Right | U | 1 | N/A | G | | 1 | 46 | - | 299 | 1905 | 746 | 40.1% |
| 3/1 | Internal SB Ahead | U | 2 | N/A | C | | 1 | 73 | - | 245 | 1940 | 1196 | 20.5% |
| 3/2 | Internal SB Right | U | 2 | N/A | D | | 1 | 46 | - | 399 | 1902 | 745 | 53.6% |
| 4/2+4/1 | A38 SW Ahead Left | U | 2 | N/A | A | | 1 | 20 | - | 311 | 1940:1724 | 340+241 | 53.6 : 53.6% |
| 4/3 | A38 SW Ahead | U | 2 | N/A | A | | 1 | 20 | - | 61 | 2080 | 364 | 16.8% |
| 5/2+5/1 | Grovesend Rd Left Right | U | 2 | N/A | B J | | 1 | 37:87 | - | 457 | 1774:1724 | 443+407 | 53.8 : 53.8% |
| 6/1 | Internal NB Ahead | U | 1 | N/A | E | | 1 | 62 | - | 276 | 1940 | 1019 | 27.1% |
| 6/2 | Internal NB Right | U | 1 | N/A | F | | 1 | 21 | - | 186 | 1891 | 347 | 53.7% |
| 7/1 | | U | N/A | N/A | - | | - | - | - | 301 | Inf | Inf | 0.0% |
| 8/1 | | U | N/A | N/A | - | | - | - | - | 206 | Inf | Inf | 0.0% |
| 9/1 | | U | N/A | N/A | - | | - | - | - | 483 | Inf | Inf | 0.0% |
| 10/1 | | U | N/A | N/A | - | | - | - | - | 528 | Inf | Inf | 0.0% |
| Ped Link: P1 | Unnamed Ped Link | - | 2 | - | I | | 0 | 0 | - | 0 | - | 0 | 0.0% |

Full Input Data And Results

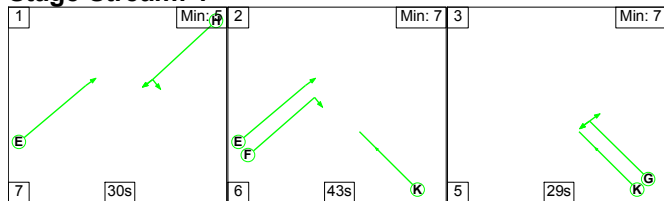
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
|---|----------------|---------------|-----------------------|--|-----------------------------|-----------------------|------------------------------|------------------------------------|---------------------|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | 0 | 0 | 0 | 18.2 | 2.0 | 0.0 | 20.2 | - | - | - | - |
| Grovesend Rd/A38/Tytherington Rd | - | - | 0 | 0 | 0 | 18.2 | 2.0 | 0.0 | 20.2 | - | - | - | - |
| 1/1+1/2 | 390 | 390 | - | - | - | 3.4 | 0.4 | - | 3.8 | 34.8 | 5.6 | 0.4 | 6.0 |
| 2/1 | 299 | 299 | - | - | - | 2.2 | 0.3 | - | 2.5 | 30.4 | 7.1 | 0.3 | 7.5 |
| 3/1 | 245 | 245 | - | - | - | 0.6 | 0.0 | - | 0.6 | 8.5 | 6.1 | 0.0 | 6.1 |
| 3/2 | 399 | 399 | - | - | - | 2.9 | 0.0 | - | 2.9 | 26.3 | 7.9 | 0.0 | 7.9 |
| 4/2+4/1 | 311 | 311 | - | - | - | 3.9 | 0.6 | - | 4.4 | 51.3 | 5.5 | 0.6 | 6.1 |
| 4/3 | 61 | 61 | - | - | - | 0.7 | 0.1 | - | 0.8 | 48.0 | 1.7 | 0.1 | 1.8 |
| 5/2+5/1 | 457 | 457 | - | - | - | 2.4 | 0.6 | - | 3.0 | 23.8 | 6.2 | 0.6 | 6.8 |
| 6/1 | 276 | 276 | - | - | - | 0.4 | 0.0 | - | 0.4 | 4.9 | 1.6 | 0.0 | 1.6 |
| 6/2 | 186 | 186 | - | - | - | 1.7 | 0.0 | - | 1.7 | 33.5 | 4.7 | 0.0 | 4.7 |
| 7/1 | 301 | 301 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8/1 | 206 | 206 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9/1 | 483 | 483 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/1 | 528 | 528 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ped Link: P1 | 0 | 0 | - | - | - | - | - | - | Inf | Inf | - | - | Inf |
| C1 Stream: 1 PRC for Signalled Lanes (%): | | | 67.7 | Total Delay for Signalled Lanes (pcuHr): | | | 8.41 | Cycle Time (s): | | 120 | | | |
| C1 Stream: 2 PRC for Signalled Lanes (%): | | | 67.4 | Total Delay for Signalled Lanes (pcuHr): | | | 11.76 | Cycle Time (s): | | 120 | | | |
| PRC Over All Lanes (%): | | | 67.4 | Total Delay Over All Lanes (pcuHr): | | | 20.17 | | | | | | |

Full Input Data And Results

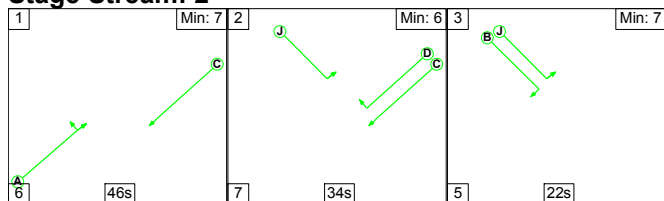
Scenario 2: '2015 Base PM' (FG2: '2015 Base PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

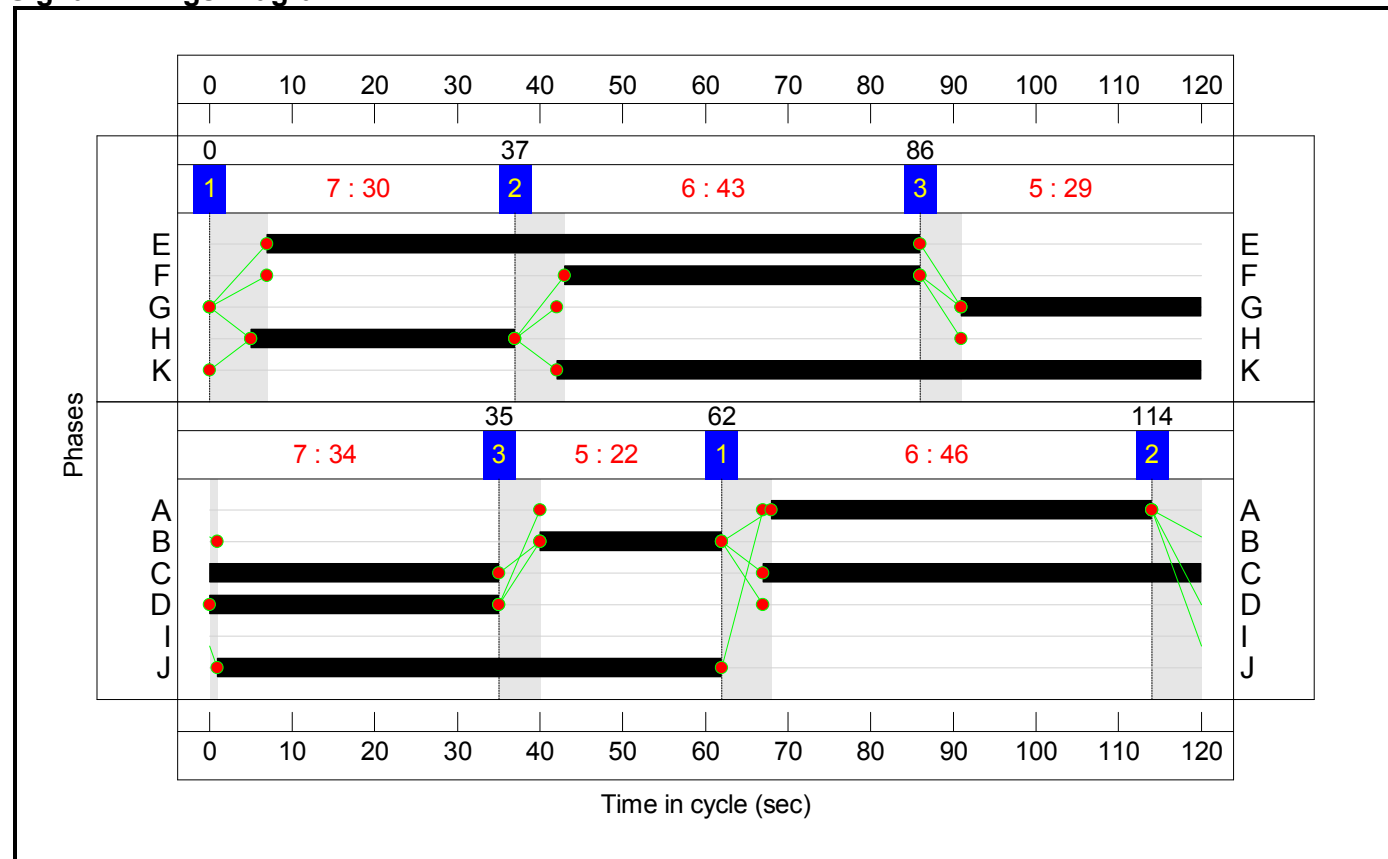
Stage Stream: 1

| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 30 | 43 | 29 |
| Change Point | 0 | 37 | 86 |

Stage Stream: 2

| Stage | 1 | 2 | 3 |
|--------------|----|-----|----|
| Duration | 46 | 34 | 22 |
| Change Point | 62 | 114 | 35 |

Signal Timings Diagram

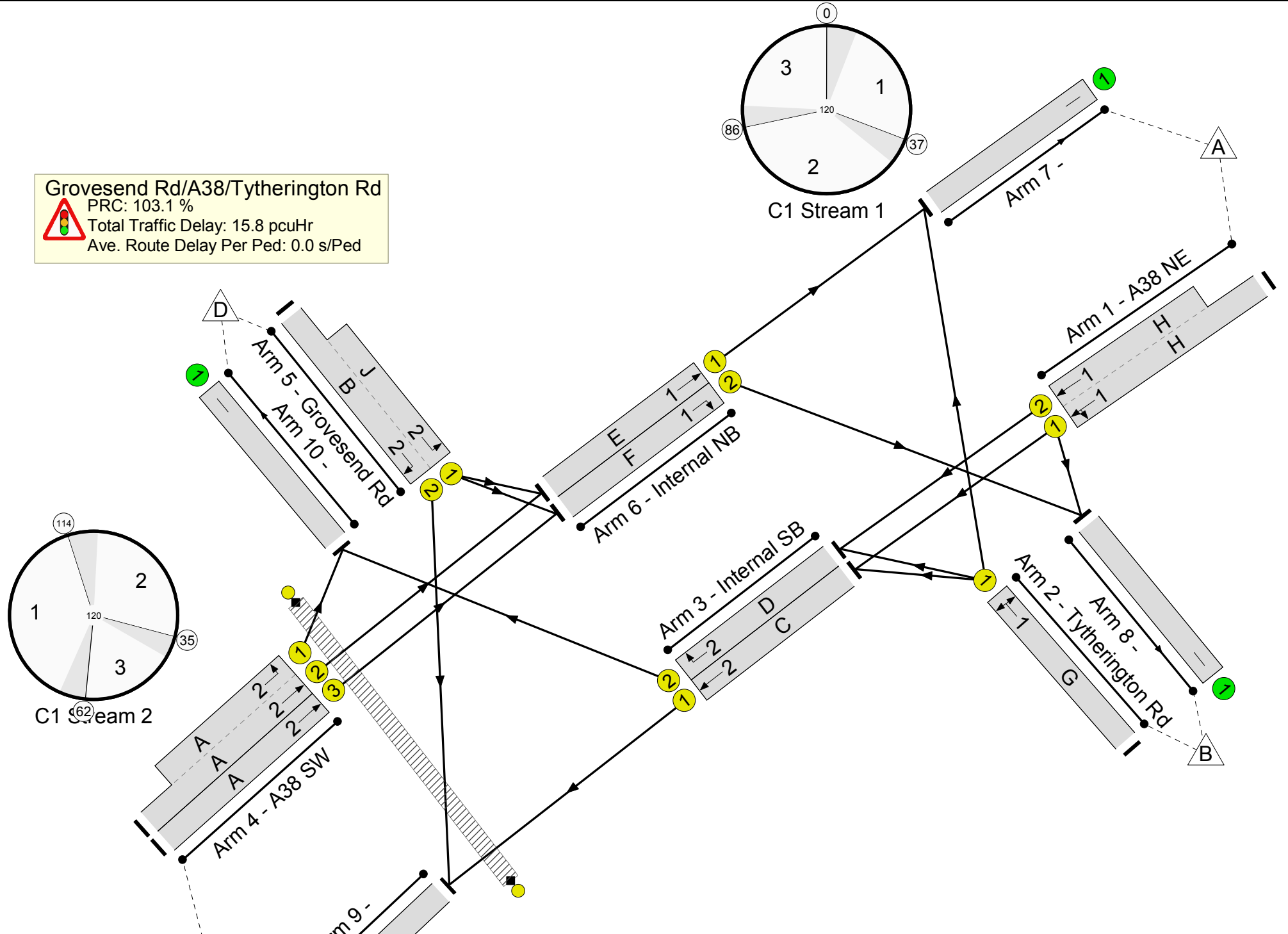


Full Input Data And Results

Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Grovesend Rd/A38/Tytherington Rd
 PRC: 103.1 %
 Total Traffic Delay: 15.8 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|---|----------------------------|-----------|-------------------|----------------------------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|--------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 44.3% |
| Grovesend Rd/A38/Tytherington Rd | - | - | N/A | - | - | | - | - | - | - | - | - | 44.3% |
| 1/1+1/2 | A38 NE Ahead Left | U | 1 | N/A | H | | 1 | 32 | - | 283 | 1940:2155 | 458+262 | 39.3 : 39.3% |
| 2/1 | Tytherington Rd Left Right | U | 1 | N/A | G | | 1 | 29 | - | 205 | 1897 | 474 | 43.2% |
| 3/1 | Internal SB Ahead | U | 2 | N/A | C | | 1 | 88 | - | 201 | 1940 | 1439 | 14.0% |
| 3/2 | Internal SB Right | U | 2 | N/A | D | | 1 | 35 | - | 251 | 1902 | 571 | 44.0% |
| 4/2+4/1 | A38 SW Ahead Left | U | 2 | N/A | A | | 1 | 46 | - | 466 | 1940:1724 | 520+543 | 43.8 : 43.8% |
| 4/3 | A38 SW Ahead | U | 2 | N/A | A | | 1 | 46 | - | 26 | 2080 | 815 | 3.2% |
| 5/2+5/1 | Grovesend Rd Left Right | U | 2 | N/A | B J | | 1 | 22:61 | - | 458 | 1774:1724 | 311+722 | 44.3 : 44.3% |
| 6/1 | Internal NB Ahead | U | 1 | N/A | E | | 1 | 79 | - | 369 | 1940 | 1293 | 28.5% |
| 6/2 | Internal NB Right | U | 1 | N/A | F | | 1 | 43 | - | 205 | 1891 | 693 | 29.6% |
| 7/1 | | U | N/A | N/A | - | | - | - | - | 391 | Inf | Inf | 0.0% |
| 8/1 | | U | N/A | N/A | - | | - | - | - | 219 | Inf | Inf | 0.0% |
| 9/1 | | U | N/A | N/A | - | | - | - | - | 339 | Inf | Inf | 0.0% |
| 10/1 | | U | N/A | N/A | - | | - | - | - | 489 | Inf | Inf | 0.0% |
| Ped Link: P1 | Unnamed Ped Link | - | 2 | - | I | | 0 | 0 | - | 0 | - | 0 | 0.0% |

Full Input Data And Results

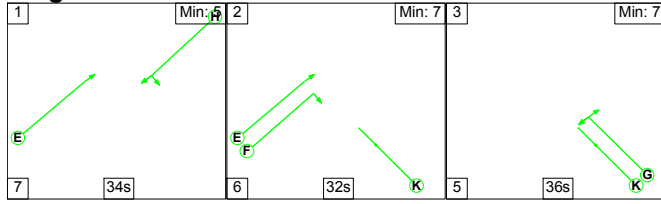
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------------|--|------------------------------|-----------------------------|-----------------------|------------------------------|------------------------------------|---------------------|---------------------------|----------------------------------|----------------------------|----------------------|--|---|-------|--|------|-----------------|-----|--|---|-------|--|------|-----------------|-----|--|-------------------------|-------|------------------------------------|-------|--|--|
| Network | - | - | 0 | 0 | 0 | 14.3 | 1.5 | 0.0 | 15.8 | - | - | - | - | | | | | | | | | | | | | | | | | | | | | |
| Grovesend Rd/A38/Tytherington Rd | - | - | 0 | 0 | 0 | 14.3 | 1.5 | 0.0 | 15.8 | - | - | - | - | | | | | | | | | | | | | | | | | | | | | |
| 1/1+1/2 | 283 | 283 | - | - | - | 2.7 | 0.3 | - | 3.0 | 38.3 | 4.8 | 0.3 | 5.1 | | | | | | | | | | | | | | | | | | | | | |
| 2/1 | 205 | 205 | - | - | - | 2.2 | 0.4 | - | 2.5 | 44.5 | 5.7 | 0.4 | 6.1 | | | | | | | | | | | | | | | | | | | | | |
| 3/1 | 201 | 201 | - | - | - | 0.1 | 0.0 | - | 0.1 | 1.8 | 0.5 | 0.0 | 0.5 | | | | | | | | | | | | | | | | | | | | | |
| 3/2 | 251 | 251 | - | - | - | 0.9 | 0.0 | - | 0.9 | 13.5 | 5.2 | 0.0 | 5.2 | | | | | | | | | | | | | | | | | | | | | |
| 4/2+4/1 | 466 | 466 | - | - | - | 3.3 | 0.4 | - | 3.7 | 28.5 | 5.6 | 0.4 | 5.9 | | | | | | | | | | | | | | | | | | | | | |
| 4/3 | 26 | 26 | - | - | - | 0.2 | 0.0 | - | 0.2 | 24.8 | 0.5 | 0.0 | 0.5 | | | | | | | | | | | | | | | | | | | | | |
| 5/2+5/1 | 458 | 458 | - | - | - | 3.2 | 0.4 | - | 3.6 | 28.0 | 6.3 | 0.4 | 6.7 | | | | | | | | | | | | | | | | | | | | | |
| 6/1 | 369 | 369 | - | - | - | 0.6 | 0.0 | - | 0.6 | 5.5 | 3.4 | 0.0 | 3.4 | | | | | | | | | | | | | | | | | | | | | |
| 6/2 | 205 | 205 | - | - | - | 1.2 | 0.0 | - | 1.2 | 21.6 | 5.3 | 0.0 | 5.3 | | | | | | | | | | | | | | | | | | | | | |
| 7/1 | 391 | 391 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | |
| 8/1 | 219 | 219 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | |
| 9/1 | 339 | 339 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | |
| 10/1 | 489 | 489 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | |
| Ped Link: P1 | 0 | 0 | - | - | - | - | - | - | Inf | Inf | - | - | Inf | | | | | | | | | | | | | | | | | | | | | |
| <table style="width:100%; border:none;"> <tr> <td style="width:20%;"></td> <td style="width:20%;">C1 Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width:20%;">108.2</td> <td style="width:20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:10%;">7.34</td> <td style="width:20%;">Cycle Time (s):</td> <td style="width:10%;">120</td> </tr> <tr> <td></td> <td>C1 Stream: 2 PRC for Signalled Lanes (%):</td> <td>103.1</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>8.47</td> <td>Cycle Time (s):</td> <td>120</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>103.1</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>15.81</td> <td></td> <td></td> </tr> </table> | | | | | | | | | | | | | | | C1 Stream: 1 PRC for Signalled Lanes (%): | 108.2 | Total Delay for Signalled Lanes (pcuHr): | 7.34 | Cycle Time (s): | 120 | | C1 Stream: 2 PRC for Signalled Lanes (%): | 103.1 | Total Delay for Signalled Lanes (pcuHr): | 8.47 | Cycle Time (s): | 120 | | PRC Over All Lanes (%): | 103.1 | Total Delay Over All Lanes(pcuHr): | 15.81 | | |
| | C1 Stream: 1 PRC for Signalled Lanes (%): | 108.2 | Total Delay for Signalled Lanes (pcuHr): | 7.34 | Cycle Time (s): | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | C1 Stream: 2 PRC for Signalled Lanes (%): | 103.1 | Total Delay for Signalled Lanes (pcuHr): | 8.47 | Cycle Time (s): | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PRC Over All Lanes (%): | 103.1 | Total Delay Over All Lanes(pcuHr): | 15.81 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Full Input Data And Results

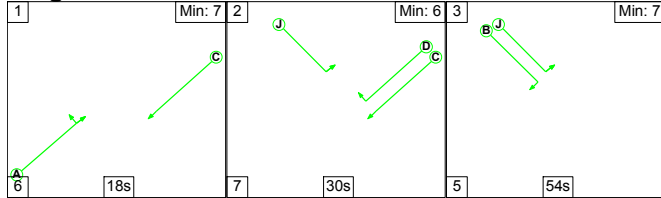
Scenario 3: '2028 Ref Case AM' (FG3: '2028 Ref Case AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

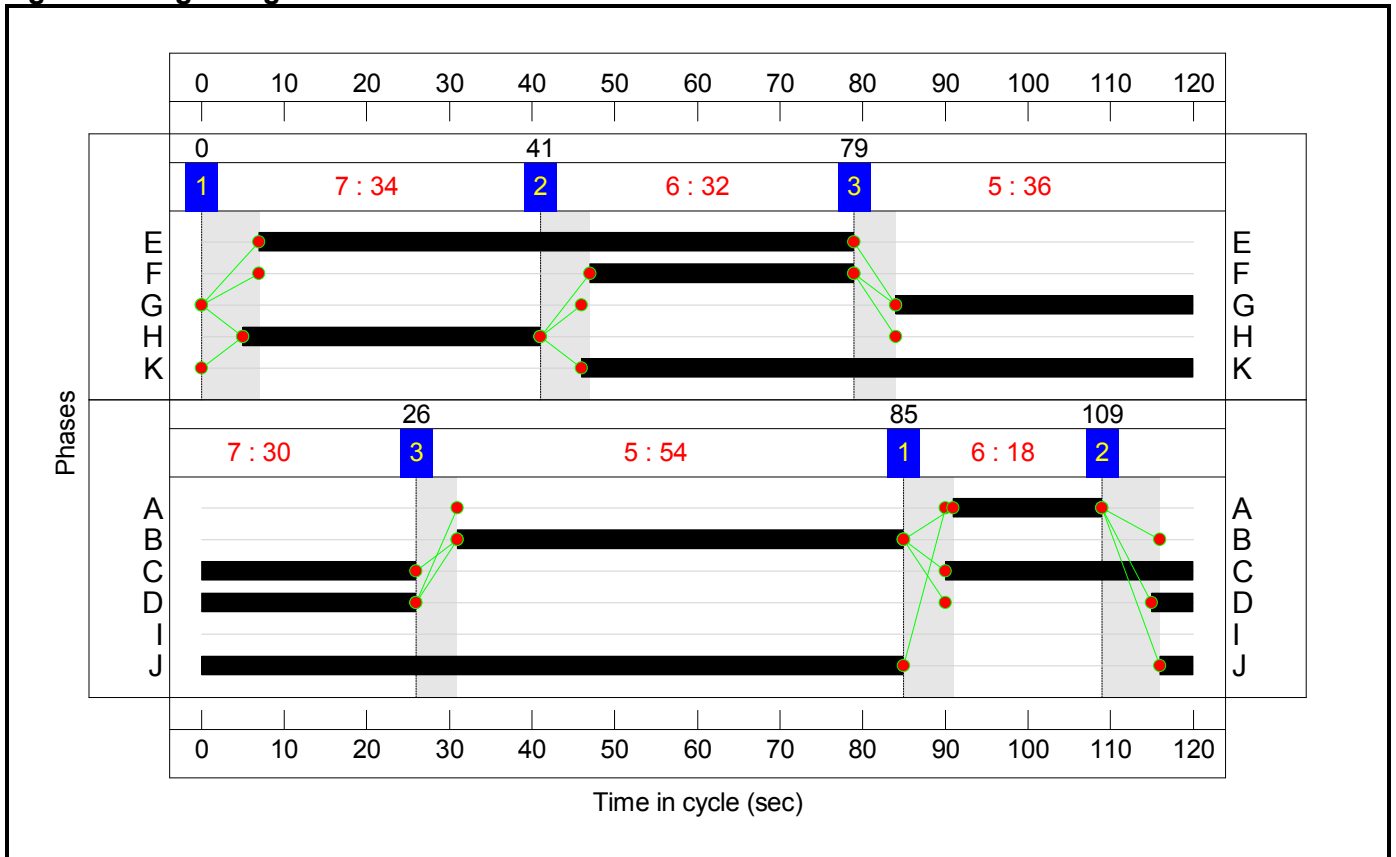
Stage Stream: 1

| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 34 | 32 | 36 |
| Change Point | 0 | 41 | 79 |

Stage Stream: 2

| Stage | 1 | 2 | 3 |
|--------------|----|-----|----|
| Duration | 18 | 30 | 54 |
| Change Point | 85 | 109 | 26 |

Signal Timings Diagram

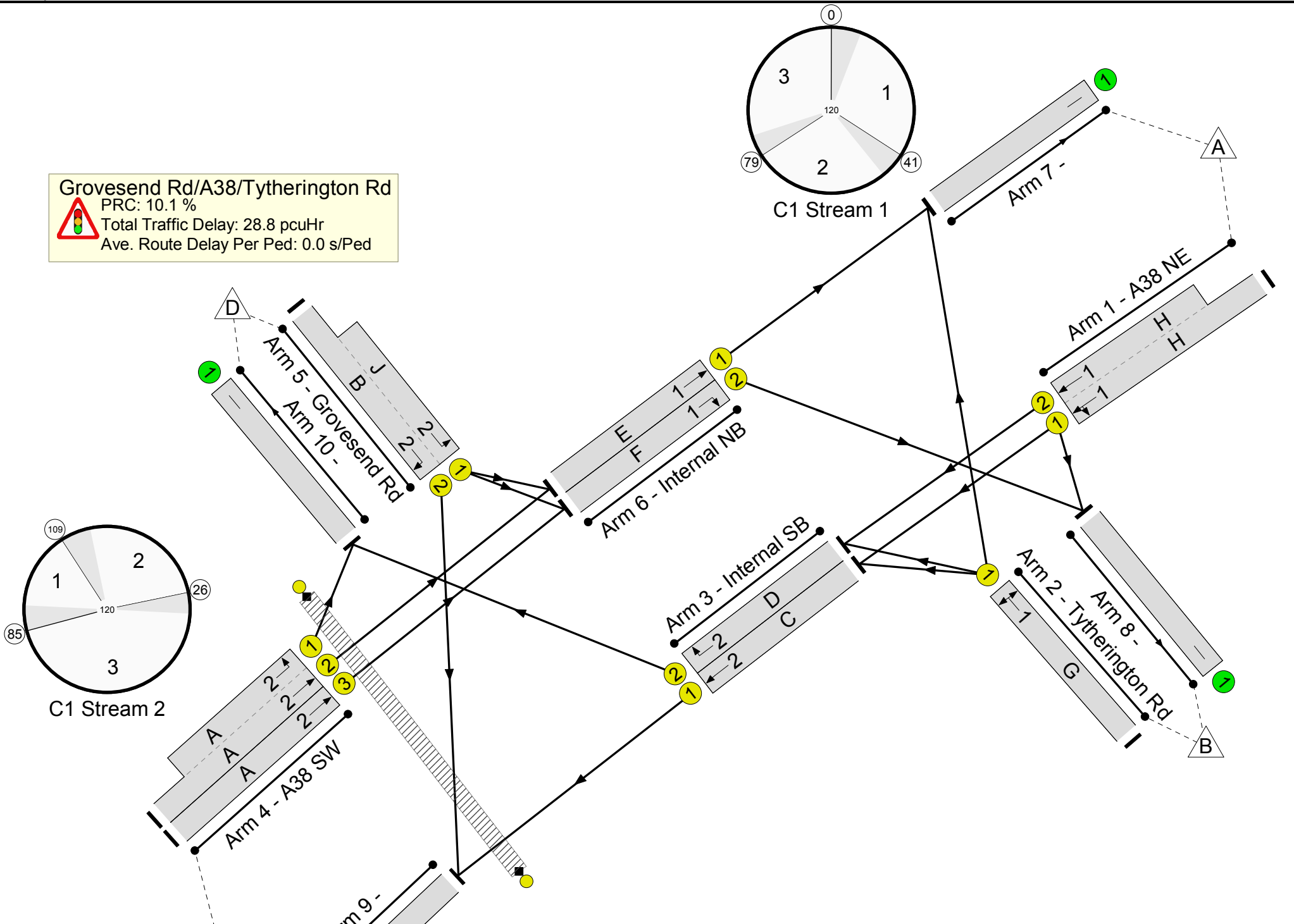


Full Input Data And Results

Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Grovesend Rd/A38/Tytherington Rd
 PRC: 10.1 %
 Total Traffic Delay: 28.8 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|----------------------------------|----------------------------|-----------|-------------------|----------------------------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|--------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 81.7% |
| Grovesend Rd/A38/Tytherington Rd | - | - | N/A | - | - | | - | - | - | - | - | - | 81.7% |
| 1/1+1/2 | A38 NE Ahead Left | U | 1 | N/A | H | | 1 | 36 | - | 395 | 1940:2155 | 479+381 | 45.9 : 45.9% |
| 2/1 | Tytherington Rd Left Right | U | 1 | N/A | G | | 1 | 36 | - | 308 | 1906 | 588 | 52.4% |
| 3/1 | Internal SB Ahead | U | 2 | N/A | C | | 1 | 56 | - | 245 | 1940 | 921 | 26.6% |
| 3/2 | Internal SB Right | U | 2 | N/A | D | | 1 | 31 | - | 413 | 1902 | 507 | 81.4% |
| 4/2+4/1 | A38 SW Ahead Left | U | 2 | N/A | A | | 1 | 18 | - | 398 | 1940:1724 | 230+273 | 79.1 : 79.1% |
| 4/3 | A38 SW Ahead | U | 2 | N/A | A | | 1 | 18 | - | 61 | 2080 | 329 | 18.5% |
| 5/2+5/1 | Grovesend Rd Left Right | U | 2 | N/A | B J | | 1 | 54:89 | - | 794 | 1774:1724 | 652+319 | 81.7 : 81.7% |
| 6/1 | Internal NB Ahead | U | 1 | N/A | E | | 1 | 72 | - | 291 | 1940 | 1180 | 24.7% |
| 6/2 | Internal NB Right | U | 1 | N/A | F | | 1 | 32 | - | 213 | 1891 | 520 | 41.0% |
| 7/1 | | U | N/A | N/A | - | | - | - | - | 316 | Inf | Inf | 0.0% |
| 8/1 | | U | N/A | N/A | - | | - | - | - | 233 | Inf | Inf | 0.0% |
| 9/1 | | U | N/A | N/A | - | | - | - | - | 778 | Inf | Inf | 0.0% |
| 10/1 | | U | N/A | N/A | - | | - | - | - | 629 | Inf | Inf | 0.0% |
| Ped Link: P1 | Unnamed Ped Link | - | 2 | - | I | | 0 | 0 | - | 0 | - | 0 | 0.0% |

Full Input Data And Results

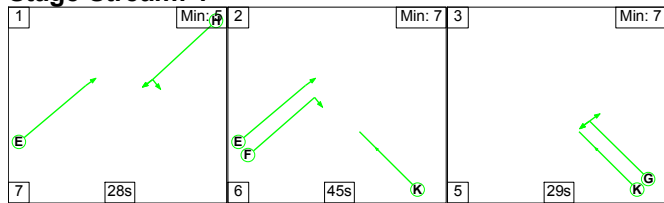
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
|---|----------------|---------------|--|------------------------------|-----------------------------|--|------------------------------|------------------------------------|---------------------|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | 0 | 0 | 0 | 23.7 | 5.1 | 0.0 | 28.8 | - | - | - | - |
| Grovesend Rd/A38/Tytherington Rd | - | - | 0 | 0 | 0 | 23.7 | 5.1 | 0.0 | 28.8 | - | - | - | - |
| 1/1+1/2 | 395 | 395 | - | - | - | 3.5 | 0.4 | - | 3.9 | 35.7 | 5.7 | 0.4 | 6.1 |
| 2/1 | 308 | 308 | - | - | - | 2.9 | 0.5 | - | 3.5 | 40.6 | 8.4 | 0.5 | 8.9 |
| 3/1 | 245 | 245 | - | - | - | 0.6 | 0.0 | - | 0.6 | 9.1 | 1.5 | 0.0 | 1.5 |
| 3/2 | 413 | 413 | - | - | - | 2.2 | 0.0 | - | 2.2 | 18.9 | 9.6 | 0.0 | 9.6 |
| 4/2+4/1 | 398 | 398 | - | - | - | 5.3 | 1.8 | - | 7.1 | 64.4 | 6.9 | 1.8 | 8.7 |
| 4/3 | 61 | 61 | - | - | - | 0.7 | 0.1 | - | 0.9 | 50.5 | 1.8 | 0.1 | 1.9 |
| 5/2+5/1 | 794 | 794 | - | - | - | 4.2 | 2.2 | - | 6.4 | 29.1 | 16.7 | 2.2 | 18.9 |
| 6/1 | 291 | 291 | - | - | - | 1.7 | 0.0 | - | 1.7 | 21.2 | 7.9 | 0.0 | 7.9 |
| 6/2 | 213 | 213 | - | - | - | 2.5 | 0.0 | - | 2.5 | 42.0 | 5.5 | 0.0 | 5.5 |
| 7/1 | 316 | 316 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8/1 | 233 | 233 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9/1 | 778 | 778 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/1 | 629 | 629 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ped Link: P1 | 0 | 0 | - | - | - | - | - | - | Inf | Inf | - | - | Inf |
| | | C1 | Stream: 1 PRC for Signalled Lanes (%): | | 71.7 | Total Delay for Signalled Lanes (pcuHr): | | 11.60 | Cycle Time (s): | | 120 | | |
| | | C1 | Stream: 2 PRC for Signalled Lanes (%): | | 10.1 | Total Delay for Signalled Lanes (pcuHr): | | 17.19 | Cycle Time (s): | | 120 | | |
| | | | PRC Over All Lanes (%): | | 10.1 | Total Delay Over All Lanes(pcuHr): | | 28.79 | | | | | |

Full Input Data And Results

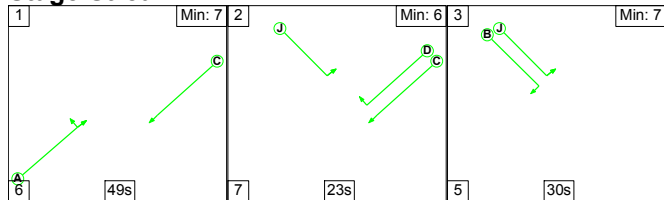
Scenario 4: '2028 Ref Case PM' (FG4: '2028 Ref Case PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

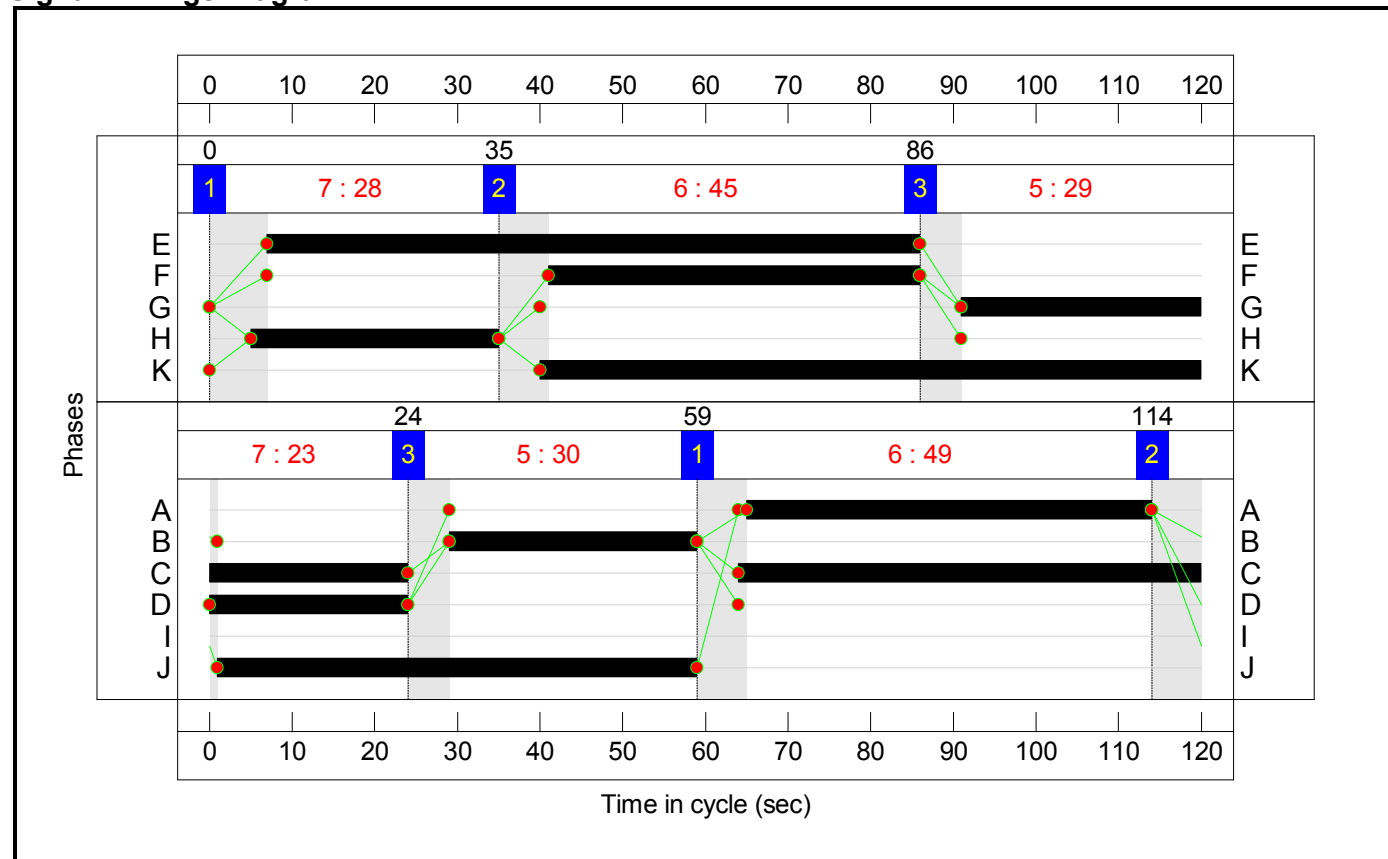
Stage Stream: 1

| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 28 | 45 | 29 |
| Change Point | 0 | 35 | 86 |

Stage Stream: 2

| Stage | 1 | 2 | 3 |
|--------------|----|-----|----|
| Duration | 49 | 23 | 30 |
| Change Point | 59 | 114 | 24 |

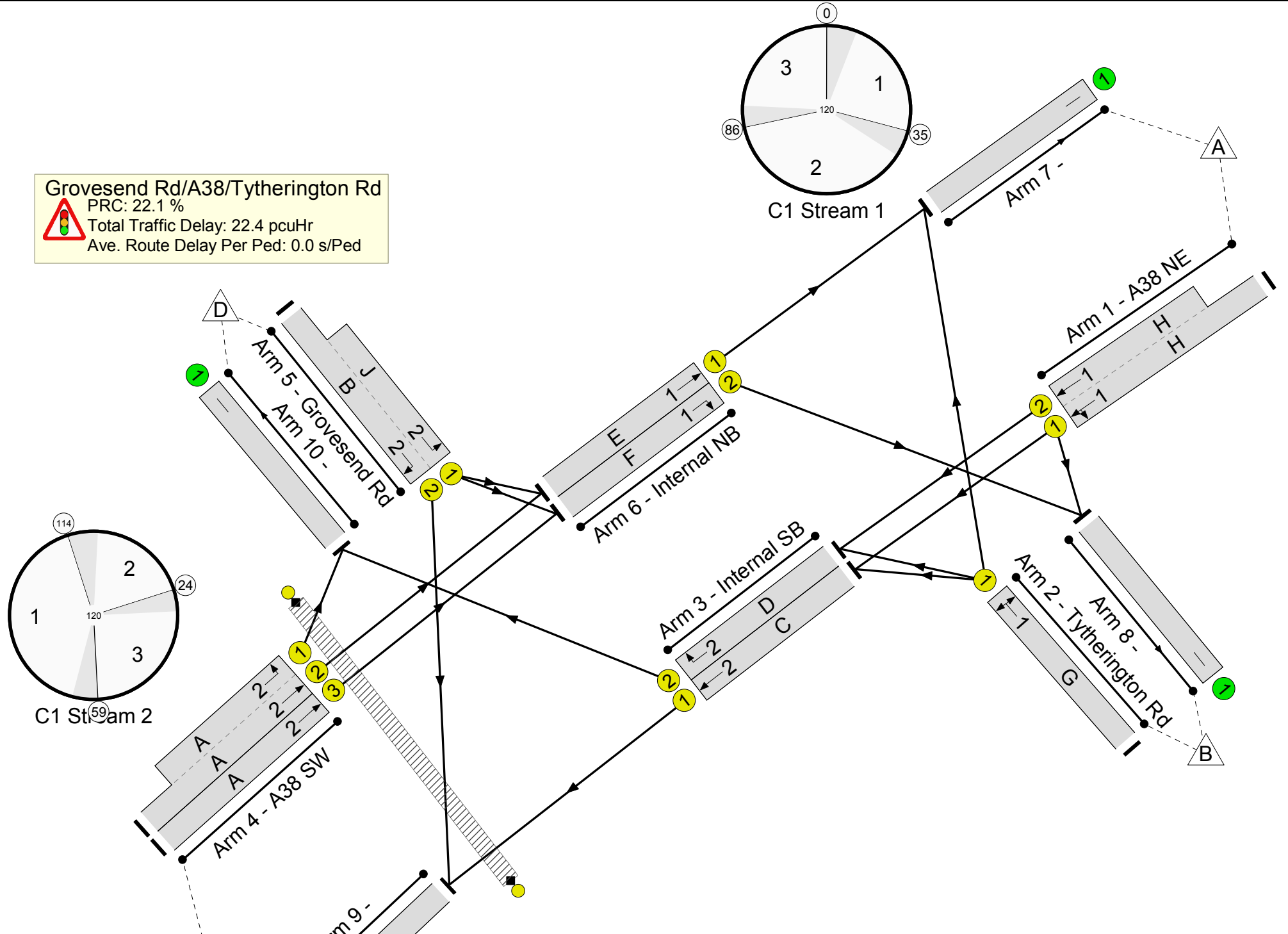
Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results
Network Layout Diagram

Grovesend Rd/A38/Tytherington Rd
 PRC: 22.1 %
 Total Traffic Delay: 22.4 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|----------------------------------|----------------------------|-----------|-------------------|----------------------------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|--------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 73.7% |
| Grovesend Rd/A38/Tytherington Rd | - | - | N/A | - | - | | - | - | - | - | - | - | 73.7% |
| 1/1+1/2 | A38 NE Ahead Left | U | 1 | N/A | H | | 1 | 30 | - | 297 | 1940:2155 | 431+280 | 41.7 : 41.7% |
| 2/1 | Tytherington Rd Left Right | U | 1 | N/A | G | | 1 | 29 | - | 228 | 1901 | 475 | 48.0% |
| 3/1 | Internal SB Ahead | U | 2 | N/A | C | | 1 | 80 | - | 201 | 1940 | 1310 | 15.3% |
| 3/2 | Internal SB Right | U | 2 | N/A | D | | 1 | 24 | - | 288 | 1902 | 396 | 72.7% |
| 4/2+4/1 | A38 SW Ahead Left | U | 2 | N/A | A | | 1 | 49 | - | 685 | 1940:1724 | 309+620 | 73.7 : 73.7% |
| 4/3 | A38 SW Ahead | U | 2 | N/A | A | | 1 | 49 | - | 26 | 2080 | 867 | 3.0% |
| 5/2+5/1 | Grovesend Rd Left Right | U | 2 | N/A | B J | | 1 | 30:58 | - | 622 | 1774:1724 | 376+468 | 73.7 : 73.7% |
| 6/1 | Internal NB Ahead | U | 1 | N/A | E | | 1 | 79 | - | 379 | 1940 | 1293 | 29.3% |
| 6/2 | Internal NB Right | U | 1 | N/A | F | | 1 | 45 | - | 220 | 1891 | 725 | 30.3% |
| 7/1 | | U | N/A | N/A | - | | - | - | - | 401 | Inf | Inf | 0.0% |
| 8/1 | | U | N/A | N/A | - | | - | - | - | 234 | Inf | Inf | 0.0% |
| 9/1 | | U | N/A | N/A | - | | - | - | - | 478 | Inf | Inf | 0.0% |
| 10/1 | | U | N/A | N/A | - | | - | - | - | 745 | Inf | Inf | 0.0% |
| Ped Link: P1 | Unnamed Ped Link | - | 2 | - | I | | 0 | 0 | - | 0 | - | 0 | 0.0% |

Full Input Data And Results

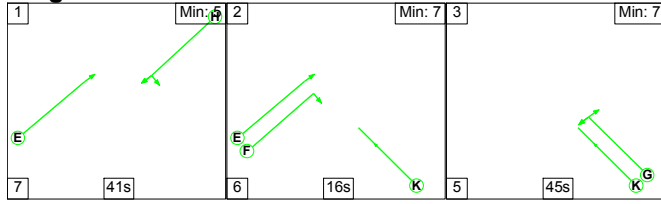
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
|---|----------------|---------------|--|------------------------------|-----------------------------|--|------------------------------|------------------------------------|---------------------|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | 0 | 0 | 0 | 18.8 | 3.6 | 0.0 | 22.4 | - | - | - | - |
| Grovesend Rd/A38/Tytherington Rd | - | - | 0 | 0 | 0 | 18.8 | 3.6 | 0.0 | 22.4 | - | - | - | - |
| 1/1+1/2 | 297 | 297 | - | - | - | 3.0 | 0.4 | - | 3.3 | 40.1 | 4.9 | 0.4 | 5.3 |
| 2/1 | 228 | 228 | - | - | - | 2.4 | 0.5 | - | 2.9 | 45.6 | 6.5 | 0.5 | 6.9 |
| 3/1 | 201 | 201 | - | - | - | 0.3 | 0.0 | - | 0.3 | 4.7 | 1.0 | 0.0 | 1.0 |
| 3/2 | 288 | 288 | - | - | - | 1.4 | 0.0 | - | 1.4 | 17.3 | 6.5 | 0.0 | 6.5 |
| 4/2+4/1 | 685 | 685 | - | - | - | 5.0 | 1.4 | - | 6.4 | 33.5 | 12.1 | 1.4 | 13.4 |
| 4/3 | 26 | 26 | - | - | - | 0.1 | 0.0 | - | 0.2 | 22.8 | 0.5 | 0.0 | 0.5 |
| 5/2+5/1 | 622 | 622 | - | - | - | 4.9 | 1.4 | - | 6.2 | 36.2 | 8.1 | 1.4 | 9.5 |
| 6/1 | 379 | 379 | - | - | - | 0.5 | 0.0 | - | 0.5 | 4.7 | 3.0 | 0.0 | 3.0 |
| 6/2 | 220 | 220 | - | - | - | 1.3 | 0.0 | - | 1.3 | 20.7 | 5.9 | 0.0 | 5.9 |
| 7/1 | 401 | 401 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8/1 | 234 | 234 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9/1 | 478 | 478 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/1 | 745 | 745 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ped Link: P1 | 0 | 0 | - | - | - | - | - | - | Inf | Inf | - | - | Inf |
| | | C1 | Stream: 1 PRC for Signalled Lanes (%): | | 87.6 | Total Delay for Signalled Lanes (pcuHr): | | 7.96 | Cycle Time (s): | | 120 | | |
| | | C1 | Stream: 2 PRC for Signalled Lanes (%): | | 22.1 | Total Delay for Signalled Lanes (pcuHr): | | 14.44 | Cycle Time (s): | | 120 | | |
| | | | PRC Over All Lanes (%): | | 22.1 | Total Delay Over All Lanes(pcuHr): | | 22.40 | | | | | |

Full Input Data And Results

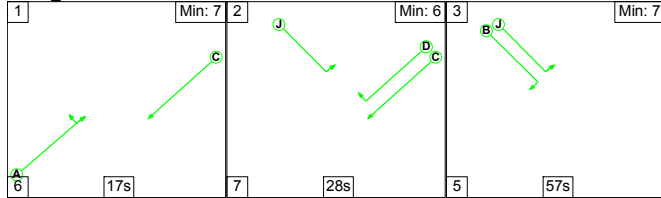
Scenario 5: '2028 Test Case AM' (FG5: '2028 Test Case AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

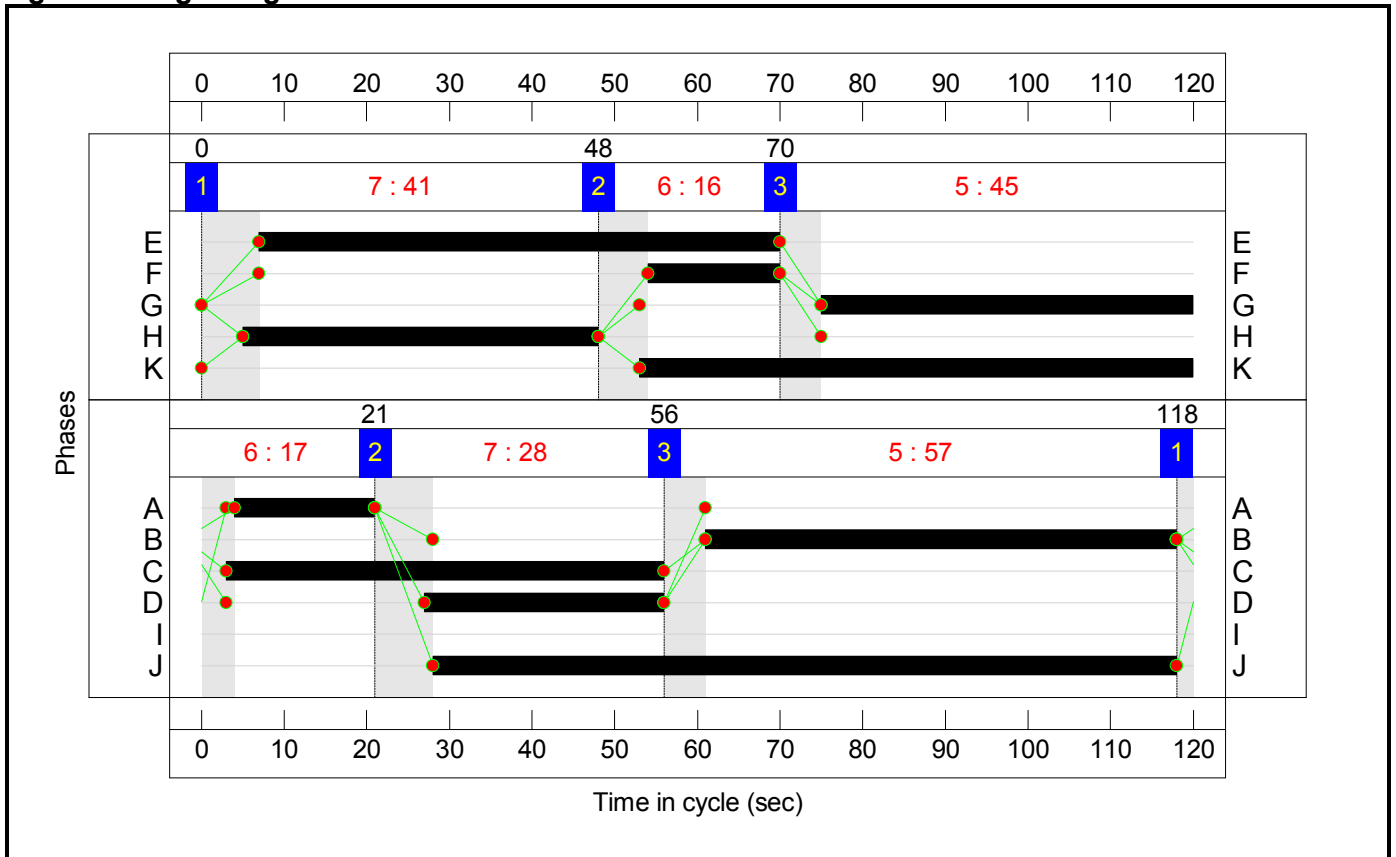
Stage Stream: 1

| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 41 | 16 | 45 |
| Change Point | 0 | 48 | 70 |

Stage Stream: 2

| Stage | 1 | 2 | 3 |
|--------------|-----|----|----|
| Duration | 17 | 28 | 57 |
| Change Point | 118 | 21 | 56 |

Signal Timings Diagram

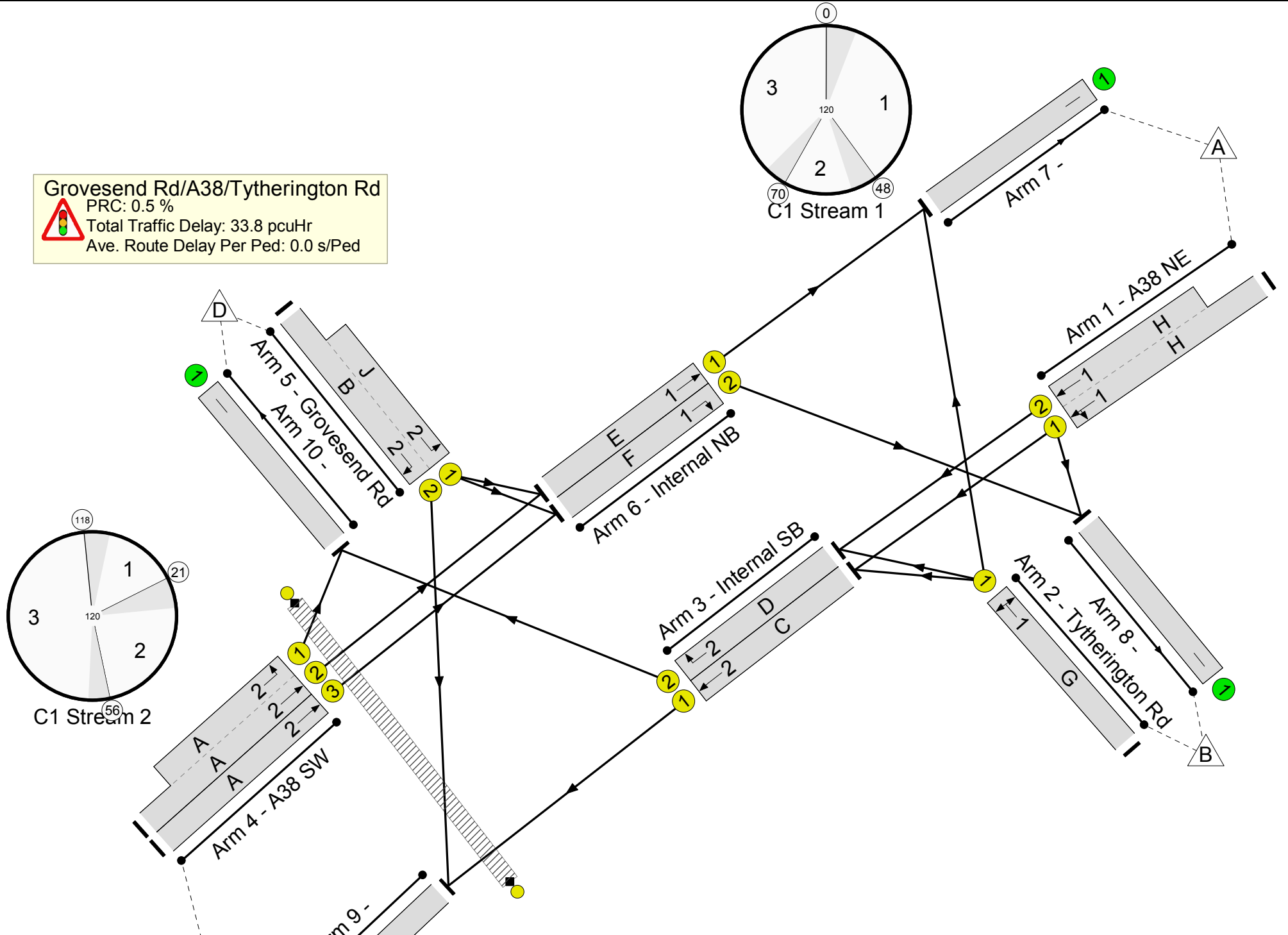


Full Input Data And Results

Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Grovesend Rd/A38/Tytherington Rd
 PRC: 0.5 %
 Total Traffic Delay: 33.8 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|----------------------------------|----------------------------|-----------|-------------------|----------------------------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|--------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 89.6% |
| Grovesend Rd/A38/Tytherington Rd | - | - | N/A | - | - | | - | - | - | - | - | - | 89.6% |
| 1/1+1/2 | A38 NE Ahead Left | U | 1 | N/A | H | | 1 | 43 | - | 395 | 1940:2155 | 545+433 | 40.4 : 40.4% |
| 2/1 | Tytherington Rd Left Right | U | 1 | N/A | G | | 1 | 45 | - | 310 | 1906 | 731 | 42.4% |
| 3/1 | Internal SB Ahead | U | 2 | N/A | C | | 1 | 53 | - | 245 | 1940 | 873 | 28.1% |
| 3/2 | Internal SB Right | U | 2 | N/A | D | | 1 | 29 | - | 415 | 1902 | 475 | 87.3% |
| 4/2+4/1 | A38 SW Ahead Left | U | 2 | N/A | A | | 1 | 17 | - | 411 | 1940:1724 | 206+259 | 88.6 : 88.6% |
| 4/3 | A38 SW Ahead | U | 2 | N/A | A | | 1 | 17 | - | 61 | 2080 | 312 | 19.6% |
| 5/2+5/1 | Grovesend Rd Left Right | U | 2 | N/A | B J | | 1 | 57:90 | - | 898 | 1774:1724 | 694+308 | 89.6 : 89.6% |
| 6/1 | Internal NB Ahead | U | 1 | N/A | E | | 1 | 63 | - | 291 | 1940 | 1035 | 28.1% |
| 6/2 | Internal NB Right | U | 1 | N/A | F | | 1 | 16 | - | 228 | 1891 | 268 | 85.1% |
| 7/1 | | U | N/A | N/A | - | | - | - | - | 316 | Inf | Inf | 0.0% |
| 8/1 | | U | N/A | N/A | - | | - | - | - | 248 | Inf | Inf | 0.0% |
| 9/1 | | U | N/A | N/A | - | | - | - | - | 867 | Inf | Inf | 0.0% |
| 10/1 | | U | N/A | N/A | - | | - | - | - | 644 | Inf | Inf | 0.0% |
| Ped Link: P1 | Unnamed Ped Link | - | 2 | - | I | | 0 | 0 | - | 0 | - | 0 | 0.0% |

Full Input Data And Results

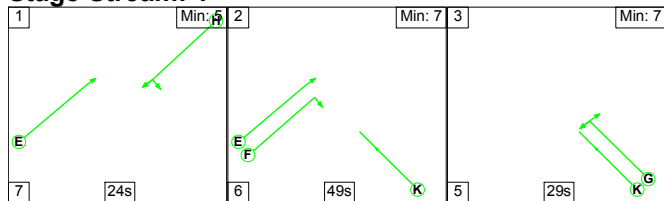
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------|--|-----------------------|--|-----------------------------|-----------------------|------------------------------|------------------------------------|---------------------|---------------------------|----------------------------------|----------------------------|----------------------|--|----|--|-----|--|------|-----------------|-----|--|----|--|-----|--|-------|-----------------|-----|--|--|-------------------------|-----|------------------------------------|-------|--|--|
| Network | - | - | 0 | 0 | 0 | 25.6 | 8.3 | 0.0 | 33.8 | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | |
| Grovesend Rd/A38/Tytherington Rd | - | - | 0 | 0 | 0 | 25.6 | 8.3 | 0.0 | 33.8 | - | - | - | - | | | | | | | | | | | | | | | | | | | | | | | | |
| 1/1+1/2 | 395 | 395 | - | - | - | 2.9 | 0.3 | - | 3.3 | 29.8 | 5.2 | 0.3 | 5.5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2/1 | 310 | 310 | - | - | - | 2.3 | 0.4 | - | 2.7 | 31.5 | 7.6 | 0.4 | 7.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3/1 | 245 | 245 | - | - | - | 0.4 | 0.0 | - | 0.4 | 5.6 | 1.5 | 0.0 | 1.5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3/2 | 415 | 415 | - | - | - | 5.1 | 0.0 | - | 5.1 | 44.4 | 13.6 | 0.0 | 13.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4/2+4/1 | 411 | 411 | - | - | - | 5.6 | 3.4 | - | 9.0 | 79.1 | 7.4 | 3.4 | 10.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4/3 | 61 | 61 | - | - | - | 0.8 | 0.1 | - | 0.9 | 51.8 | 1.8 | 0.1 | 1.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5/2+5/1 | 898 | 898 | - | - | - | 5.1 | 4.0 | - | 9.1 | 36.4 | 21.9 | 4.0 | 25.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6/1 | 291 | 291 | - | - | - | 0.4 | 0.0 | - | 0.4 | 4.5 | 1.9 | 0.0 | 1.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6/2 | 228 | 228 | - | - | - | 3.0 | 0.0 | - | 3.0 | 46.9 | 7.6 | 0.0 | 7.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7/1 | 316 | 316 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8/1 | 248 | 248 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9/1 | 867 | 867 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10/1 | 644 | 644 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Ped Link: P1 | 0 | 0 | - | - | - | - | - | - | Inf | Inf | - | - | Inf | | | | | | | | | | | | | | | | | | | | | | | | |
| <table style="width:100%; border:none;"> <tr> <td style="width:15%;"></td> <td style="width:15%;">C1</td> <td style="width:25%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width:10%;">5.7</td> <td style="width:15%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:10%;">9.32</td> <td style="width:10%;">Cycle Time (s):</td> <td style="width:10%;">120</td> </tr> <tr> <td></td> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>0.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>24.49</td> <td>Cycle Time (s):</td> <td>120</td> </tr> <tr> <td></td> <td></td> <td>PRC Over All Lanes (%):</td> <td>0.5</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>33.81</td> <td></td> <td></td> </tr> </table> | | | | | | | | | | | | | | | C1 | Stream: 1 PRC for Signalled Lanes (%): | 5.7 | Total Delay for Signalled Lanes (pcuHr): | 9.32 | Cycle Time (s): | 120 | | C1 | Stream: 2 PRC for Signalled Lanes (%): | 0.5 | Total Delay for Signalled Lanes (pcuHr): | 24.49 | Cycle Time (s): | 120 | | | PRC Over All Lanes (%): | 0.5 | Total Delay Over All Lanes(pcuHr): | 33.81 | | |
| | C1 | Stream: 1 PRC for Signalled Lanes (%): | 5.7 | Total Delay for Signalled Lanes (pcuHr): | 9.32 | Cycle Time (s): | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | C1 | Stream: 2 PRC for Signalled Lanes (%): | 0.5 | Total Delay for Signalled Lanes (pcuHr): | 24.49 | Cycle Time (s): | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | PRC Over All Lanes (%): | 0.5 | Total Delay Over All Lanes(pcuHr): | 33.81 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Full Input Data And Results

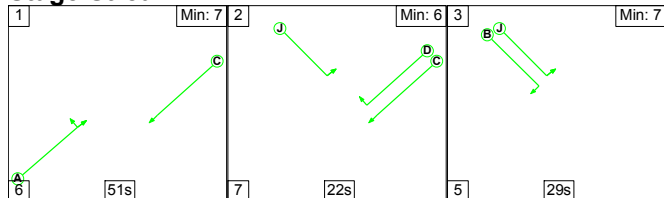
Scenario 6: '2028 Test Case PM' (FG6: '2028 Test Case PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

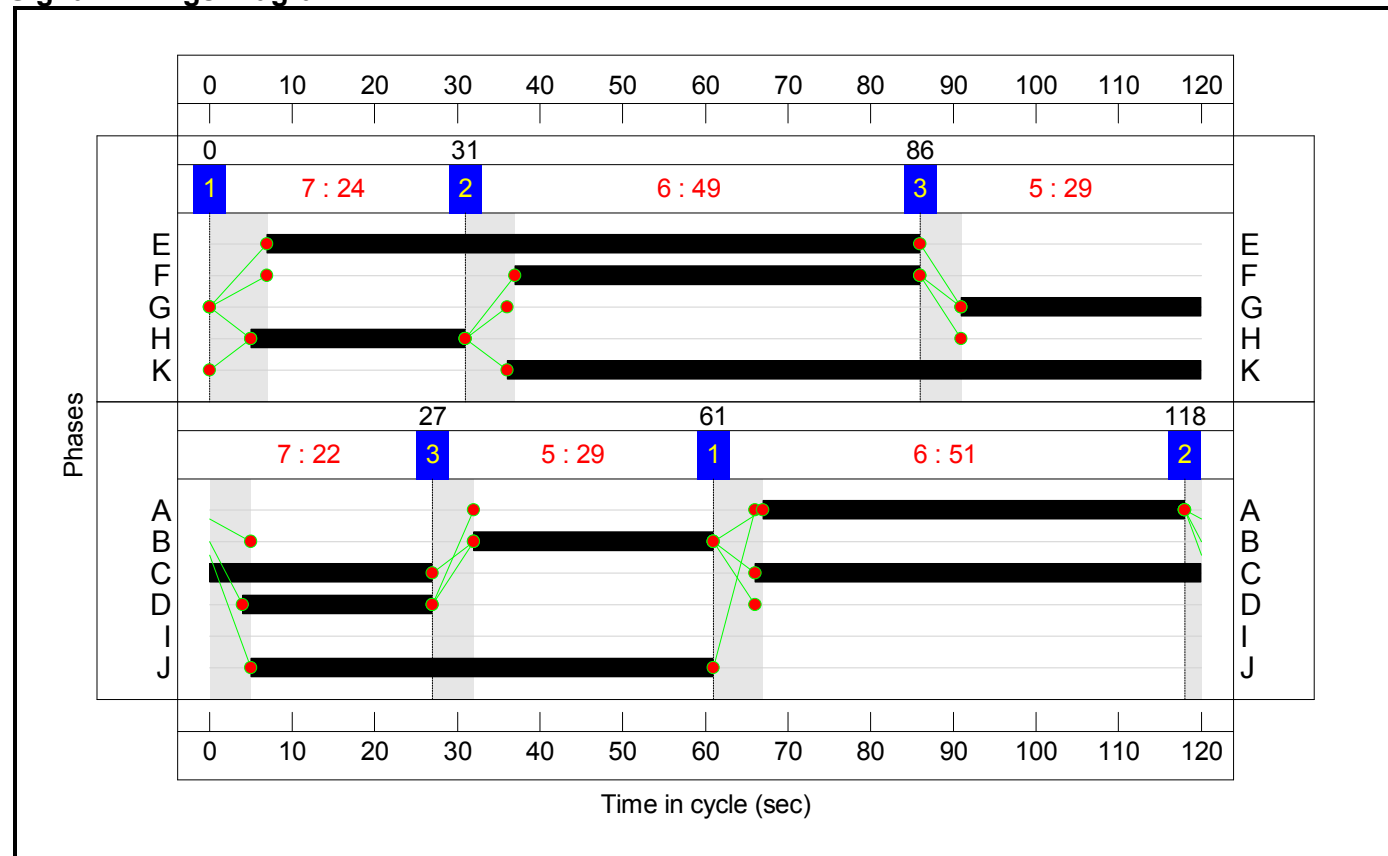
Stage Stream: 1

| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 24 | 49 | 29 |
| Change Point | 0 | 31 | 86 |

Stage Stream: 2

| Stage | 1 | 2 | 3 |
|--------------|----|-----|----|
| Duration | 51 | 22 | 29 |
| Change Point | 61 | 118 | 27 |

Signal Timings Diagram

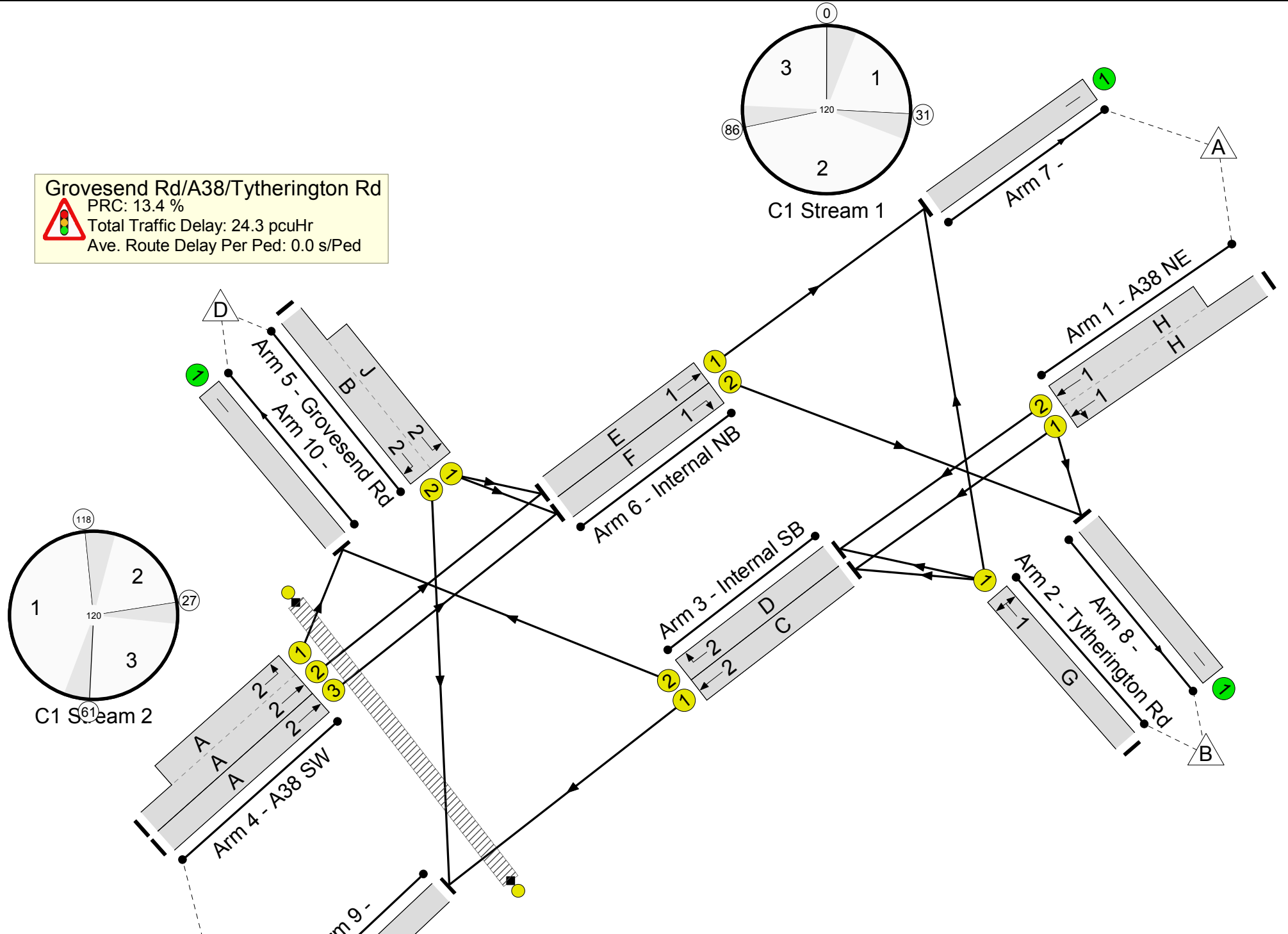


Full Input Data And Results

Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Grovesend Rd/A38/Tytherington Rd
 PRC: 13.4 %
 Total Traffic Delay: 24.3 pcuHr
 Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|----------------------------------|----------------------------|-----------|-------------------|----------------------------|------------|-------------|------------|-----------------|-----------------|-------------------|-------------------|----------------|--------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 79.3% |
| Grovesend Rd/A38/Tytherington Rd | - | - | N/A | - | - | | - | - | - | - | - | - | 79.3% |
| 1/1+1/2 | A38 NE Ahead Left | U | 1 | N/A | H | | 1 | 26 | - | 297 | 1940:2155 | 391+254 | 46.1 : 46.1% |
| 2/1 | Tytherington Rd Left Right | U | 1 | N/A | G | | 1 | 29 | - | 238 | 1902 | 475 | 50.1% |
| 3/1 | Internal SB Ahead | U | 2 | N/A | C | | 1 | 81 | - | 201 | 1940 | 1326 | 15.2% |
| 3/2 | Internal SB Right | U | 2 | N/A | D | | 1 | 23 | - | 298 | 1902 | 380 | 78.3% |
| 4/2+4/1 | A38 SW Ahead Left | U | 2 | N/A | A | | 1 | 51 | - | 743 | 1940:1724 | 287+649 | 79.3 : 79.3% |
| 4/3 | A38 SW Ahead | U | 2 | N/A | A | | 1 | 51 | - | 26 | 2080 | 901 | 2.9% |
| 5/2+5/1 | Grovesend Rd Left Right | U | 2 | N/A | B J | | 1 | 29:56 | - | 641 | 1774:1724 | 371+441 | 78.9 : 78.9% |
| 6/1 | Internal NB Ahead | U | 1 | N/A | E | | 1 | 79 | - | 379 | 1940 | 1293 | 29.3% |
| 6/2 | Internal NB Right | U | 1 | N/A | F | | 1 | 49 | - | 223 | 1891 | 788 | 28.3% |
| 7/1 | | U | N/A | N/A | - | | - | - | - | 401 | Inf | Inf | 0.0% |
| 8/1 | | U | N/A | N/A | - | | - | - | - | 237 | Inf | Inf | 0.0% |
| 9/1 | | U | N/A | N/A | - | | - | - | - | 494 | Inf | Inf | 0.0% |
| 10/1 | | U | N/A | N/A | - | | - | - | - | 813 | Inf | Inf | 0.0% |
| Ped Link: P1 | Unnamed Ped Link | - | 2 | - | I | | 0 | 0 | - | 0 | - | 0 | 0.0% |

Full Input Data And Results

| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
|---|----------------|---------------|-----------------------|------------------------------|--|-----------------------|------------------------------|------------------------------------|---------------------|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | 0 | 0 | 0 | 19.7 | 4.7 | 0.0 | 24.3 | - | - | - | - |
| Grovesend Rd/A38/Tytherington Rd | - | - | 0 | 0 | 0 | 19.7 | 4.7 | 0.0 | 24.3 | - | - | - | - |
| 1/1+1/2 | 297 | 297 | - | - | - | 3.2 | 0.4 | - | 3.7 | 44.3 | 5.1 | 0.4 | 5.5 |
| 2/1 | 238 | 238 | - | - | - | 2.6 | 0.5 | - | 3.0 | 46.1 | 6.7 | 0.5 | 7.2 |
| 3/1 | 201 | 201 | - | - | - | 0.2 | 0.0 | - | 0.2 | 3.0 | 0.6 | 0.0 | 0.6 |
| 3/2 | 298 | 298 | - | - | - | 1.5 | 0.0 | - | 1.5 | 18.7 | 9.6 | 0.0 | 9.6 |
| 4/2+4/1 | 743 | 743 | - | - | - | 5.3 | 1.9 | - | 7.2 | 35.0 | 14.6 | 1.9 | 16.4 |
| 4/3 | 26 | 26 | - | - | - | 0.1 | 0.0 | - | 0.2 | 21.6 | 0.5 | 0.0 | 0.5 |
| 5/2+5/1 | 641 | 641 | - | - | - | 5.3 | 1.8 | - | 7.1 | 40.0 | 8.7 | 1.8 | 10.5 |
| 6/1 | 379 | 379 | - | - | - | 0.5 | 0.0 | - | 0.5 | 4.8 | 2.7 | 0.0 | 2.7 |
| 6/2 | 223 | 223 | - | - | - | 0.9 | 0.0 | - | 0.9 | 15.1 | 5.6 | 0.0 | 5.6 |
| 7/1 | 401 | 401 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8/1 | 237 | 237 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9/1 | 494 | 494 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10/1 | 813 | 813 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ped Link: P1 | 0 | 0 | - | - | - | - | - | - | Inf | Inf | - | - | Inf |
| C1 Stream: 1 PRC for Signalled Lanes (%): | | | 79.8 | | Total Delay for Signalled Lanes (pcuHr): | | | 8.14 | | Cycle Time (s): 120 | | | |
| C1 Stream: 2 PRC for Signalled Lanes (%): | | | 13.4 | | Total Delay for Signalled Lanes (pcuHr): | | | 16.20 | | Cycle Time (s): 120 | | | |
| PRC Over All Lanes (%): | | | 13.4 | | Total Delay Over All Lanes(pcuHr): | | | 24.35 | | | | | |

| |
|--|
| Junctions 9 |
| ARCADY 9 - Roundabout Module |
| Version: 9.0.2.5947 © Copyright TRL Limited, 2017 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk |
| 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: Junction 5a_18.07.26.j9

Path: J:\39209 West of Park Farm, Thornbury\Technical\Transport\Junction Assessments\ARCADY\2018 Base

Report generation date: 30/07/2018 16:07:32

- »2018 Baseline, AM
- »2018 Baseline, PM
- »2028 Reference Case , AM
- »2028 Reference Case, PM
- »2028 Test Case, AM
- »2028 Test Case, PM

Summary of junction performance

| | AM | | | | PM | | | |
|----------------------------|-------------|-----------|------|-----|-------------|-----------|------|-----|
| | Queue (Veh) | Delay (s) | RFC | LOS | Queue (Veh) | Delay (s) | RFC | LOS |
| 2018 Baseline | | | | | | | | |
| 1 - Gloucester Road | 1.6 | 11.08 | 0.62 | B | 0.9 | 7.96 | 0.48 | A |
| 2 - Quaker Road | 0.5 | 6.66 | 0.32 | A | 0.8 | 7.33 | 0.43 | A |
| 3 - The Plain | 0.5 | 6.08 | 0.32 | A | 0.9 | 8.61 | 0.49 | A |
| 2028 Reference Case | | | | | | | | |
| 1 - Gloucester Road | 2.5 | 15.16 | 0.72 | C | 1.1 | 8.91 | 0.53 | A |
| 2 - Quaker Road | 0.6 | 7.54 | 0.36 | A | 0.9 | 8.10 | 0.48 | A |
| 3 - The Plain | 0.6 | 6.54 | 0.36 | A | 1.3 | 10.30 | 0.57 | B |
| 2028 Test Case | | | | | | | | |
| 1 - Gloucester Road | 3.9 | 21.72 | 0.82 | C | 1.2 | 9.48 | 0.56 | A |
| 2 - Quaker Road | 0.6 | 8.03 | 0.38 | A | 1.2 | 9.62 | 0.56 | A |
| 3 - The Plain | 0.6 | 6.66 | 0.37 | A | 1.9 | 13.77 | 0.66 | B |

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

File summary

File Description

| | |
|--------------------|---|
| Title | Gloucester Road / Quaker Lane / The Plain |
| Location | 5A |
| Site number | |
| Date | 23/04/2018 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | PBA\jasaunders |
| 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 | Veh | Veh | perHour | s | -Min | perMin |

Analysis Options

| Mini-roundabout model | Vehicle length (m) | Calculate Queue Percentiles | Calculate detailed queueing delay | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|-----------------------|--------------------|-----------------------------|-----------------------------------|-----------------------------|---------------|-----------------------------|-----------------------|
| JUNCTIONS 9 | 5.75 | | | | 0.85 | 36.00 | 20.00 |

Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2018 Baseline | AM | ONE HOUR | 07:45 | 09:15 | 5 | ✓ |
| D2 | 2018 Baseline | PM | ONE HOUR | 16:45 | 18:15 | 5 | ✓ |
| D3 | 2028 Reference Case | AM | ONE HOUR | 07:45 | 09:15 | 5 | ✓ |
| D4 | 2028 Reference Case | PM | ONE HOUR | 16:45 | 18:15 | 5 | ✓ |
| D5 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 5 | ✓ |
| D6 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 5 | ✓ |

Analysis Set Details

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

2018 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|-----------------|-----------|--------------------|--------------|
| 1 | untitled | Mini-roundabout | 1, 2, 3 | 8.69 | A |

Junction Network Options

| Driving side | Lighting | Road surface | In London |
|--------------|----------------|----------------|-----------|
| Left | Normal/unknown | Normal/unknown | |

Arms

Arms

| Arm | Name | Description |
|-----|-----------------|-------------|
| 1 | Gloucester Road | |
| 2 | Quaker Road | |
| 3 | The Plain | |

Mini Roundabout Geometry

| Arm | Approach road half-width (m) | Minimum approach road half-width (m) | Entry width (m) | Effective flare length (m) | Distance to next arm (m) | Entry corner kerb line distance (m) | Gradient over 50m (%) | Kerbed central island |
|---------------------|------------------------------|--------------------------------------|-----------------|----------------------------|--------------------------|-------------------------------------|-----------------------|-----------------------|
| 1 - Gloucester Road | 2.80 | 2.80 | 3.80 | 1.9 | 13.07 | 11.76 | 0.0 | |
| 2 - Quaker Road | 3.50 | 3.50 | 4.85 | 5.3 | 10.26 | 5.59 | 0.0 | |
| 3 - The Plain | 3.80 | 3.80 | 4.50 | 3.3 | 12.49 | 9.20 | 0.0 | |

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

| Arm | Final slope | Final intercept (PCU/hr) |
|---------------------|-------------|--------------------------|
| 1 - Gloucester Road | 0.601 | 918 |
| 2 - Quaker Road | 0.638 | 1024 |
| 3 - The Plain | 0.638 | 989 |

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

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 | 2018 Baseline | AM | ONE HOUR | 07:45 | 09:15 | 5 | ✓ |

| 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 (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Gloucester Road | | ONE HOUR | ✓ | 465 | 100.000 |
| 2 - Quaker Road | | ONE HOUR | ✓ | 221 | 100.000 |
| 3 - The Plain | | ONE HOUR | ✓ | 247 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 200 | 265 |
| | 2 - Quaker Road | 123 | 0 | 98 |
| | 3 - The Plain | 176 | 71 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 1 | 3 |
| | 2 - Quaker Road | 4 | 0 | 5 |
| | 3 - The Plain | 4 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|---------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Gloucester Road | 0.62 | 11.08 | 1.6 | B | 427 | 641 |
| 2 - Quaker Road | 0.32 | 6.66 | 0.5 | A | 203 | 305 |
| 3 - The Plain | 0.32 | 6.08 | 0.5 | A | 227 | 341 |

Main Results for each time segment

07:45 - 07:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 352 | 29 | 53 | 866 | 0.407 | 344 | 223 | 0.0 | 0.7 | 6.804 | A |
| 2 - Quaker Road | 167 | 14 | 196 | 856 | 0.195 | 164 | 201 | 0.0 | 0.2 | 5.185 | A |
| 3 - The Plain | 187 | 16 | 92 | 903 | 0.207 | 184 | 269 | 0.0 | 0.3 | 4.988 | A |

07:50 - 07:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 352 | 29 | 54 | 866 | 0.407 | 352 | 226 | 0.7 | 0.7 | 7.004 | A |
| 2 - Quaker Road | 167 | 14 | 201 | 853 | 0.196 | 167 | 205 | 0.2 | 0.2 | 5.247 | A |
| 3 - The Plain | 187 | 16 | 93 | 902 | 0.207 | 187 | 275 | 0.3 | 0.3 | 5.037 | A |

07:55 - 08:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 352 | 29 | 54 | 866 | 0.407 | 352 | 226 | 0.7 | 0.7 | 7.006 | A |
| 2 - Quaker Road | 167 | 14 | 201 | 853 | 0.196 | 167 | 205 | 0.2 | 0.2 | 5.247 | A |
| 3 - The Plain | 187 | 16 | 93 | 902 | 0.207 | 187 | 275 | 0.3 | 0.3 | 5.037 | A |

08:00 - 08:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 376 | 31 | 57 | 864 | 0.435 | 375 | 241 | 0.7 | 0.7 | 7.348 | A |
| 2 - Quaker Road | 179 | 15 | 214 | 845 | 0.211 | 178 | 219 | 0.2 | 0.3 | 5.394 | A |
| 3 - The Plain | 200 | 17 | 99 | 898 | 0.222 | 199 | 293 | 0.3 | 0.3 | 5.150 | A |

08:05 - 08:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 420 | 35 | 64 | 860 | 0.489 | 418 | 270 | 0.7 | 0.9 | 8.112 | A |
| 2 - Quaker Road | 200 | 17 | 238 | 829 | 0.241 | 199 | 244 | 0.3 | 0.3 | 5.705 | A |
| 3 - The Plain | 223 | 19 | 111 | 890 | 0.251 | 223 | 327 | 0.3 | 0.3 | 5.389 | A |

08:10 - 08:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 460 | 38 | 70 | 856 | 0.537 | 458 | 295 | 0.9 | 1.1 | 8.974 | A |
| 2 - Quaker Road | 219 | 18 | 261 | 815 | 0.268 | 218 | 267 | 0.3 | 0.4 | 6.021 | A |
| 3 - The Plain | 244 | 20 | 121 | 883 | 0.277 | 244 | 358 | 0.3 | 0.4 | 5.624 | A |

08:15 - 08:20

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 492 | 41 | 75 | 853 | 0.577 | 490 | 316 | 1.1 | 1.3 | 9.828 | A |
| 2 - Quaker Road | 234 | 19 | 279 | 804 | 0.291 | 233 | 286 | 0.4 | 0.4 | 6.305 | A |
| 3 - The Plain | 261 | 22 | 130 | 878 | 0.298 | 261 | 383 | 0.4 | 0.4 | 5.830 | A |

08:20 - 08:25

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 515 | 43 | 79 | 851 | 0.605 | 513 | 331 | 1.3 | 1.4 | 10.554 | B |
| 2 - Quaker Road | 245 | 20 | 292 | 795 | 0.308 | 244 | 299 | 0.4 | 0.4 | 6.526 | A |
| 3 - The Plain | 274 | 23 | 136 | 874 | 0.313 | 273 | 401 | 0.4 | 0.4 | 5.991 | A |

08:25 - 08:30

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 527 | 44 | 80 | 850 | 0.620 | 525 | 338 | 1.4 | 1.5 | 11.006 | B |
| 2 - Quaker Road | 250 | 21 | 299 | 791 | 0.316 | 250 | 306 | 0.4 | 0.5 | 6.649 | A |
| 3 - The Plain | 280 | 23 | 139 | 872 | 0.321 | 280 | 410 | 0.4 | 0.5 | 6.073 | A |

08:30 - 08:35

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 527 | 44 | 80 | 850 | 0.620 | 526 | 339 | 1.5 | 1.6 | 11.075 | B |
| 2 - Quaker Road | 250 | 21 | 300 | 791 | 0.317 | 250 | 307 | 0.5 | 0.5 | 6.658 | A |
| 3 - The Plain | 280 | 23 | 139 | 872 | 0.321 | 280 | 411 | 0.5 | 0.5 | 6.079 | A |

08:35 - 08:40

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 515 | 43 | 79 | 851 | 0.605 | 515 | 331 | 1.6 | 1.6 | 10.740 | B |
| 2 - Quaker Road | 245 | 20 | 294 | 795 | 0.308 | 245 | 300 | 0.5 | 0.5 | 6.550 | A |
| 3 - The Plain | 274 | 23 | 136 | 874 | 0.313 | 274 | 402 | 0.5 | 0.5 | 6.001 | A |

08:40 - 08:45

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 492 | 41 | 75 | 853 | 0.577 | 494 | 317 | 1.6 | 1.4 | 10.096 | B |
| 2 - Quaker Road | 234 | 19 | 281 | 802 | 0.292 | 234 | 288 | 0.5 | 0.4 | 6.342 | A |
| 3 - The Plain | 261 | 22 | 130 | 878 | 0.298 | 262 | 385 | 0.5 | 0.4 | 5.850 | A |

08:45 - 08:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 460 | 38 | 70 | 856 | 0.538 | 463 | 296 | 1.4 | 1.2 | 9.231 | A |
| 2 - Quaker Road | 219 | 18 | 264 | 814 | 0.269 | 219 | 269 | 0.4 | 0.4 | 6.063 | A |
| 3 - The Plain | 244 | 20 | 122 | 883 | 0.277 | 245 | 361 | 0.4 | 0.4 | 5.646 | A |

08:50 - 08:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 420 | 35 | 64 | 859 | 0.489 | 423 | 271 | 1.2 | 1.0 | 8.310 | A |
| 2 - Quaker Road | 200 | 17 | 241 | 828 | 0.241 | 200 | 246 | 0.4 | 0.3 | 5.744 | A |
| 3 - The Plain | 223 | 19 | 112 | 890 | 0.251 | 224 | 330 | 0.4 | 0.3 | 5.413 | A |

08:55 - 09:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 376 | 31 | 58 | 863 | 0.435 | 378 | 242 | 1.0 | 0.8 | 7.460 | A |
| 2 - Quaker Road | 179 | 15 | 215 | 844 | 0.212 | 179 | 220 | 0.3 | 0.3 | 5.420 | A |
| 3 - The Plain | 200 | 17 | 100 | 897 | 0.222 | 200 | 295 | 0.3 | 0.3 | 5.167 | A |

09:00 - 09:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 352 | 29 | 54 | 866 | 0.407 | 353 | 227 | 0.8 | 0.7 | 7.044 | A |
| 2 - Quaker Road | 167 | 14 | 201 | 853 | 0.196 | 168 | 206 | 0.3 | 0.2 | 5.257 | A |
| 3 - The Plain | 187 | 16 | 93 | 902 | 0.207 | 187 | 276 | 0.3 | 0.3 | 5.044 | A |

09:05 - 09:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 352 | 29 | 54 | 866 | 0.407 | 352 | 226 | 0.7 | 0.7 | 7.018 | A |
| 2 - Quaker Road | 167 | 14 | 201 | 853 | 0.196 | 167 | 205 | 0.2 | 0.2 | 5.248 | A |
| 3 - The Plain | 187 | 16 | 93 | 902 | 0.207 | 187 | 275 | 0.3 | 0.3 | 5.040 | A |

09:10 - 09:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 352 | 29 | 54 | 866 | 0.407 | 352 | 226 | 0.7 | 0.7 | 7.013 | A |
| 2 - Quaker Road | 167 | 14 | 201 | 853 | 0.196 | 167 | 205 | 0.2 | 0.2 | 5.248 | A |
| 3 - The Plain | 187 | 16 | 93 | 902 | 0.207 | 187 | 275 | 0.3 | 0.3 | 5.039 | A |

2018 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|-----------------|-----------|--------------------|--------------|
| 1 | untitled | Mini-roundabout | 1, 2, 3 | 7.98 | A |

Junction Network Options

| Driving side | Lighting | Road surface | In London |
|--------------|----------------|----------------|-----------|
| Left | Normal/unknown | Normal/unknown | |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2018 Baseline | PM | ONE HOUR | 16:45 | 18:15 | 5 | ✓ |

| 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 (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Gloucester Road | | ONE HOUR | ✓ | 362 | 100.000 |
| 2 - Quaker Road | | ONE HOUR | ✓ | 332 | 100.000 |
| 3 - The Plain | | ONE HOUR | ✓ | 354 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 159 | 203 |
| | 2 - Quaker Road | 234 | 0 | 98 |
| | 3 - The Plain | 295 | 59 | 0 |
| | | | | |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 1 | 3 |
| | 2 - Quaker Road | 1 | 0 | 0 |
| | 3 - The Plain | 0 | 0 | 0 |
| | | | | |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|---------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Gloucester Road | 0.48 | 7.96 | 0.9 | A | 333 | 499 |
| 2 - Quaker Road | 0.43 | 7.33 | 0.8 | A | 305 | 458 |
| 3 - The Plain | 0.49 | 8.61 | 0.9 | A | 325 | 488 |

Main Results for each time segment

16:45 - 16:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 274 | 23 | 44 | 875 | 0.313 | 269 | 393 | 0.0 | 0.4 | 5.889 | A |
| 2 - Quaker Road | 251 | 21 | 151 | 918 | 0.274 | 247 | 162 | 0.0 | 0.4 | 5.329 | A |
| 3 - The Plain | 268 | 22 | 174 | 877 | 0.306 | 263 | 224 | 0.0 | 0.4 | 5.816 | A |

16:50 - 16:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 274 | 23 | 45 | 875 | 0.313 | 274 | 400 | 0.4 | 0.4 | 5.992 | A |
| 2 - Quaker Road | 251 | 21 | 154 | 917 | 0.274 | 251 | 165 | 0.4 | 0.4 | 5.412 | A |
| 3 - The Plain | 268 | 22 | 177 | 875 | 0.306 | 268 | 228 | 0.4 | 0.4 | 5.928 | A |

16:55 - 17:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 274 | 23 | 45 | 875 | 0.313 | 274 | 401 | 0.4 | 0.5 | 5.994 | A |
| 2 - Quaker Road | 251 | 21 | 154 | 916 | 0.274 | 251 | 165 | 0.4 | 0.4 | 5.412 | A |
| 3 - The Plain | 268 | 22 | 177 | 875 | 0.306 | 268 | 228 | 0.4 | 0.4 | 5.930 | A |

17:00 - 17:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 292 | 24 | 48 | 873 | 0.335 | 292 | 427 | 0.5 | 0.5 | 6.189 | A |
| 2 - Quaker Road | 268 | 22 | 164 | 910 | 0.295 | 268 | 176 | 0.4 | 0.4 | 5.605 | A |
| 3 - The Plain | 286 | 24 | 189 | 868 | 0.330 | 285 | 243 | 0.4 | 0.5 | 6.177 | A |

17:05 - 17:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 327 | 27 | 53 | 870 | 0.376 | 326 | 477 | 0.5 | 0.6 | 6.613 | A |
| 2 - Quaker Road | 300 | 25 | 183 | 897 | 0.334 | 299 | 196 | 0.4 | 0.5 | 6.005 | A |
| 3 - The Plain | 320 | 27 | 211 | 853 | 0.375 | 319 | 271 | 0.5 | 0.6 | 6.719 | A |

17:10 - 17:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 358 | 30 | 58 | 867 | 0.413 | 357 | 522 | 0.6 | 0.7 | 7.043 | A |
| 2 - Quaker Road | 328 | 27 | 200 | 886 | 0.371 | 327 | 215 | 0.5 | 0.6 | 6.428 | A |
| 3 - The Plain | 350 | 29 | 231 | 840 | 0.417 | 349 | 297 | 0.6 | 0.7 | 7.300 | A |

17:15 - 17:20

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 383 | 32 | 62 | 864 | 0.443 | 382 | 558 | 0.7 | 0.8 | 7.445 | A |
| 2 - Quaker Road | 351 | 29 | 214 | 877 | 0.401 | 351 | 230 | 0.6 | 0.6 | 6.822 | A |
| 3 - The Plain | 375 | 31 | 247 | 830 | 0.452 | 374 | 318 | 0.7 | 0.8 | 7.858 | A |

17:20 - 17:25

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 401 | 33 | 65 | 862 | 0.465 | 400 | 584 | 0.8 | 0.8 | 7.768 | A |
| 2 - Quaker Road | 368 | 31 | 224 | 870 | 0.422 | 367 | 241 | 0.6 | 0.7 | 7.134 | A |
| 3 - The Plain | 392 | 33 | 259 | 823 | 0.477 | 391 | 333 | 0.8 | 0.9 | 8.311 | A |

17:25 - 17:30

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 410 | 34 | 67 | 862 | 0.476 | 410 | 598 | 0.8 | 0.9 | 7.945 | A |
| 2 - Quaker Road | 376 | 31 | 230 | 867 | 0.434 | 376 | 247 | 0.7 | 0.7 | 7.314 | A |
| 3 - The Plain | 401 | 33 | 265 | 819 | 0.490 | 400 | 341 | 0.9 | 0.9 | 8.581 | A |

17:30 - 17:35

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 410 | 34 | 67 | 862 | 0.476 | 410 | 599 | 0.9 | 0.9 | 7.963 | A |
| 2 - Quaker Road | 376 | 31 | 230 | 867 | 0.434 | 376 | 247 | 0.7 | 0.8 | 7.328 | A |
| 3 - The Plain | 401 | 33 | 265 | 818 | 0.490 | 401 | 341 | 0.9 | 0.9 | 8.608 | A |

17:35 - 17:40

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 401 | 33 | 65 | 862 | 0.465 | 401 | 586 | 0.9 | 0.9 | 7.810 | A |
| 2 - Quaker Road | 368 | 31 | 225 | 870 | 0.423 | 368 | 241 | 0.8 | 0.7 | 7.173 | A |
| 3 - The Plain | 392 | 33 | 259 | 822 | 0.477 | 392 | 333 | 0.9 | 0.9 | 8.382 | A |

17:40 - 17:45

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 383 | 32 | 63 | 864 | 0.444 | 384 | 561 | 0.9 | 0.8 | 7.519 | A |
| 2 - Quaker Road | 351 | 29 | 215 | 876 | 0.401 | 352 | 231 | 0.7 | 0.7 | 6.882 | A |
| 3 - The Plain | 375 | 31 | 248 | 829 | 0.452 | 376 | 319 | 0.9 | 0.9 | 7.961 | A |

17:45 - 17:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 358 | 30 | 59 | 866 | 0.413 | 359 | 525 | 0.8 | 0.7 | 7.122 | A |
| 2 - Quaker Road | 328 | 27 | 201 | 885 | 0.371 | 329 | 216 | 0.7 | 0.6 | 6.492 | A |
| 3 - The Plain | 350 | 29 | 232 | 840 | 0.417 | 352 | 299 | 0.9 | 0.7 | 7.402 | A |

17:50 - 17:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 327 | 27 | 54 | 869 | 0.377 | 329 | 480 | 0.7 | 0.6 | 6.675 | A |
| 2 - Quaker Road | 300 | 25 | 184 | 897 | 0.335 | 301 | 198 | 0.6 | 0.5 | 6.059 | A |
| 3 - The Plain | 320 | 27 | 212 | 852 | 0.376 | 322 | 273 | 0.7 | 0.6 | 6.805 | A |

17:55 - 18:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 292 | 24 | 48 | 873 | 0.335 | 294 | 429 | 0.6 | 0.5 | 6.232 | A |
| 2 - Quaker Road | 268 | 22 | 165 | 909 | 0.295 | 269 | 177 | 0.5 | 0.4 | 5.634 | A |
| 3 - The Plain | 286 | 24 | 190 | 867 | 0.330 | 287 | 244 | 0.6 | 0.5 | 6.230 | A |

18:00 - 18:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 274 | 23 | 45 | 874 | 0.313 | 275 | 401 | 0.5 | 0.5 | 6.011 | A |
| 2 - Quaker Road | 251 | 21 | 154 | 916 | 0.274 | 252 | 165 | 0.4 | 0.4 | 5.423 | A |
| 3 - The Plain | 268 | 22 | 178 | 875 | 0.306 | 269 | 228 | 0.5 | 0.5 | 5.947 | A |

18:05 - 18:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 274 | 23 | 45 | 875 | 0.313 | 274 | 401 | 0.5 | 0.5 | 5.997 | A |
| 2 - Quaker Road | 251 | 21 | 154 | 916 | 0.274 | 251 | 165 | 0.4 | 0.4 | 5.413 | A |
| 3 - The Plain | 268 | 22 | 177 | 875 | 0.306 | 268 | 228 | 0.5 | 0.4 | 5.935 | A |

18:10 - 18:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 274 | 23 | 45 | 875 | 0.313 | 274 | 401 | 0.5 | 0.5 | 5.998 | A |
| 2 - Quaker Road | 251 | 21 | 154 | 916 | 0.274 | 251 | 165 | 0.4 | 0.4 | 5.413 | A |
| 3 - The Plain | 268 | 22 | 177 | 875 | 0.306 | 268 | 228 | 0.4 | 0.4 | 5.934 | A |

2028 Reference Case , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|-----------------|-----------|--------------------|--------------|
| 1 | untitled | Mini-roundabout | 1, 2, 3 | 11.15 | B |

Junction Network Options

| Driving side | Lighting | Road surface | In London |
|--------------|----------------|----------------|-----------|
| Left | Normal/unknown | Normal/unknown | |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2028 Reference Case | AM | ONE HOUR | 07:45 | 09:15 | 5 | ✓ |

| 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 (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Gloucester Road | | ONE HOUR | ✓ | 542 | 100.000 |
| 2 - Quaker Road | | ONE HOUR | ✓ | 239 | 100.000 |
| 3 - The Plain | | ONE HOUR | ✓ | 278 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 216 | 326 |
| | 2 - Quaker Road | 133 | 0 | 106 |
| | 3 - The Plain | 201 | 77 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 1 | 3 |
| | 2 - Quaker Road | 4 | 0 | 5 |
| | 3 - The Plain | 4 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|---------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Gloucester Road | 0.72 | 15.16 | 2.5 | C | 498 | 747 |
| 2 - Quaker Road | 0.36 | 7.54 | 0.6 | A | 220 | 329 |
| 3 - The Plain | 0.36 | 6.54 | 0.6 | A | 256 | 383 |

Main Results for each time segment

07:45 - 07:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 410 | 34 | 57 | 865 | 0.474 | 400 | 248 | 0.0 | 0.9 | 7.590 | A |
| 2 - Quaker Road | 181 | 15 | 241 | 828 | 0.219 | 178 | 217 | 0.0 | 0.3 | 5.507 | A |
| 3 - The Plain | 211 | 18 | 99 | 899 | 0.234 | 207 | 319 | 0.0 | 0.3 | 5.180 | A |

07:50 - 07:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 410 | 34 | 58 | 864 | 0.475 | 410 | 253 | 0.9 | 0.9 | 7.914 | A |
| 2 - Quaker Road | 181 | 15 | 247 | 824 | 0.220 | 181 | 222 | 0.3 | 0.3 | 5.594 | A |
| 3 - The Plain | 211 | 18 | 101 | 898 | 0.235 | 210 | 327 | 0.3 | 0.3 | 5.238 | A |

07:55 - 08:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 410 | 34 | 58 | 864 | 0.475 | 410 | 253 | 0.9 | 0.9 | 7.922 | A |
| 2 - Quaker Road | 181 | 15 | 247 | 824 | 0.220 | 181 | 222 | 0.3 | 0.3 | 5.594 | A |
| 3 - The Plain | 211 | 18 | 101 | 898 | 0.235 | 210 | 327 | 0.3 | 0.3 | 5.238 | A |

08:00 - 08:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 438 | 36 | 62 | 862 | 0.508 | 437 | 269 | 0.9 | 1.0 | 8.425 | A |
| 2 - Quaker Road | 193 | 16 | 263 | 814 | 0.237 | 193 | 236 | 0.3 | 0.3 | 5.788 | A |
| 3 - The Plain | 225 | 19 | 107 | 893 | 0.251 | 224 | 348 | 0.3 | 0.3 | 5.378 | A |

08:05 - 08:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 490 | 41 | 69 | 858 | 0.571 | 487 | 301 | 1.0 | 1.3 | 9.604 | A |
| 2 - Quaker Road | 216 | 18 | 293 | 795 | 0.272 | 215 | 263 | 0.3 | 0.4 | 6.198 | A |
| 3 - The Plain | 251 | 21 | 120 | 885 | 0.284 | 251 | 388 | 0.3 | 0.4 | 5.664 | A |

08:10 - 08:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 536 | 45 | 76 | 854 | 0.628 | 533 | 330 | 1.3 | 1.6 | 11.023 | B |
| 2 - Quaker Road | 236 | 20 | 320 | 778 | 0.304 | 236 | 288 | 0.4 | 0.4 | 6.635 | A |
| 3 - The Plain | 275 | 23 | 131 | 878 | 0.313 | 274 | 425 | 0.4 | 0.4 | 5.957 | A |

08:15 - 08:20

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 574 | 48 | 81 | 851 | 0.674 | 570 | 353 | 1.6 | 1.9 | 12.553 | B |
| 2 - Quaker Road | 253 | 21 | 343 | 764 | 0.331 | 252 | 308 | 0.4 | 0.5 | 7.033 | A |
| 3 - The Plain | 294 | 25 | 140 | 872 | 0.338 | 294 | 455 | 0.4 | 0.5 | 6.216 | A |

08:20 - 08:25

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 600 | 50 | 85 | 849 | 0.707 | 597 | 369 | 1.9 | 2.2 | 13.962 | B |
| 2 - Quaker Road | 265 | 22 | 359 | 754 | 0.351 | 264 | 323 | 0.5 | 0.5 | 7.339 | A |
| 3 - The Plain | 308 | 26 | 147 | 868 | 0.355 | 307 | 476 | 0.5 | 0.5 | 6.417 | A |

08:25 - 08:30

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 614 | 51 | 87 | 847 | 0.724 | 611 | 378 | 2.2 | 2.4 | 14.926 | B |
| 2 - Quaker Road | 271 | 23 | 368 | 748 | 0.362 | 270 | 331 | 0.5 | 0.6 | 7.523 | A |
| 3 - The Plain | 315 | 26 | 150 | 865 | 0.364 | 315 | 488 | 0.5 | 0.6 | 6.533 | A |

08:30 - 08:35

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 614 | 51 | 87 | 847 | 0.724 | 613 | 378 | 2.4 | 2.5 | 15.156 | C |
| 2 - Quaker Road | 271 | 23 | 369 | 748 | 0.362 | 271 | 331 | 0.6 | 0.6 | 7.543 | A |
| 3 - The Plain | 315 | 26 | 151 | 865 | 0.364 | 315 | 489 | 0.6 | 0.6 | 6.536 | A |

08:35 - 08:40

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 600 | 50 | 85 | 848 | 0.707 | 600 | 370 | 2.5 | 2.5 | 14.558 | B |
| 2 - Quaker Road | 265 | 22 | 361 | 753 | 0.352 | 265 | 325 | 0.6 | 0.6 | 7.385 | A |
| 3 - The Plain | 308 | 26 | 147 | 867 | 0.355 | 308 | 478 | 0.6 | 0.6 | 6.435 | A |

08:40 - 08:45

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 574 | 48 | 82 | 851 | 0.675 | 577 | 354 | 2.5 | 2.2 | 13.362 | B |
| 2 - Quaker Road | 253 | 21 | 347 | 762 | 0.332 | 253 | 311 | 0.6 | 0.5 | 7.097 | A |
| 3 - The Plain | 294 | 25 | 141 | 872 | 0.338 | 295 | 459 | 0.6 | 0.5 | 6.247 | A |

08:45 - 08:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 536 | 45 | 76 | 854 | 0.628 | 541 | 331 | 2.2 | 1.8 | 11.738 | B |
| 2 - Quaker Road | 236 | 20 | 326 | 775 | 0.305 | 237 | 292 | 0.5 | 0.5 | 6.708 | A |
| 3 - The Plain | 275 | 23 | 132 | 877 | 0.314 | 276 | 431 | 0.5 | 0.5 | 5.993 | A |

08:50 - 08:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 490 | 41 | 70 | 858 | 0.571 | 495 | 303 | 1.8 | 1.4 | 10.073 | B |
| 2 - Quaker Road | 216 | 18 | 298 | 792 | 0.273 | 217 | 267 | 0.5 | 0.4 | 6.267 | A |
| 3 - The Plain | 251 | 21 | 121 | 885 | 0.284 | 252 | 394 | 0.5 | 0.4 | 5.700 | A |

08:55 - 09:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 438 | 36 | 62 | 862 | 0.508 | 442 | 271 | 1.4 | 1.1 | 8.659 | A |
| 2 - Quaker Road | 193 | 16 | 266 | 812 | 0.238 | 194 | 239 | 0.4 | 0.3 | 5.829 | A |
| 3 - The Plain | 225 | 19 | 108 | 893 | 0.252 | 225 | 352 | 0.4 | 0.3 | 5.400 | A |

09:00 - 09:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 410 | 34 | 58 | 864 | 0.475 | 412 | 253 | 1.1 | 0.9 | 8.001 | A |
| 2 - Quaker Road | 181 | 15 | 248 | 824 | 0.220 | 181 | 223 | 0.3 | 0.3 | 5.608 | A |
| 3 - The Plain | 211 | 18 | 101 | 897 | 0.235 | 211 | 328 | 0.3 | 0.3 | 5.246 | A |

09:05 - 09:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 410 | 34 | 58 | 864 | 0.475 | 411 | 253 | 0.9 | 0.9 | 7.944 | A |
| 2 - Quaker Road | 181 | 15 | 247 | 824 | 0.220 | 181 | 222 | 0.3 | 0.3 | 5.599 | A |
| 3 - The Plain | 211 | 18 | 101 | 898 | 0.235 | 211 | 327 | 0.3 | 0.3 | 5.240 | A |

09:10 - 09:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 410 | 34 | 58 | 864 | 0.475 | 410 | 253 | 0.9 | 0.9 | 7.938 | A |
| 2 - Quaker Road | 181 | 15 | 247 | 824 | 0.220 | 181 | 222 | 0.3 | 0.3 | 5.598 | A |
| 3 - The Plain | 211 | 18 | 101 | 898 | 0.235 | 211 | 327 | 0.3 | 0.3 | 5.239 | A |

2028 Reference Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|-----------------|-----------|--------------------|--------------|
| 1 | untitled | Mini-roundabout | 1, 2, 3 | 9.15 | A |

Junction Network Options

| Driving side | Lighting | Road surface | In London |
|--------------|----------------|----------------|-----------|
| Left | Normal/unknown | Normal/unknown | |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D4 | 2028 Reference Case | PM | ONE HOUR | 16:45 | 18:15 | 5 | ✓ |

| 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 (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Gloucester Road | | ONE HOUR | ✓ | 403 | 100.000 |
| 2 - Quaker Road | | ONE HOUR | ✓ | 355 | 100.000 |
| 3 - The Plain | | ONE HOUR | ✓ | 405 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 170 | 233 |
| | 2 - Quaker Road | 250 | 0 | 105 |
| | 3 - The Plain | 342 | 63 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 1 | 3 |
| | 2 - Quaker Road | 1 | 0 | 0 |
| | 3 - The Plain | 0 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|---------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Gloucester Road | 0.53 | 8.91 | 1.1 | A | 370 | 556 |
| 2 - Quaker Road | 0.48 | 8.10 | 0.9 | A | 326 | 489 |
| 3 - The Plain | 0.57 | 10.30 | 1.3 | B | 372 | 558 |

Main Results for each time segment

16:45 - 16:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 305 | 25 | 47 | 874 | 0.349 | 299 | 439 | 0.0 | 0.5 | 6.196 | A |
| 2 - Quaker Road | 269 | 22 | 173 | 905 | 0.297 | 264 | 173 | 0.0 | 0.4 | 5.574 | A |
| 3 - The Plain | 307 | 26 | 186 | 870 | 0.353 | 300 | 251 | 0.0 | 0.5 | 6.260 | A |

16:50 - 16:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 305 | 25 | 48 | 873 | 0.349 | 305 | 448 | 0.5 | 0.5 | 6.333 | A |
| 2 - Quaker Road | 269 | 22 | 176 | 903 | 0.298 | 269 | 176 | 0.4 | 0.4 | 5.677 | A |
| 3 - The Plain | 307 | 26 | 189 | 867 | 0.354 | 307 | 256 | 0.5 | 0.5 | 6.418 | A |

16:55 - 17:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 305 | 25 | 48 | 873 | 0.349 | 305 | 448 | 0.5 | 0.5 | 6.334 | A |
| 2 - Quaker Road | 269 | 22 | 176 | 903 | 0.298 | 269 | 176 | 0.4 | 0.4 | 5.680 | A |
| 3 - The Plain | 307 | 26 | 189 | 867 | 0.354 | 307 | 256 | 0.5 | 0.5 | 6.420 | A |

17:00 - 17:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 326 | 27 | 51 | 872 | 0.374 | 325 | 477 | 0.5 | 0.6 | 6.576 | A |
| 2 - Quaker Road | 287 | 24 | 188 | 895 | 0.320 | 286 | 188 | 0.4 | 0.5 | 5.908 | A |
| 3 - The Plain | 327 | 27 | 202 | 859 | 0.381 | 326 | 273 | 0.5 | 0.6 | 6.754 | A |

17:05 - 17:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 364 | 30 | 57 | 868 | 0.420 | 363 | 533 | 0.6 | 0.7 | 7.080 | A |
| 2 - Quaker Road | 321 | 27 | 210 | 881 | 0.364 | 320 | 210 | 0.5 | 0.6 | 6.402 | A |
| 3 - The Plain | 366 | 31 | 225 | 844 | 0.434 | 365 | 304 | 0.6 | 0.7 | 7.479 | A |

17:10 - 17:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 399 | 33 | 62 | 865 | 0.461 | 397 | 583 | 0.7 | 0.8 | 7.665 | A |
| 2 - Quaker Road | 351 | 29 | 230 | 868 | 0.405 | 350 | 230 | 0.6 | 0.7 | 6.932 | A |
| 3 - The Plain | 401 | 33 | 246 | 830 | 0.483 | 399 | 333 | 0.7 | 0.9 | 8.296 | A |

17:15 - 17:20

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 427 | 36 | 66 | 862 | 0.495 | 425 | 624 | 0.8 | 0.9 | 8.198 | A |
| 2 - Quaker Road | 376 | 31 | 246 | 857 | 0.438 | 375 | 246 | 0.7 | 0.8 | 7.433 | A |
| 3 - The Plain | 429 | 36 | 264 | 819 | 0.523 | 427 | 357 | 0.9 | 1.0 | 9.115 | A |

17:20 - 17:25

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 446 | 37 | 70 | 861 | 0.519 | 445 | 654 | 0.9 | 1.0 | 8.626 | A |
| 2 - Quaker Road | 393 | 33 | 257 | 850 | 0.463 | 392 | 257 | 0.8 | 0.8 | 7.841 | A |
| 3 - The Plain | 448 | 37 | 276 | 811 | 0.553 | 447 | 373 | 1.0 | 1.2 | 9.819 | A |

17:25 - 17:30

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 456 | 38 | 71 | 860 | 0.531 | 456 | 669 | 1.0 | 1.1 | 8.885 | A |
| 2 - Quaker Road | 402 | 34 | 263 | 846 | 0.475 | 402 | 263 | 0.8 | 0.9 | 8.083 | A |
| 3 - The Plain | 459 | 38 | 283 | 807 | 0.568 | 458 | 382 | 1.2 | 1.3 | 10.245 | B |

17:30 - 17:35

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 456 | 38 | 71 | 859 | 0.531 | 456 | 670 | 1.1 | 1.1 | 8.912 | A |
| 2 - Quaker Road | 402 | 34 | 264 | 846 | 0.475 | 402 | 264 | 0.9 | 0.9 | 8.104 | A |
| 3 - The Plain | 459 | 38 | 283 | 807 | 0.568 | 458 | 383 | 1.3 | 1.3 | 10.299 | B |

17:35 - 17:40

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 446 | 37 | 70 | 860 | 0.519 | 446 | 656 | 1.1 | 1.1 | 8.707 | A |
| 2 - Quaker Road | 393 | 33 | 258 | 849 | 0.463 | 393 | 258 | 0.9 | 0.9 | 7.900 | A |
| 3 - The Plain | 448 | 37 | 277 | 811 | 0.553 | 449 | 374 | 1.3 | 1.3 | 9.957 | A |

17:40 - 17:45

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 427 | 36 | 67 | 862 | 0.495 | 428 | 628 | 1.1 | 1.0 | 8.317 | A |
| 2 - Quaker Road | 376 | 31 | 247 | 856 | 0.439 | 377 | 247 | 0.9 | 0.8 | 7.522 | A |
| 3 - The Plain | 429 | 36 | 265 | 818 | 0.524 | 430 | 359 | 1.3 | 1.1 | 9.323 | A |

17:45 - 17:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 399 | 33 | 63 | 865 | 0.461 | 400 | 588 | 1.0 | 0.9 | 7.787 | A |
| 2 - Quaker Road | 351 | 29 | 231 | 867 | 0.405 | 352 | 232 | 0.8 | 0.7 | 7.024 | A |
| 3 - The Plain | 401 | 33 | 248 | 829 | 0.483 | 403 | 336 | 1.1 | 1.0 | 8.489 | A |

17:50 - 17:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 364 | 30 | 57 | 868 | 0.420 | 366 | 538 | 0.9 | 0.7 | 7.205 | A |
| 2 - Quaker Road | 321 | 27 | 212 | 880 | 0.365 | 322 | 212 | 0.7 | 0.6 | 6.479 | A |
| 3 - The Plain | 366 | 31 | 227 | 843 | 0.434 | 368 | 307 | 1.0 | 0.8 | 7.624 | A |

17:55 - 18:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 326 | 27 | 51 | 871 | 0.374 | 327 | 481 | 0.7 | 0.6 | 6.639 | A |
| 2 - Quaker Road | 287 | 24 | 189 | 894 | 0.321 | 288 | 189 | 0.6 | 0.5 | 5.954 | A |
| 3 - The Plain | 327 | 27 | 203 | 859 | 0.381 | 329 | 274 | 0.8 | 0.6 | 6.828 | A |

18:00 - 18:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 305 | 25 | 48 | 873 | 0.349 | 306 | 449 | 0.6 | 0.6 | 6.357 | A |
| 2 - Quaker Road | 269 | 22 | 177 | 902 | 0.298 | 269 | 177 | 0.5 | 0.4 | 5.695 | A |
| 3 - The Plain | 307 | 26 | 190 | 867 | 0.354 | 308 | 257 | 0.6 | 0.6 | 6.446 | A |

18:05 - 18:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 305 | 25 | 48 | 873 | 0.349 | 305 | 448 | 0.6 | 0.5 | 6.340 | A |
| 2 - Quaker Road | 269 | 22 | 176 | 902 | 0.298 | 269 | 176 | 0.4 | 0.4 | 5.684 | A |
| 3 - The Plain | 307 | 26 | 189 | 867 | 0.354 | 307 | 256 | 0.6 | 0.6 | 6.427 | A |

18:10 - 18:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 305 | 25 | 48 | 873 | 0.349 | 305 | 448 | 0.5 | 0.5 | 6.338 | A |
| 2 - Quaker Road | 269 | 22 | 176 | 903 | 0.298 | 269 | 176 | 0.4 | 0.4 | 5.681 | A |
| 3 - The Plain | 307 | 26 | 189 | 867 | 0.354 | 307 | 256 | 0.6 | 0.6 | 6.422 | A |

2028 Test Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|-----------------|-----------|--------------------|--------------|
| 1 | untitled | Mini-roundabout | 1, 2, 3 | 14.98 | B |

Junction Network Options

| Driving side | Lighting | Road surface | In London |
|--------------|----------------|----------------|-----------|
| Left | Normal/unknown | Normal/unknown | |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 5 | ✓ |

| 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 (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Gloucester Road | | ONE HOUR | ✓ | 612 | 100.000 |
| 2 - Quaker Road | | ONE HOUR | ✓ | 246 | 100.000 |
| 3 - The Plain | | ONE HOUR | ✓ | 284 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 254 | 358 |
| | 2 - Quaker Road | 140 | 0 | 106 |
| | 3 - The Plain | 207 | 77 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 1 | 3 |
| | 2 - Quaker Road | 4 | 0 | 5 |
| | 3 - The Plain | 4 | 0 | 0 |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|---------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Gloucester Road | 0.82 | 21.72 | 3.9 | C | 562 | 844 |
| 2 - Quaker Road | 0.38 | 8.03 | 0.6 | A | 226 | 339 |
| 3 - The Plain | 0.37 | 6.66 | 0.6 | A | 261 | 392 |

Main Results for each time segment

07:45 - 07:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 463 | 39 | 57 | 867 | 0.534 | 450 | 258 | 0.0 | 1.1 | 8.405 | A |
| 2 - Quaker Road | 186 | 16 | 263 | 815 | 0.229 | 183 | 244 | 0.0 | 0.3 | 5.668 | A |
| 3 - The Plain | 215 | 18 | 104 | 897 | 0.240 | 211 | 342 | 0.0 | 0.3 | 5.223 | A |

07:50 - 07:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 463 | 39 | 58 | 867 | 0.535 | 463 | 263 | 1.1 | 1.1 | 8.896 | A |
| 2 - Quaker Road | 186 | 16 | 271 | 810 | 0.230 | 186 | 250 | 0.3 | 0.3 | 5.771 | A |
| 3 - The Plain | 215 | 18 | 106 | 896 | 0.240 | 215 | 351 | 0.3 | 0.3 | 5.286 | A |

07:55 - 08:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 463 | 39 | 58 | 867 | 0.535 | 463 | 263 | 1.1 | 1.1 | 8.912 | A |
| 2 - Quaker Road | 186 | 16 | 271 | 810 | 0.230 | 186 | 251 | 0.3 | 0.3 | 5.771 | A |
| 3 - The Plain | 215 | 18 | 106 | 896 | 0.240 | 215 | 351 | 0.3 | 0.3 | 5.287 | A |

08:00 - 08:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 494 | 41 | 62 | 864 | 0.572 | 493 | 280 | 1.1 | 1.3 | 9.613 | A |
| 2 - Quaker Road | 199 | 17 | 288 | 799 | 0.249 | 198 | 267 | 0.3 | 0.3 | 5.988 | A |
| 3 - The Plain | 229 | 19 | 113 | 891 | 0.257 | 229 | 374 | 0.3 | 0.3 | 5.433 | A |

08:05 - 08:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 553 | 46 | 69 | 860 | 0.643 | 549 | 313 | 1.3 | 1.7 | 11.345 | B |
| 2 - Quaker Road | 222 | 19 | 321 | 779 | 0.286 | 222 | 297 | 0.3 | 0.4 | 6.462 | A |
| 3 - The Plain | 257 | 21 | 126 | 883 | 0.291 | 256 | 416 | 0.3 | 0.4 | 5.736 | A |

08:10 - 08:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 606 | 50 | 76 | 856 | 0.707 | 600 | 342 | 1.7 | 2.2 | 13.612 | B |
| 2 - Quaker Road | 243 | 20 | 351 | 760 | 0.320 | 243 | 325 | 0.4 | 0.5 | 6.942 | A |
| 3 - The Plain | 281 | 23 | 138 | 875 | 0.321 | 280 | 455 | 0.4 | 0.5 | 6.041 | A |

08:15 - 08:20

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 648 | 54 | 81 | 853 | 0.759 | 641 | 366 | 2.2 | 2.7 | 16.241 | C |
| 2 - Quaker Road | 260 | 22 | 375 | 745 | 0.350 | 260 | 347 | 0.5 | 0.5 | 7.404 | A |
| 3 - The Plain | 301 | 25 | 148 | 869 | 0.346 | 300 | 487 | 0.5 | 0.5 | 6.320 | A |

08:20 - 08:25

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 678 | 56 | 85 | 851 | 0.797 | 671 | 384 | 2.7 | 3.3 | 18.887 | C |
| 2 - Quaker Road | 272 | 23 | 392 | 734 | 0.371 | 272 | 364 | 0.5 | 0.6 | 7.776 | A |
| 3 - The Plain | 314 | 26 | 155 | 864 | 0.364 | 314 | 510 | 0.5 | 0.6 | 6.534 | A |

08:25 - 08:30

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 693 | 58 | 87 | 850 | 0.816 | 688 | 393 | 3.3 | 3.7 | 20.945 | C |
| 2 - Quaker Road | 279 | 23 | 402 | 728 | 0.383 | 278 | 373 | 0.6 | 0.6 | 7.995 | A |
| 3 - The Plain | 322 | 27 | 158 | 862 | 0.373 | 321 | 522 | 0.6 | 0.6 | 6.647 | A |

08:30 - 08:35

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 693 | 58 | 87 | 850 | 0.816 | 691 | 393 | 3.7 | 3.9 | 21.723 | C |
| 2 - Quaker Road | 279 | 23 | 404 | 727 | 0.383 | 279 | 374 | 0.6 | 0.6 | 8.029 | A |
| 3 - The Plain | 322 | 27 | 159 | 862 | 0.373 | 322 | 524 | 0.6 | 0.6 | 6.660 | A |

08:35 - 08:40

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 678 | 56 | 85 | 851 | 0.797 | 678 | 384 | 3.9 | 3.9 | 20.833 | C |
| 2 - Quaker Road | 272 | 23 | 396 | 731 | 0.372 | 272 | 367 | 0.6 | 0.6 | 7.849 | A |
| 3 - The Plain | 314 | 26 | 155 | 864 | 0.364 | 315 | 514 | 0.6 | 0.6 | 6.553 | A |

08:40 - 08:45

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 648 | 54 | 82 | 853 | 0.760 | 653 | 368 | 3.9 | 3.5 | 18.671 | C |
| 2 - Quaker Road | 260 | 22 | 382 | 741 | 0.352 | 261 | 352 | 0.6 | 0.6 | 7.519 | A |
| 3 - The Plain | 301 | 25 | 149 | 868 | 0.346 | 301 | 494 | 0.6 | 0.5 | 6.353 | A |

08:45 - 08:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 606 | 50 | 76 | 856 | 0.707 | 616 | 344 | 3.5 | 2.7 | 15.616 | C |
| 2 - Quaker Road | 243 | 20 | 360 | 754 | 0.323 | 244 | 332 | 0.6 | 0.5 | 7.075 | A |
| 3 - The Plain | 281 | 23 | 139 | 875 | 0.321 | 282 | 465 | 0.5 | 0.5 | 6.083 | A |

08:50 - 08:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 553 | 46 | 70 | 860 | 0.644 | 562 | 315 | 2.7 | 2.0 | 12.458 | B |
| 2 - Quaker Road | 222 | 19 | 329 | 774 | 0.287 | 223 | 303 | 0.5 | 0.4 | 6.555 | A |
| 3 - The Plain | 257 | 21 | 127 | 882 | 0.291 | 258 | 425 | 0.5 | 0.4 | 5.771 | A |

08:55 - 09:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 494 | 41 | 62 | 864 | 0.572 | 501 | 281 | 2.0 | 1.4 | 10.092 | B |
| 2 - Quaker Road | 199 | 17 | 293 | 796 | 0.250 | 200 | 270 | 0.4 | 0.3 | 6.046 | A |
| 3 - The Plain | 229 | 19 | 114 | 891 | 0.258 | 230 | 379 | 0.4 | 0.4 | 5.457 | A |

09:00 - 09:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 463 | 39 | 58 | 867 | 0.535 | 466 | 263 | 1.4 | 1.2 | 9.061 | A |
| 2 - Quaker Road | 186 | 16 | 273 | 809 | 0.230 | 187 | 252 | 0.3 | 0.3 | 5.789 | A |
| 3 - The Plain | 215 | 18 | 106 | 896 | 0.240 | 215 | 353 | 0.4 | 0.3 | 5.297 | A |

09:05 - 09:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 463 | 39 | 58 | 867 | 0.535 | 464 | 263 | 1.2 | 1.2 | 8.955 | A |
| 2 - Quaker Road | 186 | 16 | 271 | 810 | 0.230 | 186 | 251 | 0.3 | 0.3 | 5.777 | A |
| 3 - The Plain | 215 | 18 | 106 | 896 | 0.240 | 215 | 352 | 0.3 | 0.3 | 5.290 | A |

09:10 - 09:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 463 | 39 | 58 | 867 | 0.535 | 464 | 263 | 1.2 | 1.2 | 8.943 | A |
| 2 - Quaker Road | 186 | 16 | 271 | 810 | 0.230 | 186 | 251 | 0.3 | 0.3 | 5.775 | A |
| 3 - The Plain | 215 | 18 | 106 | 896 | 0.240 | 215 | 351 | 0.3 | 0.3 | 5.287 | A |

2028 Test Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Arm order | Junction Delay (s) | Junction LOS |
|----------|----------|-----------------|-----------|--------------------|--------------|
| 1 | untitled | Mini-roundabout | 1, 2, 3 | 11.01 | B |

Junction Network Options

| Driving side | Lighting | Road surface | In London |
|--------------|----------------|----------------|-----------|
| Left | Normal/unknown | Normal/unknown | |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 5 | ✓ |

| 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 (Veh/hr) | Scaling Factor (%) |
|---------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Gloucester Road | | ONE HOUR | ✓ | 426 | 100.000 |
| 2 - Quaker Road | | ONE HOUR | ✓ | 411 | 100.000 |
| 3 - The Plain | | ONE HOUR | ✓ | 448 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 183 | 243 |
| | 2 - Quaker Road | 306 | 0 | 105 |
| | 3 - The Plain | 385 | 63 | 0 |
| | | | | |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|---------------------|---------------------|-----------------|---------------|
| | | 1 - Gloucester Road | 2 - Quaker Road | 3 - The Plain |
| From | 1 - Gloucester Road | 0 | 1 | 3 |
| | 2 - Quaker Road | 1 | 0 | 0 |
| | 3 - The Plain | 0 | 0 | 0 |
| | | | | |

Results

Results Summary for whole modelled period

| Arm | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|---------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Gloucester Road | 0.56 | 9.48 | 1.2 | A | 392 | 587 |
| 2 - Quaker Road | 0.56 | 9.62 | 1.2 | A | 378 | 567 |
| 3 - The Plain | 0.66 | 13.77 | 1.9 | B | 412 | 618 |

Main Results for each time segment

16:45 - 16:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 323 | 27 | 47 | 876 | 0.368 | 316 | 512 | 0.0 | 0.6 | 6.357 | A |
| 2 - Quaker Road | 311 | 26 | 180 | 900 | 0.346 | 305 | 182 | 0.0 | 0.5 | 5.992 | A |
| 3 - The Plain | 339 | 28 | 227 | 843 | 0.402 | 331 | 258 | 0.0 | 0.6 | 6.937 | A |

16:50 - 16:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 323 | 27 | 48 | 875 | 0.369 | 322 | 523 | 0.6 | 0.6 | 6.509 | A |
| 2 - Quaker Road | 311 | 26 | 184 | 898 | 0.347 | 311 | 186 | 0.5 | 0.5 | 6.136 | A |
| 3 - The Plain | 339 | 28 | 232 | 840 | 0.404 | 339 | 263 | 0.6 | 0.7 | 7.178 | A |

16:55 - 17:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 323 | 27 | 48 | 875 | 0.369 | 323 | 523 | 0.6 | 0.6 | 6.512 | A |
| 2 - Quaker Road | 311 | 26 | 184 | 898 | 0.347 | 311 | 186 | 0.5 | 0.5 | 6.138 | A |
| 3 - The Plain | 339 | 28 | 232 | 840 | 0.404 | 339 | 263 | 0.7 | 0.7 | 7.184 | A |

17:00 - 17:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 344 | 29 | 51 | 873 | 0.394 | 343 | 557 | 0.6 | 0.6 | 6.794 | A |
| 2 - Quaker Road | 332 | 28 | 196 | 890 | 0.373 | 331 | 198 | 0.5 | 0.6 | 6.435 | A |
| 3 - The Plain | 362 | 30 | 247 | 830 | 0.436 | 361 | 281 | 0.7 | 0.7 | 7.647 | A |

17:05 - 17:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 385 | 32 | 57 | 870 | 0.443 | 384 | 622 | 0.6 | 0.8 | 7.376 | A |
| 2 - Quaker Road | 372 | 31 | 219 | 875 | 0.425 | 370 | 221 | 0.6 | 0.7 | 7.104 | A |
| 3 - The Plain | 405 | 34 | 275 | 812 | 0.499 | 403 | 313 | 0.7 | 0.9 | 8.735 | A |

17:10 - 17:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 421 | 35 | 62 | 867 | 0.486 | 420 | 680 | 0.8 | 0.9 | 8.018 | A |
| 2 - Quaker Road | 407 | 34 | 239 | 862 | 0.472 | 405 | 242 | 0.7 | 0.9 | 7.842 | A |
| 3 - The Plain | 443 | 37 | 301 | 795 | 0.557 | 440 | 343 | 0.9 | 1.2 | 10.046 | B |

17:15 - 17:20

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 451 | 38 | 66 | 864 | 0.522 | 449 | 728 | 0.9 | 1.0 | 8.620 | A |
| 2 - Quaker Road | 435 | 36 | 256 | 851 | 0.511 | 433 | 259 | 0.9 | 1.0 | 8.579 | A |
| 3 - The Plain | 474 | 40 | 323 | 781 | 0.607 | 471 | 367 | 1.2 | 1.4 | 11.450 | B |

17:20 - 17:25

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 472 | 39 | 69 | 862 | 0.547 | 470 | 762 | 1.0 | 1.2 | 9.138 | A |
| 2 - Quaker Road | 455 | 38 | 268 | 843 | 0.540 | 454 | 271 | 1.0 | 1.1 | 9.183 | A |
| 3 - The Plain | 496 | 41 | 338 | 772 | 0.643 | 493 | 384 | 1.4 | 1.7 | 12.735 | B |

17:25 - 17:30

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 482 | 40 | 71 | 861 | 0.560 | 482 | 780 | 1.2 | 1.2 | 9.445 | A |
| 2 - Quaker Road | 465 | 39 | 275 | 839 | 0.555 | 465 | 278 | 1.1 | 1.2 | 9.577 | A |
| 3 - The Plain | 507 | 42 | 346 | 767 | 0.662 | 506 | 393 | 1.7 | 1.8 | 13.601 | B |

17:30 - 17:35

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 482 | 40 | 71 | 861 | 0.560 | 482 | 782 | 1.2 | 1.2 | 9.482 | A |
| 2 - Quaker Road | 465 | 39 | 275 | 838 | 0.555 | 465 | 278 | 1.2 | 1.2 | 9.623 | A |
| 3 - The Plain | 507 | 42 | 346 | 766 | 0.662 | 507 | 394 | 1.8 | 1.9 | 13.767 | B |

17:35 - 17:40

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 472 | 39 | 70 | 862 | 0.547 | 472 | 765 | 1.2 | 1.2 | 9.241 | A |
| 2 - Quaker Road | 455 | 38 | 269 | 842 | 0.540 | 455 | 272 | 1.2 | 1.2 | 9.318 | A |
| 3 - The Plain | 496 | 41 | 339 | 771 | 0.643 | 496 | 385 | 1.9 | 1.9 | 13.155 | B |

17:40 - 17:45

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 451 | 38 | 67 | 864 | 0.522 | 452 | 735 | 1.2 | 1.1 | 8.787 | A |
| 2 - Quaker Road | 435 | 36 | 258 | 850 | 0.512 | 436 | 261 | 1.2 | 1.1 | 8.752 | A |
| 3 - The Plain | 474 | 40 | 325 | 780 | 0.608 | 477 | 369 | 1.9 | 1.7 | 12.008 | B |

17:45 - 17:50

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 421 | 35 | 63 | 866 | 0.487 | 423 | 688 | 1.1 | 1.0 | 8.173 | A |
| 2 - Quaker Road | 407 | 34 | 241 | 860 | 0.473 | 409 | 245 | 1.1 | 0.9 | 8.010 | A |
| 3 - The Plain | 443 | 37 | 304 | 793 | 0.559 | 447 | 346 | 1.7 | 1.3 | 10.522 | B |

17:50 - 17:55

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 385 | 32 | 57 | 869 | 0.443 | 387 | 629 | 1.0 | 0.8 | 7.504 | A |
| 2 - Quaker Road | 372 | 31 | 221 | 874 | 0.425 | 374 | 224 | 0.9 | 0.8 | 7.233 | A |
| 3 - The Plain | 405 | 34 | 278 | 810 | 0.500 | 409 | 316 | 1.3 | 1.1 | 9.051 | A |

17:55 - 18:00

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 344 | 29 | 51 | 873 | 0.394 | 346 | 562 | 0.8 | 0.7 | 6.858 | A |
| 2 - Quaker Road | 332 | 28 | 197 | 889 | 0.374 | 334 | 200 | 0.8 | 0.6 | 6.508 | A |
| 3 - The Plain | 362 | 30 | 249 | 829 | 0.436 | 365 | 283 | 1.1 | 0.8 | 7.807 | A |

18:00 - 18:05

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 323 | 27 | 48 | 875 | 0.369 | 323 | 525 | 0.7 | 0.6 | 6.540 | A |
| 2 - Quaker Road | 311 | 26 | 184 | 897 | 0.347 | 312 | 187 | 0.6 | 0.5 | 6.161 | A |
| 3 - The Plain | 339 | 28 | 232 | 840 | 0.404 | 340 | 264 | 0.8 | 0.7 | 7.237 | A |

18:05 - 18:10

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 323 | 27 | 48 | 875 | 0.369 | 323 | 523 | 0.6 | 0.6 | 6.522 | A |
| 2 - Quaker Road | 311 | 26 | 184 | 898 | 0.347 | 311 | 186 | 0.5 | 0.5 | 6.142 | A |
| 3 - The Plain | 339 | 28 | 232 | 840 | 0.404 | 339 | 264 | 0.7 | 0.7 | 7.195 | A |

18:10 - 18:15

| Arm | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Circulating flow (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Throughput (exit side) (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|---------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-----|
| 1 - Gloucester Road | 323 | 27 | 48 | 875 | 0.369 | 323 | 523 | 0.6 | 0.6 | 6.520 | A |
| 2 - Quaker Road | 311 | 26 | 184 | 898 | 0.347 | 311 | 186 | 0.5 | 0.5 | 6.142 | A |
| 3 - The Plain | 339 | 28 | 232 | 840 | 0.404 | 339 | 264 | 0.7 | 0.7 | 7.191 | A |

| |
|--|
| Junctions 9 |
| PICADY 9 - Priority Intersection Module |
| Version: 9.0.2.5947 © Copyright TRL Limited, 2017 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk |
| 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: Junction 5b_18.07.26.j9

Path: J:\39209 West of Park Farm, Thornbury\Technical\Transport\Junction Assessments\PICADY\2018 Base

Report generation date: 30/07/2018 15:58:24

- »2018 Baseline, AM
- »2018 Baseline, PM
- »2028 Reference Case, AM
- »2028 Reference Case, PM
- »2028 Test Case, AM
- »2028 Test Case, PM

Summary of junction performance

| | AM | | | | PM | | | |
|----------------------------|-------------|-----------|------|-----|-------------|-----------|------|-----|
| | Queue (Veh) | Delay (s) | RFC | LOS | Queue (Veh) | Delay (s) | RFC | LOS |
| 2018 Baseline | | | | | | | | |
| Stream B-C | 0.2 | 6.57 | 0.14 | A | 0.1 | 6.71 | 0.12 | A |
| Stream B-A | 0.4 | 10.92 | 0.28 | B | 0.4 | 10.91 | 0.28 | B |
| Stream C-AB | 0.5 | 6.29 | 0.24 | A | 0.3 | 6.20 | 0.19 | A |
| 2028 Reference Case | | | | | | | | |
| Stream B-C | 0.2 | 7.67 | 0.17 | A | 0.2 | 7.43 | 0.14 | A |
| Stream B-A | 0.8 | 15.05 | 0.46 | C | 0.6 | 13.32 | 0.37 | B |
| Stream C-AB | 0.6 | 6.35 | 0.28 | A | 0.4 | 6.38 | 0.21 | A |
| 2028 Test Case | | | | | | | | |
| Stream B-C | 0.2 | 7.75 | 0.17 | A | 0.2 | 7.67 | 0.14 | A |
| Stream B-A | 0.8 | 15.58 | 0.47 | C | 0.6 | 14.11 | 0.39 | B |
| Stream C-AB | 0.7 | 6.23 | 0.28 | A | 0.4 | 6.45 | 0.22 | A |

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

File summary

File Description

| | |
|--------------------|---|
| Title | The Plain / Castle Street / High Street |
| Location | 5A |
| Site number | |
| Date | 23/04/2018 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | PBA\jasaunders |
| 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 | Veh | Veh | perHour | s | -Min | perMin |

Analysis Options

| Calculate Queue Percentiles | Calculate residual capacity | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|-----------------------------|-----------------------------|---------------|-----------------------------|-----------------------|
| | | 0.85 | 36.00 | 20.00 |

Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D1 | 2018 Baseline | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D2 | 2018 Baseline | PM | ONE HOUR | 16:45 | 18:15 | 5 |
| D3 | 2028 Reference Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D4 | 2028 Reference Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |
| D5 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |
| D6 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |

Analysis Set Details

| ID | Network flow scaling factor (%) |
|----|---------------------------------|
| A1 | 100.000 |

2018 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 2.79 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Arms

Arms

| Arm | Name | Description | Arm type |
|-----|---------------|-------------|----------|
| A | High Street | | Major |
| B | Castle Street | | Minor |
| C | The Plain | | Major |

Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|---------------|--------------------------|----------------------------|--------------------|-------------------------------|---------|----------------------|
| C - The Plain | 7.85 | | | 150.0 | ✓ | 0.00 |

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

Minor Arm Geometry

| Arm | Minor arm type | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate flare length | Flare length (PCU) | Visibility to left (m) | Visibility to right (m) |
|-------------------|---------------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| B - Castle Street | One lane plus flare | 10.00 | 10.00 | 9.30 | 5.75 | 4.60 | | 2.00 | 63 | 155 |

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1 | B-A | 648 | 0.108 | 0.274 | 0.172 | 0.392 |
| 1 | B-C | 770 | 0.109 | 0.274 | - | - |
| 1 | C-B | 661 | 0.235 | 0.235 | - | - |

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

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

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D1 | 2018 Baseline | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|-------------------------|--------------------|
| A - High Street | | ✓ | 388 | 100.000 |
| B - Castle Street | | ✓ | 191 | 100.000 |
| C - The Plain | | ✓ | 362 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 219 | 169 |
| | B - Castle Street | 115 | 0 | 76 |
| | C - The Plain | 270 | 92 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 2 | 4 |
| | B - Castle Street | 2 | 0 | 0 |
| | C - The Plain | 4 | 2 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.14 | 6.57 | 0.2 | A |
| B-A | 0.28 | 10.92 | 0.4 | B |
| C-AB | 0.24 | 6.29 | 0.5 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

07:45 - 07:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 58 | 685 | 0.084 | 56 | 0.1 | 5.719 | A |
| B-A | 87 | 519 | 0.168 | 85 | 0.2 | 8.243 | A |
| C-AB | 98 | 713 | 0.137 | 95 | 0.2 | 5.815 | A |
| C-A | 176 | | | 176 | | | |
| A-B | 166 | | | 166 | | | |
| A-C | 128 | | | 128 | | | |

07:50 - 07:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 58 | 684 | 0.084 | 58 | 0.1 | 5.747 | A |
| B-A | 87 | 519 | 0.168 | 87 | 0.2 | 8.341 | A |
| C-AB | 98 | 713 | 0.138 | 98 | 0.2 | 5.866 | A |
| C-A | 176 | | | 176 | | | |
| A-B | 166 | | | 166 | | | |
| A-C | 128 | | | 128 | | | |

07:55 - 08:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 58 | 684 | 0.084 | 58 | 0.1 | 5.747 | A |
| B-A | 87 | 519 | 0.168 | 87 | 0.2 | 8.342 | A |
| C-AB | 98 | 713 | 0.138 | 98 | 0.2 | 5.865 | A |
| C-A | 176 | | | 176 | | | |
| A-B | 166 | | | 166 | | | |
| A-C | 128 | | | 128 | | | |

08:00 - 08:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 61 | 678 | 0.091 | 61 | 0.1 | 5.841 | A |
| B-A | 93 | 511 | 0.182 | 93 | 0.2 | 8.605 | A |
| C-AB | 108 | 719 | 0.150 | 107 | 0.2 | 5.900 | A |
| C-A | 185 | | | 185 | | | |
| A-B | 177 | | | 177 | | | |
| A-C | 137 | | | 137 | | | |

08:05 - 08:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 69 | 666 | 0.103 | 69 | 0.1 | 6.029 | A |
| B-A | 104 | 496 | 0.210 | 103 | 0.3 | 9.165 | A |
| C-AB | 126 | 728 | 0.173 | 126 | 0.3 | 5.982 | A |
| C-A | 201 | | | 201 | | | |
| A-B | 198 | | | 198 | | | |
| A-C | 153 | | | 153 | | | |

08:10 - 08:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 75 | 654 | 0.115 | 75 | 0.1 | 6.214 | A |
| B-A | 114 | 482 | 0.236 | 113 | 0.3 | 9.757 | A |
| C-AB | 144 | 737 | 0.195 | 144 | 0.3 | 6.076 | A |
| C-A | 214 | | | 214 | | | |
| A-B | 217 | | | 217 | | | |
| A-C | 167 | | | 167 | | | |

08:15 - 08:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 80 | 645 | 0.125 | 80 | 0.1 | 6.376 | A |
| B-A | 122 | 471 | 0.258 | 121 | 0.3 | 10.252 | B |
| C-AB | 160 | 745 | 0.215 | 159 | 0.4 | 6.166 | A |
| C-A | 223 | | | 223 | | | |
| A-B | 232 | | | 232 | | | |
| A-C | 179 | | | 179 | | | |

08:20 - 08:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 84 | 638 | 0.132 | 84 | 0.1 | 6.498 | A |
| B-A | 127 | 463 | 0.275 | 127 | 0.4 | 10.678 | B |
| C-AB | 172 | 751 | 0.229 | 171 | 0.4 | 6.241 | A |
| C-A | 229 | | | 229 | | | |
| A-B | 243 | | | 243 | | | |
| A-C | 187 | | | 187 | | | |

08:25 - 08:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 86 | 634 | 0.136 | 86 | 0.2 | 6.568 | A |
| B-A | 130 | 459 | 0.283 | 130 | 0.4 | 10.912 | B |
| C-AB | 178 | 753 | 0.236 | 178 | 0.5 | 6.285 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 248 | | | 248 | | | |
| A-C | 191 | | | 191 | | | |

08:30 - 08:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 86 | 634 | 0.136 | 86 | 0.2 | 6.570 | A |
| B-A | 130 | 459 | 0.284 | 130 | 0.4 | 10.925 | B |
| C-AB | 178 | 754 | 0.236 | 178 | 0.5 | 6.291 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 248 | | | 248 | | | |
| A-C | 191 | | | 191 | | | |

08:35 - 08:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 84 | 637 | 0.132 | 84 | 0.2 | 6.509 | A |
| B-A | 127 | 463 | 0.275 | 127 | 0.4 | 10.723 | B |
| C-AB | 172 | 751 | 0.229 | 172 | 0.5 | 6.257 | A |
| C-A | 229 | | | 229 | | | |
| A-B | 243 | | | 243 | | | |
| A-C | 187 | | | 187 | | | |

08:40 - 08:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 80 | 644 | 0.125 | 81 | 0.1 | 6.390 | A |
| B-A | 122 | 471 | 0.258 | 122 | 0.4 | 10.333 | B |
| C-AB | 160 | 746 | 0.215 | 161 | 0.4 | 6.195 | A |
| C-A | 223 | | | 223 | | | |
| A-B | 232 | | | 232 | | | |
| A-C | 179 | | | 179 | | | |

08:45 - 08:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 75 | 654 | 0.115 | 75 | 0.1 | 6.229 | A |
| B-A | 114 | 482 | 0.236 | 114 | 0.3 | 9.812 | A |
| C-AB | 145 | 738 | 0.196 | 145 | 0.4 | 6.113 | A |
| C-A | 214 | | | 214 | | | |
| A-B | 217 | | | 217 | | | |
| A-C | 167 | | | 167 | | | |

08:50 - 08:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 69 | 665 | 0.103 | 69 | 0.1 | 6.041 | A |
| B-A | 104 | 495 | 0.210 | 105 | 0.3 | 9.229 | A |
| C-AB | 127 | 729 | 0.174 | 127 | 0.3 | 6.016 | A |
| C-A | 201 | | | 201 | | | |
| A-B | 198 | | | 198 | | | |
| A-C | 153 | | | 153 | | | |

08:55 - 09:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 61 | 677 | 0.091 | 62 | 0.1 | 5.851 | A |
| B-A | 93 | 510 | 0.182 | 93 | 0.2 | 8.647 | A |
| C-AB | 108 | 719 | 0.150 | 109 | 0.3 | 5.924 | A |
| C-A | 185 | | | 185 | | | |
| A-B | 177 | | | 177 | | | |
| A-C | 137 | | | 137 | | | |

09:00 - 09:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 58 | 684 | 0.084 | 58 | 0.1 | 5.753 | A |
| B-A | 87 | 518 | 0.168 | 87 | 0.2 | 8.356 | A |
| C-AB | 99 | 714 | 0.138 | 99 | 0.2 | 5.877 | A |
| C-A | 176 | | | 176 | | | |
| A-B | 166 | | | 166 | | | |
| A-C | 128 | | | 128 | | | |

09:05 - 09:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 58 | 684 | 0.084 | 58 | 0.1 | 5.750 | A |
| B-A | 87 | 519 | 0.168 | 87 | 0.2 | 8.345 | A |
| C-AB | 98 | 714 | 0.138 | 99 | 0.2 | 5.867 | A |
| C-A | 176 | | | 176 | | | |
| A-B | 166 | | | 166 | | | |
| A-C | 128 | | | 128 | | | |

09:10 - 09:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 58 | 684 | 0.084 | 58 | 0.1 | 5.750 | A |
| B-A | 87 | 519 | 0.168 | 87 | 0.2 | 8.344 | A |
| C-AB | 98 | 714 | 0.138 | 98 | 0.2 | 5.869 | A |
| C-A | 176 | | | 176 | | | |
| A-B | 166 | | | 166 | | | |
| A-C | 128 | | | 128 | | | |

2018 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 2.59 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D2 | 2018 Baseline | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|-------------------------|--------------------|
| A - High Street | | ✓ | 419 | 100.000 |
| B - Castle Street | | ✓ | 176 | 100.000 |
| C - The Plain | | ✓ | 303 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 131 | 288 |
| | B - Castle Street | 111 | 0 | 65 |
| | C - The Plain | 229 | 74 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 1 | 0 |
| | B - Castle Street | 2 | 0 | 0 |
| | C - The Plain | 2 | 3 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.12 | 6.71 | 0.1 | A |
| B-A | 0.28 | 10.91 | 0.4 | B |
| C-AB | 0.19 | 6.20 | 0.3 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

16:45 - 16:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 49 | 667 | 0.074 | 48 | 0.1 | 5.819 | A |
| B-A | 84 | 517 | 0.162 | 82 | 0.2 | 8.225 | A |
| C-AB | 75 | 688 | 0.109 | 73 | 0.2 | 5.850 | A |
| C-A | 155 | | | 155 | | | |
| A-B | 99 | | | 99 | | | |
| A-C | 218 | | | 218 | | | |

16:50 - 16:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 49 | 666 | 0.074 | 49 | 0.1 | 5.837 | A |
| B-A | 84 | 517 | 0.163 | 84 | 0.2 | 8.317 | A |
| C-AB | 75 | 688 | 0.110 | 75 | 0.2 | 5.884 | A |
| C-A | 154 | | | 154 | | | |
| A-B | 99 | | | 99 | | | |
| A-C | 218 | | | 218 | | | |

16:55 - 17:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 49 | 666 | 0.074 | 49 | 0.1 | 5.838 | A |
| B-A | 84 | 517 | 0.163 | 84 | 0.2 | 8.318 | A |
| C-AB | 75 | 688 | 0.110 | 75 | 0.2 | 5.882 | A |
| C-A | 154 | | | 154 | | | |
| A-B | 99 | | | 99 | | | |
| A-C | 218 | | | 218 | | | |

17:00 - 17:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 659 | 0.080 | 52 | 0.1 | 5.937 | A |
| B-A | 90 | 509 | 0.176 | 89 | 0.2 | 8.581 | A |
| C-AB | 82 | 692 | 0.119 | 82 | 0.2 | 5.914 | A |
| C-A | 163 | | | 163 | | | |
| A-B | 106 | | | 106 | | | |
| A-C | 233 | | | 233 | | | |

17:05 - 17:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 59 | 645 | 0.091 | 59 | 0.1 | 6.136 | A |
| B-A | 100 | 493 | 0.204 | 100 | 0.2 | 9.146 | A |
| C-AB | 96 | 699 | 0.137 | 95 | 0.2 | 5.976 | A |
| C-A | 178 | | | 178 | | | |
| A-B | 118 | | | 118 | | | |
| A-C | 260 | | | 260 | | | |

17:10 - 17:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 64 | 633 | 0.102 | 64 | 0.1 | 6.332 | A |
| B-A | 110 | 479 | 0.229 | 109 | 0.3 | 9.734 | A |
| C-AB | 109 | 705 | 0.154 | 108 | 0.3 | 6.048 | A |
| C-A | 191 | | | 191 | | | |
| A-B | 130 | | | 130 | | | |
| A-C | 285 | | | 285 | | | |

17:15 - 17:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 69 | 622 | 0.111 | 69 | 0.1 | 6.504 | A |
| B-A | 118 | 468 | 0.251 | 117 | 0.3 | 10.261 | B |
| C-AB | 120 | 710 | 0.169 | 120 | 0.3 | 6.113 | A |
| C-A | 201 | | | 201 | | | |
| A-B | 139 | | | 139 | | | |
| A-C | 305 | | | 305 | | | |

17:20 - 17:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 72 | 614 | 0.117 | 72 | 0.1 | 6.634 | A |
| B-A | 123 | 460 | 0.267 | 123 | 0.4 | 10.659 | B |
| C-AB | 128 | 714 | 0.180 | 128 | 0.3 | 6.164 | A |
| C-A | 207 | | | 207 | | | |
| A-B | 145 | | | 145 | | | |
| A-C | 319 | | | 319 | | | |

17:25 - 17:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 610 | 0.121 | 74 | 0.1 | 6.708 | A |
| B-A | 126 | 456 | 0.276 | 126 | 0.4 | 10.893 | B |
| C-AB | 133 | 716 | 0.186 | 133 | 0.3 | 6.191 | A |
| C-A | 210 | | | 210 | | | |
| A-B | 148 | | | 148 | | | |
| A-C | 326 | | | 326 | | | |

17:30 - 17:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 610 | 0.121 | 74 | 0.1 | 6.709 | A |
| B-A | 126 | 456 | 0.276 | 126 | 0.4 | 10.909 | B |
| C-AB | 133 | 716 | 0.186 | 133 | 0.3 | 6.196 | A |
| C-A | 210 | | | 210 | | | |
| A-B | 148 | | | 148 | | | |
| A-C | 326 | | | 326 | | | |

17:35 - 17:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 72 | 614 | 0.117 | 72 | 0.1 | 6.644 | A |
| B-A | 123 | 460 | 0.267 | 123 | 0.4 | 10.695 | B |
| C-AB | 129 | 714 | 0.180 | 129 | 0.3 | 6.171 | A |
| C-A | 207 | | | 207 | | | |
| A-B | 145 | | | 145 | | | |
| A-C | 319 | | | 319 | | | |

17:40 - 17:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 69 | 621 | 0.111 | 69 | 0.1 | 6.518 | A |
| B-A | 118 | 468 | 0.251 | 118 | 0.3 | 10.306 | B |
| C-AB | 120 | 711 | 0.169 | 121 | 0.3 | 6.129 | A |
| C-A | 200 | | | 200 | | | |
| A-B | 139 | | | 139 | | | |
| A-C | 305 | | | 305 | | | |

17:45 - 17:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 64 | 632 | 0.102 | 64 | 0.1 | 6.347 | A |
| B-A | 110 | 479 | 0.229 | 110 | 0.3 | 9.782 | A |
| C-AB | 109 | 705 | 0.155 | 110 | 0.3 | 6.067 | A |
| C-A | 191 | | | 191 | | | |
| A-B | 130 | | | 130 | | | |
| A-C | 285 | | | 285 | | | |

17:50 - 17:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 59 | 644 | 0.091 | 59 | 0.1 | 6.149 | A |
| B-A | 100 | 493 | 0.204 | 101 | 0.3 | 9.200 | A |
| C-AB | 96 | 699 | 0.137 | 97 | 0.2 | 5.997 | A |
| C-A | 178 | | | 178 | | | |
| A-B | 118 | | | 118 | | | |
| A-C | 260 | | | 260 | | | |

17:55 - 18:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 658 | 0.080 | 53 | 0.1 | 5.945 | A |
| B-A | 90 | 508 | 0.176 | 90 | 0.2 | 8.620 | A |
| C-AB | 82 | 692 | 0.119 | 83 | 0.2 | 5.926 | A |
| C-A | 162 | | | 162 | | | |
| A-B | 106 | | | 106 | | | |
| A-C | 233 | | | 233 | | | |

18:00 - 18:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 49 | 666 | 0.074 | 49 | 0.1 | 5.843 | A |
| B-A | 84 | 517 | 0.163 | 84 | 0.2 | 8.330 | A |
| C-AB | 75 | 688 | 0.110 | 76 | 0.2 | 5.890 | A |
| C-A | 154 | | | 154 | | | |
| A-B | 99 | | | 99 | | | |
| A-C | 218 | | | 218 | | | |

18:05 - 18:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 49 | 666 | 0.074 | 49 | 0.1 | 5.841 | A |
| B-A | 84 | 517 | 0.163 | 84 | 0.2 | 8.322 | A |
| C-AB | 75 | 688 | 0.110 | 75 | 0.2 | 5.884 | A |
| C-A | 154 | | | 154 | | | |
| A-B | 99 | | | 99 | | | |
| A-C | 218 | | | 218 | | | |

18:10 - 18:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 49 | 666 | 0.074 | 49 | 0.1 | 5.840 | A |
| B-A | 84 | 517 | 0.163 | 84 | 0.2 | 8.319 | A |
| C-AB | 75 | 688 | 0.110 | 75 | 0.2 | 5.883 | A |
| C-A | 154 | | | 154 | | | |
| A-B | 99 | | | 99 | | | |
| A-C | 218 | | | 218 | | | |

2028 Reference Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 3.82 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D3 | 2028 Reference Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|-------------------------|--------------------|
| A - High Street | | ✓ | 446 | 100.000 |
| B - Castle Street | | ✓ | 260 | 100.000 |
| C - The Plain | | ✓ | 430 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 252 | 194 |
| | B - Castle Street | 178 | 0 | 82 |
| | C - The Plain | 331 | 99 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 2 | 4 |
| | B - Castle Street | 1 | 0 | 0 |
| | C - The Plain | 4 | 2 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.17 | 7.67 | 0.2 | A |
| B-A | 0.46 | 15.05 | 0.8 | C |
| C-AB | 0.28 | 6.35 | 0.6 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

07:45 - 07:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 648 | 0.096 | 61 | 0.1 | 6.121 | A |
| B-A | 135 | 511 | 0.264 | 131 | 0.3 | 9.375 | A |
| C-AB | 114 | 735 | 0.155 | 111 | 0.3 | 5.756 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 147 | | | 147 | | | |

07:50 - 07:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 646 | 0.096 | 62 | 0.1 | 6.167 | A |
| B-A | 135 | 510 | 0.264 | 135 | 0.4 | 9.581 | A |
| C-AB | 115 | 736 | 0.156 | 115 | 0.3 | 5.817 | A |
| C-A | 211 | | | 211 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 147 | | | 147 | | | |

07:55 - 08:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 646 | 0.096 | 62 | 0.1 | 6.167 | A |
| B-A | 135 | 510 | 0.264 | 135 | 0.4 | 9.587 | A |
| C-AB | 115 | 736 | 0.156 | 115 | 0.3 | 5.819 | A |
| C-A | 211 | | | 211 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 147 | | | 147 | | | |

08:00 - 08:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 66 | 637 | 0.104 | 66 | 0.1 | 6.305 | A |
| B-A | 144 | 501 | 0.287 | 143 | 0.4 | 10.070 | B |
| C-AB | 126 | 742 | 0.170 | 126 | 0.3 | 5.856 | A |
| C-A | 221 | | | 221 | | | |
| A-B | 204 | | | 204 | | | |
| A-C | 157 | | | 157 | | | |

08:05 - 08:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 619 | 0.120 | 74 | 0.1 | 6.603 | A |
| B-A | 161 | 483 | 0.333 | 160 | 0.5 | 11.099 | B |
| C-AB | 150 | 756 | 0.198 | 149 | 0.4 | 5.954 | A |
| C-A | 239 | | | 239 | | | |
| A-B | 228 | | | 228 | | | |
| A-C | 175 | | | 175 | | | |

08:10 - 08:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 81 | 600 | 0.135 | 81 | 0.2 | 6.925 | A |
| B-A | 176 | 467 | 0.377 | 175 | 0.6 | 12.260 | B |
| C-AB | 173 | 768 | 0.225 | 172 | 0.4 | 6.067 | A |
| C-A | 252 | | | 252 | | | |
| A-B | 249 | | | 249 | | | |
| A-C | 192 | | | 192 | | | |

08:15 - 08:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 87 | 584 | 0.149 | 87 | 0.2 | 7.238 | A |
| B-A | 188 | 454 | 0.415 | 187 | 0.7 | 13.412 | B |
| C-AB | 194 | 778 | 0.249 | 193 | 0.5 | 6.185 | A |
| C-A | 262 | | | 262 | | | |
| A-B | 267 | | | 267 | | | |
| A-C | 205 | | | 205 | | | |

08:20 - 08:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 91 | 570 | 0.159 | 91 | 0.2 | 7.499 | A |
| B-A | 197 | 445 | 0.443 | 196 | 0.8 | 14.380 | B |
| C-AB | 209 | 785 | 0.266 | 208 | 0.6 | 6.282 | A |
| C-A | 267 | | | 267 | | | |
| A-B | 279 | | | 279 | | | |
| A-C | 215 | | | 215 | | | |

08:25 - 08:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 93 | 563 | 0.165 | 93 | 0.2 | 7.660 | A |
| B-A | 202 | 440 | 0.458 | 201 | 0.8 | 14.982 | B |
| C-AB | 218 | 789 | 0.276 | 217 | 0.6 | 6.342 | A |
| C-A | 269 | | | 269 | | | |
| A-B | 285 | | | 285 | | | |
| A-C | 220 | | | 220 | | | |

08:30 - 08:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 93 | 562 | 0.165 | 93 | 0.2 | 7.673 | A |
| B-A | 202 | 440 | 0.458 | 201 | 0.8 | 15.052 | C |
| C-AB | 218 | 790 | 0.276 | 218 | 0.6 | 6.351 | A |
| C-A | 269 | | | 269 | | | |
| A-B | 285 | | | 285 | | | |
| A-C | 220 | | | 220 | | | |

08:35 - 08:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 91 | 569 | 0.160 | 91 | 0.2 | 7.533 | A |
| B-A | 197 | 445 | 0.443 | 197 | 0.8 | 14.572 | B |
| C-AB | 210 | 786 | 0.267 | 210 | 0.6 | 6.306 | A |
| C-A | 267 | | | 267 | | | |
| A-B | 279 | | | 279 | | | |
| A-C | 215 | | | 215 | | | |

08:40 - 08:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 87 | 581 | 0.149 | 87 | 0.2 | 7.283 | A |
| B-A | 188 | 454 | 0.415 | 189 | 0.7 | 13.684 | B |
| C-AB | 194 | 779 | 0.250 | 195 | 0.6 | 6.225 | A |
| C-A | 261 | | | 261 | | | |
| A-B | 267 | | | 267 | | | |
| A-C | 205 | | | 205 | | | |

08:45 - 08:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 81 | 598 | 0.136 | 81 | 0.2 | 6.971 | A |
| B-A | 176 | 467 | 0.377 | 177 | 0.6 | 12.519 | B |
| C-AB | 174 | 769 | 0.226 | 175 | 0.5 | 6.117 | A |
| C-A | 252 | | | 252 | | | |
| A-B | 249 | | | 249 | | | |
| A-C | 192 | | | 192 | | | |

08:50 - 08:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 617 | 0.120 | 74 | 0.1 | 6.641 | A |
| B-A | 161 | 483 | 0.334 | 162 | 0.5 | 11.297 | B |
| C-AB | 151 | 756 | 0.199 | 152 | 0.4 | 5.997 | A |
| C-A | 238 | | | 238 | | | |
| A-B | 228 | | | 228 | | | |
| A-C | 175 | | | 175 | | | |

08:55 - 09:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 66 | 636 | 0.104 | 66 | 0.1 | 6.326 | A |
| B-A | 144 | 500 | 0.287 | 145 | 0.4 | 10.168 | B |
| C-AB | 127 | 743 | 0.171 | 128 | 0.3 | 5.887 | A |
| C-A | 221 | | | 221 | | | |
| A-B | 204 | | | 204 | | | |
| A-C | 157 | | | 157 | | | |

09:00 - 09:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 645 | 0.096 | 62 | 0.1 | 6.177 | A |
| B-A | 135 | 510 | 0.264 | 135 | 0.4 | 9.631 | A |
| C-AB | 115 | 736 | 0.156 | 115 | 0.3 | 5.832 | A |
| C-A | 211 | | | 211 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 147 | | | 147 | | | |

09:05 - 09:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 646 | 0.096 | 62 | 0.1 | 6.172 | A |
| B-A | 135 | 510 | 0.264 | 135 | 0.4 | 9.601 | A |
| C-AB | 115 | 736 | 0.156 | 115 | 0.3 | 5.820 | A |
| C-A | 211 | | | 211 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 147 | | | 147 | | | |

09:10 - 09:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 646 | 0.096 | 62 | 0.1 | 6.169 | A |
| B-A | 135 | 510 | 0.264 | 135 | 0.4 | 9.596 | A |
| C-AB | 115 | 736 | 0.156 | 115 | 0.3 | 5.821 | A |
| C-A | 211 | | | 211 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 147 | | | 147 | | | |

2028 Reference Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 3.01 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D4 | 2028 Reference Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|-------------------------|--------------------|
| A - High Street | | ✓ | 513 | 100.000 |
| B - Castle Street | | ✓ | 211 | 100.000 |
| C - The Plain | | ✓ | 340 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 178 | 335 |
| | B - Castle Street | 141 | 0 | 70 |
| | C - The Plain | 261 | 79 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 1 | 0 |
| | B - Castle Street | 2 | 0 | 0 |
| | C - The Plain | 2 | 3 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.14 | 7.43 | 0.2 | A |
| B-A | 0.37 | 13.32 | 0.6 | B |
| C-AB | 0.21 | 6.38 | 0.4 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

16:45 - 16:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 640 | 0.083 | 52 | 0.1 | 6.111 | A |
| B-A | 107 | 502 | 0.213 | 104 | 0.3 | 8.982 | A |
| C-AB | 84 | 690 | 0.122 | 82 | 0.2 | 5.910 | A |
| C-A | 174 | | | 174 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 254 | | | 254 | | | |

16:50 - 16:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 638 | 0.083 | 53 | 0.1 | 6.148 | A |
| B-A | 107 | 501 | 0.213 | 107 | 0.3 | 9.127 | A |
| C-AB | 84 | 690 | 0.122 | 84 | 0.2 | 5.953 | A |
| C-A | 173 | | | 173 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 254 | | | 254 | | | |

16:55 - 17:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 638 | 0.083 | 53 | 0.1 | 6.149 | A |
| B-A | 107 | 501 | 0.213 | 107 | 0.3 | 9.132 | A |
| C-AB | 85 | 690 | 0.122 | 84 | 0.2 | 5.954 | A |
| C-A | 173 | | | 173 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 254 | | | 254 | | | |

17:00 - 17:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 57 | 630 | 0.090 | 56 | 0.1 | 6.281 | A |
| B-A | 114 | 491 | 0.232 | 114 | 0.3 | 9.517 | A |
| C-AB | 92 | 694 | 0.133 | 92 | 0.2 | 5.992 | A |
| C-A | 182 | | | 182 | | | |
| A-B | 144 | | | 144 | | | |
| A-C | 271 | | | 271 | | | |

17:05 - 17:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 63 | 612 | 0.103 | 63 | 0.1 | 6.558 | A |
| B-A | 127 | 473 | 0.269 | 127 | 0.4 | 10.358 | B |
| C-AB | 109 | 702 | 0.155 | 108 | 0.3 | 6.079 | A |
| C-A | 199 | | | 199 | | | |
| A-B | 161 | | | 161 | | | |
| A-C | 303 | | | 303 | | | |

17:10 - 17:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 69 | 595 | 0.116 | 69 | 0.1 | 6.833 | A |
| B-A | 140 | 457 | 0.305 | 139 | 0.4 | 11.278 | B |
| C-AB | 124 | 709 | 0.175 | 124 | 0.3 | 6.172 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 176 | | | 176 | | | |
| A-C | 331 | | | 331 | | | |

17:15 - 17:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 581 | 0.128 | 74 | 0.1 | 7.092 | A |
| B-A | 149 | 444 | 0.336 | 149 | 0.5 | 12.189 | B |
| C-AB | 138 | 715 | 0.193 | 137 | 0.4 | 6.258 | A |
| C-A | 222 | | | 222 | | | |
| A-B | 188 | | | 188 | | | |
| A-C | 355 | | | 355 | | | |

17:20 - 17:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 78 | 570 | 0.136 | 77 | 0.2 | 7.303 | A |
| B-A | 156 | 434 | 0.359 | 156 | 0.5 | 12.867 | B |
| C-AB | 148 | 719 | 0.206 | 148 | 0.4 | 6.328 | A |
| C-A | 228 | | | 228 | | | |
| A-B | 197 | | | 197 | | | |
| A-C | 371 | | | 371 | | | |

17:25 - 17:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 79 | 564 | 0.141 | 79 | 0.2 | 7.419 | A |
| B-A | 160 | 429 | 0.372 | 159 | 0.6 | 13.285 | B |
| C-AB | 154 | 722 | 0.213 | 154 | 0.4 | 6.369 | A |
| C-A | 231 | | | 231 | | | |
| A-B | 202 | | | 202 | | | |
| A-C | 379 | | | 379 | | | |

17:30 - 17:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 79 | 564 | 0.141 | 79 | 0.2 | 7.426 | A |
| B-A | 160 | 429 | 0.372 | 160 | 0.6 | 13.323 | B |
| C-AB | 154 | 722 | 0.213 | 154 | 0.4 | 6.376 | A |
| C-A | 231 | | | 231 | | | |
| A-B | 202 | | | 202 | | | |
| A-C | 379 | | | 379 | | | |

17:35 - 17:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 78 | 569 | 0.136 | 78 | 0.2 | 7.317 | A |
| B-A | 156 | 434 | 0.360 | 156 | 0.6 | 12.963 | B |
| C-AB | 148 | 719 | 0.206 | 148 | 0.4 | 6.344 | A |
| C-A | 228 | | | 228 | | | |
| A-B | 197 | | | 197 | | | |
| A-C | 371 | | | 371 | | | |

17:40 - 17:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 580 | 0.128 | 74 | 0.1 | 7.120 | A |
| B-A | 149 | 443 | 0.337 | 150 | 0.5 | 12.293 | B |
| C-AB | 138 | 715 | 0.193 | 139 | 0.4 | 6.280 | A |
| C-A | 222 | | | 222 | | | |
| A-B | 188 | | | 188 | | | |
| A-C | 355 | | | 355 | | | |

17:45 - 17:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 69 | 594 | 0.117 | 69 | 0.1 | 6.864 | A |
| B-A | 140 | 457 | 0.306 | 140 | 0.5 | 11.422 | B |
| C-AB | 125 | 709 | 0.176 | 125 | 0.3 | 6.198 | A |
| C-A | 212 | | | 212 | | | |
| A-B | 176 | | | 176 | | | |
| A-C | 331 | | | 331 | | | |

17:50 - 17:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 63 | 611 | 0.104 | 63 | 0.1 | 6.577 | A |
| B-A | 127 | 473 | 0.270 | 128 | 0.4 | 10.484 | B |
| C-AB | 109 | 702 | 0.155 | 110 | 0.3 | 6.104 | A |
| C-A | 198 | | | 198 | | | |
| A-B | 161 | | | 161 | | | |
| A-C | 303 | | | 303 | | | |

17:55 - 18:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 57 | 629 | 0.090 | 57 | 0.1 | 6.294 | A |
| B-A | 114 | 491 | 0.232 | 115 | 0.3 | 9.589 | A |
| C-AB | 93 | 694 | 0.133 | 93 | 0.2 | 6.009 | A |
| C-A | 182 | | | 182 | | | |
| A-B | 144 | | | 144 | | | |
| A-C | 271 | | | 271 | | | |

18:00 - 18:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 638 | 0.083 | 53 | 0.1 | 6.154 | A |
| B-A | 107 | 501 | 0.213 | 107 | 0.3 | 9.158 | A |
| C-AB | 85 | 690 | 0.123 | 85 | 0.2 | 5.963 | A |
| C-A | 173 | | | 173 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 254 | | | 254 | | | |

18:05 - 18:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 638 | 0.083 | 53 | 0.1 | 6.152 | A |
| B-A | 107 | 501 | 0.213 | 107 | 0.3 | 9.139 | A |
| C-AB | 85 | 690 | 0.122 | 85 | 0.2 | 5.956 | A |
| C-A | 173 | | | 173 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 254 | | | 254 | | | |

18:10 - 18:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 638 | 0.083 | 53 | 0.1 | 6.152 | A |
| B-A | 107 | 501 | 0.213 | 107 | 0.3 | 9.135 | A |
| C-AB | 85 | 690 | 0.122 | 85 | 0.2 | 5.958 | A |
| C-A | 173 | | | 173 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 254 | | | 254 | | | |

2028 Test Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 3.82 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D5 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|-------------------------|--------------------|
| A - High Street | | ✓ | 451 | 100.000 |
| B - Castle Street | | ✓ | 260 | 100.000 |
| C - The Plain | | ✓ | 463 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 252 | 199 |
| | B - Castle Street | 178 | 0 | 82 |
| | C - The Plain | 364 | 99 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 2 | 4 |
| | B - Castle Street | 1 | 0 | 0 |
| | C - The Plain | 4 | 2 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.17 | 7.75 | 0.2 | A |
| B-A | 0.47 | 15.58 | 0.8 | C |
| C-AB | 0.28 | 6.23 | 0.7 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

07:45 - 07:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 646 | 0.096 | 61 | 0.1 | 6.137 | A |
| B-A | 135 | 506 | 0.267 | 131 | 0.3 | 9.502 | A |
| C-AB | 118 | 751 | 0.158 | 115 | 0.3 | 5.650 | A |
| C-A | 232 | | | 232 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 151 | | | 151 | | | |

07:50 - 07:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 644 | 0.096 | 62 | 0.1 | 6.184 | A |
| B-A | 135 | 505 | 0.267 | 135 | 0.4 | 9.725 | A |
| C-AB | 120 | 752 | 0.159 | 120 | 0.3 | 5.712 | A |
| C-A | 231 | | | 231 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 151 | | | 151 | | | |

07:55 - 08:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 644 | 0.096 | 62 | 0.1 | 6.185 | A |
| B-A | 135 | 505 | 0.267 | 135 | 0.4 | 9.728 | A |
| C-AB | 120 | 752 | 0.159 | 120 | 0.3 | 5.711 | A |
| C-A | 231 | | | 231 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 151 | | | 151 | | | |

08:00 - 08:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 66 | 635 | 0.104 | 66 | 0.1 | 6.326 | A |
| B-A | 144 | 495 | 0.291 | 143 | 0.4 | 10.204 | B |
| C-AB | 132 | 760 | 0.174 | 132 | 0.3 | 5.748 | A |
| C-A | 242 | | | 242 | | | |
| A-B | 204 | | | 204 | | | |
| A-C | 161 | | | 161 | | | |

08:05 - 08:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 616 | 0.120 | 74 | 0.1 | 6.631 | A |
| B-A | 161 | 476 | 0.338 | 160 | 0.5 | 11.330 | B |
| C-AB | 157 | 776 | 0.203 | 157 | 0.4 | 5.834 | A |
| C-A | 261 | | | 261 | | | |
| A-B | 228 | | | 228 | | | |
| A-C | 180 | | | 180 | | | |

08:10 - 08:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 81 | 597 | 0.136 | 81 | 0.2 | 6.965 | A |
| B-A | 176 | 460 | 0.383 | 175 | 0.6 | 12.559 | B |
| C-AB | 183 | 790 | 0.231 | 182 | 0.5 | 5.948 | A |
| C-A | 275 | | | 275 | | | |
| A-B | 249 | | | 249 | | | |
| A-C | 197 | | | 197 | | | |

08:15 - 08:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 87 | 580 | 0.150 | 87 | 0.2 | 7.293 | A |
| B-A | 188 | 446 | 0.422 | 187 | 0.7 | 13.799 | B |
| C-AB | 205 | 802 | 0.256 | 204 | 0.5 | 6.060 | A |
| C-A | 285 | | | 285 | | | |
| A-B | 267 | | | 267 | | | |
| A-C | 211 | | | 211 | | | |

08:20 - 08:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 91 | 566 | 0.160 | 91 | 0.2 | 7.569 | A |
| B-A | 197 | 437 | 0.451 | 196 | 0.8 | 14.850 | B |
| C-AB | 222 | 811 | 0.274 | 222 | 0.6 | 6.157 | A |
| C-A | 290 | | | 290 | | | |
| A-B | 279 | | | 279 | | | |
| A-C | 220 | | | 220 | | | |

08:25 - 08:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 93 | 558 | 0.167 | 93 | 0.2 | 7.742 | A |
| B-A | 202 | 432 | 0.467 | 201 | 0.8 | 15.503 | C |
| C-AB | 232 | 815 | 0.284 | 231 | 0.6 | 6.218 | A |
| C-A | 293 | | | 293 | | | |
| A-B | 285 | | | 285 | | | |
| A-C | 225 | | | 225 | | | |

08:30 - 08:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 93 | 557 | 0.167 | 93 | 0.2 | 7.754 | A |
| B-A | 202 | 432 | 0.467 | 201 | 0.8 | 15.582 | C |
| C-AB | 232 | 815 | 0.284 | 232 | 0.7 | 6.230 | A |
| C-A | 293 | | | 293 | | | |
| A-B | 285 | | | 285 | | | |
| A-C | 225 | | | 225 | | | |

08:35 - 08:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 91 | 564 | 0.161 | 91 | 0.2 | 7.609 | A |
| B-A | 197 | 437 | 0.452 | 197 | 0.8 | 15.062 | C |
| C-AB | 223 | 811 | 0.275 | 223 | 0.6 | 6.187 | A |
| C-A | 290 | | | 290 | | | |
| A-B | 279 | | | 279 | | | |
| A-C | 220 | | | 220 | | | |

08:40 - 08:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 87 | 577 | 0.150 | 87 | 0.2 | 7.342 | A |
| B-A | 188 | 446 | 0.422 | 189 | 0.8 | 14.099 | B |
| C-AB | 206 | 803 | 0.257 | 207 | 0.6 | 6.106 | A |
| C-A | 284 | | | 284 | | | |
| A-B | 267 | | | 267 | | | |
| A-C | 211 | | | 211 | | | |

08:45 - 08:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 81 | 595 | 0.136 | 81 | 0.2 | 7.012 | A |
| B-A | 176 | 459 | 0.383 | 177 | 0.7 | 12.849 | B |
| C-AB | 184 | 791 | 0.232 | 185 | 0.5 | 5.997 | A |
| C-A | 275 | | | 275 | | | |
| A-B | 249 | | | 249 | | | |
| A-C | 197 | | | 197 | | | |

08:50 - 08:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 614 | 0.121 | 74 | 0.1 | 6.669 | A |
| B-A | 161 | 476 | 0.338 | 162 | 0.5 | 11.541 | B |
| C-AB | 158 | 776 | 0.204 | 159 | 0.4 | 5.883 | A |
| C-A | 260 | | | 260 | | | |
| A-B | 228 | | | 228 | | | |
| A-C | 180 | | | 180 | | | |

08:55 - 09:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 66 | 634 | 0.105 | 66 | 0.1 | 6.350 | A |
| B-A | 144 | 495 | 0.291 | 145 | 0.4 | 10.343 | B |
| C-AB | 132 | 761 | 0.174 | 133 | 0.3 | 5.777 | A |
| C-A | 242 | | | 242 | | | |
| A-B | 204 | | | 204 | | | |
| A-C | 161 | | | 161 | | | |

09:00 - 09:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 644 | 0.096 | 62 | 0.1 | 6.195 | A |
| B-A | 135 | 505 | 0.267 | 135 | 0.4 | 9.774 | A |
| C-AB | 120 | 752 | 0.159 | 120 | 0.3 | 5.724 | A |
| C-A | 231 | | | 231 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 151 | | | 151 | | | |

09:05 - 09:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 644 | 0.096 | 62 | 0.1 | 6.189 | A |
| B-A | 135 | 505 | 0.267 | 135 | 0.4 | 9.743 | A |
| C-AB | 120 | 752 | 0.159 | 120 | 0.3 | 5.715 | A |
| C-A | 231 | | | 231 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 151 | | | 151 | | | |

09:10 - 09:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 62 | 644 | 0.096 | 62 | 0.1 | 6.189 | A |
| B-A | 135 | 505 | 0.267 | 135 | 0.4 | 9.739 | A |
| C-AB | 120 | 752 | 0.159 | 120 | 0.3 | 5.714 | A |
| C-A | 231 | | | 231 | | | |
| A-B | 191 | | | 191 | | | |
| A-C | 151 | | | 151 | | | |

2028 Test Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 3.01 | A |

Junction Network Options

| Driving side | Lighting |
|--------------|----------------|
| Left | Normal/unknown |

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|
| D6 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 5 |

| Vehicle mix source | PCU Factor for a HV (PCU) |
|--------------------|---------------------------|
| HV Percentages | 2.00 |

Demand overview (Traffic)

| Arm | Linked arm | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|-------------------------|--------------------|
| A - High Street | | ✓ | 555 | 100.000 |
| B - Castle Street | | ✓ | 211 | 100.000 |
| C - The Plain | | ✓ | 350 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 178 | 377 |
| | B - Castle Street | 141 | 0 | 70 |
| | C - The Plain | 271 | 79 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|-------------------|-----------------|-------------------|---------------|
| | | A - High Street | B - Castle Street | C - The Plain |
| From | A - High Street | 0 | 1 | 0 |
| | B - Castle Street | 2 | 0 | 0 |
| | C - The Plain | 2 | 3 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS |
|--------|---------|---------------|-----------------|---------|
| B-C | 0.14 | 7.67 | 0.2 | A |
| B-A | 0.39 | 14.11 | 0.6 | B |
| C-AB | 0.22 | 6.45 | 0.4 | A |
| C-A | | | | |
| A-B | | | | |
| A-C | | | | |

Main Results for each time segment

16:45 - 16:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 631 | 0.084 | 52 | 0.1 | 6.206 | A |
| B-A | 107 | 491 | 0.217 | 104 | 0.3 | 9.212 | A |
| C-AB | 85 | 687 | 0.124 | 83 | 0.2 | 5.952 | A |
| C-A | 180 | | | 180 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 285 | | | 285 | | | |

16:50 - 16:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 629 | 0.084 | 53 | 0.1 | 6.245 | A |
| B-A | 107 | 491 | 0.218 | 107 | 0.3 | 9.370 | A |
| C-AB | 86 | 688 | 0.125 | 86 | 0.2 | 5.997 | A |
| C-A | 179 | | | 179 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 285 | | | 285 | | | |

16:55 - 17:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 629 | 0.084 | 53 | 0.1 | 6.245 | A |
| B-A | 107 | 491 | 0.218 | 107 | 0.3 | 9.372 | A |
| C-AB | 86 | 688 | 0.125 | 86 | 0.2 | 5.998 | A |
| C-A | 179 | | | 179 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 285 | | | 285 | | | |

17:00 - 17:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 57 | 620 | 0.091 | 56 | 0.1 | 6.390 | A |
| B-A | 114 | 481 | 0.237 | 114 | 0.3 | 9.796 | A |
| C-AB | 94 | 691 | 0.136 | 94 | 0.2 | 6.037 | A |
| C-A | 189 | | | 189 | | | |
| A-B | 144 | | | 144 | | | |
| A-C | 305 | | | 305 | | | |

17:05 - 17:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 63 | 601 | 0.105 | 63 | 0.1 | 6.687 | A |
| B-A | 127 | 461 | 0.277 | 127 | 0.4 | 10.734 | B |
| C-AB | 111 | 699 | 0.159 | 110 | 0.3 | 6.131 | A |
| C-A | 205 | | | 205 | | | |
| A-B | 161 | | | 161 | | | |
| A-C | 341 | | | 341 | | | |

17:10 - 17:15

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 69 | 583 | 0.119 | 69 | 0.1 | 6.999 | A |
| B-A | 140 | 444 | 0.314 | 139 | 0.4 | 11.758 | B |
| C-AB | 127 | 706 | 0.180 | 127 | 0.3 | 6.233 | A |
| C-A | 219 | | | 219 | | | |
| A-B | 176 | | | 176 | | | |
| A-C | 373 | | | 373 | | | |

17:15 - 17:20

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 567 | 0.131 | 74 | 0.1 | 7.289 | A |
| B-A | 149 | 430 | 0.348 | 148 | 0.5 | 12.749 | B |
| C-AB | 142 | 713 | 0.199 | 141 | 0.4 | 6.326 | A |
| C-A | 229 | | | 229 | | | |
| A-B | 188 | | | 188 | | | |
| A-C | 399 | | | 399 | | | |

17:20 - 17:25

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 78 | 556 | 0.140 | 77 | 0.2 | 7.528 | A |
| B-A | 156 | 420 | 0.372 | 155 | 0.6 | 13.577 | B |
| C-AB | 153 | 717 | 0.213 | 152 | 0.4 | 6.403 | A |
| C-A | 235 | | | 235 | | | |
| A-B | 197 | | | 197 | | | |
| A-C | 417 | | | 417 | | | |

17:25 - 17:30

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 79 | 549 | 0.144 | 79 | 0.2 | 7.661 | A |
| B-A | 160 | 414 | 0.385 | 159 | 0.6 | 14.065 | B |
| C-AB | 158 | 719 | 0.220 | 158 | 0.4 | 6.449 | A |
| C-A | 238 | | | 238 | | | |
| A-B | 202 | | | 202 | | | |
| A-C | 427 | | | 427 | | | |

17:30 - 17:35

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 79 | 549 | 0.145 | 79 | 0.2 | 7.669 | A |
| B-A | 160 | 414 | 0.386 | 160 | 0.6 | 14.115 | B |
| C-AB | 159 | 720 | 0.220 | 159 | 0.4 | 6.454 | A |
| C-A | 238 | | | 238 | | | |
| A-B | 202 | | | 202 | | | |
| A-C | 427 | | | 427 | | | |

17:35 - 17:40

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 78 | 555 | 0.140 | 78 | 0.2 | 7.545 | A |
| B-A | 156 | 419 | 0.372 | 156 | 0.6 | 13.693 | B |
| C-AB | 153 | 717 | 0.213 | 153 | 0.4 | 6.418 | A |
| C-A | 235 | | | 235 | | | |
| A-B | 197 | | | 197 | | | |
| A-C | 417 | | | 417 | | | |

17:40 - 17:45

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 74 | 566 | 0.131 | 74 | 0.2 | 7.324 | A |
| B-A | 149 | 429 | 0.348 | 150 | 0.6 | 12.928 | B |
| C-AB | 142 | 713 | 0.199 | 143 | 0.4 | 6.353 | A |
| C-A | 228 | | | 228 | | | |
| A-B | 188 | | | 188 | | | |
| A-C | 399 | | | 399 | | | |

17:45 - 17:50

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 69 | 582 | 0.119 | 69 | 0.1 | 7.030 | A |
| B-A | 140 | 443 | 0.315 | 140 | 0.5 | 11.930 | B |
| C-AB | 128 | 707 | 0.181 | 128 | 0.3 | 6.258 | A |
| C-A | 218 | | | 218 | | | |
| A-B | 176 | | | 176 | | | |
| A-C | 373 | | | 373 | | | |

17:50 - 17:55

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 63 | 600 | 0.106 | 64 | 0.1 | 6.715 | A |
| B-A | 127 | 461 | 0.277 | 128 | 0.4 | 10.870 | B |
| C-AB | 111 | 700 | 0.159 | 112 | 0.3 | 6.157 | A |
| C-A | 205 | | | 205 | | | |
| A-B | 161 | | | 161 | | | |
| A-C | 341 | | | 341 | | | |

17:55 - 18:00

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 57 | 619 | 0.091 | 57 | 0.1 | 6.406 | A |
| B-A | 114 | 480 | 0.237 | 115 | 0.3 | 9.875 | A |
| C-AB | 94 | 692 | 0.137 | 95 | 0.2 | 6.057 | A |
| C-A | 188 | | | 188 | | | |
| A-B | 144 | | | 144 | | | |
| A-C | 305 | | | 305 | | | |

18:00 - 18:05

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 629 | 0.084 | 53 | 0.1 | 6.251 | A |
| B-A | 107 | 491 | 0.218 | 107 | 0.3 | 9.401 | A |
| C-AB | 86 | 688 | 0.125 | 86 | 0.2 | 6.005 | A |
| C-A | 179 | | | 179 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 285 | | | 285 | | | |

18:05 - 18:10

| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 629 | 0.084 | 53 | 0.1 | 6.249 | A |
| B-A | 107 | 491 | 0.218 | 107 | 0.3 | 9.380 | A |
| C-AB | 86 | 688 | 0.125 | 86 | 0.2 | 6.000 | A |
| C-A | 179 | | | 179 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 285 | | | 285 | | | |

18:10 - 18:15

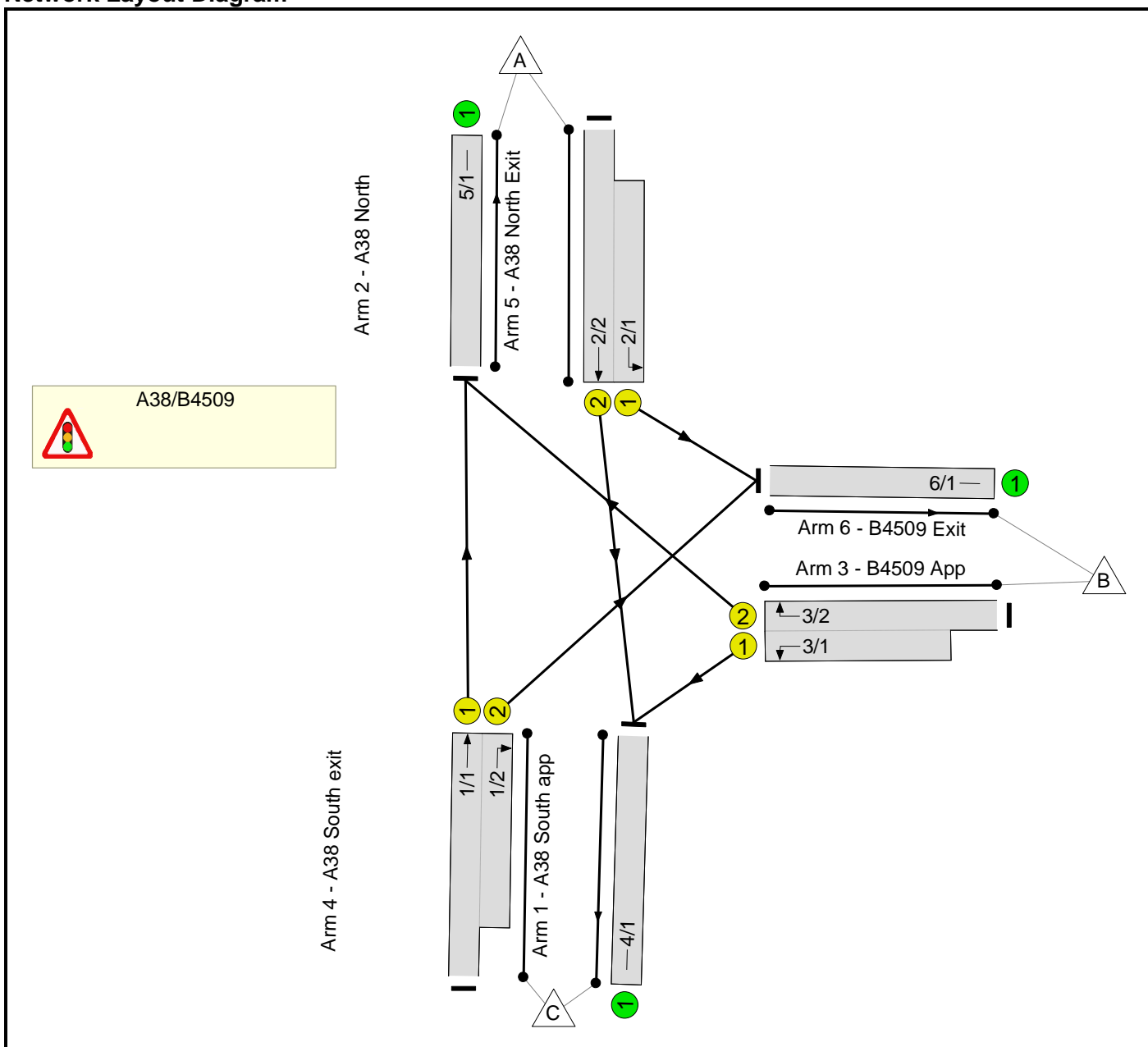
| Stream | Total Demand (Veh/hr) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------|-------|---------------------|-----------------|-----------|-----|
| B-C | 53 | 629 | 0.084 | 53 | 0.1 | 6.246 | A |
| B-A | 107 | 491 | 0.218 | 107 | 0.3 | 9.376 | A |
| C-AB | 86 | 688 | 0.125 | 86 | 0.2 | 6.000 | A |
| C-A | 179 | | | 179 | | | |
| A-B | 135 | | | 135 | | | |
| A-C | 285 | | | 285 | | | |

Full Input Data And Results
Full Input Data And Results

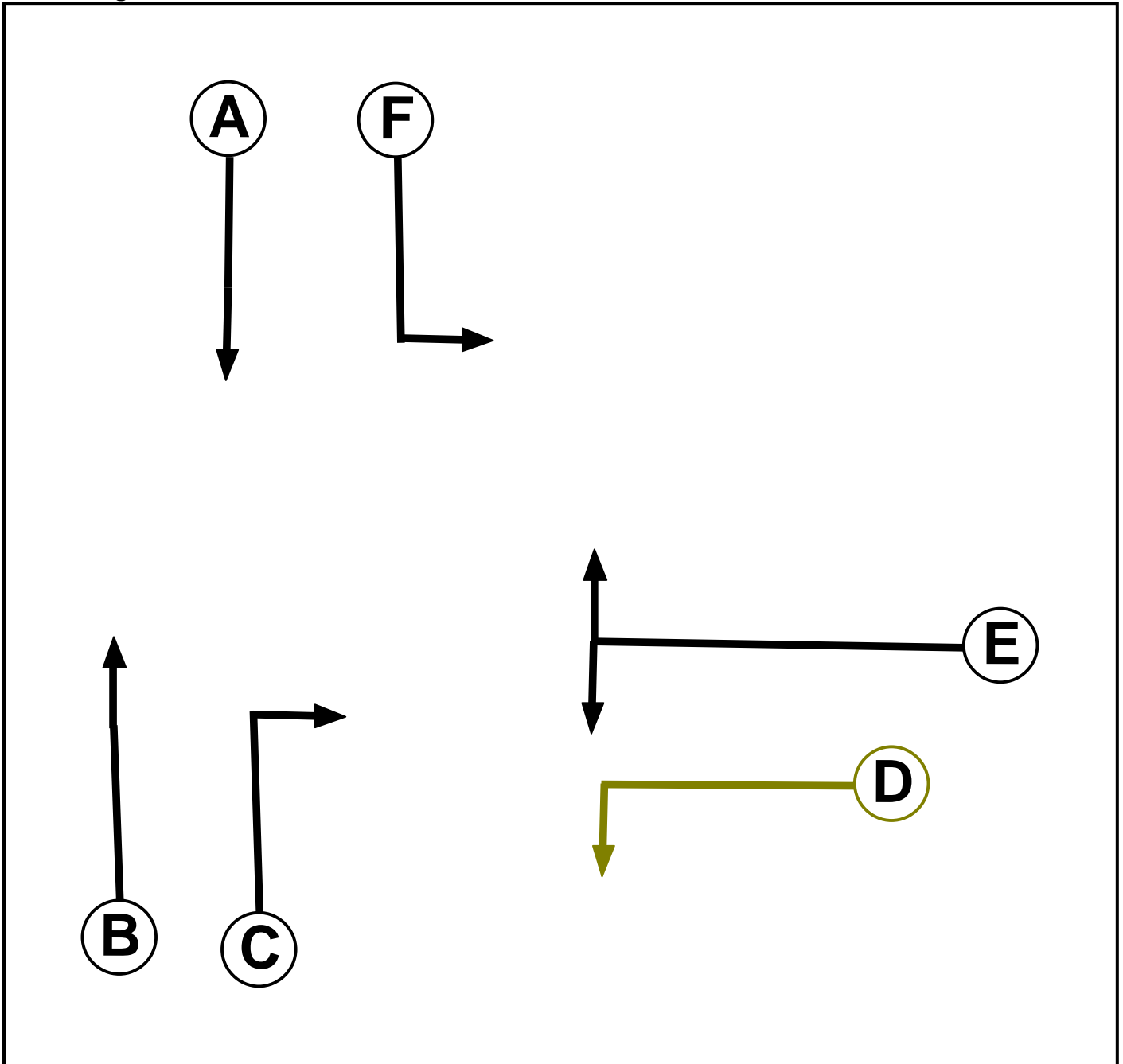
User and Project Details

| | |
|------------|--|
| Project: | Land to the West of Park Farm, Thornbury |
| Title: | |
| Location: | |
| File name: | A38-B4509_2017 only_24.07.18 |
| Author: | |
| Company: | Peter Brett Associates |
| Address: | 10 Queen Square BS1 4NT |
| Notes: | |

Network Layout Diagram



Phase Diagram



Phase Input Data

| Phase Name | Phase Type | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|------------|----------|
| A | Traffic | | 7 | 7 |
| B | Traffic | | 7 | 7 |
| C | Traffic | | 7 | 7 |
| D | Filter | E | 0 | 0 |
| E | Traffic | | 7 | 7 |
| F | Traffic | | 7 | 7 |

Full Input Data And Results

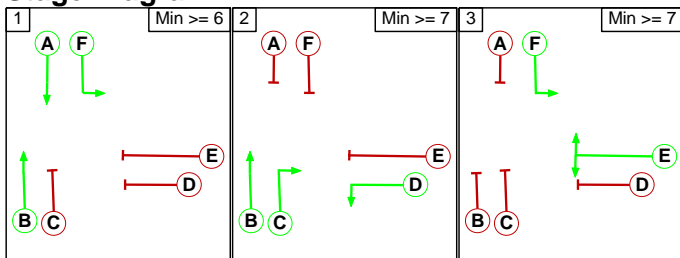
Phase Intergrens Matrix

| | | | | | | | |
|-------------------|----------------|---|---|---|---|---|---|
| Terminating Phase | Starting Phase | | | | | | |
| | | A | B | C | D | E | F |
| | A | - | - | 7 | 7 | 7 | - |
| | B | - | - | - | - | 7 | - |
| | C | 7 | - | - | - | 7 | 7 |
| | D | 5 | - | - | - | - | - |
| | E | 6 | 7 | 7 | - | - | - |
| | F | - | - | 5 | - | - | - |

Phases in Stage

| Stage No. | Phases in Stage |
|-----------|-----------------|
| 1 | A B F |
| 2 | B C D |
| 3 | E F |

Stage Diagram



Phase Delays

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-------------|-------------|-------|------------------|-------|------------|
| 3 | 2 | D | Gaining absolute | 7 | 7 |

Prohibited Stage Change

| | | | | |
|------------|----------|---|---|---|
| From Stage | To Stage | | | |
| | | 1 | 2 | 3 |
| | 1 | - | 7 | 7 |
| | 2 | X | - | 7 |
| 3 | 7 | 7 | - | |

Full Input Data And Results

Give-Way Lane Input Data

Junction: A38/B4509

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

| Junction: A38/B4509 | | | | | | | | | | | | |
|-------------------------|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|-------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| 1/1 (A38 South app) | U | B | 2 | 3 | 19.1 | Geom | - | 3.50 | 0.00 | Y | Arm 5 Ahead | Inf |
| 1/2 (A38 South app) | U | C | 2 | 3 | 19.0 | Geom | - | 3.90 | 0.00 | Y | Arm 6 Right | 40.00 |
| 2/1 (A38 North) | U | F | 2 | 3 | 10.1 | Geom | - | 4.00 | 0.00 | Y | Arm 6 Left | 50.00 |
| 2/2 (A38 North) | U | A | 2 | 3 | 17.4 | Geom | - | 3.60 | 0.00 | Y | Arm 4 Ahead | Inf |
| 3/1 (B4509 App) | U | E D | 2 | 3 | 10.8 | Geom | - | 3.50 | 0.00 | Y | Arm 4 Left | 20.00 |
| 3/2 (B4509 App) | U | E | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm 5 Right | 35.00 |
| 4/1 (A38 South exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| 5/1 (A38 North Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| 6/1 (B4509 Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |

Traffic Flow Groups

| Flow Group | Start Time | End Time | Duration | Formula |
|-------------------|------------|----------|----------|---------|
| 1: '2017 Base AM' | 08:00 | 09:00 | 01:00 | |
| 2: '2017 Base PM' | 17:00 | 18:00 | 01:00 | |

Scenario 1: '2017 Base AM' (FG1: '2017 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | |
|--------|-------------|-----|-----|-----|------|
| | | A | B | C | Tot. |
| Origin | A | 0 | 473 | 236 | 709 |
| | B | 306 | 0 | 282 | 588 |
| | C | 130 | 397 | 0 | 527 |
| | Tot. | 436 | 870 | 518 | 1824 |

Full Input Data And Results

Traffic Lane Flows

| Lane | Scenario 1: 2017 Base AM |
|----------------------------|--------------------------------|
| Junction: A38/B4509 | |
| 1/1 (with short) | 527(In) 130(Out) |
| 1/2 (short) | 397 |
| 2/1 (short) | 473 |
| 2/2 (with short) | 709(In) 236(Out) |
| 3/1 (short) | 282 |
| 3/2 (with short) | 588(In) 306(Out) |
| 4/1 | 518 |
| 5/1 | 436 |
| 6/1 | 870 |

Lane Saturation Flows

| Junction: A38/B4509 | | | | | | | | |
|--------------------------------|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 South app) | 3.50 | 0.00 | Y | Arm 5 Ahead | Inf | 100.0 % | 1965 | 1965 |
| 1/2 (A38 South app) | 3.90 | 0.00 | Y | Arm 6 Right | 40.00 | 100.0 % | 1933 | 1933 |
| 2/1 (A38 North) | 4.00 | 0.00 | Y | Arm 6 Left | 50.00 | 100.0 % | 1956 | 1956 |
| 2/2 (A38 North) | 3.60 | 0.00 | Y | Arm 4 Ahead | Inf | 100.0 % | 1975 | 1975 |
| 3/1 (B4509 App) | 3.50 | 0.00 | Y | Arm 4 Left | 20.00 | 100.0 % | 1828 | 1828 |
| 3/2 (B4509 App) | 3.50 | 0.00 | Y | Arm 5 Right | 35.00 | 100.0 % | 1884 | 1884 |
| 4/1 (A38 South exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 5/1 (A38 North Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 6/1 (B4509 Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |

Full Input Data And Results

Scenario 2: '2017 Base PM' (FG2: '2017 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | |
|--------|-------------|-----|-----|-----|------|
| | | A | B | C | Tot. |
| Origin | A | 0 | 323 | 264 | 587 |
| | B | 512 | 0 | 296 | 808 |
| | C | 264 | 222 | 0 | 486 |
| | Tot. | 776 | 545 | 560 | 1881 |

Traffic Lane Flows

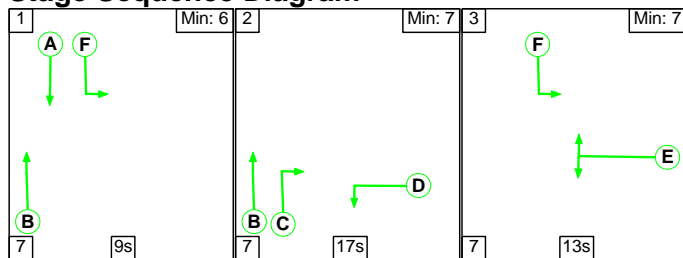
| Lane | Scenario 2: 2017 Base PM |
|----------------------------|--------------------------------|
| Junction: A38/B4509 | |
| 1/1 (with short) | 486(In) 264(Out) |
| 1/2 (short) | 222 |
| 2/1 (short) | 323 |
| 2/2 (with short) | 587(In) 264(Out) |
| 3/1 (short) | 296 |
| 3/2 (with short) | 808(In) 512(Out) |
| 4/1 | 560 |
| 5/1 | 776 |
| 6/1 | 545 |

Lane Saturation Flows

| Junction: A38/B4509 | | | | | | | | |
|--------------------------------|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 South app) | 3.50 | 0.00 | Y | Arm 5 Ahead | Inf | 100.0 % | 1965 | 1965 |
| 1/2 (A38 South app) | 3.90 | 0.00 | Y | Arm 6 Right | 40.00 | 100.0 % | 1933 | 1933 |
| 2/1 (A38 North) | 4.00 | 0.00 | Y | Arm 6 Left | 50.00 | 100.0 % | 1956 | 1956 |
| 2/2 (A38 North) | 3.60 | 0.00 | Y | Arm 4 Ahead | Inf | 100.0 % | 1975 | 1975 |
| 3/1 (B4509 App) | 3.50 | 0.00 | Y | Arm 4 Left | 20.00 | 100.0 % | 1828 | 1828 |
| 3/2 (B4509 App) | 3.50 | 0.00 | Y | Arm 5 Right | 35.00 | 100.0 % | 1884 | 1884 |
| 4/1 (A38 South exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 5/1 (A38 North Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 6/1 (B4509 Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |

Scenario 1: '2017 Base AM' (FG1: '2017 Base AM', Plan 1: 'Network Control Plan 1')

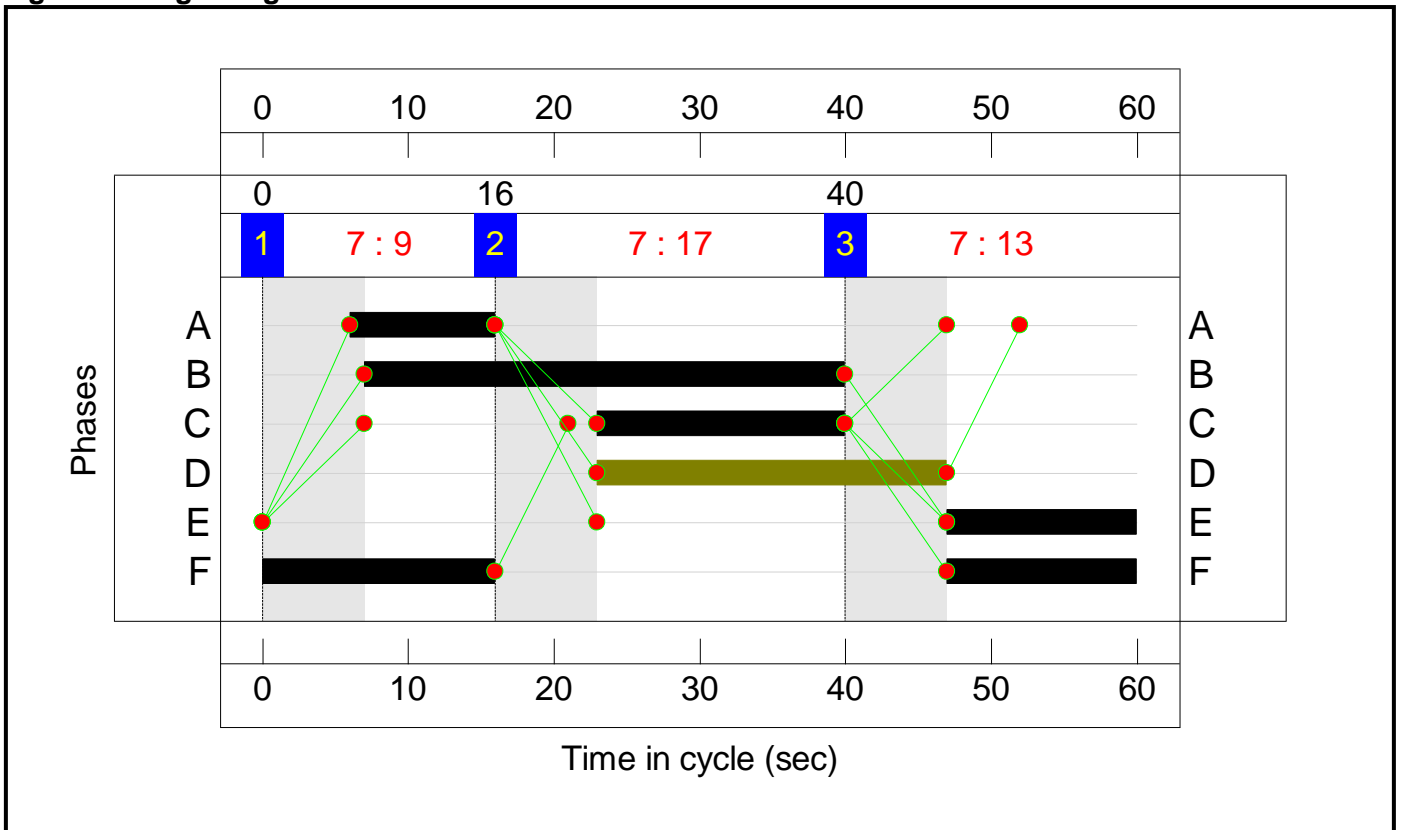
Stage Sequence Diagram




Stage Timings

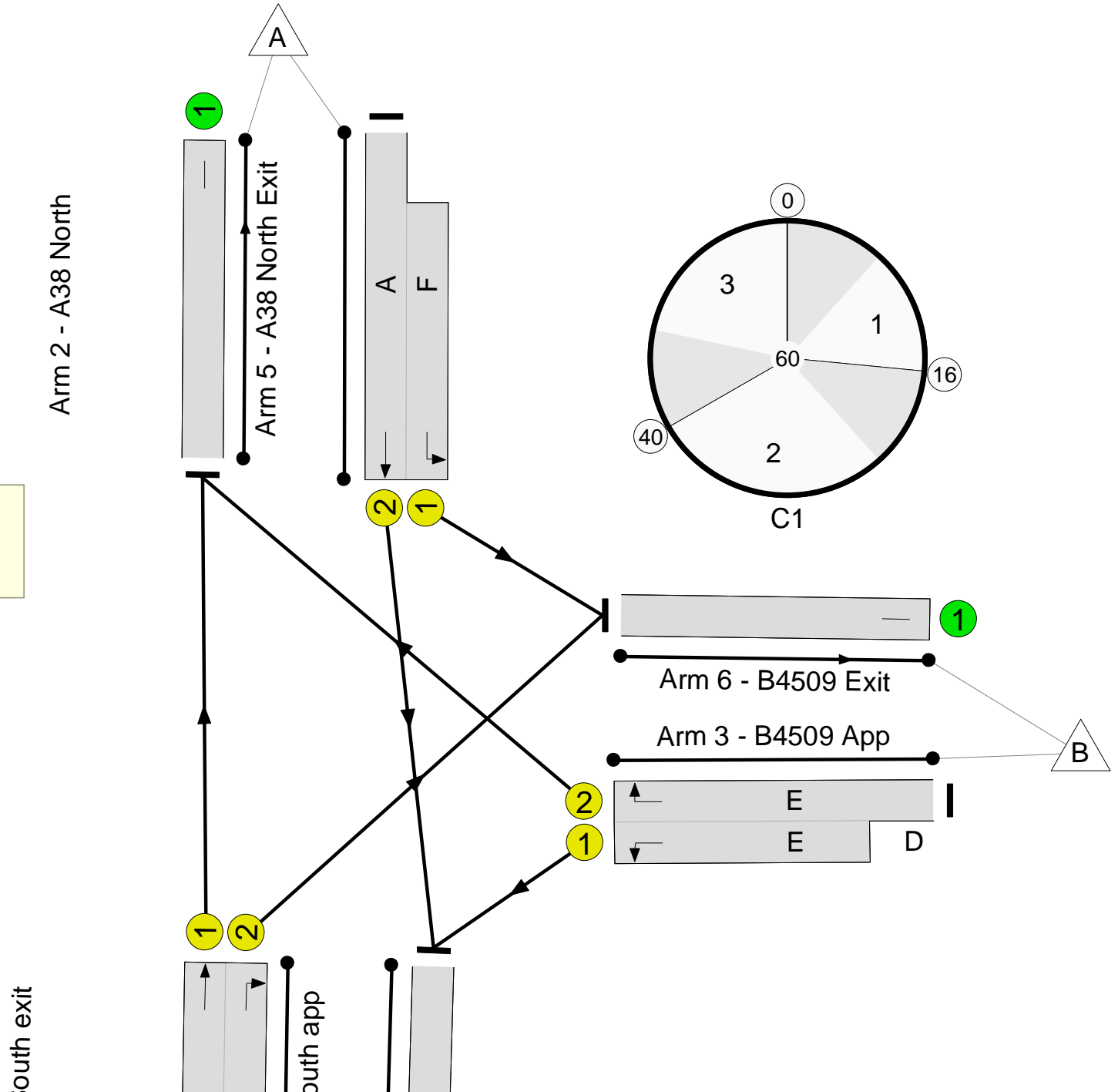
| Stage | 1 | 2 | 3 |
|--------------|---|----|----|
| Duration | 9 | 17 | 13 |
| Change Point | 0 | 16 | 40 |

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **A38/B4509**
PRC: 29.3 %
Total Traffic Delay: 10.1 pcuHr



Full Input Data And Results

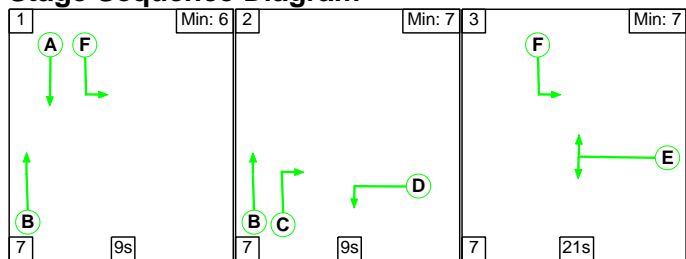
Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|-----------|---------------------------|---------------|-----------------------------------|------------------------------|------------------------------|-----------------------|--|------------------------------------|--|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 69.6% |
| A38/B4509 | - | - | N/A | - | - | | - | - | - | - | - | - | 69.6% |
| 1/1+1/2 | A38 South app Ahead Right | U | N/A | N/A | B C | | 1 | 33:17 | - | 527 | 1965:1933 | 190+580 | 68.5 : 68.5% |
| 2/2+2/1 | A38 North Ahead Left | U | N/A | N/A | A F | | 1 | 10:29 | - | 709 | 1975:1956 | 362+866 | 65.2 : 54.6% |
| 3/2+3/1 | B4509 App Left Right | U | N/A | N/A | E | D | 1 | 13:37 | 24 | 588 | 1884:1828 | 440+405 | 69.6 : 69.6% |
| 4/1 | A38 South exit | U | N/A | N/A | - | | - | - | - | 518 | Inf | Inf | 0.0% |
| 5/1 | A38 North Exit | U | N/A | N/A | - | | - | - | - | 436 | Inf | Inf | 0.0% |
| 6/1 | B4509 Exit | U | N/A | N/A | - | | - | - | - | 870 | Inf | Inf | 0.0% |
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
| Network | - | - | 0 | 0 | 0 | 7.2 | 2.9 | 0.0 | 10.1 | - | - | - | - |
| A38/B4509 | - | - | 0 | 0 | 0 | 7.2 | 2.9 | 0.0 | 10.1 | - | - | - | - |
| 1/1+1/2 | 527 | 527 | - | - | - | 2.3 | 1.1 | - | 3.3 | 22.8 | 5.7 | 1.1 | 6.8 |
| 2/2+2/1 | 709 | 709 | - | - | - | 2.8 | 0.7 | - | 3.5 | 17.6 | 5.1 | 0.7 | 5.8 |
| 3/2+3/1 | 588 | 588 | - | - | - | 2.2 | 1.1 | - | 3.3 | 20.2 | 4.6 | 1.1 | 5.7 |
| 4/1 | 518 | 518 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/1 | 436 | 436 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6/1 | 870 | 870 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| C1 | | | PRC for Signalled Lanes (%): 29.3 | | PRC Over All Lanes (%): 29.3 | | Total Delay for Signalled Lanes (pcuHr): 10.11 | | Total Delay Over All Lanes(pcuHr): 10.11 | | Cycle Time (s): 60 | | |

Full Input Data And Results

Scenario 2: '2017 Base PM' (FG2: '2017 Base PM', Plan 1: 'Network Control Plan 1')

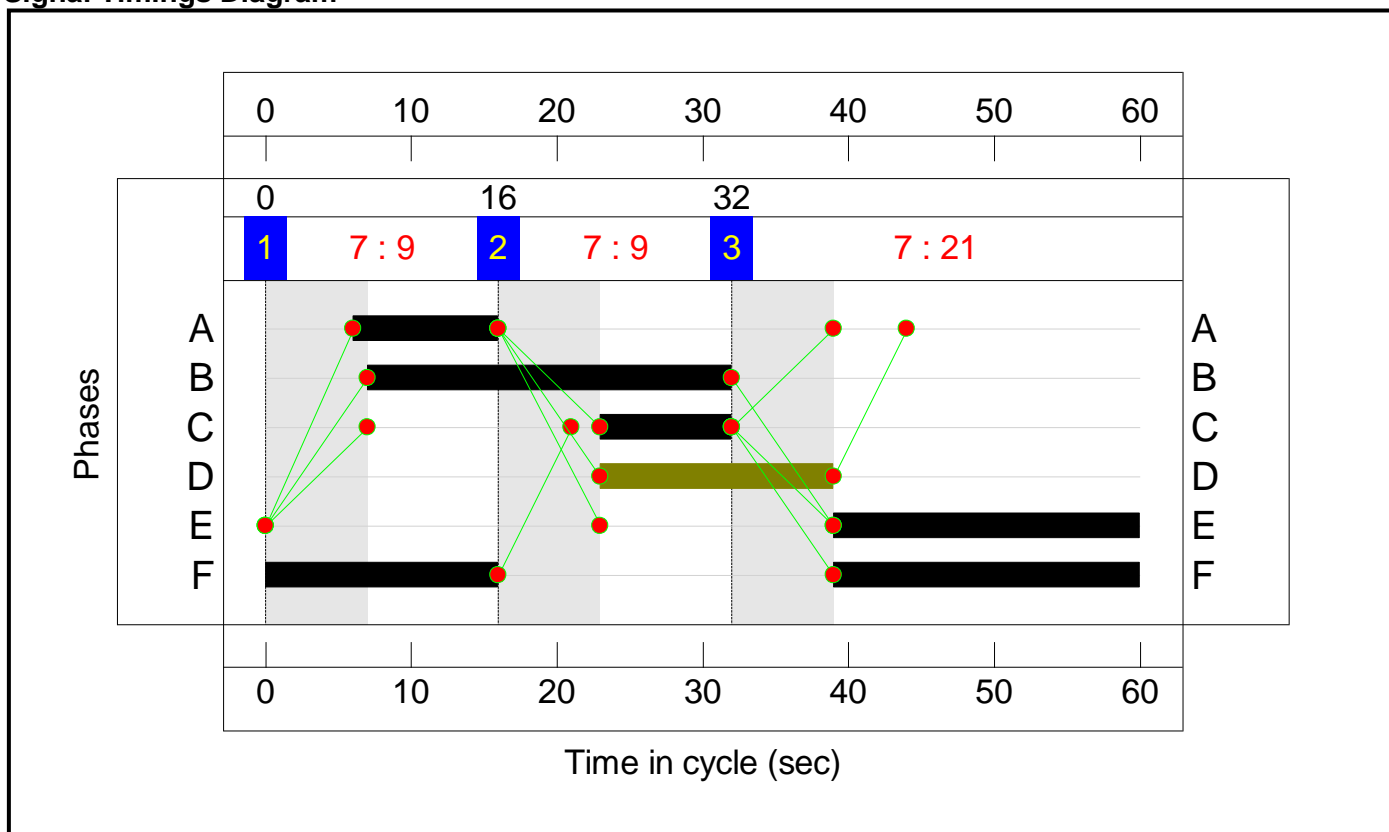
Stage Sequence Diagram




Stage Timings

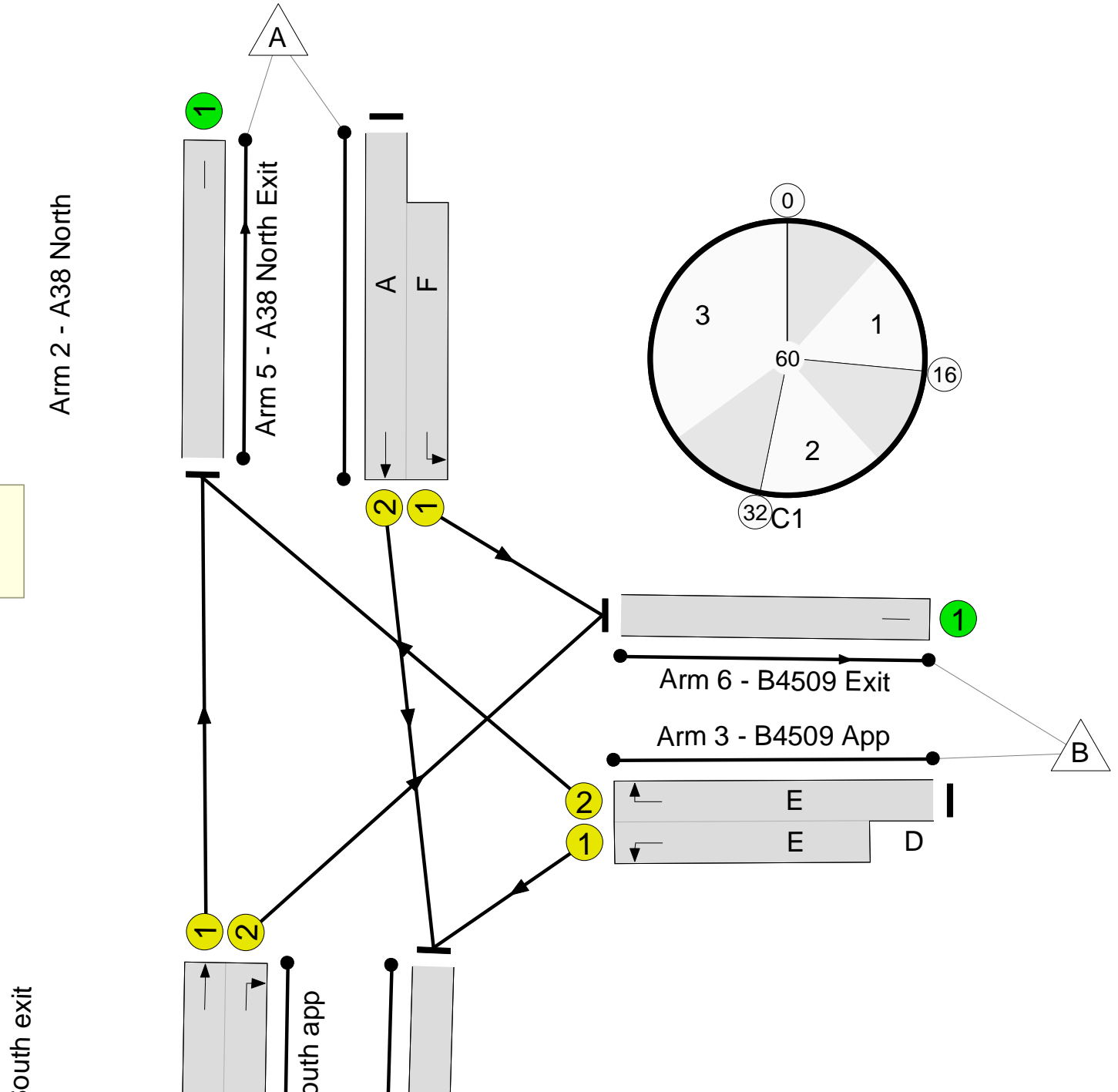
| Stage | 1 | 2 | 3 |
|--------------|---|----|----|
| Duration | 9 | 9 | 21 |
| Change Point | 0 | 16 | 32 |

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **A38/B4509**
 PRC: 21.4 %
 Total Traffic Delay: 10.2 pcuHr



Full Input Data And Results

Network Results

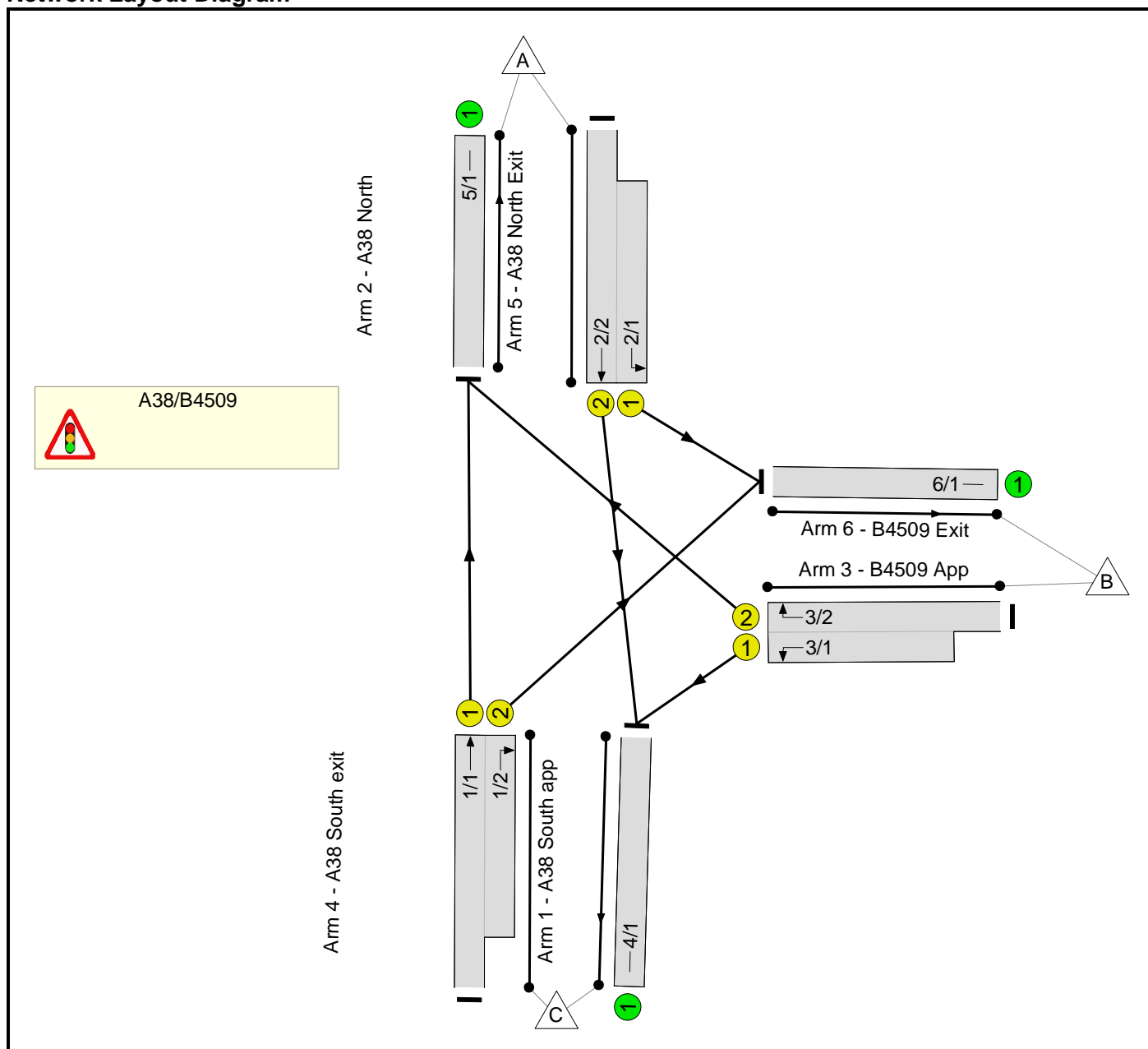
| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|-----------|---------------------------|---------------|-----------------------------------|------------------------------|------------------------------|-----------------------|--|------------------------------------|--|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 74.1% |
| A38/B4509 | - | - | N/A | - | - | | - | - | - | - | - | - | 74.1% |
| 1/1+1/2 | A38 South app Ahead Right | U | N/A | N/A | B C | | 1 | 25:9 | - | 486 | 1965:1933 | 852+322 | 31.0 : 68.9% |
| 2/2+2/1 | A38 North Ahead Left | U | N/A | N/A | A F | | 1 | 10:37 | - | 587 | 1975:1956 | 362+443 | 72.9 : 72.9% |
| 3/2+3/1 | B4509 App Left Right | U | N/A | N/A | E | D | 1 | 21:37 | 16 | 808 | 1884:1828 | 691+399 | 74.1 : 74.1% |
| 4/1 | A38 South exit | U | N/A | N/A | - | | - | - | - | 560 | Inf | Inf | 0.0% |
| 5/1 | A38 North Exit | U | N/A | N/A | - | | - | - | - | 776 | Inf | Inf | 0.0% |
| 6/1 | B4509 Exit | U | N/A | N/A | - | | - | - | - | 545 | Inf | Inf | 0.0% |
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
| Network | - | - | 0 | 0 | 0 | 7.1 | 3.1 | 0.0 | 10.2 | - | - | - | - |
| A38/B4509 | - | - | 0 | 0 | 0 | 7.1 | 3.1 | 0.0 | 10.2 | - | - | - | - |
| 1/1+1/2 | 486 | 486 | - | - | - | 2.3 | 0.4 | - | 2.6 | 19.4 | 3.5 | 0.4 | 3.8 |
| 2/2+2/1 | 587 | 587 | - | - | - | 2.1 | 1.3 | - | 3.5 | 21.2 | 4.1 | 1.3 | 5.4 |
| 3/2+3/1 | 808 | 808 | - | - | - | 2.7 | 1.4 | - | 4.2 | 18.6 | 7.4 | 1.4 | 8.8 |
| 4/1 | 560 | 560 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/1 | 776 | 776 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6/1 | 545 | 545 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| C1 | | | PRC for Signalled Lanes (%): 21.4 | | PRC Over All Lanes (%): 21.4 | | Total Delay for Signalled Lanes (pcuHr): 10.25 | | Total Delay Over All Lanes(pcuHr): 10.25 | | Cycle Time (s): 60 | | |

Full Input Data And Results
Full Input Data And Results

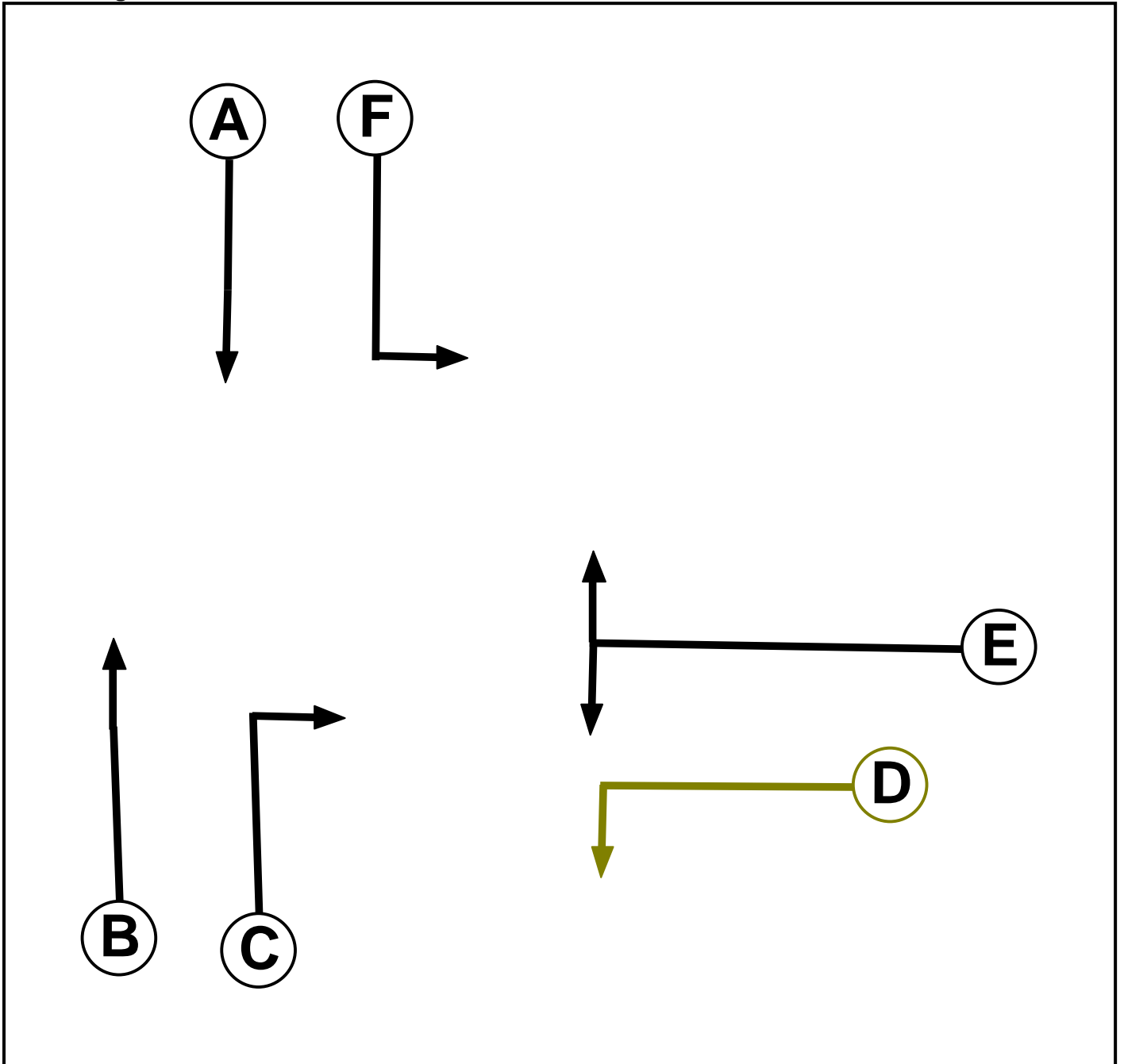
User and Project Details

| | |
|-------------------|---|
| Project: | Land West of Park Farm, Thornbury |
| Title: | |
| Location: | |
| File name: | A38-B4509_ Committed scheme _26.07.18.lsg3x |
| Author: | |
| Company: | Peter Brett Associates |
| Address: | 10 Queen Square BS1 4NT |
| Notes: | |

Network Layout Diagram



Phase Diagram



Phase Input Data

| Phase Name | Phase Type | Assoc. Phase | Street Min | Cont Min |
|------------|------------|--------------|------------|----------|
| A | Traffic | | 7 | 7 |
| B | Traffic | | 7 | 7 |
| C | Traffic | | 7 | 7 |
| D | Filter | E | 4 | 0 |
| E | Traffic | | 7 | 7 |
| F | Traffic | | 7 | 7 |

Full Input Data And Results

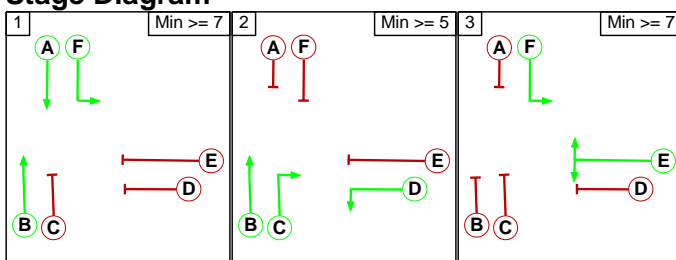
Phase Intergrens Matrix

| | Starting Phase | | | | | |
|-------------------|----------------|---|---|---|---|---|
| | A | B | C | D | E | F |
| Terminating Phase | A | - | 7 | 7 | 7 | - |
| | B | - | - | - | 7 | - |
| | C | 7 | - | - | 7 | 7 |
| | D | 5 | - | - | - | - |
| | E | 6 | 5 | 5 | - | - |
| | F | - | - | 5 | - | - |
| | | | | | | |

Phases in Stage

| Stage No. | Phases in Stage |
|-----------|-----------------|
| 1 | A B F |
| 2 | B C D |
| 3 | E F |

Stage Diagram



Phase Delays

| Term. Stage | Start Stage | Phase | Type | Value | Cont value |
|-------------|-------------|-------|------------------|-------|------------|
| 3 | 2 | D | Gaining absolute | 7 | 7 |

Prohibited Stage Change

| From Stage | To Stage | | |
|------------|----------|---|---|
| | 1 | 2 | 3 |
| 1 | | 7 | 7 |
| 2 | X | | 7 |
| 3 | 6 | 7 | |

Full Input Data And Results

Give-Way Lane Input Data

Junction: A38/B4509

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

| Junction: A38/B4509 | | | | | | | | | | | | |
|-------------------------|-----------|--------|-------------|-----------|-----------------------|---------------|-----------------------------------|----------------|----------|---------------|-------------|--------------------|
| Lane | Lane Type | Phases | Start Disp. | End Disp. | Physical Length (PCU) | Sat Flow Type | Def User Saturation Flow (PCU/Hr) | Lane Width (m) | Gradient | Nearside Lane | Turns | Turning Radius (m) |
| 1/1 (A38 South app) | U | B | 2 | 3 | 19.1 | Geom | - | 3.50 | 0.00 | Y | Arm 5 Ahead | Inf |
| 1/2 (A38 South app) | U | C | 2 | 3 | 19.0 | Geom | - | 3.90 | 0.00 | Y | Arm 6 Right | 40.00 |
| 2/1 (A38 North) | U | F | 2 | 3 | 13.0 | Geom | - | 4.00 | 0.00 | Y | Arm 6 Left | 50.00 |
| 2/2 (A38 North) | U | A | 2 | 3 | 17.4 | Geom | - | 3.60 | 0.00 | Y | Arm 4 Ahead | Inf |
| 3/1 (B4509 App) | U | E D | 2 | 3 | 10.8 | Geom | - | 3.50 | 0.00 | Y | Arm 4 Left | 20.00 |
| 3/2 (B4509 App) | U | E | 2 | 3 | 60.0 | Geom | - | 3.50 | 0.00 | Y | Arm 5 Right | 35.00 |
| 4/1 (A38 South exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| 5/1 (A38 North Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| 6/1 (B4509 Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |

Traffic Flow Groups

| Flow Group | Start Time | End Time | Duration | Formula |
|-----------------------------|------------|----------|----------|---------|
| 1: '2028 Reference Case AM' | 08:00 | 09:00 | 01:00 | |
| 2: '2028 Reference Case PM' | 17:00 | 18:00 | 01:00 | |
| 3: '2028 Test Case AM' | 08:00 | 09:00 | 01:00 | |
| 4: '2028 Test Case PM' | 17:00 | 18:00 | 01:00 | |

Full Input Data And Results

Scenario 1: '2028 Reference Case AM' (FG1: '2028 Reference Case AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | |
|--------|-------------|-----|------|-----|------|
| | | A | B | C | Tot. |
| Origin | A | 0 | 526 | 273 | 799 |
| | B | 314 | 0 | 354 | 668 |
| | C | 176 | 490 | 0 | 666 |
| | Tot. | 490 | 1016 | 627 | 2133 |

Traffic Lane Flows

| Lane | Scenario 1: 2028 Reference Case AM |
|----------------------------|---|
| Junction: A38/B4509 | |
| 1/1 (with short) | 666(In) 176(Out) |
| 1/2 (short) | 490 |
| 2/1 (short) | 526 |
| 2/2 (with short) | 799(In) 273(Out) |
| 3/1 (short) | 354 |
| 3/2 (with short) | 668(In) 314(Out) |
| 4/1 | 627 |
| 5/1 | 490 |
| 6/1 | 1016 |

Full Input Data And Results

Lane Saturation Flows

| Junction: A38/B4509 | | | | | | | | |
|--------------------------------|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 South app) | 3.50 | 0.00 | Y | Arm 5 Ahead | Inf | 100.0 % | 1965 | 1965 |
| 1/2 (A38 South app) | 3.90 | 0.00 | Y | Arm 6 Right | 40.00 | 100.0 % | 1933 | 1933 |
| 2/1 (A38 North) | 4.00 | 0.00 | Y | Arm 6 Left | 50.00 | 100.0 % | 1956 | 1956 |
| 2/2 (A38 North) | 3.60 | 0.00 | Y | Arm 4 Ahead | Inf | 100.0 % | 1975 | 1975 |
| 3/1 (B4509 App) | 3.50 | 0.00 | Y | Arm 4 Left | 20.00 | 100.0 % | 1828 | 1828 |
| 3/2 (B4509 App) | 3.50 | 0.00 | Y | Arm 5 Right | 35.00 | 100.0 % | 1884 | 1884 |
| 4/1 (A38 South exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 5/1 (A38 North Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 6/1 (B4509 Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |

Scenario 2: '2028 Reference Case PM' (FG2: '2028 Reference Case PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | |
|--------|-------------|-----|-----|-----|------|
| | | A | B | C | Tot. |
| Origin | A | 0 | 355 | 315 | 670 |
| | B | 563 | 0 | 357 | 920 |
| | C | 305 | 265 | 0 | 570 |
| | Tot. | 868 | 620 | 672 | 2160 |

Full Input Data And Results

Traffic Lane Flows

| Lane | Scenario 2: 2028 Reference Case PM |
|----------------------------|---|
| Junction: A38/B4509 | |
| 1/1 (with short) | 570(In) 305(Out) |
| 1/2 (short) | 265 |
| 2/1 (short) | 355 |
| 2/2 (with short) | 670(In) 315(Out) |
| 3/1 (short) | 357 |
| 3/2 (with short) | 920(In) 563(Out) |
| 4/1 | 672 |
| 5/1 | 868 |
| 6/1 | 620 |

Lane Saturation Flows

| Junction: A38/B4509 | | | | | | | | |
|--------------------------------|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 South app) | 3.50 | 0.00 | Y | Arm 5 Ahead | Inf | 100.0 % | 1965 | 1965 |
| 1/2 (A38 South app) | 3.90 | 0.00 | Y | Arm 6 Right | 40.00 | 100.0 % | 1933 | 1933 |
| 2/1 (A38 North) | 4.00 | 0.00 | Y | Arm 6 Left | 50.00 | 100.0 % | 1956 | 1956 |
| 2/2 (A38 North) | 3.60 | 0.00 | Y | Arm 4 Ahead | Inf | 100.0 % | 1975 | 1975 |
| 3/1 (B4509 App) | 3.50 | 0.00 | Y | Arm 4 Left | 20.00 | 100.0 % | 1828 | 1828 |
| 3/2 (B4509 App) | 3.50 | 0.00 | Y | Arm 5 Right | 35.00 | 100.0 % | 1884 | 1884 |
| 4/1 (A38 South exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 5/1 (A38 North Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 6/1 (B4509 Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |

Full Input Data And Results

Scenario 3: '2028 Test Case AM' (FG3: '2028 Test Case AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | | Destination | | | |
|--------|------|-------------|------|-----|------|
| | | A | B | C | Tot. |
| Origin | A | 0 | 526 | 276 | 802 |
| | B | 314 | 0 | 361 | 675 |
| | C | 192 | 530 | 0 | 722 |
| | Tot. | 506 | 1056 | 637 | 2199 |

Traffic Lane Flows

| Lane | Scenario 3: 2028 Test Case AM |
|----------------------------|-------------------------------------|
| Junction: A38/B4509 | |
| 1/1 (with short) | 722(In) 192(Out) |
| 1/2 (short) | 530 |
| 2/1 (short) | 526 |
| 2/2 (with short) | 802(In) 276(Out) |
| 3/1 (short) | 361 |
| 3/2 (with short) | 675(In) 314(Out) |
| 4/1 | 637 |
| 5/1 | 506 |
| 6/1 | 1056 |

Full Input Data And Results

Lane Saturation Flows

| Junction: A38/B4509 | | | | | | | | |
|--------------------------------|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 South app) | 3.50 | 0.00 | Y | Arm 5 Ahead | Inf | 100.0 % | 1965 | 1965 |
| 1/2 (A38 South app) | 3.90 | 0.00 | Y | Arm 6 Right | 40.00 | 100.0 % | 1933 | 1933 |
| 2/1 (A38 North) | 4.00 | 0.00 | Y | Arm 6 Left | 50.00 | 100.0 % | 1956 | 1956 |
| 2/2 (A38 North) | 3.60 | 0.00 | Y | Arm 4 Ahead | Inf | 100.0 % | 1975 | 1975 |
| 3/1 (B4509 App) | 3.50 | 0.00 | Y | Arm 4 Left | 20.00 | 100.0 % | 1828 | 1828 |
| 3/2 (B4509 App) | 3.50 | 0.00 | Y | Arm 5 Right | 35.00 | 100.0 % | 1884 | 1884 |
| 4/1 (A38 South exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 5/1 (A38 North Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 6/1 (B4509 Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |

Scenario 4: '2028 Test Case PM' (FG4: '2028 Test Case PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

| | Destination | | | | |
|--------|-------------|-----|-----|-----|------|
| | | A | B | C | Tot. |
| Origin | A | 0 | 355 | 327 | 682 |
| | B | 563 | 0 | 386 | 949 |
| | C | 308 | 272 | 0 | 580 |
| | Tot. | 871 | 627 | 713 | 2211 |

Full Input Data And Results

Traffic Lane Flows

| Lane | Scenario 4: 2028 Test Case PM |
|----------------------------|-------------------------------------|
| Junction: A38/B4509 | |
| 1/1 (with short) | 580(In) 308(Out) |
| 1/2 (short) | 272 |
| 2/1 (short) | 355 |
| 2/2 (with short) | 682(In) 327(Out) |
| 3/1 (short) | 386 |
| 3/2 (with short) | 949(In) 563(Out) |
| 4/1 | 713 |
| 5/1 | 871 |
| 6/1 | 627 |

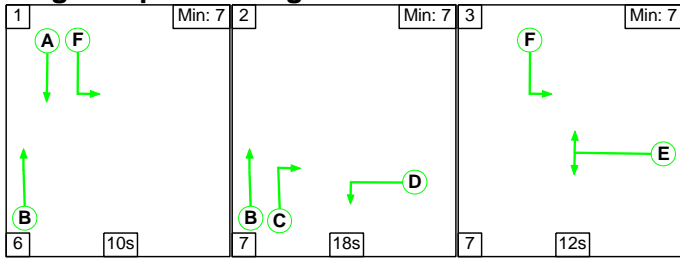
Lane Saturation Flows

| Junction: A38/B4509 | | | | | | | | |
|--------------------------------|--------------------------|----------|---------------|---------------|--------------------|---------------|-------------------|--------------------------|
| Lane | Lane Width (m) | Gradient | Nearside Lane | Allowed Turns | Turning Radius (m) | Turning Prop. | Sat Flow (PCU/Hr) | Flared Sat Flow (PCU/Hr) |
| 1/1 (A38 South app) | 3.50 | 0.00 | Y | Arm 5 Ahead | Inf | 100.0 % | 1965 | 1965 |
| 1/2 (A38 South app) | 3.90 | 0.00 | Y | Arm 6 Right | 40.00 | 100.0 % | 1933 | 1933 |
| 2/1 (A38 North) | 4.00 | 0.00 | Y | Arm 6 Left | 50.00 | 100.0 % | 1956 | 1956 |
| 2/2 (A38 North) | 3.60 | 0.00 | Y | Arm 4 Ahead | Inf | 100.0 % | 1975 | 1975 |
| 3/1 (B4509 App) | 3.50 | 0.00 | Y | Arm 4 Left | 20.00 | 100.0 % | 1828 | 1828 |
| 3/2 (B4509 App) | 3.50 | 0.00 | Y | Arm 5 Right | 35.00 | 100.0 % | 1884 | 1884 |
| 4/1 (A38 South exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 5/1 (A38 North Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 6/1 (B4509 Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |

Full Input Data And Results

Scenario 1: '2028 Reference Case AM' (FG1: '2028 Reference Case AM', Plan 1: 'Network Control Plan 1')

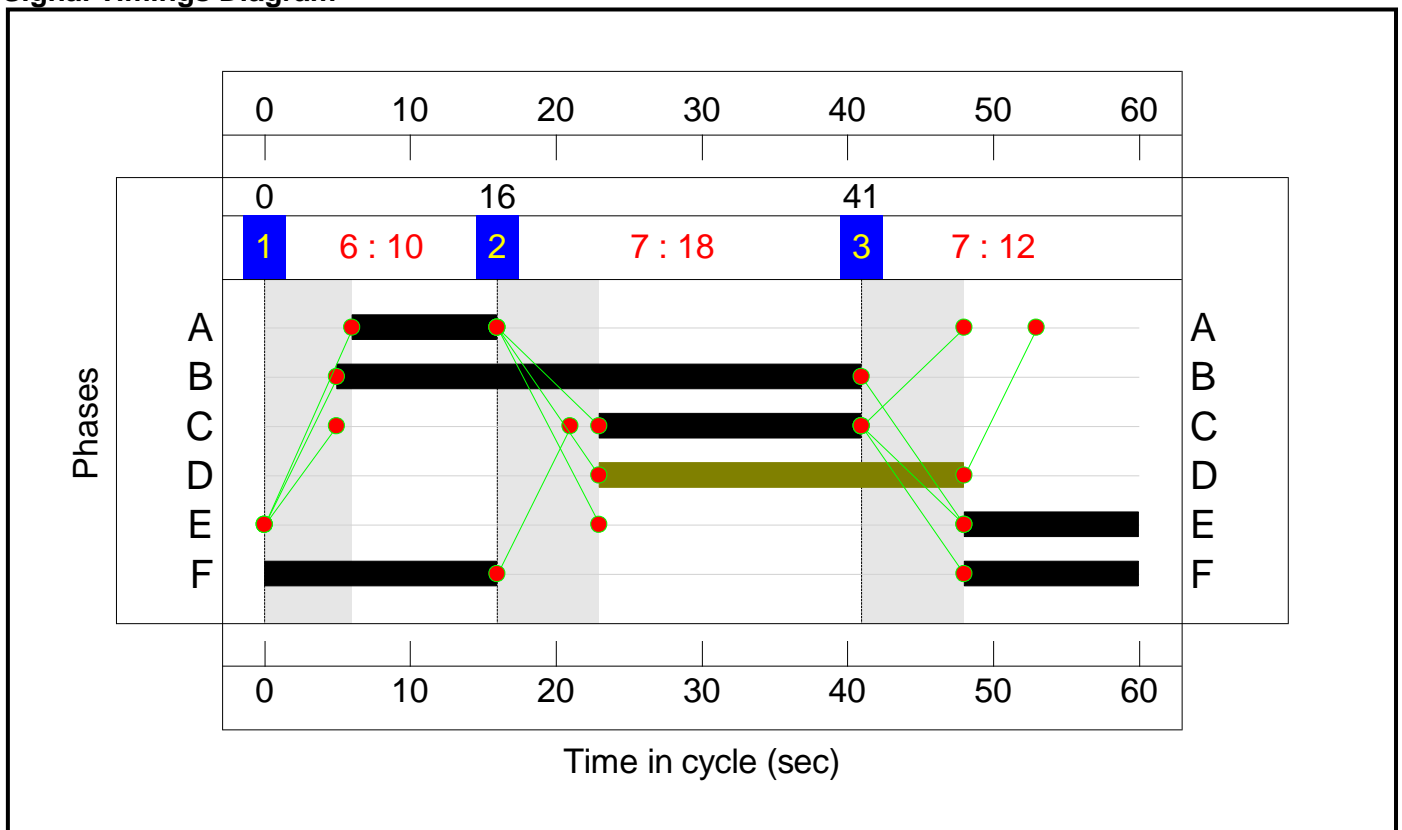
Stage Sequence Diagram




Stage Timings

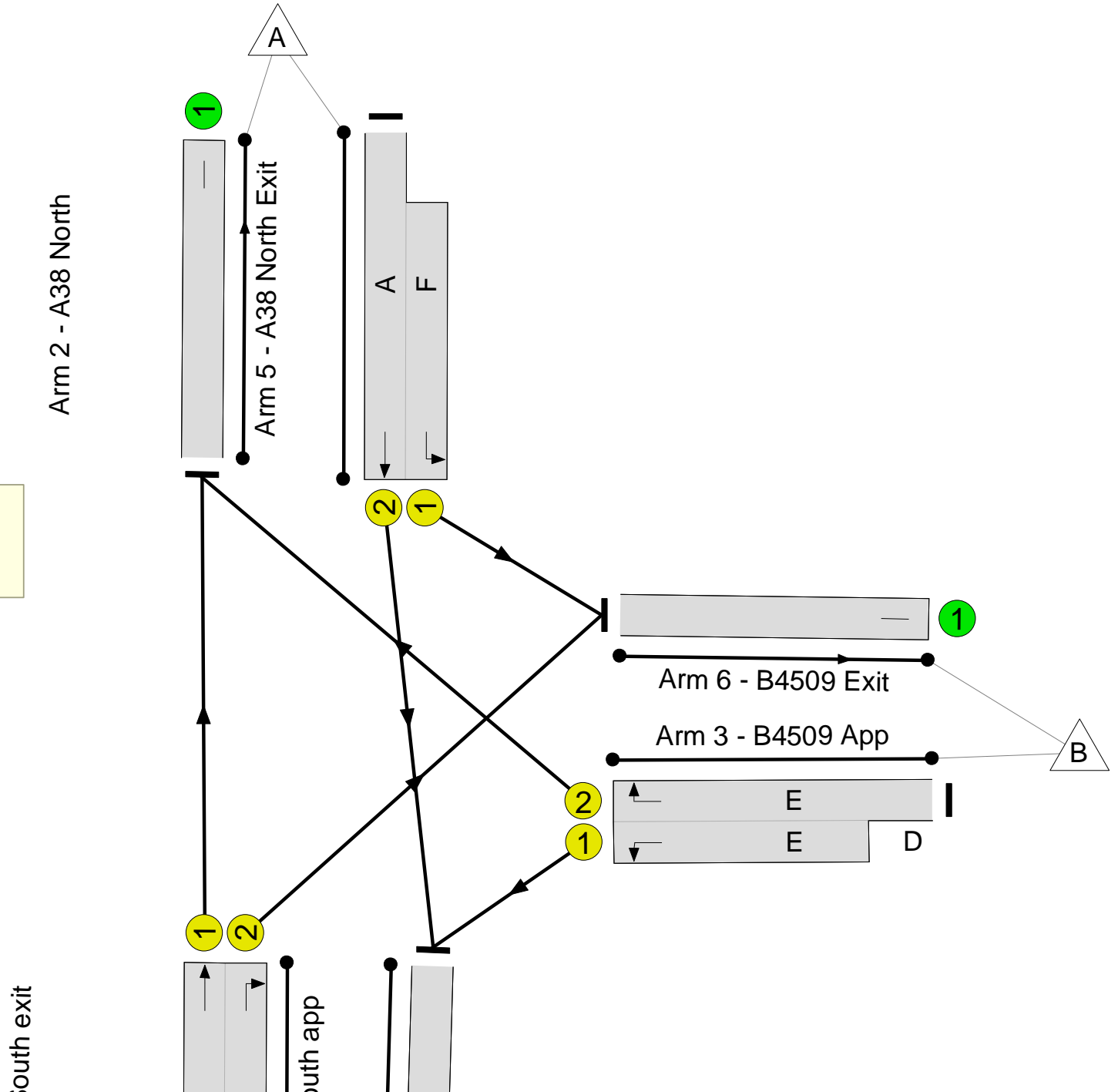
| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 10 | 18 | 12 |
| Change Point | 0 | 16 | 41 |

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **A38/B4509**
PRC: 12.4 %
Total Traffic Delay: 13.1 pcuHr



Full Input Data And Results

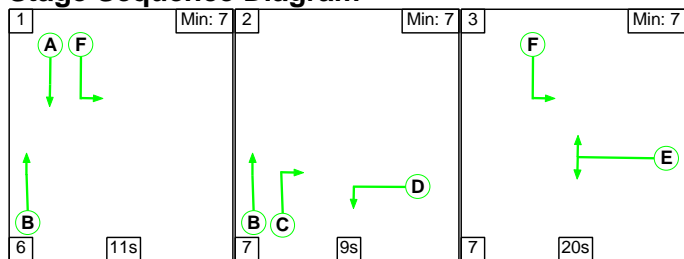
Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|------------------|---------------------------|---------------|-----------------------------------|------------------------------|------------------------------|-----------------------|--|------------------------------------|--|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 80.1% |
| A38/B4509 | - | - | N/A | - | - | | - | - | - | - | - | - | 80.1% |
| 1/1+1/2 | A38 South app Ahead Right | U | N/A | N/A | B C | | 1 | 36:18 | - | 666 | 1965:1933 | 220+612 | 80.1 : 80.1% |
| 2/2+2/1 | A38 North Ahead Left | U | N/A | N/A | A F | | 1 | 10:28 | - | 799 | 1975:1956 | 362+888 | 75.4 : 59.3% |
| 3/2+3/1 | B4509 App Left Right | U | N/A | N/A | E | D | 1 | 12:37 | 25 | 668 | 1884:1828 | 408+460 | 76.9 : 76.9% |
| 4/1 | A38 South exit | U | N/A | N/A | - | | - | - | - | 627 | Inf | Inf | 0.0% |
| 5/1 | A38 North Exit | U | N/A | N/A | - | | - | - | - | 490 | Inf | Inf | 0.0% |
| 6/1 | B4509 Exit | U | N/A | N/A | - | | - | - | - | 1016 | Inf | Inf | 0.0% |
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
| Network | - | - | 0 | 0 | 0 | 8.6 | 4.5 | 0.0 | 13.1 | - | - | - | - |
| A38/B4509 | - | - | 0 | 0 | 0 | 8.6 | 4.5 | 0.0 | 13.1 | - | - | - | - |
| 1/1+1/2 | 666 | 666 | - | - | - | 2.8 | 2.0 | - | 4.8 | 25.7 | 7.3 | 2.0 | 9.3 |
| 2/2+2/1 | 799 | 799 | - | - | - | 3.4 | 0.9 | - | 4.2 | 19.1 | 6.1 | 0.9 | 7.0 |
| 3/2+3/1 | 668 | 668 | - | - | - | 2.4 | 1.6 | - | 4.1 | 21.9 | 4.9 | 1.6 | 6.5 |
| 4/1 | 627 | 627 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/1 | 490 | 490 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6/1 | 1016 | 1016 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| C1 | | | PRC for Signalled Lanes (%): 12.4 | | PRC Over All Lanes (%): 12.4 | | Total Delay for Signalled Lanes (pcuHr): 13.06 | | Total Delay Over All Lanes(pcuHr): 13.06 | | Cycle Time (s): 60 | | |

Full Input Data And Results

Scenario 2: '2028 Reference Case PM' (FG2: '2028 Reference Case PM', Plan 1: 'Network Control Plan 1')

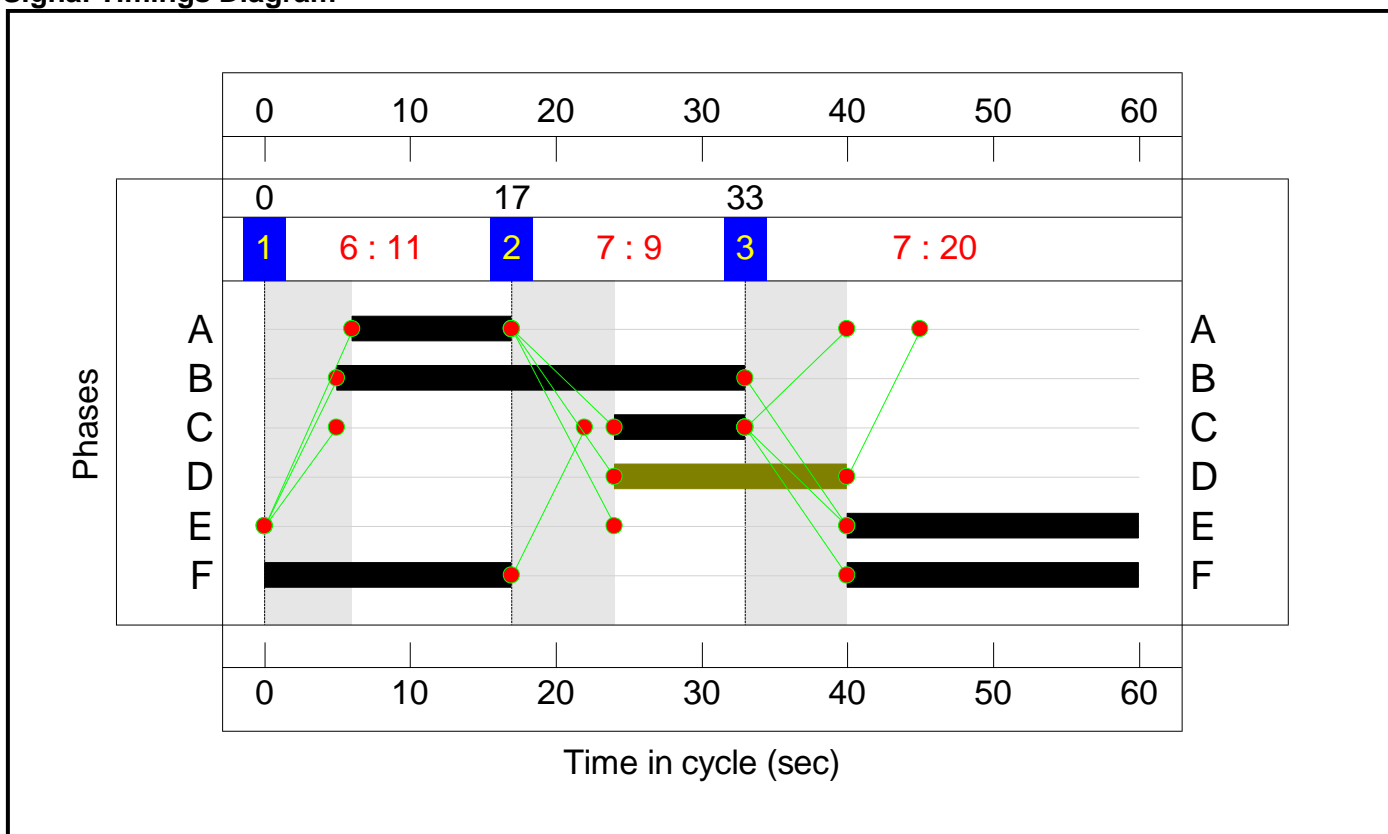
Stage Sequence Diagram




Stage Timings

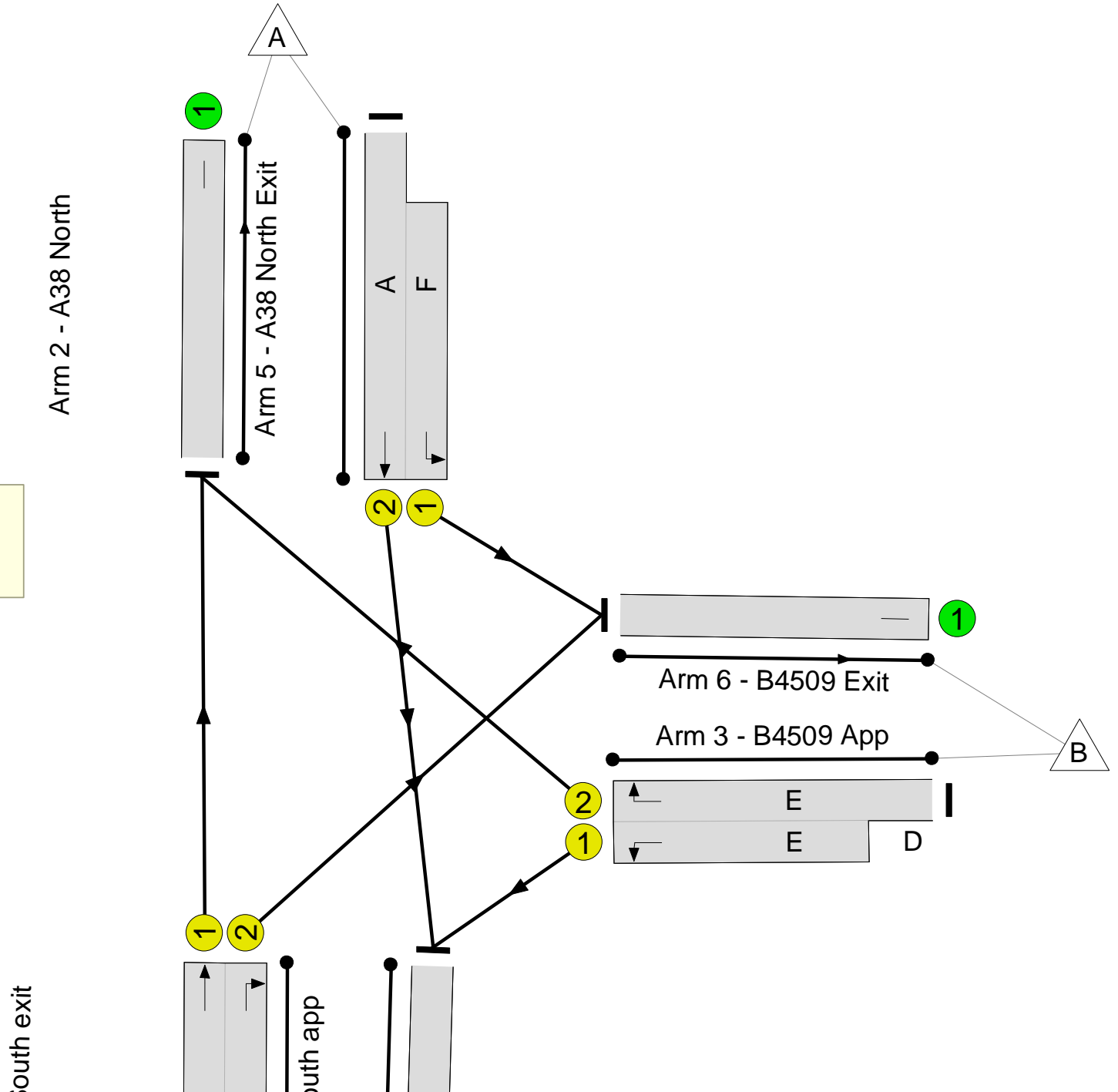
| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 11 | 9 | 20 |
| Change Point | 0 | 17 | 33 |

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **A38/B4509**
PRC: 5.4 %
Total Traffic Delay: 13.8 pcuHr



Full Input Data And Results

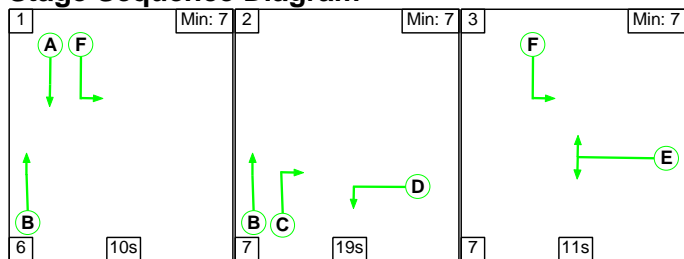
Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|-----------|---------------------------|---------------|----------------------------------|------------------------------|--|-----------------------|------------------------------|------------------------------------|---------------------|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 85.4% |
| A38/B4509 | - | - | N/A | - | - | | - | - | - | - | - | - | 85.4% |
| 1/1+1/2 | A38 South app Ahead Right | U | N/A | N/A | B C | | 1 | 28:9 | - | 570 | 1965:1933 | 733+322 | 41.6 : 82.3% |
| 2/2+2/1 | A38 North Ahead Left | U | N/A | N/A | A F | | 1 | 11:37 | - | 670 | 1975:1956 | 395+445 | 79.7 : 79.7% |
| 3/2+3/1 | B4509 App Left Right | U | N/A | N/A | E | D | 1 | 20:36 | 16 | 920 | 1884:1828 | 659+418 | 85.4 : 85.4% |
| 4/1 | A38 South exit | U | N/A | N/A | - | | - | - | - | 672 | Inf | Inf | 0.0% |
| 5/1 | A38 North Exit | U | N/A | N/A | - | | - | - | - | 868 | Inf | Inf | 0.0% |
| 6/1 | B4509 Exit | U | N/A | N/A | - | | - | - | - | 620 | Inf | Inf | 0.0% |
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
| Network | - | - | 0 | 0 | 0 | 8.4 | 5.3 | 0.0 | 13.8 | - | - | - | - |
| A38/B4509 | - | - | 0 | 0 | 0 | 8.4 | 5.3 | 0.0 | 13.8 | - | - | - | - |
| 1/1+1/2 | 570 | 570 | - | - | - | 2.6 | 0.6 | - | 3.2 | 20.0 | 4.2 | 0.6 | 4.8 |
| 2/2+2/1 | 670 | 670 | - | - | - | 2.5 | 1.9 | - | 4.4 | 23.7 | 5.0 | 1.9 | 6.9 |
| 3/2+3/1 | 920 | 920 | - | - | - | 3.4 | 2.8 | - | 6.2 | 24.2 | 8.6 | 2.8 | 11.4 |
| 4/1 | 672 | 672 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/1 | 868 | 868 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6/1 | 620 | 620 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| C1 | | | PRC for Signalled Lanes (%): 5.4 | | Total Delay for Signalled Lanes (pcuHr): 13.77 | | Cycle Time (s): 60 | | | | | | |
| | | | PRC Over All Lanes (%): 5.4 | | Total Delay Over All Lanes(pcuHr): 13.77 | | | | | | | | |

Full Input Data And Results

Scenario 3: '2028 Test Case AM' (FG3: '2028 Test Case AM', Plan 1: 'Network Control Plan 1')

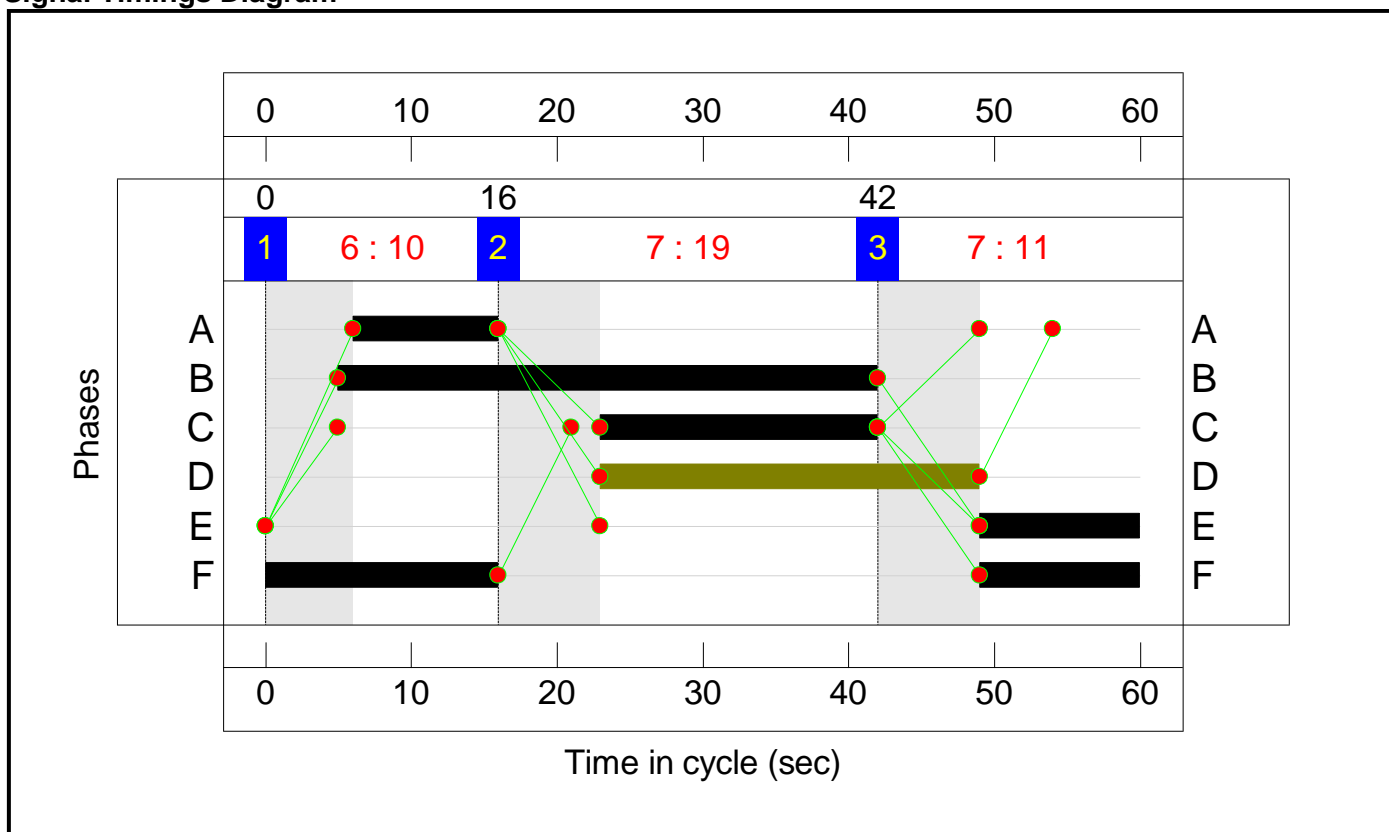
Stage Sequence Diagram




Stage Timings

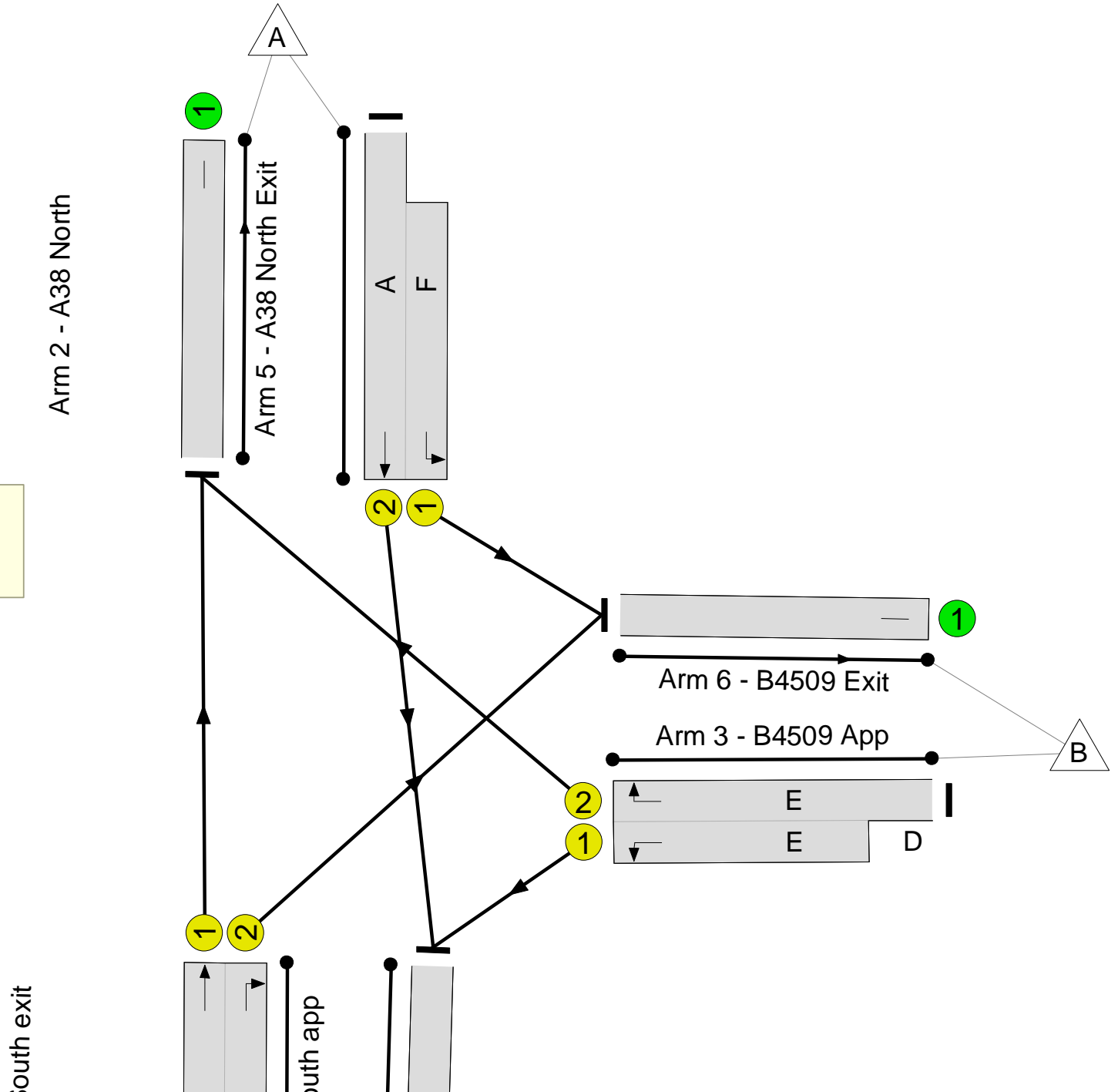
| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 10 | 19 | 11 |
| Change Point | 0 | 16 | 42 |

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **A38/B4509**
PRC: 8.0 %
Total Traffic Delay: 14.6 pcuHr



Full Input Data And Results

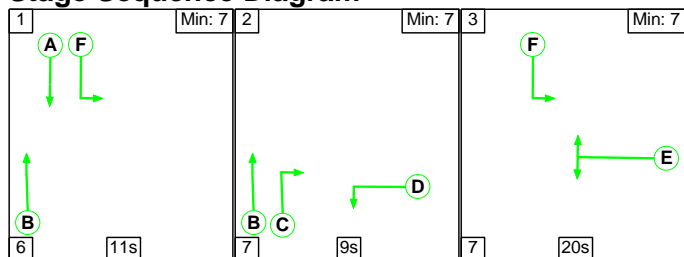
Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) | |
|-----------|---------------------------|---------------|------------------------------|------------------------------|-----------------------------|--|------------------------------|------------------------------------|---------------------|---------------------------|----------------------------------|----------------------------|----------------------|----|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 83.3% | |
| A38/B4509 | - | - | N/A | - | - | | - | - | - | - | - | - | 83.3% | |
| 1/1+1/2 | A38 South app Ahead Right | U | N/A | N/A | B C | | 1 | 37:19 | - | 722 | 1965:1933 | 233+644 | 82.3 : 82.3% | |
| 2/2+2/1 | A38 North Ahead Left | U | N/A | N/A | A F | | 1 | 10:27 | - | 802 | 1975:1956 | 362+866 | 76.2 : 60.8% | |
| 3/2+3/1 | B4509 App Left Right | U | N/A | N/A | E | D | 1 | 11:37 | 26 | 675 | 1884:1828 | 377+433 | 83.3 : 83.3% | |
| 4/1 | A38 South exit | U | N/A | N/A | - | | - | - | - | 637 | Inf | Inf | 0.0% | |
| 5/1 | A38 North Exit | U | N/A | N/A | - | | - | - | - | 506 | Inf | Inf | 0.0% | |
| 6/1 | B4509 Exit | U | N/A | N/A | - | | - | - | - | 1056 | Inf | Inf | 0.0% | |
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) | |
| Network | - | - | 0 | 0 | 0 | 8.9 | 5.6 | 0.0 | 14.6 | - | - | - | - | |
| A38/B4509 | - | - | 0 | 0 | 0 | 8.9 | 5.6 | 0.0 | 14.6 | - | - | - | - | |
| 1/1+1/2 | 722 | 722 | - | - | - | 2.9 | 2.3 | - | 5.2 | 25.9 | 8.1 | 2.3 | 10.3 | |
| 2/2+2/1 | 802 | 802 | - | - | - | 3.5 | 0.9 | - | 4.4 | 19.9 | 6.3 | 0.9 | 7.2 | |
| 3/2+3/1 | 675 | 675 | - | - | - | 2.5 | 2.4 | - | 4.9 | 26.3 | 5.0 | 2.4 | 7.4 | |
| 4/1 | 637 | 637 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 5/1 | 506 | 506 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 6/1 | 1056 | 1056 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| C1 | | | PRC for Signalled Lanes (%): | | 8.0 | Total Delay for Signalled Lanes (pcuHr): | | 14.55 | Cycle Time (s): | | | | | 60 |
| | | | PRC Over All Lanes (%): | | 8.0 | Total Delay Over All Lanes(pcuHr): | | 14.55 | | | | | | |

Full Input Data And Results

Scenario 4: '2028 Test Case PM' (FG4: '2028 Test Case PM', Plan 1: 'Network Control Plan 1')

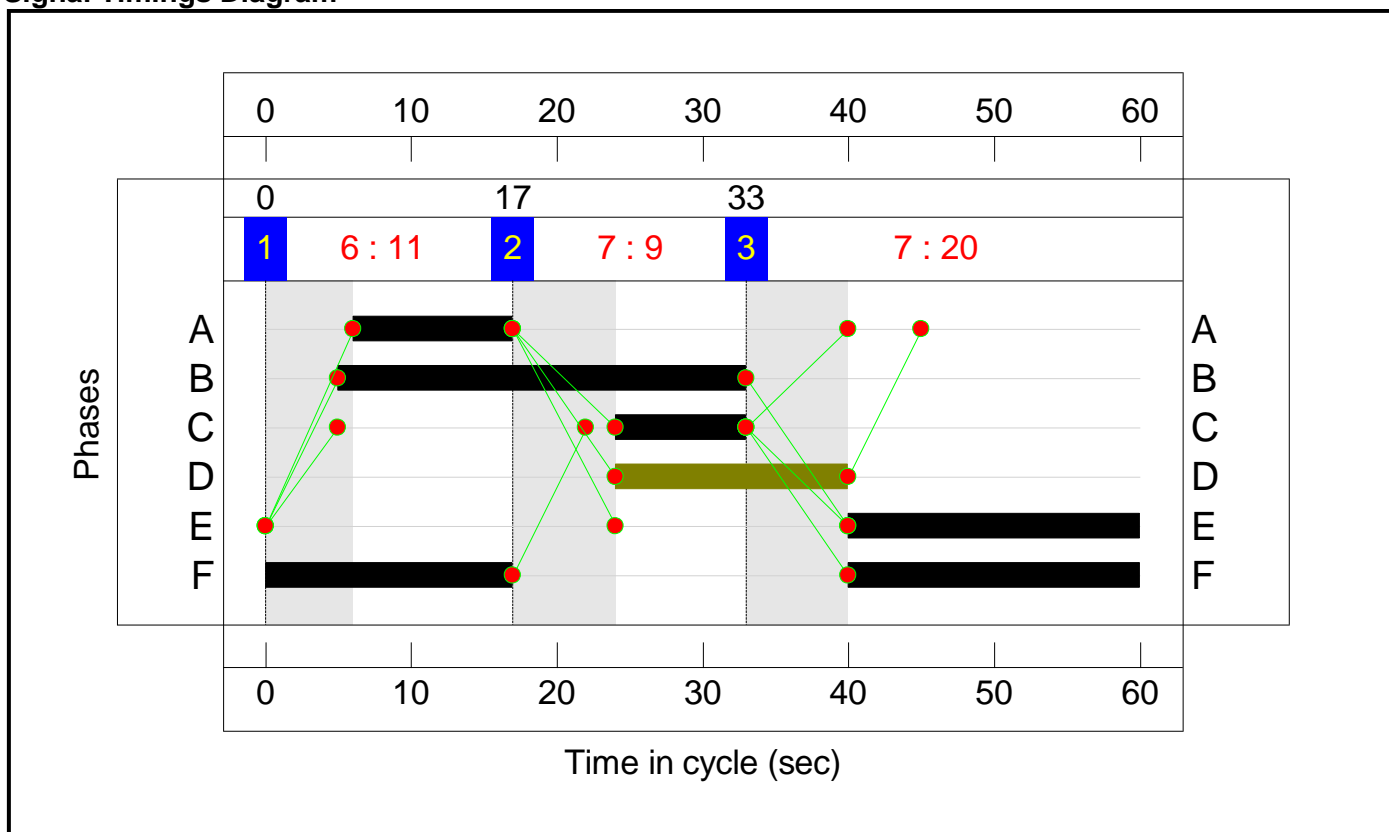
Stage Sequence Diagram




Stage Timings

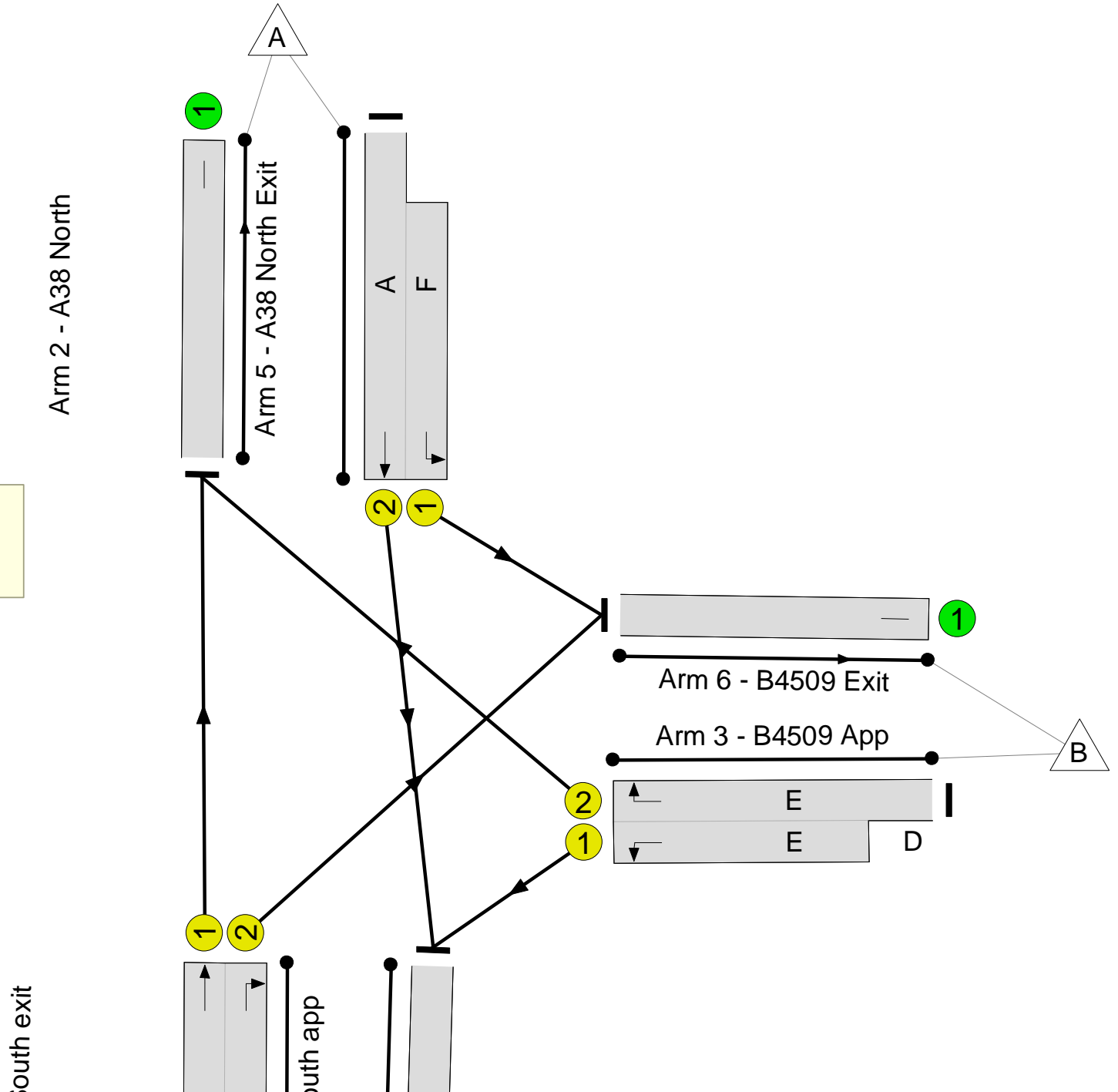
| Stage | 1 | 2 | 3 |
|--------------|----|----|----|
| Duration | 11 | 9 | 20 |
| Change Point | 0 | 17 | 33 |

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **A38/B4509**
PRC: 5.4 %
Total Traffic Delay: 14.4 pcuHr



Full Input Data And Results

Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|------------------|---------------------------|---------------|----------------------------------|------------------------------|-----------------------------|-----------------------|--|------------------------------------|--|---------------------------|----------------------------------|----------------------------|----------------------|
| Network | - | - | N/A | - | - | | - | - | - | - | - | - | 85.4% |
| A38/B4509 | - | - | N/A | - | - | | - | - | - | - | - | - | 85.4% |
| 1/1+1/2 | A38 South app Ahead Right | U | N/A | N/A | B C | | 1 | 28:9 | - | 580 | 1965:1933 | 706+322 | 43.6 : 84.4% |
| 2/2+2/1 | A38 North Ahead Left | U | N/A | N/A | A F | | 1 | 11:37 | - | 682 | 1975:1956 | 395+429 | 82.8 : 82.8% |
| 3/2+3/1 | B4509 App Left Right | U | N/A | N/A | E | D | 1 | 20:36 | 16 | 949 | 1884:1828 | 659+452 | 85.4 : 85.4% |
| 4/1 | A38 South exit | U | N/A | N/A | - | | - | - | - | 713 | Inf | Inf | 0.0% |
| 5/1 | A38 North Exit | U | N/A | N/A | - | | - | - | - | 871 | Inf | Inf | 0.0% |
| 6/1 | B4509 Exit | U | N/A | N/A | - | | - | - | - | 627 | Inf | Inf | 0.0% |
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
| Network | - | - | 0 | 0 | 0 | 8.7 | 5.8 | 0.0 | 14.4 | - | - | - | - |
| A38/B4509 | - | - | 0 | 0 | 0 | 8.7 | 5.8 | 0.0 | 14.4 | - | - | - | - |
| 1/1+1/2 | 580 | 580 | - | - | - | 2.6 | 0.6 | - | 3.3 | 20.4 | 4.4 | 0.6 | 5.0 |
| 2/2+2/1 | 682 | 682 | - | - | - | 2.6 | 2.3 | - | 4.9 | 25.9 | 5.2 | 2.3 | 7.5 |
| 3/2+3/1 | 949 | 949 | - | - | - | 3.4 | 2.8 | - | 6.2 | 23.7 | 8.6 | 2.8 | 11.4 |
| 4/1 | 713 | 713 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5/1 | 871 | 871 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6/1 | 627 | 627 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| C1 | | | PRC for Signalled Lanes (%): 5.4 | | PRC Over All Lanes (%): 5.4 | | Total Delay for Signalled Lanes (pcuHr): 14.45 | | Total Delay Over All Lanes(pcuHr): 14.45 | | Cycle Time (s): 60 | | |

| |
|--|
| Junctions 9 |
| PICADY 9 - Priority Intersection Module |
| Version: 9.0.2.5947 © Copyright TRL Limited, 2017 |
| For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk |
| 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: Western Site Access 23.08.18.j9
Path: \\Pba.int\bri\Projects\39209 West of Park Farm, Thornbury\Technical\Transport\Junction Assessments\PICADY\Site Accesses
Report generation date: 23/08/2018 17:33:31

- »2028 Test Case, AM
- »2028 Test Case, PM

Summary of junction performance

| | AM | | | | | PM | | | | |
|----------------|-------------|-----------|------|-----|---------------------------|-------------|-----------|------|-----|---------------------------|
| | Queue (Veh) | Delay (s) | RFC | LOS | Network Residual Capacity | Queue (Veh) | Delay (s) | RFC | LOS | Network Residual Capacity |
| 2028 Test Case | | | | | | | | | | |
| Stream B-C | 0.0 | 6.63 | 0.01 | A | 45 % [Stream B-A] | 0.0 | 5.45 | 0.00 | A | 159 % [Stream B-A] |
| Stream B-A | 0.7 | 15.08 | 0.41 | C | | 0.1 | 9.65 | 0.09 | A | |
| Stream C-AB | 0.0 | 6.29 | 0.00 | A | | 0.0 | 6.35 | 0.01 | 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. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

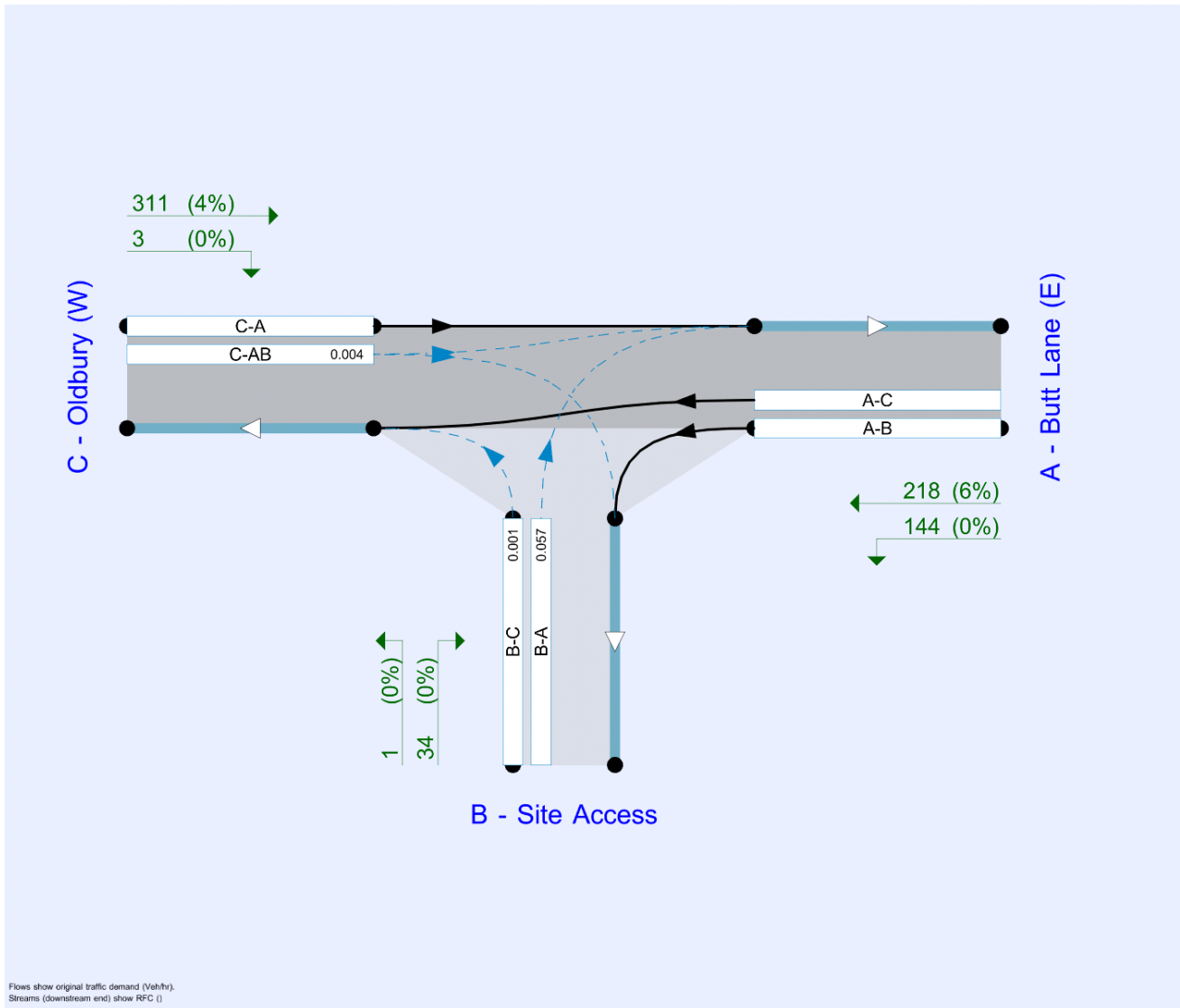
File summary

File Description

| | |
|-------------|----------------------------------|
| Title | Land West of Park Farm Thornbury |
| Location | |
| Site number | |
| Date | 30/11/2017 |
| Version | |
| Status | (new file) |
| Identifier | |
| Client | |
| Jobnumber | |
| Enumerator | PBA\sleake |
| 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 | Veh | Veh | perHour | s | -Min | perMin |



Flows show original traffic demand (Veh/hr). Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

| Vehicle length (m) | Calculate Queue Percentiles | Calculate detailed queueing delay | Calculate residual capacity | Residual capacity criteria type | RFC Threshold | Average Delay threshold (s) | Queue threshold (PCU) |
|--------------------|-----------------------------|-----------------------------------|-----------------------------|---------------------------------|---------------|-----------------------------|-----------------------|
| 5.75 | | | ✓ | Delay | 0.85 | 36.00 | 20.00 |

Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |
| D2 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

Analysis Set Details

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

2028 Test Case, AM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|-----------------|--------------------------------------|---|
| Warning | Minor arm flare | B - Site Access - Minor arm geometry | Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed. |

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 2.95 | A |

Junction Network Options

| Driving side | Lighting | Network residual capacity (%) | First arm reaching threshold |
|--------------|----------------|-------------------------------|------------------------------|
| Left | Normal/unknown | 45 | Stream B-A |

Arms

Arms

| Arm | Name | Description | Arm type |
|-----|---------------|-------------|----------|
| A | Butt Lane (E) | | Major |
| B | Site Access | | Minor |
| C | Oldbury (W) | | Major |

Major Arm Geometry

| Arm | Width of carriageway (m) | Has kerbed central reserve | Has right turn bay | Width for right turn (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|-----------------|--------------------------|----------------------------|--------------------|--------------------------|-------------------------------|---------|----------------------|
| C - Oldbury (W) | 6.43 | | ✓ | 2.50 | 139.9 | ✓ | 4.00 |

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

Minor Arm Geometry

| Arm | Minor arm type | Width at give-way (m) | Width at 5m (m) | Width at 10m (m) | Width at 15m (m) | Width at 20m (m) | Estimate flare length | Flare length (PCU) | Visibility to left (m) | Visibility to right (m) |
|-----------------|---------------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| B - Site Access | One lane plus flare | 10.00 | 4.35 | 3.25 | 3.25 | 3.25 | ✓ | 1.00 | 35 | 29 |

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (Veh/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1 | B-A | 544 | 0.097 | 0.246 | 0.155 | 0.351 |
| 1 | B-C | 771 | 0.116 | 0.293 | - | - |
| 1 | C-B | 676 | 0.257 | 0.257 | - | - |

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

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

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

Traffic Demand

Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|----------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2028 Test Case | AM | ONE HOUR | 07:45 | 09:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - Butt Lane (E) | | ONE HOUR | ✓ | 337 | 100.000 |
| B - Site Access | | ONE HOUR | ✓ | 155 | 100.000 |
| C - Oldbury (W) | | ONE HOUR | ✓ | 235 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | To | | | |
|------|-------------------|-------------------|-----------------|-----------------|
| | | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) |
| From | A - Butt Lane (E) | 0 | 26 | 311 |
| | B - Site Access | 151 | 0 | 4 |
| | C - Oldbury (W) | 234 | 1 | 0 |
| | | | | |

Vehicle Mix

Heavy Vehicle Percentages

| | To | | | |
|------|-------------------|-------------------|-----------------|-----------------|
| | | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) |
| From | A - Butt Lane (E) | 0 | 0 | 9 |
| | B - Site Access | 0 | 0 | 0 |
| | C - Oldbury (W) | 13 | 0 | 0 |
| | | | | |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-C | 0.01 | 6.63 | 0.0 | A | 4 | 6 |
| B-A | 0.41 | 15.08 | 0.7 | C | 139 | 208 |
| C-AB | 0.00 | 6.29 | 0.0 | A | 0.92 | 1 |
| C-A | | | | | 215 | 322 |
| A-B | | | | | 24 | 36 |
| A-C | | | | | 285 | 428 |

Main Results for each time segment

07:45 - 08:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 3 | 0.75 | 640 | 0.005 | 3 | 0.0 | 0.0 | 5.653 | A |
| B-A | 114 | 28 | 449 | 0.253 | 112 | 0.0 | 0.3 | 10.652 | B |
| C-AB | 0.75 | 0.19 | 606 | 0.001 | 0.75 | 0.0 | 0.0 | 5.947 | A |
| C-A | 176 | 44 | | | 176 | | | | |
| A-B | 20 | 5 | | | 20 | | | | |
| A-C | 234 | 59 | | | 234 | | | | |

08:00 - 08:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 4 | 0.90 | 605 | 0.006 | 4 | 0.0 | 0.0 | 5.983 | A |
| B-A | 136 | 34 | 430 | 0.315 | 135 | 0.3 | 0.5 | 12.175 | B |
| C-AB | 0.90 | 0.22 | 592 | 0.002 | 0.90 | 0.0 | 0.0 | 6.086 | A |
| C-A | 210 | 53 | | | 210 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 280 | 70 | | | 280 | | | | |

08:15 - 08:30

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 4 | 1 | 549 | 0.008 | 4 | 0.0 | 0.0 | 6.613 | A |
| B-A | 166 | 42 | 405 | 0.411 | 165 | 0.5 | 0.7 | 14.971 | B |
| C-AB | 1 | 0.28 | 573 | 0.002 | 1 | 0.0 | 0.0 | 6.289 | A |
| C-A | 258 | 64 | | | 258 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 342 | 86 | | | 342 | | | | |

08:30 - 08:45

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 4 | 1 | 548 | 0.008 | 4 | 0.0 | 0.0 | 6.626 | A |
| B-A | 166 | 42 | 405 | 0.411 | 166 | 0.7 | 0.7 | 15.080 | C |
| C-AB | 1 | 0.28 | 573 | 0.002 | 1 | 0.0 | 0.0 | 6.289 | A |
| C-A | 258 | 64 | | | 258 | | | | |
| A-B | 29 | 7 | | | 29 | | | | |
| A-C | 342 | 86 | | | 342 | | | | |

08:45 - 09:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 4 | 0.90 | 604 | 0.006 | 4 | 0.0 | 0.0 | 5.995 | A |
| B-A | 136 | 34 | 430 | 0.315 | 137 | 0.7 | 0.5 | 12.286 | B |
| C-AB | 0.90 | 0.22 | 592 | 0.002 | 0.90 | 0.0 | 0.0 | 6.086 | A |
| C-A | 210 | 53 | | | 210 | | | | |
| A-B | 23 | 6 | | | 23 | | | | |
| A-C | 280 | 70 | | | 280 | | | | |

09:00 - 09:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 3 | 0.75 | 638 | 0.005 | 3 | 0.0 | 0.0 | 5.666 | A |
| B-A | 114 | 28 | 449 | 0.253 | 114 | 0.5 | 0.3 | 10.769 | B |
| C-AB | 0.75 | 0.19 | 606 | 0.001 | 0.75 | 0.0 | 0.0 | 5.950 | A |
| C-A | 176 | 44 | | | 176 | | | | |
| A-B | 20 | 5 | | | 20 | | | | |
| A-C | 234 | 59 | | | 234 | | | | |

2028 Test Case, PM

Data Errors and Warnings

| Severity | Area | Item | Description |
|----------|-----------------|--------------------------------------|---|
| Warning | Minor arm flare | B - Site Access - Minor arm geometry | Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed. |

Junction Network

Junctions

| Junction | Name | Junction Type | Major road direction | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|----------------------|--------------------|--------------|
| 1 | untitled | T-Junction | Two-way | 0.48 | A |

Junction Network Options

| Driving side | Lighting | Network residual capacity (%) | First arm reaching threshold |
|--------------|----------------|-------------------------------|------------------------------|
| Left | Normal/unknown | 159 | Stream B-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 | 2028 Test Case | PM | ONE HOUR | 16:45 | 18:15 | 15 | ✓ |

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

Demand overview (Traffic)

| Arm | Linked arm | Profile type | Use O-D data | Average Demand (Veh/hr) | Scaling Factor (%) |
|-------------------|------------|--------------|--------------|-------------------------|--------------------|
| A - Butt Lane (E) | | ONE HOUR | ✓ | 362 | 100.000 |
| B - Site Access | | ONE HOUR | ✓ | 35 | 100.000 |
| C - Oldbury (W) | | ONE HOUR | ✓ | 314 | 100.000 |

Origin-Destination Data

Demand (Veh/hr)

| | | To | | |
|------|-------------------|-------------------|-----------------|-----------------|
| | | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) |
| From | A - Butt Lane (E) | 0 | 144 | 218 |
| | B - Site Access | 34 | 0 | 1 |
| | C - Oldbury (W) | 311 | 3 | 0 |

Vehicle Mix

Heavy Vehicle Percentages

| | | To | | |
|------|-------------------|-------------------|-----------------|-----------------|
| | | A - Butt Lane (E) | B - Site Access | C - Oldbury (W) |
| From | A - Butt Lane (E) | 0 | 0 | 6 |
| | B - Site Access | 0 | 0 | 0 |
| | C - Oldbury (W) | 4 | 0 | 0 |

Results

Results Summary for whole modelled period

| Stream | Max RFC | Max delay (s) | Max Queue (Veh) | Max LOS | Average Demand (Veh/hr) | Total Junction Arrivals (Veh) |
|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| B-C | 0.00 | 5.45 | 0.0 | A | 0.92 | 1 |
| B-A | 0.09 | 9.65 | 0.1 | A | 31 | 47 |
| C-AB | 0.01 | 6.35 | 0.0 | A | 3 | 4 |
| C-A | | | | | 285 | 428 |
| A-B | | | | | 132 | 198 |
| A-C | | | | | 200 | 300 |

Main Results for each time segment

16:45 - 17:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 0.75 | 0.19 | 697 | 0.001 | 0.75 | 0.0 | 0.0 | 5.168 | A |
| B-A | 26 | 6 | 453 | 0.057 | 25 | 0.0 | 0.1 | 8.414 | A |
| C-AB | 2 | 0.56 | 604 | 0.004 | 2 | 0.0 | 0.0 | 5.983 | A |
| C-A | 234 | 59 | | | 234 | | | | |
| A-B | 108 | 27 | | | 108 | | | | |
| A-C | 164 | 41 | | | 164 | | | | |

17:00 - 17:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 0.90 | 0.22 | 683 | 0.001 | 0.90 | 0.0 | 0.0 | 5.280 | A |
| B-A | 31 | 8 | 435 | 0.070 | 31 | 0.1 | 0.1 | 8.894 | A |
| C-AB | 3 | 0.67 | 590 | 0.005 | 3 | 0.0 | 0.0 | 6.131 | A |
| C-A | 280 | 70 | | | 280 | | | | |
| A-B | 129 | 32 | | | 129 | | | | |
| A-C | 196 | 49 | | | 196 | | | | |

17:15 - 17:30

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 1 | 0.28 | 662 | 0.002 | 1 | 0.0 | 0.0 | 5.446 | A |
| B-A | 37 | 9 | 411 | 0.091 | 37 | 0.1 | 0.1 | 9.641 | A |
| C-AB | 3 | 0.83 | 570 | 0.006 | 3 | 0.0 | 0.0 | 6.347 | A |
| C-A | 342 | 86 | | | 342 | | | | |
| A-B | 159 | 40 | | | 159 | | | | |
| A-C | 240 | 60 | | | 240 | | | | |

17:30 - 17:45

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 1 | 0.28 | 662 | 0.002 | 1 | 0.0 | 0.0 | 5.447 | A |
| B-A | 37 | 9 | 411 | 0.091 | 37 | 0.1 | 0.1 | 9.645 | A |
| C-AB | 3 | 0.83 | 570 | 0.006 | 3 | 0.0 | 0.0 | 6.347 | A |
| C-A | 342 | 86 | | | 342 | | | | |
| A-B | 159 | 40 | | | 159 | | | | |
| A-C | 240 | 60 | | | 240 | | | | |

17:45 - 18:00

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 0.90 | 0.22 | 682 | 0.001 | 0.90 | 0.0 | 0.0 | 5.281 | A |
| B-A | 31 | 8 | 435 | 0.070 | 31 | 0.1 | 0.1 | 8.902 | A |
| C-AB | 3 | 0.67 | 590 | 0.005 | 3 | 0.0 | 0.0 | 6.131 | A |
| C-A | 280 | 70 | | | 280 | | | | |
| A-B | 129 | 32 | | | 129 | | | | |
| A-C | 196 | 49 | | | 196 | | | | |

18:00 - 18:15

| Stream | Total Demand (Veh/hr) | Junction Arrivals (Veh) | Capacity (Veh/hr) | RFC | Throughput (Veh/hr) | Start queue (Veh) | End queue (Veh) | Delay (s) | LOS |
|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-----|
| B-C | 0.75 | 0.19 | 697 | 0.001 | 0.75 | 0.0 | 0.0 | 5.171 | A |
| B-A | 26 | 6 | 453 | 0.057 | 26 | 0.1 | 0.1 | 8.427 | A |
| C-AB | 2 | 0.56 | 604 | 0.004 | 2 | 0.0 | 0.0 | 5.983 | A |
| C-A | 234 | 59 | | | 234 | | | | |
| A-B | 108 | 27 | | | 108 | | | | |
| A-C | 164 | 41 | | | 164 | | | | |