

# TRANSYT 16

Version: 16.0.1.8473  
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**Filename:** M62 JN 28 CRF Scheme\_Mar 20\_PF\_Sept 20\_RevC\_mitigation  
DS\_optA+B\_2019+Com+CP+Dev\_05.t16  
**Path:** P:\133--\A13398-VAA Land at Chidswell\30 Technical\31 Modelling\Transyt\Option A+B  
**Report generation date:** 24/01/2021 14:14:36

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« A15 - AM Base 2019 + Com Dev + CP + Dev : D15 - AM 2019 + Com Dev + CP + Dev, :

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## Summary of network performance

|         | Set ID   | Cycle time (s) | PI (£ per hr) | Total delay (PCU-hr/hr) | Highest DOS     | Number oversaturated |
|---------|--|----------------|---------------|-------------------------|-----------------|----------------------|
|         | AM Base 2019 + Com Dev + CP + Dev - AM 2019 + Com Dev + CP + Dev |                |               |                         |                 |                      |
| Network | A15<br>D15   | 120            | 540134.78     | 2255.98                 | 1081% (TS Df/1) | 27 (17%)             |

*There are warnings associated with this model run - see the 'Data Errors and Warnings' tables.*

## File summary

### File description

|             |            |
|-------------|------------|
| File title  | (untitled) |
| Location    |            |
| Site number |            |
| UTCRegion   |            |

|              |                |
|--------------|----------------|
| Driving side | Left           |
| Date         | 01/03/2017     |
| Version      |                |
| Status       | [no status]    |
| Identifier   |                |
| Client       |                |
| Jobnumber    |                |
| Enumerator   | LEEDS\00730414 |
| Description  |                |

## Model and Results

| Enable controller offsets | Enable fuel consumption | Enable quick flares | Display journey time results | Display OD matrix distances | Display level of service results | Display blocking and starvation results | Display end of red and green queue results | Display excess queue results | Display separate uniform and random results | Display unweighted results | Display TRANSYT 12 style timings | Display effective greens in results | Display Red-With-Ambler | Display End-Of-Green Ambler | Display controller phase minimums |
|---------------------------|-------------------------|---------------------|------------------------------|-----------------------------|----------------------------------|---|--|------------------------------|---|----------------------------|----------------------------------|-------------------------------------|-------------------------|-----------------------------|-----------------------------------|
|                           |                         |                     |                              |                             |                                  |   |  |                              |   |                            |                                  |                                     |                         |                             |                                   |

## Units

| Cost units | Speed units | Distance units | Fuel economy units | Fuel rate units | Mass units | Traffic units input | Traffic units results | Flow units | Average delay units | Total delay units | Rate of delay units |
|------------|-------------|----------------|--------------------|-----------------|------------|---------------------|-----------------------|------------|---------------------|-------------------|---------------------|
| £          | kph         | m              | mpg                | l/h             | kg         | PCU                 | PCU                   | perHour    | s                   | -Hour             | perHour             |

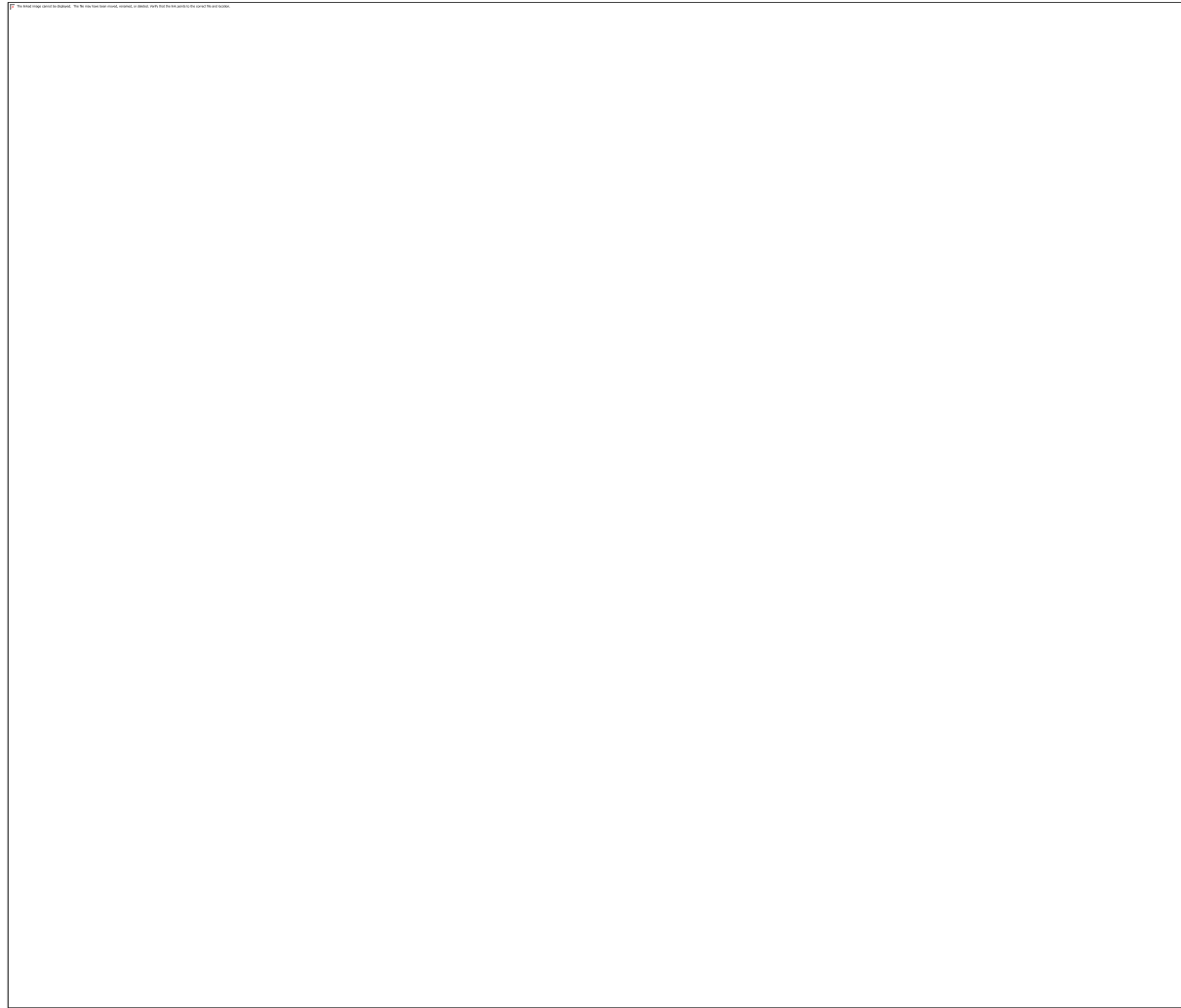
## Sorting

| Show names instead of IDs | Sorting direction | Sorting type | Ignore prefixes when sorting | Analysis/demand set sorting | Link grouping | Source grouping | Colour Analysis/Demand Sets |
|---------------------------|-------------------|--------------|------------------------------|-----------------------------|---------------|-----------------|-----------------------------|
|                           | Ascending         | Numerical    |                              | ID                          | Normal        | Normal          | ✓                           |

## Simulation options

| Criteria type | Stop criteria (%) | Stop criteria time (s) | Stop criteria number of trials | Random seed | Results refresh speed (s) | Average animation capture interval (s) | Use quick response | Do flow sampling | Uniform vehicle generation | Last run random seed | Last run number of trials | Last run time taken (s) |
|---------------|-------------------|------------------------|--------------------------------|-------------|---------------------------|--|--------------------|------------------|----------------------------|----------------------|---------------------------|-------------------------|
| Delay         | 3.00              | 999                    | 200                            | -1          | 3                         | 60                                     | ✓                  |                  |                            | 0                    | 0                         | 0.00                    |

## Network Diagrams



# A15 - AM Base 2019 + Com Dev + CP + Dev D15 - AM 2019 + Com Dev + CP + Dev,

## Summary

### Data Errors and Warnings

| Severity | Area                | Item                        | Description   |
|----------|---------------------|-----------------------------|---|
| Warning  | Traffic Stream Data | Arm Bf - Traffic Stream 1   | Arm Bf - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Bf - Traffic Stream 2   | Arm Bf - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Ff - Traffic Stream 1   | Arm Ff - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Ff - Traffic Stream 2   | Arm Ff - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm xA - Traffic Stream 1   | Arm xA - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm xA - Traffic Stream 2   | Arm xA - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm TC38 - Traffic Stream 1 | Traffic Stream 1: CTM uses a whole number of cells. CTM is using the length adjusted by 30%.  |

|         |                        |  |  |
|---------|------------------------|--|--|
| Warning | Local Matrix           | Local Matrix 1                                     | Local Matrix 1: Auto Calculate option is switched off - OD flows will not be allocated automatically to the network. |
| Warning | Traffic Stream Signals | Arm TC42 - Traffic Stream 1 - Signals (TC777-1, E) | Traffic Stream 1 controlling phase E never runs in the current stage sequence.                                       |
| Info    | Arm Data               | Arm xC   | No traffic node specified for arm(s): xC   |
| Info    | Traffic Stream Signals | Arm TC42 - Traffic Stream 1 - Signals (TC777-1, E) | Traffic Stream 1 controlling phase E never runs in stage sequence 1.   |

## Run Summary

| Analysis set used | Run start time      | Run finish time     | Run duration (s) | Modeling start time (HH:mm) | Network Cycle Time (s) | Performance Index (£ per hr) | Total network delay (PCU - hr/hr) | Highest DOS (%) | Item with highest DOS | Number of oversaturated items | Percentage of oversaturated items (%) | Item with worst signalised PRC | Item with worst unsignalised PRC | Item with worst over all PRC | Network within capacity |
|-------------------|---------------------|---------------------|------------------|-----------------------------|------------------------|------------------------------|-----------------------------------|-----------------|-----------------------|-------------------------------|---------------------------------------|--------------------------------|----------------------------------|------------------------------|-------------------------|
| 15                | 24/01/2021 14:13:06 | 24/01/2021 14:13:19 | 13.19            | 07:30                       | 120                    | 540134.78                    | 2255.98                           | 1080.70         | Df/1                  | 27                            | 17                                    | TC42/1                         | Df/1                             | TC42/1                       |                         |

## Analysis Set Details

| Name                              | Use Simulation | Description | Use specific Demand Set(s) | Specific Demand Set(s) | Optimise specific Demand Set(s) | Include in report | Locked |
|-----------------------------------|----------------|-------------|----------------------------|------------------------|---------------------------------|-------------------|--------|
| AM Base 2019 + Com Dev + CP + Dev |                |             | ✓                          | D15                    |                                 | ✓                 |        |

## Demand Set Details

| Scenario name                | Time Period name | Description | Composite | Demand sets | Start time (HH:mm) | Locked | Run automatically |
|------------------------------|------------------|-------------|-----------|-------------|--------------------|--------|-------------------|
| AM 2019 + Com Dev + CP + Dev |                  |             |           |             | 07:30              |        | ✓                 |

## Network Options

### Network timings

| Network cycle time (s) | Minimum possible cycle time (s) | Absolute minimum possible cycle time (s) | Restrict to SCOOT cycle times | Time segment length (min) | Number of time segments | Modelled time period (min) |
|------------------------|---------------------------------|--|-------------------------------|---------------------------|-------------------------|----------------------------|
| 120                    | 72                              | 70                                       |                               | 60                        | 1                       | 60                         |

### Signals options

| Start displacement (s) | End displacement (s) |
|------------------------|----------------------|
| 2                      | 3                    |

### Advanced

| Phase minimum broken penalty (£) | Phase maximum broken penalty (£) | Intergreen broken penalty (£) | Starting Red-with-Amber (s) | Missing stage transition options |
|----------------------------------|----------------------------------|-------------------------------|-----------------------------|----------------------------------|
| 10000.00                         | 10000.00                         | 10000.00                      | 2                           | Assume banned                    |

### Traffic options

| Traffic model            | Vehicle flow scaling factor (%) | Pedestrian flow scaling factor (%) | Cruise times or speeds |
|--------------------------|---------------------------------|------------------------------------|------------------------|
| Platoon Dispersion (PDM) | 100                             | 100                                | Cruise Speeds          |

### Advanced

| Resolution | DOS Threshold (%) | Cruise scaling factor (%) | Use link stop weightings | Use link delay weightings | Exclude pedestrians from traffic model | Exclude pedestrians from results calculation | Random delay mode | Type of Vehicle-in-Service | Type of random parameter | PCU Length (m) | Calculate results for Path Segments | Generate PDM Profile Data |
|------------|-------------------|---------------------------|--------------------------|---------------------------|--|--|-------------------|----------------------------|--------------------------|----------------|-------------------------------------|---------------------------|
| 1          | 90                | 100                       | ✓                        | ✓                         |  |  | Complex           | Uniform (TRANSYT)          | Uniform (TRANSYT)        | 5.75           |                                     | ✓                         |

### Normal Traffic parameters

| Dispersion type | Dispersion coefficient | Travel time coefficient |
|-----------------|------------------------|-------------------------|
| Default         | 35                     | 80                      |

### Normal Traffic Types

| Name   | PCU Factor |
|--------|------------|
| Normal | 1.00       |

### Bus parameters

| Name | PCU Factor | Dispersion type | Acceleration (ms <sup>[-2]</sup> ) | Stationary time coefficient | Cruise time coefficient |
|------|------------|-----------------|------------------------------------|-----------------------------|-------------------------|
| Bus  | 1.00       | Default         | 0.94                               | 30                          | 85                      |

### Tram parameters

| Name | PCU Factor | Dispersion type | Acceleration (ms <sup>[-2]</sup> ) | Stationary time coefficient | Cruise time coefficient |
|------|------------|-----------------|------------------------------------|-----------------------------|-------------------------|
| Tram | 1.00       | Default         | 0.94                               | 100                         | 100                     |

### Pedestrian parameters

| Dispersion type |
|-----------------|
| Default         |

### Optimisation options

| Enable optimisation | Auto redistribute | Optimisation level       | Enable OUT Profile accuracy |
|---------------------|-------------------|--------------------------|-----------------------------|
| ✓                   |                   | Offsets And Green Splits | ✓                           |

### Advanced

| Optimisation type            | Hill climb increments        | OUTProfile accuracy (%)            | Use enhanced optimisation | Auto optimisation order | Optimisation order   | Master controller | Offsets relative to master controller | Master controller offset after each run |
|------------------------------|------------------------------|------------------------------------|---------------------------|-------------------------|--|-------------------|---------------------------------------|---|
| Standard accuracy Hill Climb | 15, 40, -1, 15, 40, 1, -1, 1 | 50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05 |                           | ✓                       | 769-1, 769-2, 770-1, 770-2, 770-3, 770-4, 771-1, 771-2, TC777-1, TC777-2 |                   |                                       | Do nothing                              |

### Economics

| Vehicle Monetary Value Of Delay (£ per PCU-hr) | Vehicle Monetary Value Of Stops (£ per 100 stops) | Pedestrian monetary value of delay (£ per Ped-hr) |
|--|---|---|
| 14.20  | 2.60  | 14.20   |

## Traffic Nodes

### Traffic Nodes

| Traffic node | Name       | Description |
|--------------|------------|-------------|
| (ALL)        | (untitled) |             |

## Arms and Traffic Streams

### Arms

| Arm  | Name                      | Description | Traffic node |
|------|---------------------------|-------------|--------------|
| A    | Dewsbury Rd SB            |             | 6            |
| Ac   | (untitled)                |             | 6            |
| Acf  | (untitled)                |             | 6            |
| Af   | Dewsbury Rd SB            |             | 6            |
| B    | M62 WB off slip           |             | 1            |
| Bc   | (untitled)                |             | 1            |
| Bcf  | (untitled)                |             | 1            |
| Bf   | M62 WB off slip           |             | 1            |
| C    | Bradford Rd WB            |             | 2            |
| Cf   | Bradford Rd WB            |             | 2            |
| D    | Dewsbury Rd NB            |             | 3            |
| Dc   | (untitled)                |             | 3            |
| Dcf  | (untitled)                |             | 3            |
| Df   | Dewsbury Rd NB            |             | 3-2          |
| Dxp  | Dewsbury Rd exit SB (ped) |             | 3-2          |
| Ec   | (untitled)                |             | 4            |
| Ecf  | (untitled)                |             | 4            |
| Ef   | Bradford Rd EB            |             | 4            |
| Exp  | Bradford Rd exit WB (ped) |             | 4-2          |
| F    | M62 EB off slip           |             | 5            |
| Fc   | (untitled)                |             | 5            |
| Ff   | M62 EB off slip           |             | 5            |
| G    | (untitled)                |             | 2            |
| Gf   | (untitled)                |             | 4            |
| xA   | Dewsbury Rd exit NB       |             | 10           |
| xB   | M62 EB on slip            |             |              |
| xC   | (untitled)                |             |              |
| xD   | Dewsbury Rd exit SB       |             |              |
| xE   | Bradford Rd exit WB       |             |              |
| xF   | M62 WB on slip            |             |              |
| Cc1  | (untitled)                |             | 2            |
| E1   | Bradford Rd EB (left)     |             | 4            |
| Gf1  | (untitled)                |             | 4            |
| Cc2  | (untitled)                |             | 2            |
| E2   | Bradford Rd EB (ahead)    |             | 4            |
| TC5  | (untitled)                |             | TC771-6      |
| TC9  | (untitled)                |             | TC771-6      |
| TC35 | (untitled)                |             | TC771-6      |
| TC36 | (untitled)                |             | TC771-6      |
| TC37 | (untitled)                |             | TC771-6      |
| TC38 | (untitled)                |             | TC771-6      |
| TC39 | (untitled)                |             | TC771-6      |
| TC40 | (untitled)                |             | TC771-6      |
| TC41 | (untitled)                |             | TC771-6      |
| TC42 | (untitled)                |             | TC771-6      |
| TC43 | (untitled)                |             |              |
| 47   | (untitled)                |             | 2            |
| 48   | (untitled)                |             | 2            |
| 49   | (untitled)                |             | TC771-6      |
| 50   | (untitled)                |             | 1            |
| 51   | (untitled)                |             | 4-2          |

|    |  |  |   |
|----|--|--|---|
| 52 |  |  | 1 |
| 53 |  |  | 2 |

## Traffic Streams

| Arm | Traffic Stream | Name       | Description     | Auto length | Length (m) | Has Saturation Flow | Saturation flow source | Saturation flow (PCU/hr) | Auto-calculated cell saturation flow | Cell saturation flow (PCU/hr) | Is signal controlled | Is give way | Traffic type | Allow Nearside Turn On Red |
|-----|----------------|------------|-----------------|-------------|------------|---------------------|------------------------|--------------------------|--------------------------------------|-------------------------------|----------------------|-------------|--------------|----------------------------|
| A   | 1              | (untitled) | M62E            | ✓           | 74.35      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Wake            | ✓           | 76.69      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Dews            | ✓           | 78.40      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 4              | (untitled) | Brad/M62W       | ✓           | 80.11      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Ac  | 1              | (untitled) | M62E            | ✓           | 95.80      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Wake            | ✓           | 92.34      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Dews/Brad       | ✓           | 87.95      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
| Acf | 1              | (untitled) |                 | ✓           | 69.59      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |                 | ✓           | 70.42      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
| Af  | 1              | (untitled) | M62E/Wake       | ✓           | 53.54      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 2              | (untitled) | Dews            | ✓           | 53.19      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 3              | (untitled) | Brad/M62W       | ✓           | 53.01      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
| B   | 1              | (untitled) | Wake/Dews       | ✓           | 94.67      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Brad            | ✓           | 97.18      | ✓                   | Directly entered       | 2150                     |                                      | 2150                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Leeds           | ✓           | 99.69      | ✓                   | Directly entered       | 2100                     |                                      | 2100                          | ✓                    |             | Normal       |                            |
|     | 4              | (untitled) |                 | ✓           | 102.42     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Bc  | 1              | (untitled) | Wake            | ✓           | 132.85     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Dews            | ✓           | 131.47     | ✓                   | Directly entered       | 2050                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Brad/M62W       | ✓           | 130.10     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Bcf | 1              | (untitled) |                 | ✓           | 62.77      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |                 | ✓           | 62.62      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 3              | (untitled) |                 | ✓           | 62.46      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 4              | (untitled) |                 | ✓           | 62.38      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
| Bf  | 1              | (untitled) |                 | ✓           | 227.81     | ✓                   | Sum of lanes           | 1800                     |                                      | 1600                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |                 | ✓           | 228.44     | ✓                   | Sum of lanes           | 1800                     |                                      | 1700                          |                      |             | Normal       |                            |
| C   | 1              | (untitled) | Dews/Brad       | ✓           | 121.13     | ✓                   | Directly entered       | 2100                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | M62W/Brad/Leeds | ✓           | 122.73     | ✓                   | Directly entered       | 2200                     |                                      | 2100                          | ✓                    |             | Normal       |                            |

|     |   |            |                |   |        |   |                  |      |  |      |   |  |        |
|-----|---|------------|----------------|---|--------|---|------------------|------|--|------|---|--|--------|
|     | 3 | (untitled) | Leeds/M62E     | ✓ | 124.35 | ✓ | Directly entered | 2050 |  | 1900 | ✓ |  | Normal |
| Cf  | 1 | (untitled) |                | ✓ | 144.60 | ✓ | Sum of lanes     | 1965 |  | 1965 |   |  | Normal |
|     | 2 | (untitled) |                | ✓ | 145.86 | ✓ | Sum of lanes     | 1965 |  | 1965 |   |  | Normal |
| D   | 1 | (untitled) | Brad/M62       |   | 55.00  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds          |   | 55.00  | ✓ | Directly entered | 1850 |  | 2075 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds/M62/Wake | ✓ | 52.87  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
|     | 4 | (untitled) | Leeds/M62/Wake | ✓ | 55.42  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
| Dc  | 1 | (untitled) | Brad           | ✓ | 50.91  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) | Brad/M62W      | ✓ | 48.96  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds          | ✓ | 47.02  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 4 | (untitled) | Leeds/M62E     | ✓ | 45.07  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
| Dcf | 1 | (untitled) |                | ✓ | 65.43  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
|     | 2 | (untitled) |                | ✓ | 65.28  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 3 | (untitled) |                | ✓ | 65.54  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 4 | (untitled) |                | ✓ | 67.69  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 5 | (untitled) |                | ✓ | 66.13  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 6 | (untitled) |                | ✓ | 66.17  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
| Df  | 1 | (untitled) |                |   | 200.00 | ✓ | Sum of lanes     | 1900 |  |      |   |  | Normal |
|     | 2 | (untitled) |                |   | 200.00 | ✓ | Directly entered | 2250 |  |      |   |  | Normal |
| Dxp | 1 | (untitled) |                | ✓ | 45.75  | ✓ | Directly entered | 2050 |  |      | ✓ |  | Normal |
|     | 2 | (untitled) |                | ✓ | 48.11  | ✓ | Directly entered | 2050 |  |      | ✓ |  | Normal |
| Ec  | 1 | (untitled) | M62W           | ✓ | 50.09  | ✓ | Directly entered | 2150 |  | 2150 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds          | ✓ | 48.43  | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds          | ✓ | 46.77  | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 4 | (untitled) | M62E           | ✓ | 45.11  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
| Ecf | 1 | (untitled) |                | ✓ | 45.94  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 2 | (untitled) |                | ✓ | 46.37  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 3 | (untitled) |                | ✓ | 46.95  | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
|     | 4 | (untitled) |                | ✓ | 47.51  | ✓ | Directly entered | 2300 |  | 2300 |   |  | Normal |
|     | 5 | (untitled) |                | ✓ | 48.55  | ✓ | Directly entered | 2300 |  | 2300 |   |  | Normal |
| Ef  | 1 | (untitled) |                | ✓ | 127.54 | ✓ | Directly entered | 1900 |  |      |   |  | Normal |
|     | 2 | (untitled) |                | ✓ | 127.54 | ✓ | Sum of lanes     | 1900 |  |      |   |  | Normal |

|     |   |            |            |   |        |   |                  |      |  |      |   |  |        |
|-----|---|------------|------------|---|--------|---|------------------|------|--|------|---|--|--------|
| Exp | 1 | (untitled) |            | ✓ | 51.83  | ✓ | Directly entered | 2050 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) |            | ✓ | 53.71  | ✓ | Directly entered | 2050 |  | 2100 | ✓ |  | Normal |
| F   | 1 | (untitled) | Leeds      | ✓ | 85.13  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) | Wake       | ✓ | 85.72  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Dews/Brad  | ✓ | 87.25  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
| Fc  | 1 | (untitled) | Leeds      | ✓ | 178.68 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds      | ✓ | 175.19 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 3 | (untitled) | M62E/Dews  | ✓ | 180.28 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
| Ff  | 1 | (untitled) |            | ✓ | 275.73 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 275.39 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
| G   | 1 | (untitled) |            | ✓ | 155.36 | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) |            | ✓ | 151.80 | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
| Gf  | 1 | (untitled) |            | ✓ | 40.48  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 40.06  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
| xA  | 1 | (untitled) |            | ✓ | 229.66 | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 229.97 | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
| xB  | 1 | (untitled) |            | ✓ | 77.15  |   |                  |      |  |      |   |  | Normal |
| xC  | 1 | (untitled) |            | ✓ | 115.60 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 115.98 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
| xD  | 1 | (untitled) |            | ✓ | 121.44 |   |                  |      |  |      |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 122.12 |   |                  |      |  |      |   |  | Normal |
| xE  | 1 | (untitled) |            | ✓ | 173.89 |   |                  |      |  |      |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 173.83 |   |                  |      |  |      |   |  | Normal |
| xF  | 1 | (untitled) |            | ✓ | 158.35 |   |                  |      |  |      |   |  | Normal |
| Cc1 | 1 | (untitled) | Wake       | ✓ | 95.84  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
| E1  | 1 | (untitled) | M62W/Leeds |   | 80.00  | ✓ | Directly entered | 2050 |  | 1900 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds/M62E |   | 80.00  | ✓ | Directly entered | 2200 |  | 2100 | ✓ |  | Normal |
| Gf1 | 1 | (untitled) |            | ✓ | 47.81  |   |                  |      |  |      | ✓ |  | Normal |
| Cc2 | 2 | (untitled) | Dews       | ✓ | 91.52  | ✓ | Directly entered | 2150 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Brad/M62W  | ✓ | 91.11  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 4 | (untitled) | Dews/Brad  | ✓ | 90.39  | ✓ | Directly entered | 2150 |  | 2100 | ✓ |  | Normal |
|     | 5 | (untitled) | Leeds      | ✓ | 90.48  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |

|      |   |            |       |   |        |   |                  |      |   |      |   |   |        |  |
|------|---|------------|-------|---|--------|---|------------------|------|---|------|---|---|--------|--|
|      | 6 | (untitled) | Leeds | ✓ | 88.08  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |  |
| E2   | 3 | (untitled) | Wake  | ✓ | 53.28  | ✓ | Directly entered | 2150 |   | 2050 | ✓ |   | Normal |  |
|      | 4 | (untitled) | Wake  | ✓ | 54.33  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |  |
| TC5  | 2 | (untitled) |       | ✓ | 23.03  | ✓ | Sum of lanes     | 2263 |   | 2263 | ✓ |   | Normal |  |
|      | 3 | (untitled) |       | ✓ | 23.02  | ✓ | Directly entered | 2263 |   | 2263 | ✓ |   | Normal |  |
|      | 4 | (untitled) |       | ✓ | 24.43  | ✓ | Sum of lanes     | 1800 |   | 2263 | ✓ |   | Normal |  |
| TC9  | 1 | (untitled) |       | ✓ | 91.71  | ✓ | Directly entered | 1925 |   | 1925 | ✓ |   | Normal |  |
|      | 2 | (untitled) |       | ✓ | 92.21  | ✓ | Sum of lanes     | 1966 |   | 1966 | ✓ |   | Normal |  |
|      | 3 | (untitled) |       | ✓ | 92.69  | ✓ | Sum of lanes     | 1947 |   | 1947 | ✓ |   | Normal |  |
| TC35 | 1 | (untitled) |       | ✓ | 24.16  | ✓ | Directly entered | 1900 |   | 2263 | ✓ |   | Normal |  |
| TC36 | 1 | (untitled) |       | ✓ | 25.22  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |  |
| TC37 | 1 | (untitled) |       | ✓ | 44.32  | ✓ | Directly entered | 1850 |   | 1850 | ✓ |   | Normal |  |
| TC38 | 1 | (untitled) |       | ✓ | 21.32  | ✓ | Directly entered | 1850 |   | 1850 |   | ✓ | Normal |  |
| TC39 | 2 | (untitled) |       | ✓ | 35.24  | ✓ | Directly entered | 2263 |   | 2263 |   |   | Normal |  |
|      | 3 | (untitled) |       | ✓ | 33.28  | ✓ | Directly entered | 2263 |   | 2263 |   |   | Normal |  |
| TC40 | 2 | (untitled) |       | ✓ | 58.74  |   |                  |      |   |      |   |   | Normal |  |
|      | 3 | (untitled) |       | ✓ | 55.82  |   |                  |      |   |      |   |   | Normal |  |
| TC41 | 1 | (untitled) |       | ✓ | 54.63  | ✓ | Directly entered | 1850 |   | 1850 | ✓ |   | Normal |  |
| TC42 | 1 | (untitled) |       | ✓ | 23.35  | ✓ | Sum of lanes     | 1771 |   |      | ✓ |   | Normal |  |
| TC43 | 1 | (untitled) |       | ✓ | 51.77  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |  |
| 47   | 1 | (untitled) |       | ✓ | 133.63 | ✓ | Directly entered | 1300 |   | 1300 |   |   | Normal |  |
| 48   | 1 | (untitled) |       | ✓ | 55.12  | ✓ | Sum of lanes     | 1965 |   |      |   |   | Normal |  |
| 49   | 1 | (untitled) |       | ✓ | 26.24  | ✓ | Directly entered | 1900 |   |      |   |   | Normal |  |
|      | 2 | (untitled) |       | ✓ | 26.24  | ✓ | Directly entered | 1900 |   |      |   |   | Normal |  |
| 50   | 1 | (untitled) |       | ✓ | 48.15  | ✓ | Sum of lanes     | 1900 |   |      |   |   | Normal |  |
| 51   | 1 | (untitled) |       | ✓ | 37.47  | ✓ | Sum of lanes     | 1900 |   |      |   |   | Normal |  |
| 52   | 1 |            |       | ✓ | 173.00 | ✓ | Sum of lanes     | 1800 | ✓ | 1800 | ✓ |   | Normal |  |
|      | 2 |            |       | ✓ | 173.18 | ✓ | Sum of lanes     | 1800 | ✓ | 1800 | ✓ |   | Normal |  |
| 53   | 1 |            |       | ✓ | 43.95  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |  |
|      | 2 |            |       | ✓ | 42.23  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |  |

## Lanes

| Arm | Traffic | Lane | Name | Description | Use RR67 | Surface condition | Site quality | Gradient (%) | Width (m) | Use connector | Proportion that turn (%) | Turning | Nearside lane | Saturation flow (PCU/hr) |
|-----|---------|------|------|-------------|----------|-------------------|--------------|--------------|-----------|---------------|--------------------------|---------|---------------|--------------------------|
|-----|---------|------|------|-------------|----------|-------------------|--------------|--------------|-----------|---------------|--------------------------|---------|---------------|--------------------------|





|     |   |   |            |  |   |     |              |   |      |   |   |          |  |      |
|-----|---|---|------------|--|---|-----|--------------|---|------|---|---|----------|--|------|
|     | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| Fc  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| Ff  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  | 1900 |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  | 1900 |
| G   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| Gf  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| xA  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| xB  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| xC  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  | 1900 |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  | 1900 |
| xD  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| xE  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| xF  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| Cc1 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| E1  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| Gf1 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| Cc2 | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 4 | 4 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 5 | 5 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 6 | 5 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| E2  | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
|     | 4 | 4 | (untitled) |  |   |     |              |   |      |   |   |          |  |      |
| TC5 | 2 | 1 | (untitled) |  | ✓ | N/A | Clearly Good | 0 | 3.50 | ✓ | 0 | 99999.00 |  | 2263 |



|         |   |                    |     |     |     |  |      |   |       |         |  |  |  |  |
|---------|---|--------------------|-----|-----|-----|--|------|---|-------|---------|--|--|--|--|
| Ac      | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 16.50 | 9999.00 |  |  |  |  |
|         | 2 | CTM                | 50  | 100 | 100 |  | 0.00 | ✓ | 16.50 | 9999.00 |  |  |  |  |
|         | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 16.50 | 9999.00 |  |  |  |  |
| Acf     | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Af      | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| B       | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 4 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Bc      | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 22.50 | 9999.00 |  |  |  |  |
|         | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 22.50 | 9999.00 |  |  |  |  |
|         | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 22.50 | 9999.00 |  |  |  |  |
| Bcf     | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 4 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Bf      | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| C       | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Cf      | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| D       | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 4 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Dc      | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |
|         | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |
|         | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |
|         | 4 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |
| Dcf     | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 4 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 5 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 6 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Df      | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Dx<br>P | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Ec      | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |

|     |   |                    |     |     |     |  |      |   |       |         |   |   |      |      |
|-----|---|--------------------|-----|-----|-----|--|------|---|-------|---------|---|---|------|------|
|     | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |   |   |      |      |
|     | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |   |   |      |      |
|     | 4 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |   |   |      |      |
| Ecf | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 4 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 5 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Ef  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Exp | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| F   | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Fc  | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 32.00 | 9999.00 |   |   |      |      |
|     | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 32.00 | 9999.00 |   |   |      |      |
|     | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 32.00 | 9999.00 |   |   |      |      |
| Ff  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 | ✓ | 0.00  | 0.00    | ✓ | 2 | 0.00 | 0.00 |
| G   | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 26.00 | 9999.00 |   |   |      |      |
|     | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 26.00 | 9999.00 |   |   |      |      |
| Gf  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xA  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xB  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xC  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xD  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xE  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xF  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Cc1 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| E1  | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Gf1 | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Cc2 | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |   |   |      |      |
|     | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |   |   |      |      |
|     | 4 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |   |   |      |      |

|       |   |                 |     |     |     |  |      |   |       |         |  |  |  |  |
|-------|---|-----------------|-----|-----|-----|--|------|---|-------|---------|--|--|--|--|
|       | 5 | CTM             | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |  |  |  |  |
|       | 6 | CTM             | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |  |  |  |  |
| E2    | 3 | CTM             | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 4 | CTM             | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 5  | 2 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 3 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 4 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 9  | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 2 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 3 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 35 | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 36 | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 37 | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 38 | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 39 | 2 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 3 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 40 | 2 | PDM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 3 | PDM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 41 | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 42 | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 43 | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 47    | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 48    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 49    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 2 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 50    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 51    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 52    | 1 | CTM             | 500 | 100 | 100 |  | 0.00 | ✓ | 30.00 | 9999.00 |  |  |  |  |
|       | 2 | CTM             | 500 | 100 | 100 |  | 0.00 | ✓ | 30.00 | 9999.00 |  |  |  |  |
| 53    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 2 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |

### Modelling - Advanced

| Arm   | Traffic Stream | Initial queue (PCU) | Type of Vehicle-in-Service | Vehicle-in-Service | Type of random parameter | Random parameter | Auto cycle time | Cycle time |
|-------|----------------|---------------------|----------------------------|--------------------|--------------------------|------------------|-----------------|------------|
| (ALL) | (ALL)          | 0.00                | NetworkDefault             | Not-Included       | NetworkDefault           | 0.50             | ✓               | 120        |

### Normal traffic - Modelling

| Arm   | Traffic Stream | Stop weighting (%) | Delay weighting (%) |
|-------|----------------|--------------------|---------------------|
| (ALL) | (ALL)          | 100                | 100                 |

### Normal traffic - Advanced

| Arm   | Traffic Stream | Dispersion type for Normal Traffic |
|-------|----------------|------------------------------------|
| (ALL) | (ALL)          | NetworkDefault                     |

## Flows

| Arm | Traffic Stream | Total Flow (PCU/hr) | Normal Flow (PCU/hr) |
|-----|----------------|---------------------|----------------------|
| A   | 1              | 382                 | 382                  |
|     | 2              | 181                 | 181                  |
|     | 3              | 368                 | 368                  |
|     | 4              | 393                 | 393                  |
| Ac  | 1              | 1075                | 1075                 |
|     | 2              | 459                 | 459                  |
|     | 3              | 112                 | 112                  |
| Acf | 1              | 1534                | 1534                 |
|     | 2              | 112                 | 112                  |
| Af  | 1              | 563                 | 563                  |
|     | 2              | 368                 | 368                  |
|     | 3              | 393                 | 393                  |
| B   | 1              | 357                 | 357                  |
|     | 2              | 438                 | 438                  |
|     | 3              | 435                 | 435                  |
|     | 4              | 547                 | 547                  |
| Bc  | 1              | 640                 | 640                  |
|     | 2              | 442                 | 442                  |
|     | 3              | 431                 | 431                  |
| Bcf | 1              | 1457                | 1457                 |
|     | 2              | 640                 | 640                  |
|     | 3              | 442                 | 442                  |
|     | 4              | 431                 | 431                  |
| Bf  | 1              | 795                 | 795                  |
|     | 2              | 982                 | 982                  |
| C   | 1              | 104                 | 104                  |
|     | 2              | 803                 | 803                  |
|     | 3              | 542                 | 542                  |
| Cf  | 1              | 794                 | 794                  |
|     | 2              | 655                 | 655                  |
| D   | 1              | 494                 | 494                  |
|     | 2              | 495                 | 495                  |
|     | 3              | 602                 | 602                  |
|     | 4              | 608                 | 608                  |
| Dc  | 1              | 738                 | 738                  |
|     | 2              | 801                 | 801                  |
|     | 3              | 307                 | 307                  |
|     | 4              | 235                 | 235                  |
| Dcf | 1              | 704                 | 704                  |
|     | 2              | 468                 | 468                  |
|     | 3              | 738                 | 738                  |
|     | 4              | 801                 | 801                  |
|     | 5              | 307                 | 307                  |
|     | 6              | 235                 | 235                  |
| Df  | 1              | 989                 | 989                  |
|     | 2              | 1210                | 1210                 |
| Dxp | 1              | 704                 | 704                  |
|     | 2              | 468                 | 468                  |
| Ec  | 1              | 649                 | 649                  |
|     | 2              | 802                 | 802                  |

|             |   |      |      |
|-------------|---|------|------|
|             | 3 | 802  | 802  |
|             | 4 | 602  | 602  |
| <b>Ecf</b>  | 1 | 897  | 897  |
|             | 2 | 1136 | 1136 |
|             | 3 | 802  | 802  |
|             | 4 | 802  | 802  |
|             | 5 | 643  | 643  |
| <b>Ef</b>   | 1 | 816  | 816  |
|             | 2 | 454  | 454  |
| <b>Exp</b>  | 1 | 897  | 897  |
|             | 2 | 487  | 487  |
| <b>F</b>    | 1 | 322  | 322  |
|             | 2 | 462  | 462  |
|             | 3 | 38   | 38   |
| <b>Fc</b>   | 1 | 1402 | 1402 |
|             | 2 | 1403 | 1403 |
|             | 3 | 1146 | 1146 |
| <b>Ff</b>   | 1 | 784  | 784  |
|             | 2 | 38   | 38   |
| <b>G</b>    | 1 | 242  | 242  |
|             | 2 | 253  | 253  |
| <b>Gf</b>   | 1 | 242  | 242  |
|             | 2 | 212  | 212  |
| <b>xA</b>   | 1 | 1712 | 1712 |
|             | 2 | 1415 | 1415 |
| <b>xB</b>   | 1 | 1457 | 1457 |
| <b>xC</b>   | 1 | 468  | 468  |
|             | 2 | 415  | 415  |
| <b>xD</b>   | 1 | 704  | 704  |
|             | 2 | 468  | 468  |
| <b>xE</b>   | 1 | 897  | 897  |
|             | 2 | 487  | 487  |
| <b>xF</b>   | 1 | 817  | 817  |
| <b>Cc1</b>  | 1 | 388  | 388  |
| <b>E1</b>   | 1 | 272  | 272  |
|             | 2 | 544  | 544  |
| <b>Gf1</b>  | 1 | 41   | 41   |
| <b>Cc2</b>  | 2 | 609  | 609  |
|             | 3 | 420  | 420  |
|             | 4 | 459  | 459  |
|             | 5 | 316  | 316  |
|             | 6 | 0    | 0    |
| <b>E2</b>   | 3 | 242  | 242  |
|             | 4 | 212  | 212  |
| <b>TC5</b>  | 2 | 1313 | 1313 |
|             | 3 | 1415 | 1415 |
|             | 4 | 0    | 0    |
| <b>TC9</b>  | 1 | 469  | 469  |
|             | 2 | 356  | 356  |
|             | 3 | 336  | 336  |
| <b>TC35</b> | 1 | 399  | 399  |
| <b>TC36</b> | 1 | 196  | 196  |
| <b>TC37</b> | 1 | 34   | 34   |
| <b>TC38</b> | 1 | 34   | 34   |
| <b>TC39</b> | 2 | 1313 | 1313 |

|      |   |      |      |
|------|---|------|------|
|      | 3 | 1415 | 1415 |
| TC40 | 2 | 1347 | 1347 |
|      | 3 | 1415 | 1415 |
| TC41 | 1 | 162  | 162  |
| TC42 | 1 | 0    | 0    |
| TC43 | 1 | 0    | 0    |
| 47   | 1 | 883  | 883  |
| 48   | 1 | 1449 | 1449 |
| 49   | 1 | 581  | 581  |
|      | 2 | 580  | 580  |
| 50   | 1 | 1777 | 1777 |
| 51   | 1 | 822  | 822  |
| 52   | 1 | 550  | 550  |
|      | 2 | 547  | 547  |
| 53   | 1 | 550  | 550  |
|      | 2 | 547  | 547  |

## Signals

| Arm | Traffic Stream | Controller stream | Phase | Second phase enabled |
|-----|----------------|-------------------|-------|----------------------|
| A   | 1              | 771-2             | E     |                      |
|     | 2              | 771-2             | E     |                      |
|     | 3              | 771-2             | E     |                      |
|     | 4              | 771-2             | E     |                      |
| Ac  | 1              | 771-2             | D     |                      |
|     | 2              | 771-2             | D     |                      |
|     | 3              | 771-2             | D     |                      |
| B   | 1              | 769-1             | B     |                      |
|     | 2              | 769-1             | B     |                      |
|     | 3              | 769-1             | B     |                      |
|     | 4              | 769-1             | B     |                      |
| Bc  | 1              | 769-1             | A     |                      |
|     | 2              | 769-1             | A     |                      |
|     | 3              | 769-1             | A     |                      |
| C   | 1              | 769-2             | G     |                      |
|     | 2              | 769-2             | G     |                      |
|     | 3              | 769-2             | G     |                      |
| D   | 1              | 770-1             | B     |                      |
|     | 2              | 770-1             | B     |                      |
|     | 3              | 770-1             | B     |                      |
|     | 4              | 770-1             | B     |                      |
| Dc  | 1              | 770-1             | A     |                      |
|     | 2              | 770-1             | A     |                      |
|     | 3              | 770-1             | A     |                      |
|     | 4              | 770-1             | A     |                      |
| Dxp | 1              | 770-2             | D     |                      |
|     | 2              | 770-2             | D     |                      |
| Ec  | 1              | 770-3             | F     |                      |
|     | 2              | 770-3             | F     |                      |
|     | 3              | 770-3             | F     |                      |
|     | 4              | 770-3             | F     |                      |
| Exp | 1              | 770-4             | L     |                      |
|     | 2              | 770-4             | L     |                      |
| F   | 1              | 771-1             | B     |                      |
|     | 2              | 771-1             | B     |                      |
|     | 3              | 771-1             | B     |                      |

|      |   |         |   |  |
|------|---|---------|---|--|
| Fc   | 1 | 771-1   | A |  |
|      | 2 | 771-1   | A |  |
|      | 3 | 771-1   | A |  |
| G    | 1 | 769-2   | F |  |
|      | 2 | 769-2   | F |  |
| Cc1  | 1 | 769-2   | E |  |
| E1   | 1 | 770-3   | G |  |
|      | 2 | 770-3   | G |  |
| Cc2  | 2 | 769-2   | D |  |
|      | 3 | 769-2   | D |  |
|      | 4 | 769-2   | D |  |
|      | 5 | 769-2   | D |  |
|      | 6 | 769-2   | D |  |
| E2   | 3 | 770-3   | H |  |
|      | 4 | 770-3   | H |  |
| TC5  | 2 | TC777-1 | A |  |
|      | 3 | TC777-1 | A |  |
|      | 4 | TC777-1 | C |  |
| TC9  | 1 | TC777-1 | B |  |
|      | 2 | TC777-1 | B |  |
|      | 3 | TC777-1 | B |  |
| TC35 | 1 | TC777-1 | A |  |
| TC37 | 1 | TC777-2 | J |  |
| TC41 | 1 | TC777-1 | D |  |
| TC42 | 1 | TC777-1 | E |  |
| 52   | 1 | 770-3   | A |  |
|      | 2 | 770-3   | A |  |

### Entry Sources

| Arm  | Traffic Stream | Cruise time for Normal Traffic (s) | Cruise speed for Normal Traffic (kph) |
|------|----------------|------------------------------------|---------------------------------------|
| Df   | 1              | 24.00                              | 30.00                                 |
|      | 2              | 24.00                              | 30.00                                 |
| Ef   | 1              | 15.31                              | 30.00                                 |
|      | 2              | 15.31                              | 30.00                                 |
| TC36 | 1              | 3.03                               | 30.00                                 |
| TC42 | 1              | 2.80                               | 30.00                                 |
| 48   | 1              | 6.61                               | 30.00                                 |
| 49   | 1              | 3.15                               | 30.00                                 |
|      | 2              | 3.15                               | 30.00                                 |
| 50   | 1              | 5.78                               | 30.00                                 |
| 51   | 1              | 4.50                               | 30.00                                 |

### Sources

| Arm | Traffic Stream | Source | Source traffic stream | Destination traffic stream | Cruise time for Normal Traffic (s) | Cruise speed for Normal Traffic (kph) | Auto turning radius | Traffic turn style | Turning radius (m) |
|-----|----------------|--------|-----------------------|----------------------------|------------------------------------|---------------------------------------|---------------------|--------------------|--------------------|
| A   | 1              | 1      | Af/1                  | A/1                        | 5.58                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
|     | 2              | 1      | Af/1                  | A/2                        | 5.75                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
|     | 3              | 1      | Af/2                  | A/3                        | 5.88                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
|     | 4              | 1      | Af/3                  | A/4                        | 6.01                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
| Ac  | 1              | 1      | Ac/1                  | Ac/1                       | 7.19                               | 48.00                                 | ✓                   | Offside            | 48.59              |
|     | 2              | 1      | Ac/1                  | Ac/2                       | 9.50                               | 35.00                                 | ✓                   | Offside            | 46.08              |

|     |   |   |        |       |       |       |   |          |                   |
|-----|---|---|--------|-------|-------|-------|---|----------|-------------------|
|     | 3 | 1 | Acf/2  | Ac/3  | 6.60  | 48.00 | ✓ | Offside  | 42.76             |
| Acf | 1 | 1 | F/2    | Acf/1 | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | F/3    | Acf/2 | 7.24  | 35.00 | ✓ | Straight | Straight Movement |
| Af  | 1 | 1 | TC42/1 | Af/1  | 6.42  | 30.00 | ✓ | Nearside | 10.60             |
|     | 2 | 1 | TC42/1 | Af/2  | 6.38  | 30.00 | ✓ | Nearside | 10.60             |
|     | 3 | 1 | TC42/1 | Af/3  | 6.36  | 30.00 | ✓ | Nearside | 10.60             |
| B   | 1 | 1 | Bf/1   | B/1   | 7.10  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Bf/1   | B/2   | 7.29  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Bf/2   | B/3   | 7.48  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Bf/2   | B/4   | 12.29 | 30.00 | ✓ | Straight | Straight Movement |
| Bc  | 1 | 1 | Bcf/2  | Bc/1  | 11.96 | 40.00 | ✓ | Offside  | 51.76             |
|     | 2 | 1 | Bcf/3  | Bc/2  | 11.83 | 40.00 | ✓ | Offside  | 48.45             |
|     | 3 | 1 | Bcf/4  | Bc/3  | 11.71 | 40.00 | ✓ | Offside  | 45.13             |
| Bcf | 1 | 1 | A/1    | Bcf/1 | 4.71  | 48.00 | ✓ | Nearside | 68.09             |
|     | 2 | 1 | A/2    | Bcf/2 | 6.63  | 34.00 | ✓ | Nearside | 71.40             |
|     | 3 | 1 | A/3    | Bcf/3 | 6.61  | 34.00 | ✓ | Nearside | 74.72             |
|     | 4 | 1 | A/4    | Bcf/4 | 6.60  | 34.00 | ✓ | Nearside | 78.03             |
| Bf  | 1 | 1 | 50/1   | Bf/1  | 27.34 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 50/1   | Bf/2  | 27.41 | 30.00 | ✓ | Straight | Straight Movement |
| C   | 1 | 1 | Cf/1   | C/1   | 14.54 | 30.00 | ✓ | Offside  | 59.30             |
|     | 2 | 1 | Cf/2   | C/2   | 14.73 | 30.00 | ✓ | Offside  | 55.98             |
|     | 3 | 1 | Cf/2   | C/3   | 14.92 | 30.00 | ✓ | Offside  | 53.27             |
| Cf  | 1 | 1 | 48/1   | Cf/1  | 17.35 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 48/1   | Cf/2  | 17.50 | 30.00 | ✓ | Straight | Straight Movement |
| D   | 1 | 1 | Df/1   | D/1   | 4.13  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Df/1   | D/2   | 4.13  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Df/2   | D/3   | 3.97  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Df/2   | D/4   | 4.16  | 48.00 | ✓ | Straight | Straight Movement |
| Dc  | 1 | 1 | Dcf/3  | Dc/1  | 6.11  | 30.00 | ✓ | Offside  | 56.19             |
|     | 2 | 1 | Dcf/4  | Dc/2  | 5.88  | 30.00 | ✓ | Offside  | 52.87             |
|     | 3 | 1 | Dcf/5  | Dc/3  | 5.64  | 30.00 | ✓ | Offside  | 49.56             |
|     | 4 | 1 | Dcf/6  | Dc/4  | 5.41  | 30.00 | ✓ | Offside  | 46.25             |
| Dcf | 1 | 1 | Cc2/2  | Dcf/1 | 4.91  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Cc2/4  | Dcf/2 | 4.90  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | C/2    | Dcf/3 | 4.92  | 48.00 | ✓ | Nearside | 58.12             |
|     | 4 | 1 | C/2    | Dcf/4 | 5.08  | 48.00 | ✓ | Nearside | 58.12             |
|     | 5 | 1 | C/3    | Dcf/5 | 4.96  | 48.00 | ✓ | Nearside | 61.43             |
|     | 6 | 1 | C/3    | Dcf/6 | 7.94  | 30.00 | ✓ | Nearside | 61.43             |
| Dxp | 1 | 1 | Dcf/1  | Dxp/1 | 3.43  | 48.00 | ✓ | Nearside | 60.22             |
|     | 2 | 1 | Dcf/2  | Dxp/2 | 3.61  | 48.00 | ✓ | Nearside | 63.54             |
| Ec  | 1 | 1 | Ecf/2  | Ec/1  | 3.76  | 48.00 | ✓ | Offside  | 76.42             |

|     |   |   |       |       |       |       |   |          |                   |
|-----|---|---|-------|-------|-------|-------|---|----------|-------------------|
|     | 2 | 1 | Ecf/3 | Ec/2  | 3.63  | 48.00 | ✓ | Offside  | 73.10             |
|     | 3 | 1 | Ecf/4 | Ec/3  | 3.51  | 48.00 | ✓ | Offside  | 69.79             |
|     | 4 | 1 | Ecf/5 | Ec/4  | 5.41  | 30.00 | ✓ | Offside  | 66.48             |
| Ecf | 1 | 1 | Dc/1  | Ecf/1 | 3.45  | 48.00 | ✓ | Offside  | 76.11             |
|     | 2 | 1 | Dc/2  | Ecf/2 | 3.48  | 48.00 | ✓ | Offside  | 72.80             |
|     | 3 | 1 | Dc/3  | Ecf/3 | 3.52  | 48.00 | ✓ | Offside  | 69.49             |
|     | 4 | 1 | Dc/4  | Ecf/4 | 3.56  | 48.00 | ✓ | Offside  | 66.17             |
|     | 5 | 1 | Dc/4  | Ecf/5 | 3.64  | 48.00 | ✓ | Offside  | 62.86             |
| Exp | 1 | 1 | Ecf/1 | Exp/1 | 3.89  | 48.00 | ✓ | Nearside | 52.96             |
|     | 2 | 1 | Ecf/2 | Exp/2 | 4.03  | 48.00 | ✓ | Nearside | 56.27             |
| F   | 1 | 1 | Ff/1  | F/1   | 6.38  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Ff/1  | F/2   | 6.43  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Ff/2  | F/3   | 6.54  | 48.00 | ✓ | Straight | Straight Movement |
| Fc  | 1 | 1 | Ec/2  | Fc/1  | 18.38 | 35.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Ec/3  | Fc/2  | 18.02 | 35.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Ec/4  | Fc/3  | 18.54 | 35.00 | ✓ | Straight | Straight Movement |
| Ff  | 1 | 1 | 5f/1  | Ff/1  | 33.09 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 5f/1  | Ff/2  | 33.05 | 30.00 | ✓ | Straight | Straight Movement |
| G   | 1 | 1 | Gf/1  | G/1   | 15.98 | 35.00 | ✓ | Offside  | 88.54             |
|     | 2 | 1 | Gf/2  | G/2   | 11.38 | 48.00 | ✓ | Offside  | 85.22             |
| Gf  | 1 | 1 | E2/3  | Gf/1  | 3.04  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | E2/4  | Gf/2  | 3.00  | 48.00 | ✓ | Straight | Straight Movement |
| xA  | 1 | 1 | F/1   | xA/1  | 17.22 | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | F/1   | xA/2  | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xB  | 1 | 1 | Bcf/1 | xB/1  | 5.79  | 48.00 | ✓ | Nearside | 59.55             |
| xC  | 1 | 1 | G/1   | xC/1  | 8.67  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | G/2   | xC/2  | 8.70  | 48.00 | ✓ | Straight | Straight Movement |
| xD  | 1 | 1 | Dxp/1 | xD/1  | 9.11  | 48.00 | ✓ | Nearside | 44.59             |
|     | 2 | 1 | Dxp/2 | xD/2  | 9.16  | 48.00 | ✓ | Nearside | 47.90             |
| xE  | 1 | 1 | Exp/1 | xE/1  | 13.04 | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Exp/2 | xE/2  | 13.04 | 48.00 | ✓ | Straight | Straight Movement |
| xF  | 1 | 1 | Ec/1  | xF/1  | 11.88 | 48.00 | ✓ | Straight | Straight Movement |
| Cc1 | 1 | 1 | B/1   | Cc1/1 | 8.63  | 40.00 | ✓ | Straight | Straight Movement |
| E1  | 1 | 1 | Ef/1  | E1/1  | 6.00  | 48.00 | ✓ | Nearside | 26.33             |
|     | 2 | 1 | Ef/1  | E1/2  | 6.00  | 48.00 | ✓ | Nearside | 28.96             |
| Gf1 | 1 | 1 | Ecf/5 | Gf1/1 | 5.74  | 30.00 | ✓ | Offside  | 21.77             |
| Cc2 | 2 | 1 | B/1   | Cc2/2 | 8.24  | 40.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | B/3   | Cc2/3 | 8.20  | 40.00 | ✓ | Straight | Straight Movement |

|      |   |   |        |        |       |       |   |          |                   |
|------|---|---|--------|--------|-------|-------|---|----------|-------------------|
|      | 4 | 1 | B/2    | Cc2/4  | 8.14  | 40.00 | ✓ | Straight | Straight Movement |
|      | 5 | 1 | Bc/3   | Cc2/5  | 6.03  | 54.00 | ✓ | Offside  | 96.53             |
|      | 6 | 1 | Bc/3   | Cc2/6  | 5.87  | 54.00 | ✓ | Offside  | 93.22             |
| E2   | 3 | 1 | Ef/2   | E2/3   | 4.00  | 48.00 | ✓ | Nearside | 43.25             |
|      | 4 | 1 | Ef/2   | E2/4   | 4.07  | 48.00 | ✓ | Nearside | 43.25             |
| TC5  | 2 | 1 | xA/1   | TC5/2  | 2.76  | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 1 | xA/2   | TC5/3  | 2.76  | 30.00 | ✓ | Straight | Straight Movement |
|      | 4 | 1 | xA/2   | TC5/4  | 2.93  | 30.00 | ✓ | Straight | Straight Movement |
| TC9  | 1 | 1 | 49/1   | TC9/1  | 11.00 | 30.00 | ✓ | Straight | Straight Movement |
|      | 2 | 1 | 49/2   | TC9/2  | 11.07 | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 1 | 49/2   | TC9/3  | 11.12 | 30.00 | ✓ | Straight | Straight Movement |
| TC35 | 1 | 1 | xA/1   | TC35/1 | 2.90  | 30.00 | ✓ | Straight | Straight Movement |
| TC37 | 1 | 1 | TC36/1 | TC37/1 | 3.19  | 50.00 | ✓ | Nearside | 46.04             |
| TC38 | 1 | 1 | TC37/1 | TC38/1 | 1.53  | 50.00 | ✓ | Straight | Straight Movement |
| TC39 | 2 | 1 | TC5/2  | TC39/2 | 2.54  | 50.00 | ✓ | Straight | Straight Movement |
|      | 3 | 1 | TC5/3  | TC39/3 | 2.40  | 50.00 | ✓ | Straight | Straight Movement |
| TC40 | 2 | 1 | TC38/1 | TC40/2 | 4.23  | 50.00 | ✓ | Nearside | 11.92             |
|      | 3 | 1 | TC39/3 | TC40/3 | 4.02  | 50.00 | ✓ | Offside  | 77.43             |
| TC41 | 1 | 1 | TC36/1 | TC41/1 | 3.93  | 50.00 | ✓ | Straight | Straight Movement |
| TC43 | 1 | 1 | TC9/1  | TC43/1 | 3.73  | 50.00 | ✓ | Nearside | 6.11              |
| 47   | 1 | 1 | xC/1   | 47/1   | 16.04 | 30.00 | ✓ | Straight | Straight Movement |
| 52   | 1 | 1 | 53/1   | 52/1   | 20.76 | 30.00 | ✓ | Straight | Straight Movement |
|      | 2 | 1 | 53/2   | 52/2   | 20.78 | 30.00 | ✓ | Straight | Straight Movement |
| 53   | 1 | 1 | Bc/3   | 53/1   | 5.27  | 30.00 | ✓ | Offside  | 5.00              |
|      | 2 | 1 | Bc/3   | 53/2   | 5.07  | 30.00 | ✓ | Offside  | 5.00              |
| Acf  | 1 | 2 | Fc/3   | Acf/1  | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
|      | 2 | 2 | Fc/3   | Acf/2  | 7.24  | 35.00 | ✓ | Straight | Straight Movement |
| Af   | 1 | 2 | TC9/1  | Af/1   | 6.42  | 30.00 | ✓ | Straight | Straight Movement |
|      | 2 | 2 | TC9/2  | Af/2   | 6.38  | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 2 | TC9/3  | Af/3   | 6.36  | 30.00 | ✓ | Straight | Straight Movement |
| Bcf  | 1 | 2 | Ac/1   | Bcf/1  | 3.96  | 57.00 | ✓ | Offside  | 93.05             |
|      | 2 | 2 | Ac/2   | Bcf/2  | 3.95  | 57.00 | ✓ | Offside  | 89.74             |
|      | 3 | 2 | Ac/3   | Bcf/3  | 3.95  | 57.00 | ✓ | Offside  | 86.42             |
|      | 4 | 2 | Ac/3   | Bcf/4  | 3.94  | 57.00 | ✓ | Offside  | 86.42             |
| C    | 2 | 2 | Cf/1   | C/2    | 14.73 | 30.00 | ✓ | Offside  | 56.58             |
| Dcf  | 1 | 2 | C/1    | Dcf/1  | 4.91  | 48.00 | ✓ | Nearside | 54.80             |
|      | 2 | 2 | C/1    | Dcf/2  | 4.90  | 48.00 | ✓ | Nearside | 54.80             |
|      | 3 | 2 | Cc2/3  | Dcf/3  | 7.87  | 30.00 | ✓ | Straight | Straight Movement |

|      |   |   |        |        |       |       |   |          |                   |
|------|---|---|--------|--------|-------|-------|---|----------|-------------------|
|      | 4 | 2 | Cc2/3  | Dcf/4  | 8.12  | 30.00 | ✓ | Straight | Straight Movement |
|      | 5 | 2 | Cc2/5  | Dcf/5  | 7.94  | 30.00 | ✓ | Offside  | 99.16             |
|      | 6 | 2 | Cc2/6  | Dcf/6  | 7.94  | 30.00 | ✓ | Offside  | 95.85             |
| Ecf  | 1 | 2 | D/1    | Ecf/1  | 3.45  | 48.00 | ✓ | Nearside | 43.36             |
|      | 2 | 2 | D/1    | Ecf/2  | 3.48  | 48.00 | ✓ | Nearside | 43.36             |
|      | 3 | 2 | D/2    | Ecf/3  | 5.63  | 30.00 | ✓ | Nearside | 46.68             |
|      | 4 | 2 | D/3    | Ecf/4  | 5.70  | 30.00 | ✓ | Nearside | 49.99             |
|      | 5 | 2 | D/4    | Ecf/5  | 5.83  | 30.00 | ✓ | Nearside | 53.30             |
| Fc   | 1 | 2 | E1/1   | Fc/1   | 20.10 | 32.00 | ✓ | Nearside | 58.94             |
|      | 2 | 2 | E1/1   | Fc/2   | 19.71 | 32.00 | ✓ | Nearside | 60.85             |
|      | 3 | 2 | E1/2   | Fc/3   | 20.28 | 32.00 | ✓ | Nearside | 64.16             |
| G    | 1 | 2 | Gf1/1  | G/1    | 15.98 | 35.00 | ✓ | Offside  | 17.91             |
|      | 2 | 2 | Gf1/1  | G/2    | 11.38 | 48.00 | ✓ | Offside  | 15.13             |
| xA   | 1 | 2 | Fc/1   | xA/1   | 17.22 | 48.00 | ✓ | Straight | Straight Movement |
|      | 2 | 2 | Fc/2   | xA/2   | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xC   | 1 | 2 | Cc1/1  | xC/1   | 8.67  | 48.00 | ✓ | Nearside | 56.51             |
|      | 2 | 2 | Cc1/1  | xC/2   | 8.70  | 48.00 | ✓ | Nearside | 57.28             |
| xF   | 1 | 2 | E1/1   | xF/1   | 11.88 | 48.00 | ✓ | Nearside | 40.67             |
| Cc1  | 1 | 2 | Bc/1   | Cc1/1  | 6.39  | 54.00 | ✓ | Straight | Straight Movement |
| Cc2  | 2 | 2 | Bc/1   | Cc2/2  | 10.98 | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 2 | Bc/2   | Cc2/3  | 10.93 | 30.00 | ✓ | Offside  | 99.84             |
|      | 4 | 2 | Bc/2   | Cc2/4  | 6.03  | 54.00 | ✓ | Straight | Straight Movement |
|      | 5 | 2 | B/4    | Cc2/5  | 8.14  | 40.00 | ✓ | Straight | Straight Movement |
|      | 6 | 2 | B/4    | Cc2/6  | 7.93  | 40.00 | ✓ | Straight | Straight Movement |
| TC9  | 2 | 2 | 49/1   | TC9/2  | 11.07 | 30.00 | ✓ | Straight | Straight Movement |
| TC39 | 2 | 2 | TC42/1 | TC39/2 | 2.54  | 50.00 | ✓ | Offside  | 9.44              |
|      | 3 | 2 | TC42/1 | TC39/3 | 2.40  | 50.00 | ✓ | Offside  | 9.44              |
| TC40 | 2 | 2 | TC39/2 | TC40/2 | 4.23  | 50.00 | ✓ | Offside  | 80.74             |
| TC43 | 1 | 2 | TC5/4  | TC43/1 | 3.73  | 50.00 | ✓ | Offside  | 21.45             |
| 47   | 1 | 2 | xC/2   | 47/1   | 16.04 | 30.00 | ✓ | Straight | Straight Movement |
| 53   | 1 | 2 | B/3    | 53/1   | 5.27  | 30.00 | ✓ | Offside  | 40.30             |
|      | 2 | 2 | B/4    | 53/2   | 5.07  | 30.00 | ✓ | Offside  | 36.99             |
| Acf  | 1 | 3 | Fc/2   | Acf/1  | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
| Af   | 1 | 3 | TC41/1 | Af/1   | 6.42  | 30.00 | ✓ | Offside  | 6.19              |
|      | 2 | 3 | TC41/1 | Af/2   | 6.38  | 30.00 | ✓ | Offside  | 6.19              |
|      | 3 | 3 | TC41/1 | Af/3   | 6.36  | 30.00 | ✓ | Offside  | 6.19              |
| Dcf  | 4 | 3 | Cc2/5  | Dcf/4  | 8.12  | 30.00 | ✓ | Straight | Straight Movement |
| Fc   | 1 | 3 | 52/1   | Fc/1   | 21.44 | 30.00 | ✓ | Offside  | 13.89             |
|      | 2 | 3 | 52/2   | Fc/2   | 21.02 | 30.00 | ✓ | Offside  | 10.58             |
| xA   | 2 | 3 | Fc/1   | xA/2   | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xF   | 1 | 3 | 52/1   | xF/1   | 19.00 | 30.00 | ✓ | Offside  | 19.56             |
| Cc2  | 3 | 3 | B/2    | Cc2/3  | 10.93 | 30.00 | ✓ | Straight | Straight Movement |

|  |   |   |     |       |       |       |   |          |                   |
|--|---|---|-----|-------|-------|-------|---|----------|-------------------|
|  | 5 | 3 | B/3 | Cc2/5 | 10.86 | 30.00 | ✓ | Straight | Straight Movement |
|--|---|---|-----|-------|-------|-------|---|----------|-------------------|

### Give Way Data

| Arm   | Traffic Stream | Opposed traffic | Use Step-wise Opposed Turn Model | Visibility restricted |
|-------|----------------|-----------------|----------------------------------|-----------------------|
| (ALL) | 1              | AllTraffic      |                                  |                       |

### Give Way Data - All Movements - Conflicts

| Traffic Stream | Description | Controlling type | Controlling traffic stream | Percentage opposing (%) | Slope coefficient | Upstream signals visible |
|----------------|-------------|------------------|----------------------------|-------------------------|-------------------|--------------------------|
| 1              |             | TrafficStream    | Gf/1                       | 100                     | 0.22              |                          |
|                |             | TrafficStream    | Gf/2                       | 100                     | 0.22              |                          |
|                |             | TrafficStream    | TC39/2                     | 100                     | 0.22              |                          |
|                |             | TrafficStream    | TC39/3                     | 100                     | 0.22              |                          |

## Pedestrian Crossings

### Pedestrian Crossings

| Crossing | Name       | Description | Traffic node | Allow walk on red | Crossing type | Length (m) | Cruise time (seconds) | Cruise speed (kph) |
|----------|------------|-------------|--------------|-------------------|---------------|------------|-----------------------|--------------------|
| 1        | (untitled) |             | 3-2          |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 2        | (untitled) |             | 3            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 3        | (untitled) |             | 4-2          |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 4        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 5        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 6        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 7        | (untitled) |             | 5            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 8        | (untitled) |             | 1            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 9        | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 10       | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 11       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 12       | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 13       | (untitled) |             |              |                   | Farside       | 3.00       | 2.00                  | 5.40               |
| 14       | (untitled) |             |              |                   | Farside       | 3.00       | 2.00                  | 5.40               |
| 15       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 16       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 17       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |

### Pedestrian Crossings - Signals

| Crossing | Controller stream | Phase | Second phase enabled |
|----------|-------------------|-------|----------------------|
| 1        | 770-2             | E     |                      |
| 2        | 770-1             | C     |                      |
| 3        | 770-4             | M     |                      |
| 4        | 770-3             | J     |                      |
| 5        | 770-3             | I     |                      |
| 6        | 770-3             | K     |                      |
| 7        | 771-1             | C     |                      |
| 8        | 769-1             | C     |                      |
| 9        | 769-2             | J     |                      |
| 10       | 769-2             | K     |                      |
| 11       | 769-2             | H     |                      |
| 12       | 769-2             | I     |                      |
| 13       | TC777-1           | I     |                      |
| 14       | TC777-1           | F     |                      |
| 15       | TC777-1           | G     |                      |

|    |         |   |  |
|----|---------|---|--|
| 16 | TC777-1 | H |  |
| 17 | TC777-2 | K |  |

### Pedestrian Crossings - Sides

| Crossing | Side  | Saturation flow (Ped/hr) |
|----------|-------|--------------------------|
| (ALL)    | (ALL) | 11000                    |

### Pedestrian Crossings - Modelling

| Crossing | Side  | Delay weighting (%) | Assignment Cost Weighting (%) | Exclude from results calculation | Max queue storage (Ped) | Has queue limit | Has degree of saturation limit |
|----------|-------|---------------------|-------------------------------|----------------------------------|-------------------------|-----------------|--------------------------------|
| (ALL)    | (ALL) | 100                 | 100                           |                                  | 0.00                    |                 |                                |

## Local OD Matrix - Local Matrix: 1

### Local Matrix Options

| OD Matrix | Name       | Use for point to point table | Allocation mode  | Allow paths past exit locations | Allow looped paths on arms | Allow looped paths on traffic nodes | Copy flows | Matrix to copy flows from | Limit paths by length | Path length limit multiplier | Limit paths by number | Path number limit | Limit paths by flow | Low path flow threshold |
|-----------|------------|------------------------------|------------------|---------------------------------|----------------------------|-------------------------------------|------------|---------------------------|-----------------------|------------------------------|-----------------------|-------------------|---------------------|-------------------------|
| 1         | (untitled) | ✓                            | User Equilibrium |                                 |                            | ✓                                   |            |                           |                       |                              |                       |                   |                     |                         |

Note: Auto Calculate disabled on this Local Matrix - Paths and Flow Allocation might not be up to date.

### Normal Input Flows (PCU/hr)

|      | To  |     |     |     |     |     |     |      |   |
|------|-----|-----|-----|-----|-----|-----|-----|------|---|
|      | A28 | B28 | C28 | D28 | E28 | F28 | G28 | H28  |   |
| From | A28 | 0   | 48  | 375 | 2   | 433 | 122 | 797  | 0 |
|      | B28 | 35  | 0   | 104 | 256 | 547 | 36  | 471  | 0 |
|      | C28 | 567 | 41  | 0   | 335 | 159 | 42  | 1055 | 0 |
|      | D28 | 3   | 204 | 255 | 0   | 38  | 103 | 219  | 0 |
|      | E28 | 470 | 454 | 74  | 50  | 0   | 36  | 186  | 0 |
|      | F28 | 64  | 13  | 17  | 60  | 8   | 0   | 34   | 0 |
|      | G28 | 318 | 123 | 347 | 114 | 199 | 60  | 0    | 0 |
|      | H28 | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0 |

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

### Locations

| OD Matrix | Location | Name       | Entries    | Exits          | Colour  |
|-----------|----------|------------|------------|----------------|---------|
| 1         | A28      | (untitled) | 50/1       | xB/1           | #FF0000 |
|           | B28      | (untitled) | 48/1       | 47/1           | #00FF40 |
|           | C28      | (untitled) | Df/2, Df/1 | xD/1, xD/2     | #804000 |
|           | D28      | (untitled) | 51/1       | xF/1           | #FF00FF |
|           | E28      | (untitled) | Ef/2, Ef/1 | xE/1, xE/2     | #FF8000 |
|           | F28      | (untitled) | TC36/1     | TC35/1         | #FFA500 |
|           | G28      | (untitled) | 49/2, 49/1 | TC40/2, TC40/3 | #0000FF |
|           | H28      | (untitled) | TC42/1     | TC43/1         | #008000 |

## Normal Paths and Flows

| OD Matrix | Path | Description | From location | To location  | Path items   | Allocation type | Normal Calculated Flow (PCU/hr) |
|-----------|------|-------------|---------------|--|--|-----------------|---------------------------------|
| 1         | 32   | I1          | C28           | E28  | Df/1, D/1, Ecf/1, Exp/1, xE/1  | Normal          | 159                             |
|           | 36   |             | C28           | E28  | Df/1, D/1, Ecf/2, Exp/2, xE/2  | Disabled        | 0                               |
|           | 41   |             | E28           | A28  | Ef/1, E1/2, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1   | Normal          | 470                             |
|           | 49   | I1          | C28           | D28  | Df/1, D/1, Ecf/2, Ec/1, xF/1   | Normal          | 335                             |
|           | 50   |             | E28           | D28  | Ef/1, E1/1, xF/1   | Normal          | 50                              |
|           | 68   |             | E28           | G28  | Ef/1, E1/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2  | Normal          | 132                             |
|           | 92   |             | E28           | F28  | Ef/1, E1/1, Fc/1, xA/1, TC35/1   | Normal          | 36                              |
|           | 100  |             | E28           | B28  | Ef/2, E2/4, Gf/2, G/2, xC/2, 47/1  | Normal          | 212                             |
|           | 102  |             | A28           | C28  | 50/1, Bf/1, B/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal          | 309                             |
|           | 103  |             | F28           | B28  | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                                    | Fixed           | 0                               |
|           | 105  |             | D28           | H28  | 51/1, Ff/1, F/1, xA/2, TC5/4, TC43/1   | Normal          | 0                               |
|           | 107  |             | A28           | B28  | 50/1, Bf/1, B/1, Cc1/1, xC/2, 47/1   | Normal          | 48                              |
|           | 110  |             | E28           | G28  | Ef/1, E1/1, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal          | 54                              |
|           | 112  |             | F28           | G28  | TC36/1, TC37/1, TC38/1, TC40/2   | Normal          | 34                              |
|           | 113  |             | F28           | A28  | TC36/1, TC41/1, Af/1, A/1, Bcf/1, xB/1   | Normal          | 64                              |
|           | 115  |             | B28           | C28  | 48/1, Cf/1, C/1, Dcf/2, Dxp/2, xD/2  | Fixed           | 9                               |
|           | 125  |             | H28           | A28  | TC42/1, Af/1, A/1, Bcf/1, xB/1   | Normal          | 0                               |
|           | 130  |             | G28           | C28  | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                               | Normal          | 208                             |
|           | 137  |             | H28           | G28  | TC42/1, TC39/2, TC40/2   | Normal          | 0                               |
|           | 138  |             | H28           | G28  | TC42/1, TC39/3, TC40/3   | Normal          | 0                               |
|           | 140  |             | B28           | G28  | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                 | Normal          | 271                             |
|           | 141  |             | B28           | F28  | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                                | Normal          | 36                              |
|           | 142  |             | B28           | G28  | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                 | Normal          | 0                               |
|           | 143  |             | E28           | H28  | Ef/1, E1/1, Fc/2, xA/2, TC5/4, TC43/1  | Normal          | 0                               |
|           | 144  |             | B28           | G28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                 | Normal          | 200                             |
|           | 145  |             | B28           | H28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                         | Normal          | 0                               |
|           | 146  |             | B28           | A28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                    | Normal          | 0                               |
|           | 147  |             | B28           | B28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1 | Normal          | 0                               |
|           | 148  |             | B28           | B28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1 | Normal          | 0                               |
|           | 149  |             | B28           | A28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                    | Normal          | 35                              |
| 150       |      | E28         | B28           | Ef/2, E2/3, Gf/1, G/1, xC/1, 47/1  | Normal   | 242             |                                 |
| 151       |      | B28         | B28           | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1 | Normal   | 0               |                                 |

|         |  |     |     |   |        |     |
|---------|--|-----|-----|---|--------|-----|
| 15<br>2 |  | H28 | B28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1   | Normal | 0   |
| 15<br>3 |  | F28 | B28 | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1   | Normal | 13  |
| 15<br>4 |  | E28 | A28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1  | Normal | 0   |
| 15<br>5 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 15<br>6 |  | G28 | B28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                  | Normal | 0   |
| 15<br>7 |  | H28 | B28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1   | Normal | 0   |
| 15<br>8 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                     | Normal | 0   |
| 15<br>9 |  | A28 | H28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                             | Normal | 0   |
| 16<br>0 |  | B28 | D28 | 48/1, Cf/1, C/2, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 256 |
| 16<br>1 |  | B28 | E28 | 48/1, Cf/1, C/2, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 224 |
| 16<br>2 |  | B28 | D28 | 48/1, Cf/2, C/2, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 16<br>3 |  | B28 | E28 | 48/1, Cf/2, C/2, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 16<br>4 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1     | Normal | 0   |
| 16<br>5 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1     | Normal | 0   |
| 16<br>6 |  | B28 | C28 | 48/1, Cf/1, C/1, Dcf/1, Dxp/1, xD/1   | Normal | 95  |
| 16<br>7 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                                      | Normal | 0   |
| 16<br>8 |  | G28 | A28 | 49/1, TC9/1, Af/1, A/1, Bcf/1, xB/1   | Normal | 318 |
| 16<br>9 |  | G28 | B28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1  | Normal | 10  |
| 17<br>0 |  | G28 | B28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1  | Normal | 113 |
| 17<br>1 |  | G28 | H28 | 49/1, TC9/1, TC43/1   | Normal | 0   |
| 17<br>2 |  | H28 | E28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                  | Normal | 0   |
| 17<br>3 |  | F28 | D28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                           | Normal | 0   |
| 17<br>4 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3      | Normal | 0   |
| 17<br>5 |  | A28 | D28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1  | Normal | 1   |
| 17<br>6 |  | H28 | C28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 0   |
| 17<br>7 |  | H28 | B28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                       | Normal | 0   |
| 17<br>8 |  | B28 | E28 | 48/1, Cf/1, C/2, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 210 |
| 17<br>9 |  | B28 | E28 | 48/1, Cf/2, C/2, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 113 |
| 18<br>0 |  | A28 | H28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                             | Normal | 0   |
| 18<br>1 |  | F28 | C28 | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                                       | Normal | 17  |
| 18<br>2 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2 | Normal | 0   |
| 18<br>3 |  | A28 | E28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 0   |
| 18<br>4 |  | C28 | A28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1  | Normal | 0   |

|     |  |     |     |   |        |     |
|-----|--|-----|-----|---|--------|-----|
| 185 |  | A28 | B28 | 50/1, Bf/1, B/1, Cc1/1, xC/1, 47/1  | Normal | 0   |
| 186 |  | A28 | C28 | 50/1, Bf/1, B/2, Cc2/4, Dcf/2, Dxp/2, xD/2  | Normal | 66  |
| 187 |  | G28 | D28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 188 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                           | Normal | 0   |
| 189 |  | G28 | E28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                   | Normal | 0   |
| 190 |  | G28 | D28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 191 |  | D28 | F28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                | Normal | 0   |
| 192 |  | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0   |
| 193 |  | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 194 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2            | Normal | 0   |
| 195 |  | D28 | G28 | 51/1, Ff/1, F/1, xA/1, TC5/2, TC39/2, TC40/2  | Normal | 219 |
| 196 |  | D28 | F28 | 51/1, Ff/1, F/1, xA/1, TC35/1   | Normal | 103 |
| 197 |  | D28 | G28 | 51/1, Ff/1, F/1, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 0   |
| 198 |  | D28 | A28 | 51/1, Ff/1, F/2, Acf/1, Ac/1, Bcf/1, xB/1   | Normal | 3   |
| 199 |  | D28 | B28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1  | Normal | 204 |
| 200 |  | D28 | B28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1  | Normal | 0   |
| 201 |  | F28 | E28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                | Normal | 7   |
| 202 |  | F28 | D28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                 | Normal | 4   |
| 203 |  | F28 | E28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 0   |
| 204 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                         | Normal | 0   |
| 205 |  | A28 | E28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 0   |
| 206 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 0   |
| 207 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 208 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                            | Normal | 0   |
| 209 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                                    | Normal | 0   |
| 210 |  | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                      | Normal | 0   |
| 211 |  | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                              | Normal | 0   |
| 212 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                                 | Normal | 0   |
| 213 |  | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1   | Normal | 0   |
| 214 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 0   |
| 215 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 216 |  | A28 | G28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 547 |
| 217 |  | A28 | H28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1  | Normal | 0   |

|     |  |     |     |  |          |     |
|-----|--|-----|-----|--|----------|-----|
| 218 |  | A28 | A28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                            | Normal   | 0   |
| 219 |  | A28 | C28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1 | Normal   | 0   |
| 220 |  | A28 | B28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1         | Normal   | 0   |
| 221 |  | A28 | B28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1         | Normal   | 0   |
| 222 |  | A28 | D28 | 50/1, Bf/2, B/3, 53/1, 52/1, xF/1  | Normal   | 0   |
| 223 |  | A28 | G28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                         | Normal   | 250 |
| 224 |  | A28 | F28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/1, TC35/1  | Normal   | 122 |
| 225 |  | A28 | G28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                         | Normal   | 0   |
| 226 |  | A28 | H28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                                 | Normal   | 0   |
| 235 |  | E28 | G28 | Ef/1, E1/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3  | Fixed    | 0   |
| 236 |  | E28 | H28 | Ef/1, E1/1, Fc/1, xA/2, TC5/4, TC43/1  | Normal   | 0   |
| 246 |  | E28 | C28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                  | Normal   | 74  |
| 248 |  | D28 | C28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                   | Disabled | 0   |
| 249 |  | H28 | C28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                              | Normal   | 0   |
| 252 |  | F28 | C28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                      | Normal   | 0   |
| 283 |  | E28 | B28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                          | Normal   | 0   |
| 284 |  | E28 | B28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                          | Normal   | 0   |
| 285 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                          | Normal   | 0   |
| 286 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                          | Normal   | 0   |
| 307 |  | G28 | C28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                         | Normal   | 112 |
| 317 |  | C28 | G28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                              | Normal   | 602 |
| 318 |  | C28 | H28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                                      | Normal   | 0   |
| 319 |  | C28 | B28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1              | Normal   | 0   |
| 320 |  | C28 | B28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1              | Normal   | 0   |
| 322 |  | C28 | G28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                              | Normal   | 441 |
| 323 |  | C28 | F28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1   | Normal   | 42  |
| 324 |  | C28 | G28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                              | Normal   | 12  |
| 325 |  | C28 | H28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                                      | Normal   | 0   |
| 330 |  | C28 | A28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                                 | Normal   | 567 |
| 331 |  | C28 | B28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1              | Normal   | 0   |
| 332 |  | C28 | B28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1              | Normal   | 0   |
| 334 |  | C28 | C28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2      | Normal   | 0   |
| 342 |  | C28 | B28 | Df/2, D/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1   | Normal   | 0   |

|     |  |     |     |   |        |    |
|-----|--|-----|-----|---|--------|----|
| 343 |  | C28 | B28 | Df/2, D/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1  | Normal | 41 |
| 364 |  | B28 | H28 | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1  | Normal | 0  |
| 379 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Act/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                  | Normal | 0  |
| 380 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1   | Normal | 0  |
| 381 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1   | Normal | 0  |
| 382 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3       | Normal | 0  |
| 383 |  | G28 | B28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                        | Normal | 0  |
| 384 |  | A28 | A28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Act/1, Ac/1, Bcf/1, xB/1                              | Normal | 0  |
| 385 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Act/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1           | Normal | 0  |
| 386 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Act/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1           | Normal | 0  |
| 387 |  | A28 | A28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Act/1, Ac/1, Bcf/1, xB/1                              | Normal | 0  |
| 388 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1  | Normal | 0  |
| 389 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                 | Normal | 0  |
| 390 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                 | Normal | 0  |
| 391 |  | D28 | G28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0  |
| 392 |  | D28 | H28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1         | Normal | 0  |
| 393 |  | D28 | B28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                  | Normal | 0  |
| 394 |  | D28 | B28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                  | Normal | 0  |
| 395 |  | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                    | Normal | 0  |
| 396 |  | H28 | B28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                             | Normal | 0  |
| 397 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3    | Normal | 0  |
| 398 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1            | Normal | 0  |
| 399 |  | F28 | B28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                     | Normal | 0  |
| 400 |  | F28 | B28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                     | Normal | 0  |
| 401 |  | G28 | F28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                      | Normal | 0  |
| 402 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3       | Normal | 0  |
| 403 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1               | Normal | 0  |
| 404 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                           | Normal | 0  |
| 405 |  | A28 | F28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1  | Normal | 0  |
| 406 |  | A28 | H28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                                   | Normal | 0  |
| 407 |  | D28 | G28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2 | Normal | 0  |
| 408 |  | H28 | F28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                           | Normal | 0  |
| 409 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3            | Normal | 0  |

|     |     |     |  |        |     |
|-----|-----|-----|--|--------|-----|
| 410 | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                 | Normal | 0   |
| 411 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2 | Normal | 0   |
| 412 | F28 | F28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                | Normal | 0   |
| 413 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0   |
| 414 | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 415 | A28 | D28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 417 | A28 | E28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 0   |
| 418 | G28 | C28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 28  |
| 423 | C28 | C28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                          | Normal | 0   |
| 424 | C28 | C28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                          | Normal | 0   |
| 425 | E28 | C28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                                      | Normal | 0   |
| 428 | E28 | C28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                                      | Normal | 0   |
| 431 | D28 | C28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                                       | Normal | 255 |
| 439 | G28 | E28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                | Normal | 37  |
| 440 | G28 | E28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 0   |
| 441 | G28 | E28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 0   |
| 442 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                         | Normal | 0   |
| 443 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                          | Normal | 0   |
| 444 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                         | Normal | 0   |
| 445 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                          | Normal | 0   |
| 446 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                           | Normal | 0   |
| 447 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                          | Normal | 0   |
| 448 | H28 | E28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                     | Normal | 0   |
| 449 | H28 | D28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                      | Normal | 0   |
| 450 | H28 | E28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                     | Normal | 0   |
| 451 | G28 | D28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                 | Normal | 52  |
| 452 | G28 | E28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 162 |
| 453 | A28 | D28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 454 | A28 | E28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 455 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                          | Normal | 0   |
| 456 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                         | Normal | 0   |
| 457 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                           | Normal | 0   |
| 458 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                          | Normal | 38  |

|     |  |     |     |  |        |     |
|-----|--|-----|-----|--|--------|-----|
| 459 |  | H28 | D28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                              | Normal | 0   |
| 460 |  | F28 | E28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                     | Normal | 1   |
| 461 |  | A28 | E28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 62  |
| 462 |  | A28 | G28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                | Normal | 0   |
| 463 |  | A28 | F28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                               | Normal | 0   |
| 464 |  | A28 | G28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                | Normal | 0   |
| 465 |  | A28 | E28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 371 |
| 466 |  | A28 | D28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 1   |
| 467 |  | G28 | D28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1  | Normal | 62  |
| 468 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                 | Normal | 0   |
| 469 |  | G28 | F28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                                | Normal | 60  |
| 470 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                 | Normal | 0   |
| 471 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                         | Normal | 0   |
| 472 |  | A28 | D28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1 | Normal | 0   |
| 473 |  | B28 | D28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1        | Normal | 0   |
| 474 |  | C28 | D28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1                           | Normal | 0   |
| 475 |  | E28 | D28 | Ef/1, E1/2, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1                                       | Normal | 0   |
| 476 |  | D28 | D28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1  | Normal | 0   |
| 477 |  | D28 | G28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2           | Normal | 0   |
| 478 |  | D28 | F28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                          | Normal | 0   |
| 479 |  | D28 | G28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3           | Normal | 0   |
| 480 |  | D28 | H28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                   | Normal | 0   |
| 481 |  | H28 | D28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1   | Normal | 0   |
| 482 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                      | Normal | 0   |
| 483 |  | H28 | F28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                                     | Normal | 0   |
| 484 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                      | Normal | 0   |
| 485 |  | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                              | Normal | 0   |
| 486 |  | F28 | D28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1   | Normal | 56  |
| 487 |  | F28 | F28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                             | Normal | 0   |

## Signal Timings

Network Default: 120s cycle time; 120 steps

## Resultant penalties

| Time Segment | Controller stream | Phase min max penalty (£ per hr) | Intergreen broken penalty (£ per hr) | Stage constraint broken penalty (£ per hr) | Cost of controller stream penalties (£ per hr) |
|--------------|-------------------|----------------------------------|--------------------------------------|--|--|
| 07:30-08:30  | (ALL)             | 0.00                             | 0.00                                 | 0.00                                       | 0.00   |

## Results - Link

## Results - Traffic Stream

### Results - Traffic Stream: Vehicle summary

| Time Segment | Arm | Traffic Stream | Name       | Phase | Calculated flow entering (PCU/hr) | Calculated sat flow (PCU/hr) | Actual green (s (per cycle)) | Calculated capacity (PCU/hr) | Degree of saturation (%) | Practical reserve capacity (%) | Mean Delay per Veh (s) | Mean max queue (PCU) | Utilised storage (%) | Journey Time (s) |
|--------------|-----|----------------|------------|-------|-----------------------------------|------------------------------|------------------------------|------------------------------|--------------------------|--------------------------------|------------------------|----------------------|----------------------|------------------|
| 07:30-08:30  | A   | 1              | (untitled) | E     | 382                               | 2050                         | 32                           | 581                          | 66                       | 37                             | 20.56                  | 7.66                 | 59.24                | 26.14            |
|              |     | 2              | (untitled) | E     | 181                               | 2050                         | 32                           | 581                          | 31                       | 189                            | 13.86                  | 2.46                 | 18.42                | 19.61            |
|              |     | 3              | (untitled) | E     | 294                               | 2050                         | 32                           | 581                          | 51                       | 78                             | 20.39                  | 4.90                 | 35.94                | 26.27            |
|              |     | 4              | (untitled) | E     | 315                               | 2050                         | 32                           | 313                          | 101                      | -11                            | 236.99                 | 22.85                | 164.02               | 243.00           |
|              | Ac  | 1              | (untitled) | D     | 629                               | 2263                         | 68                           | 1320                         | 48                       | 89                             | 1.74                   | 2.58                 | 15.46                | 8.93             |
|              |     | 2              | (untitled) | D     | 459                               | 2263                         | 68                           | 1274                         | 36                       | 150                            | 19.91                  | 8.58                 | 53.45                | 29.41            |
|              |     | 3              | (untitled) | D     | 112                               | 2263                         | 68                           | 731                          | 15                       | 488                            | 13.15                  | 2.33                 | 15.25                | 19.74            |
|              | Acf | 1              | (untitled) |       | 1088                              | 2263                         | 120                          | 2263                         | 48                       | 87                             | 0.74                   | 0.22                 | 1.84                 | 5.96             |
|              |     | 2              | (untitled) |       | 112                               | 2263                         | 120                          | 2263                         | 5                        | 1718                           | 0.04                   | 0.00                 | 0.01                 | 7.28             |
|              | Af  | 1              | (untitled) |       | 563                               | 2050                         | 120                          | 2050                         | 27                       | 228                            | 0.33                   | 0.05                 | 0.56                 | 6.76             |
|              |     | 2              | (untitled) |       | 295                               | 2050                         | 120                          | 2050                         | 14                       | 526                            | 0.15                   | 0.01                 | 0.13                 | 6.53             |
|              |     | 3              | (untitled) |       | 316                               | 2050                         | 120                          | 315                          | 100                      | -10                            | 176.49                 | 17.37                | 188.35               | 182.85           |
|              | B   | 1              | (untitled) | B     | 87                                | 2050                         | 34                           | 615                          | 14                       | 534                            | 10.94                  | 2.33                 | 14.16                | 18.04            |
|              |     | 2              | (untitled) | B     | 107                               | 2150                         | 34                           | 645                          | 17                       | 442                            | 11.15                  | 2.34                 | 13.82                | 18.44            |
|              |     | 3              | (untitled) | B     | 111                               | 2100                         | 34                           | 112                          | 100                      | -10                            | 651.39                 | 21.02                | 121.22               | 658.87           |
|              |     | 4              | (untitled) | B     | 140                               | 2050                         | 34                           | 615                          | 23                       | 294                            | 24.73                  | 2.37                 | 13.32                | 37.02            |
|              | Bc  | 1              | (untitled) | A     | 640                               | 2050                         | 62                           | 1093                         | 59                       | 54                             | 20.24                  | 12.01                | 51.97                | 32.20            |
|              |     | 2              | (untitled) | A     | 370                               | 2050                         | 62                           | 1093                         | 34                       | 166                            | 1.55                   | 2.02                 | 8.83                 | 13.38            |
|              |     | 3              | (untitled) | A     | 351                               | 2050                         | 62                           | 333                          | 106                      | -15                            | 331.15                 | 35.87                | 158.53               | 342.86           |
|              | Bcf | 1              | (untitled) |       | 1011                              | 2263                         | 120                          | 2263                         | 45                       | 101                            | 0.64                   | 0.18                 | 1.65                 | 4.89             |
|              |     | 2              | (untitled) |       | 640                               | 2263                         | 120                          | 2263                         | 28                       | 218                            | 0.31                   | 0.06                 | 0.51                 | 5.02             |
|              |     | 3              | (untitled) |       | 370                               | 2263                         | 120                          | 2263                         | 16                       | 450                            | 0.16                   | 0.02                 | 0.15                 | 6.24             |

|     |   |            |   |      |      |     |      |      |     |         |        |         |         |
|-----|---|------------|---|------|------|-----|------|------|-----|---------|--------|---------|---------|
|     | 4 | (untitled) |   | 351  | 2263 | 120 | 351  | 100  | -10 | 169.05  | 19.21  | 177.05  | 175.36  |
| Bf  | 1 | (untitled) |   | 189  | 1800 | 120 | 1800 | 11   | 757 | 0.12    | 0.01   | 0.02    | 27.45   |
|     | 2 | (untitled) |   | 233  | 1800 | 120 | 252  | 93   | -3  | 579.69  | 42.97  | 108.17  | 607.11  |
| C   | 1 | (untitled) | G | 87   | 2100 | 36  | 665  | 13   | 590 | 16.60   | 1.46   | 6.93    | 31.14   |
|     | 2 | (untitled) | G | 669  | 2200 | 36  | 697  | 96   | -6  | 113.60  | 27.63  | 129.44  | 128.32  |
|     | 3 | (untitled) | G | 452  | 2050 | 36  | 649  | 70   | 29  | 32.80   | 8.32   | 38.45   | 47.72   |
| Cf  | 1 | (untitled) |   | 662  | 1965 | 120 | 662  | 100  | -10 | 151.80  | 37.02  | 147.21  | 169.15  |
|     | 2 | (untitled) |   | 546  | 1965 | 120 | 1165 | 47   | 92  | 7.09    | 6.09   | 24.03   | 24.59   |
| D   | 1 | (untitled) | B | 46   | 2050 | 22  | 410  | 11   | 707 | 30.27   | 0.52   | 5.43    | 34.39   |
|     | 2 | (untitled) | B | 46   | 1850 | 22  | 46   | 100  | -10 | 947.84  | 12.25  | 128.09  | 951.96  |
|     | 3 | (untitled) | B | 135  | 2250 | 22  | 135  | 100  | -10 | 319.11  | 12.31  | 133.83  | 323.08  |
|     | 4 | (untitled) | B | 136  | 2250 | 22  | 450  | 30   | 197 | 21.69   | 2.38   | 24.74   | 25.84   |
| Dc  | 1 | (untitled) | A | 397  | 2100 | 78  | 1400 | 28   | 217 | 2.05    | 2.19   | 24.77   | 8.16    |
|     | 2 | (untitled) | A | 621  | 2100 | 78  | 618  | 101  | -11 | 104.32  | 20.15  | 236.59  | 110.20  |
|     | 3 | (untitled) | A | 256  | 2100 | 78  | 495  | 52   | 74  | 33.83   | 4.66   | 57.02   | 39.47   |
|     | 4 | (untitled) | A | 196  | 2100 | 78  | 631  | 31   | 190 | 25.47   | 3.34   | 42.61   | 30.88   |
| Dcf | 1 | (untitled) |   | 457  | 2050 | 120 | 2050 | 22   | 304 | 0.25    | 0.03   | 0.28    | 5.16    |
|     | 2 | (untitled) |   | 365  | 2100 | 120 | 2100 | 17   | 417 | 0.18    | 0.02   | 0.16    | 5.08    |
|     | 3 | (untitled) |   | 397  | 2100 | 120 | 2100 | 19   | 376 | 0.20    | 0.02   | 0.19    | 6.07    |
|     | 4 | (untitled) |   | 620  | 2100 | 120 | 621  | 100  | -10 | 102.47  | 21.33  | 181.16  | 108.63  |
|     | 5 | (untitled) |   | 256  | 2100 | 120 | 2100 | 12   | 638 | 0.12    | 0.01   | 0.07    | 5.08    |
|     | 6 | (untitled) |   | 196  | 2050 | 120 | 2050 | 10   | 842 | 0.09    | 0.01   | 0.04    | 8.03    |
| Df  | 1 | (untitled) |   | 989  | 1900 | 120 | 92   | 1081 | -92 | 1635.60 | 451.82 | 1298.98 | 1659.60 |
|     | 2 | (untitled) |   | 1210 | 2250 | 120 | 271  | 446  | -80 | 1401.38 | 473.91 | 1362.50 | 1425.38 |
| Dxp | 1 | (untitled) | D | 688  | 2050 | 103 | 1777 | 39   | 132 | 1.40    | 1.46   | 18.35   | 4.83    |
|     | 2 | (untitled) | D | 467  | 2050 | 103 | 1777 | 26   | 242 | 0.48    | 3.50   | 41.83   | 4.09    |
| Ec  | 1 | (untitled) | F | 287  | 2150 | 14  | 287  | 100  | -10 | 174.87  | 15.01  | 172.34  | 178.63  |
|     | 2 | (untitled) | F | 302  | 2263 | 14  | 302  | 100  | -10 | 169.92  | 15.17  | 180.09  | 173.55  |
|     | 3 | (untitled) | F | 302  | 2263 | 14  | 302  | 100  | -10 | 169.92  | 15.17  | 186.47  | 173.42  |
|     | 4 | (untitled) | F | 156  | 2250 | 14  | 300  | 52   | 73  | 22.47   | 2.89   | 36.79   | 27.88   |
| Ecf | 1 | (untitled) |   | 412  | 2100 | 120 | 2099 | 20   | 359 | 0.21    | 2.34   | 29.33   | 3.66    |
|     | 2 | (untitled) |   | 649  | 2100 | 120 | 641  | 101  | -11 | 103.86  | 21.16  | 262.34  | 107.33  |

|     |   |            |   |      |              |     |              |     |              |        |       |        |        |
|-----|---|------------|---|------|--------------|-----|--------------|-----|--------------|--------|-------|--------|--------|
|     | 3 | (untitled) |   | 302  | 2263         | 120 | 302          | 100 | -10          | 170.39 | 15.34 | 187.90 | 174.23 |
|     | 4 | (untitled) |   | 302  | 2300         | 120 | 302          | 100 | -10          | 160.61 | 14.88 | 180.05 | 165.13 |
|     | 5 | (untitled) |   | 166  | 2300         | 120 | 2300         | 7   | 1151         | 0.06   | 0.00  | 0.03   | 5.50   |
| Ef  | 1 | (untitled) |   | 816  | 1900         | 120 | 1900         | 43  | 110          | 0.71   | 0.16  | 0.73   | 16.02  |
|     | 2 | (untitled) |   | 454  | 1900         | 120 | 1900         | 24  | 277          | 0.30   | 0.04  | 0.17   | 15.60  |
| Exp | 1 | (untitled) | L | 412  | 2050         | 99  | 1708         | 24  | 273          | 3.27   | 4.91  | 54.52  | 7.16   |
|     | 2 | (untitled) | L | 355  | 2050         | 99  | 1708         | 21  | 334          | 0.28   | 0.03  | 0.30   | 4.31   |
| F   | 1 | (untitled) | B | 322  | 2100         | 26  | 490          | 66  | 37           | 27.77  | 5.26  | 35.54  | 34.16  |
|     | 2 | (untitled) | B | 462  | 2100         | 26  | 490          | 94  | -5           | 64.41  | 12.33 | 82.72  | 70.84  |
|     | 3 | (untitled) | B | 38   | 2100         | 26  | 490          | 8   | 1061         | 18.33  | 0.49  | 3.22   | 24.87  |
| Fc  | 1 | (untitled) | A | 588  | 2263         | 74  | 1433         | 41  | 119          | 2.93   | 3.04  | 9.80   | 22.42  |
|     | 2 | (untitled) | A | 493  | 2263         | 74  | 1432         | 34  | 161          | 2.65   | 4.86  | 15.96  | 21.69  |
|     | 3 | (untitled) | A | 700  | 2263         | 74  | 1433         | 49  | 84           | 3.91   | 2.06  | 6.57   | 23.80  |
| Ff  | 1 | (untitled) |   | 784  | 1900         | 120 | 1900         | 41  | 118          | 0.66   | 0.14  | 0.30   | 33.75  |
|     | 2 | (untitled) |   | 38   | 1900         | 120 | 1900         | 2   | 4400         | 0.02   | 0.00  | 0.00   | 33.07  |
| G   | 1 | (untitled) | F | 242  | 2050         | 34  | 600          | 40  | 123          | 11.45  | 3.69  | 13.67  | 27.43  |
|     | 2 | (untitled) | F | 221  | 2050         | 34  | 603          | 37  | 145          | 11.97  | 4.76  | 18.02  | 23.36  |
| Gf  | 1 | (untitled) |   | 242  | 2050         | 120 | 2050         | 12  | 662          | 0.12   | 0.01  | 0.11   | 3.15   |
|     | 2 | (untitled) |   | 212  | 2050         | 120 | 2050         | 10  | 770          | 0.10   | 0.01  | 0.09   | 3.11   |
| xA  | 1 | (untitled) |   | 909  | 2263         | 120 | 1938         | 47  | 92           | 3.18   | 5.15  | 12.89  | 20.40  |
|     | 2 | (untitled) |   | 494  | 2263         | 120 | 1867         | 26  | 240          | 6.90   | 7.12  | 17.79  | 24.15  |
| xB  | 1 | (untitled) |   | 1011 | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 5.79   |
| xC  | 1 | (untitled) |   | 469  | 1900         | 120 | 1438         | 33  | 176          | 3.88   | 4.82  | 23.97  | 12.55  |
|     | 2 | (untitled) |   | 346  | 1900         | 120 | 1389         | 25  | 261          | 4.56   | 4.71  | 23.35  | 13.26  |
| xD  | 1 | (untitled) |   | 688  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 9.11   |
|     | 2 | (untitled) |   | 467  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 9.16   |
| xE  | 1 | (untitled) |   | 412  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.04  |
|     | 2 | (untitled) |   | 355  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.04  |
| xF  | 1 | (untitled) |   | 458  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.76  |
| Cc1 | 1 | (untitled) | E | 352  | 2050         | 58  | 1025         | 34  | 162          | 12.20  | 2.88  | 17.28  | 18.67  |
| E1  | 1 | (untitled) | G | 272  | 2050         | 58  | 1025         | 27  | 239          | 9.29   | 2.52  | 18.08  | 15.29  |
|     | 2 | (untitled) | G | 544  | 2200         | 58  | 1100         | 49  | 82           | 11.57  | 5.48  | 39.42  | 17.57  |

|      |   |            |   |      |              |     |              |     |              |         |        |         |         |
|------|---|------------|---|------|--------------|-----|--------------|-----|--------------|---------|--------|---------|---------|
| Gf1  | 1 | (untitled) |   | 9    | 705          | 120 | 705          | 1   | 6803         | 0.03    | 0.00   | 0.00    | 5.77    |
| Cc2  | 2 | (untitled) | D | 378  | 2150         | 60  | 1102         | 34  | 163          | 10.58   | 3.81   | 23.95   | 21.00   |
|      | 3 | (untitled) | D | 131  | 2050         | 60  | 1059         | 12  | 629          | 5.58    | 1.50   | 9.49    | 16.51   |
|      | 4 | (untitled) | D | 357  | 2150         | 60  | 1105         | 32  | 179          | 19.64   | 6.30   | 40.08   | 25.76   |
|      | 5 | (untitled) | D | 215  | 2050         | 60  | 215          | 100 | -10          | 327.59  | 21.09  | 134.00  | 333.98  |
|      | 6 | (untitled) | D | 0    | 2050         | 60  | 1059         | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 0.00    |
| E2   | 3 | (untitled) | H | 242  | 2150         | 62  | 1142         | 21  | 325          | 7.84    | 2.35   | 25.33   | 11.84   |
|      | 4 | (untitled) | H | 212  | 2050         | 62  | 1093         | 19  | 364          | 7.70    | 2.34   | 24.79   | 11.77   |
| TC5  | 2 | (untitled) | A | 679  | 2263         | 95  | 1829         | 37  | 142          | 3.04    | 3.01   | 75.11   | 5.81    |
|      | 3 | (untitled) | A | 498  | 2263         | 95  | 1829         | 27  | 230          | 4.20    | 2.95   | 73.67   | 6.96    |
|      | 4 | (untitled) | C | 0    | 1800         | 7   | 120          | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 0.00    |
| TC9  | 1 | (untitled) | B | 469  | 1925         | 84  | 1396         | 34  | 168          | 6.65    | 5.19   | 32.54   | 17.66   |
|      | 2 | (untitled) | B | 301  | 1966         | 84  | 1425         | 21  | 326          | 3.03    | 1.48   | 9.21    | 14.09   |
|      | 3 | (untitled) | B | 259  | 1947         | 84  | 260          | 100 | -10          | 295.73  | 23.43  | 145.37  | 306.86  |
| TC35 | 1 | (untitled) | A | 249  | 1900         | 95  | 1536         | 16  | 455          | 3.21    | 1.46   | 34.87   | 6.11    |
| TC36 | 1 | (untitled) |   | 195  | 1800         | 120 | 1800         | 11  | 731          | 0.12    | 0.01   | 0.15    | 3.15    |
| TC37 | 1 | (untitled) | J | 34   | 1850         | 103 | 1603         | 2   | 4144         | 1.16    | 0.15   | 1.96    | 4.35    |
| TC38 | 1 | (untitled) |   | 34   | 500          | 120 | 500          | 7   | 1224         | 1.36    | 2.42   | 65.21   | 2.90    |
| TC39 | 2 | (untitled) |   | 679  | 2263         | 120 | 2263         | 30  | 200          | 0.34    | 0.06   | 1.05    | 2.88    |
|      | 3 | (untitled) |   | 498  | 2263         | 120 | 2263         | 22  | 309          | 0.22    | 0.03   | 0.54    | 2.62    |
| TC40 | 2 | (untitled) |   | 713  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 4.23    |
|      | 3 | (untitled) |   | 498  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 4.02    |
| TC41 | 1 | (untitled) | D | 161  | 1850         | 14  | 231          | 70  | 29           | 67.44   | 5.68   | 59.78   | 71.38   |
| TC42 | 1 | (untitled) | E | 0    | 0            | 0   | 0            | 0   | -100         | 0.00    | 0.00   | 0.00    | 0.00    |
| TC43 | 1 | (untitled) |   | 0    | 1800         | 120 | 1800         | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 0.00    |
| 47   | 1 | (untitled) |   | 815  | 1300         | 120 | 1300         | 63  | 44           | 2.32    | 0.52   | 2.26    | 18.35   |
| 48   | 1 | (untitled) |   | 1449 | 1965         | 120 | 1208         | 120 | -25          | 314.69  | 142.76 | 1489.13 | 321.30  |
| 49   | 1 | (untitled) |   | 581  | 1900         | 120 | 1900         | 31  | 194          | 0.42    | 0.07   | 1.47    | 3.57    |
|      | 2 | (untitled) |   | 581  | 1900         | 120 | 449          | 129 | -30          | 438.03  | 82.50  | 1807.55 | 441.18  |
| 50   | 1 | (untitled) |   | 1776 | 1900         | 120 | 422          | 421 | -79          | 1375.13 | 690.73 | 8249.21 | 1380.91 |
| 51   | 1 | (untitled) |   | 822  | 1900         | 120 | 1900         | 43  | 108          | 0.72    | 0.16   | 2.53    | 5.22    |
| 52   | 1 |            | A | 234  | 1800         | 14  | 240          | 97  | -8           | 297.48  | 23.74  | 78.90   | 318.24  |
|      | 2 |            | A | 130  | 1800         | 14  | 240          | 54  | 66           | 46.92   | 2.92   | 9.69    | 67.70   |

|    |   |  |  |     |      |     |      |    |      |      |      |      |      |
|----|---|--|--|-----|------|-----|------|----|------|------|------|------|------|
| 53 | 1 |  |  | 229 | 1800 | 120 | 1800 | 13 | 607  | 0.15 | 0.01 | 0.12 | 5.42 |
|    | 2 |  |  | 130 | 1800 | 120 | 1800 | 7  | 1147 | 0.08 | 0.50 | 6.87 | 5.15 |

## Data Entry - Stage Start and End

### Resultant Stage

| Controller Stream | Resultant Stage | Is base stage | Library Stage ID | Phases in this stage | Stage start (s) | Stage end (s) | Stage duration (s) | User stage minimum (s) | Stage minimum (s) |
|-------------------|-----------------|---------------|------------------|----------------------|-----------------|---------------|--------------------|------------------------|-------------------|
| 769-1             | 1               | ✓             | 1                | A                    | 38              | 69            | 31                 | 1                      | 7                 |
|                   | 2               | ✓             | 2                | B                    | 76              | 93            | 17                 | 1                      | 7                 |
|                   | 3               |               | 1                | A                    | 98              | 9             | 31                 | 1                      | 7                 |
|                   | 4               |               | 2                | B                    | 16              | 33            | 17                 | 1                      | 7                 |
| 769-2             | 1               | ✓             | 4                | D,E,H,I              | 87              | 111           | 24                 | 1                      | 3                 |
|                   | 2               | ✓             | 5                | F,G,J,K              | 2               | 13            | 11                 | 1                      | 8                 |
|                   | 3               |               | 4                | D,E,H,I              | 27              | 51            | 24                 | 1                      | 3                 |
|                   | 4               |               | 5                | F,G,J,K              | 62              | 73            | 11                 | 1                      | 8                 |
| 770-1             | 1               | ✓             | 1                | A,C                  | 81              | 118           | 37                 | 1                      | 5                 |
|                   | 2               | ✓             | 2                | B                    | 5               | 16            | 11                 | 1                      | 7                 |
|                   | 3               |               | 1                | A,C                  | 21              | 58            | 37                 | 1                      | 5                 |
|                   | 4               |               | 2                | B                    | 65              | 76            | 11                 | 1                      | 7                 |
| 770-2             | 1               | ✓             | 4                | D                    | 23              | 6             | 103                | 1                      | 7                 |
|                   | 2               | ✓             | 5                | E                    | 11              | 16            | 5                  | 1                      | 5                 |
| 770-3             | 1               | ✓             | 4                | A                    | 18              | 25            | 7                  | 1                      | 7                 |
|                   | 2               | ✓             | 7                | F,I,J                | 30              | 33            | 3                  | 1                      | 3                 |
|                   | 3               | ✓             | 9                | G,H                  | 44              | 73            | 29                 | 1                      | 4                 |
|                   | 4               |               | 4                | A                    | 78              | 85            | 7                  | 1                      | 7                 |
|                   | 5               |               | 7                | F,I,J                | 90              | 93            | 3                  | 1                      | 3                 |
|                   | 6               |               | 9                | G,H                  | 104             | 13            | 29                 | 1                      | 4                 |
| 770-4             | 1               | ✓             | 11               | L                    | 96              | 75            | 99                 | 1                      | 7                 |
|                   | 2               | ✓             | 12               | M                    | 80              | 89            | 9                  | 1                      | 6                 |
| 771-1             | 1               | ✓             | 1                | A,C                  | 43              | 74            | 31                 | 1                      | 9                 |
|                   | 2               | ✓             | 3                | B                    | 85              | 98            | 13                 | 1                      | 7                 |
|                   | 3               |               | 1                | A,C                  | 103             | 14            | 31                 | 1                      | 9                 |
|                   | 4               |               | 3                | B                    | 25              | 38            | 13                 | 1                      | 7                 |
| 771-2             | 1               | ✓             | 5                | D                    | 58              | 92            | 34                 | 1                      | 7                 |
|                   | 2               | ✓             | 6                | E                    | 97              | 113           | 16                 | 1                      | 7                 |
|                   | 3               |               | 5                | D                    | 118             | 32            | 34                 | 1                      | 7                 |
|                   | 4               |               | 6                | E                    | 37              | 53            | 16                 | 1                      | 7                 |
| TC777-1           | 1               | ✓             | 1                | A,B,F                | 84              | 47            | 83                 | 1                      | 6                 |
|                   | 2               | ✓             | 2                | A,C,F,G              | 52              | 59            | 7                  | 1                      | 7                 |
|                   | 3               | ✓             | 5                | D,H,I                | 66              | 78            | 12                 | 1                      | 6                 |
| TC777-2           | 1               | ✓             | 1                | J                    | 58              | 41            | 103                | 1                      | 7                 |
|                   | 2               | ✓             | 2                | K                    | 46              | 53            | 7                  | 1                      | 5                 |

## Data Entry - Phase

### Phase

| Controller Stream | Phase | Phase | Street minimum green (s) | Maximum green (s) | Relative start displacement (s) | Relative end displacement (s) | Type    |
|-------------------|-------|-------|--------------------------|-------------------|---------------------------------|-------------------------------|---------|
| 769-1             | A     | A     | 7                        | 300               | 0                               | 0                             | Traffic |
|                   | B     | B     | 7                        | 300               | 0                               | 0                             | Traffic |

|         |   |   |    |     |   |   |            |
|---------|---|---|----|-----|---|---|------------|
|         | C | C | 7  | 300 | 0 | 0 | Pedestrian |
| 769-2   | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 7  | 300 | 0 | 0 | Traffic    |
|         | F | F | 4  | 300 | 0 | 0 | Traffic    |
|         | G | G | 4  | 300 | 0 | 0 | Traffic    |
|         | H | H | 5  | 300 | 0 | 0 | Pedestrian |
|         | I | I | 7  | 300 | 0 | 0 | Pedestrian |
|         | J | J | 10 | 300 | 0 | 0 | Pedestrian |
|         | K | K | 5  | 300 | 0 | 0 | Pedestrian |
| 770-1   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | B | B | 7  | 300 | 0 | 0 | Traffic    |
|         | C | C | 5  | 300 | 0 | 0 | Pedestrian |
| 770-2   | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 5  | 300 | 0 | 0 | Pedestrian |
| 770-3   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | F | F | 7  | 300 | 0 | 0 | Traffic    |
|         | G | G | 4  | 300 | 0 | 0 | Traffic    |
|         | H | H | 4  | 300 | 0 | 0 | Traffic    |
|         | I | I | 5  | 300 | 0 | 0 | Pedestrian |
|         | J | J | 5  | 300 | 0 | 0 | Pedestrian |
|         | K | K | 10 | 300 | 0 | 0 | Pedestrian |
| 770-4   | L | L | 7  | 300 | 0 | 0 | Traffic    |
|         | M | M | 6  | 300 | 0 | 0 | Pedestrian |
| 771-1   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | B | B | 7  | 300 | 0 | 0 | Traffic    |
|         | C | C | 9  | 300 | 0 | 0 | Pedestrian |
| 771-2   | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 7  | 300 | 0 | 0 | Traffic    |
| TC777-1 | A | A | 7  | 300 | 0 | 1 | Traffic    |
|         | B | B | 7  | 300 | 0 | 2 | Traffic    |
|         | C | C | 7  | 300 | 0 | 0 | Traffic    |
|         | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 7  | 300 | 0 | 0 | Traffic    |
|         | F | F | 5  | 300 | 0 | 0 | Pedestrian |
|         | G | G | 7  | 300 | 0 | 0 | Pedestrian |
|         | H | H | 6  | 300 | 0 | 0 | Pedestrian |
|         | I | I | 5  | 300 | 0 | 0 | Pedestrian |
| TC777-2 | J | J | 7  | 300 | 0 | 0 | Traffic    |
|         | K | K | 5  | 300 | 0 | 0 | Pedestrian |

## Data Entry - Traffic Stream

### Traffic Stream

| Arm | Traffic Stream | Auto length | Length (m) | Traffic model | Max queue storage (PCU) | Traffic type | Has Saturation Flow | Is signal controlled | Is give way | Saturation flow source | Saturation flow (PCU/hr) | Delay weighting multiplier (%) | Stop weighting multiplier (%) |
|-----|----------------|-------------|------------|---------------|-------------------------|--------------|---------------------|----------------------|-------------|------------------------|--------------------------|--------------------------------|-------------------------------|
| A   | 1              | ✓           | 74.35      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 2              | ✓           | 76.69      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 3              | ✓           | 78.40      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 4              | ✓           | 80.11      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |

|     |   |   |        |     |      |        |   |   |  |                  |      |     |     |
|-----|---|---|--------|-----|------|--------|---|---|--|------------------|------|-----|-----|
| Ac  | 1 | ✓ | 95.80  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 2 | ✓ | 92.34  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 50  |
|     | 3 | ✓ | 87.95  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
| Acf | 1 | ✓ | 69.59  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 2 | ✓ | 70.42  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
| Af  | 1 | ✓ | 53.54  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 53.19  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 3 | ✓ | 53.01  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
| B   | 1 | ✓ | 94.67  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 2 | ✓ | 97.18  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2150 | 20  | 0   |
|     | 3 | ✓ | 99.69  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 4 | ✓ | 102.42 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Bc  | 1 | ✓ | 132.85 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 2 | ✓ | 131.47 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 3 | ✓ | 130.10 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
| Bcf | 1 | ✓ | 62.77  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 2 | ✓ | 62.62  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 3 | ✓ | 62.46  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 62.38  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
| Bf  | 1 | ✓ | 227.81 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
|     | 2 | ✓ | 228.44 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
| C   | 1 | ✓ | 121.13 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 2 | ✓ | 122.73 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2200 | 20  | 0   |
|     | 3 | ✓ | 124.35 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Cf  | 1 | ✓ | 144.60 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
|     | 2 | ✓ | 145.86 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
| D   | 1 |   | 55.00  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 2 |   | 55.00  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 1850 | 20  | 0   |
|     | 3 | ✓ | 52.87  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 20  | 0   |
|     | 4 | ✓ | 55.42  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 20  | 0   |
| Dc  | 1 | ✓ | 50.91  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 2 | ✓ | 48.96  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |

|     |   |   |        |                |      |        |   |   |  |                  |      |     |     |
|-----|---|---|--------|----------------|------|--------|---|---|--|------------------|------|-----|-----|
|     | 3 | ✓ | 47.02  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 4 | ✓ | 45.07  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
| Dcf | 1 | ✓ | 65.43  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 65.28  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 3 | ✓ | 65.54  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 4 | ✓ | 67.69  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 5 | ✓ | 66.13  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 6 | ✓ | 66.17  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
| Df  | 1 |   | 200.00 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 |   | 200.00 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 2250 | 100 | 100 |
| Dxp | 1 | ✓ | 45.75  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 48.11  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
| Ec  | 1 | ✓ | 50.09  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2150 | 100 | 500 |
|     | 2 | ✓ | 48.43  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 3 | ✓ | 46.77  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 4 | ✓ | 45.11  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 100 | 500 |
| Ecf | 1 | ✓ | 45.94  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 2 | ✓ | 46.37  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 3 | ✓ | 46.95  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 47.51  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2300 | 100 | 100 |
|     | 5 | ✓ | 48.55  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2300 | 100 | 100 |
| Ef  | 1 | ✓ | 127.54 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 1900 | 100 | 100 |
|     | 2 | ✓ | 127.54 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| Exp | 1 | ✓ | 51.83  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 53.71  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
| F   | 1 | ✓ | 85.13  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 2 | ✓ | 85.72  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 3 | ✓ | 87.25  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
| Fc  | 1 | ✓ | 178.68 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 2 | ✓ | 175.19 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 3 | ✓ | 180.28 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
| Ff  | 1 | ✓ | 275.73 | CTM            | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |

|     |   |   |        |                |      |        |   |   |   |                  |      |     |     |
|-----|---|---|--------|----------------|------|--------|---|---|---|------------------|------|-----|-----|
|     | 2 | ✓ | 275.39 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
| G   | 1 | ✓ | 155.36 | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|     | 2 | ✓ | 151.80 | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
| Gf  | 1 | ✓ | 40.48  | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 40.06  | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2050 | 100 | 100 |
| xA  | 1 | ✓ | 229.66 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
|     | 2 | ✓ | 229.97 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
| xB  | 1 | ✓ | 77.15  | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xC  | 1 | ✓ | 115.60 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 | ✓ | 115.98 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
| xD  | 1 | ✓ | 121.44 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|     | 2 | ✓ | 122.12 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xE  | 1 | ✓ | 173.89 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|     | 2 | ✓ | 173.83 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xF  | 1 | ✓ | 158.35 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| Cc1 | 1 | ✓ | 95.84  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 100 |
| E1  | 1 |   | 80.00  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 20  | 0   |
|     | 2 |   | 80.00  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2200 | 20  | 0   |
| Gf1 | 1 | ✓ | 47.81  | NetworkDefault | 0.00 | Normal |   |   | ✓ |                  |      | 100 | 100 |
| Cc2 | 2 | ✓ | 91.52  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 100 | 500 |
|     | 3 | ✓ | 91.11  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|     | 4 | ✓ | 90.39  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 100 | 500 |
|     | 5 | ✓ | 90.48  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|     | 6 | ✓ | 88.08  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
| E2  | 3 | ✓ | 53.28  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 20  | 0   |
|     | 4 | ✓ | 54.33  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 20  | 0   |
| TC5 | 2 | ✓ | 23.03  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 2263 | 100 | 100 |
|     | 3 | ✓ | 23.02  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 24.43  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1800 | 100 | 100 |
| TC9 | 1 | ✓ | 91.71  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1925 | 100 | 100 |
|     | 2 | ✓ | 92.21  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1966 | 100 | 100 |
|     | 3 | ✓ | 92.69  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1947 | 100 | 100 |

|      |   |   |        |                |      |        |   |   |   |                  |      |     |     |
|------|---|---|--------|----------------|------|--------|---|---|---|------------------|------|-----|-----|
| TC35 | 1 | ✓ | 24.16  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1900 | 100 | 100 |
| TC36 | 1 | ✓ | 25.22  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1800 | 100 | 100 |
| TC37 | 1 | ✓ | 44.32  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1850 | 100 | 100 |
| TC38 | 1 | ✓ | 21.32  | CTM            | 0.00 | Normal | ✓ |   | ✓ | Directly entered | 1850 | 100 | 100 |
| TC39 | 2 | ✓ | 35.24  | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
|      | 3 | ✓ | 33.28  | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
| TC40 | 2 | ✓ | 58.74  | PDM            | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|      | 3 | ✓ | 55.82  | PDM            | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| TC41 | 1 | ✓ | 54.63  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1850 | 100 | 100 |
| TC42 | 1 | ✓ | 23.35  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1771 | 100 | 100 |
| TC43 | 1 | ✓ | 51.77  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1800 | 100 | 100 |
| 47   | 1 | ✓ | 133.63 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 1300 | 100 | 100 |
| 48   | 1 | ✓ | 55.12  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1965 | 100 | 100 |
| 49   | 1 | ✓ | 26.24  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Directly entered | 1900 | 100 | 100 |
|      | 2 | ✓ | 26.24  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Directly entered | 1900 | 100 | 100 |
| 50   | 1 | ✓ | 48.15  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
| 51   | 1 | ✓ | 37.47  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
| 52   | 1 | ✓ | 173.00 | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1800 | 100 | 500 |
|      | 2 | ✓ | 173.18 | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1800 | 100 | 500 |
| 53   | 1 | ✓ | 43.95  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1800 | 100 | 100 |
|      | 2 | ✓ | 42.23  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1800 | 100 | 100 |

## Data entry - Link

## Results - Pedestrian

### Pedestrian Crossings: Pedestrian summary

| Time Segment | Pedestrian crossing | Side | Calculated Flow Entering (Ped/hr) | Degree of saturation (%) | Actual green (s (per cycle)) | Mean Delay Per Ped (s) | Mean max queue (Ped) |
|--------------|---------------------|------|-----------------------------------|--------------------------|------------------------------|------------------------|----------------------|
| 07:30-08:30  | 1                   | 1    | 0                                 | 0                        | 5                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 5                            | 0.00                   | 0.00                 |
|              | 2                   | 1    | 0                                 | 0                        | 74                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 74                           | 0.00                   | 0.00                 |
|              | 3                   | 1    | 0                                 | 0                        | 9                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 9                            | 0.00                   | 0.00                 |
|              | 4                   | 1    | 0                                 | 0                        | 20                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 20                           | 0.00                   | 0.00                 |
|              | 5                   | 1    | 0                                 | 0                        | 24                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 24                           | 0.00                   | 0.00                 |

|    |   |   |   |    |      |      |
|----|---|---|---|----|------|------|
| 6  | 1 | 0 | 0 | 0  | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 0  | 0.00 | 0.00 |
| 7  | 1 | 0 | 0 | 62 | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 62 | 0.00 | 0.00 |
| 8  | 1 | 0 | 0 | 0  | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 0  | 0.00 | 0.00 |
| 9  | 1 | 0 | 0 | 26 | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 26 | 0.00 | 0.00 |
| 10 | 1 | 0 | 0 | 38 | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 38 | 0.00 | 0.00 |
| 11 | 1 | 0 | 0 | 58 | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 58 | 0.00 | 0.00 |
| 12 | 1 | 0 | 0 | 56 | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 56 | 0.00 | 0.00 |
| 13 | 1 | 0 | 0 | 14 | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 14 | 0.00 | 0.00 |
| 14 | 1 | 0 | 0 | 96 | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 96 | 0.00 | 0.00 |
| 15 | 1 | 0 | 0 | 7  | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 7  | 0.00 | 0.00 |
| 16 | 1 | 0 | 0 | 12 | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 12 | 0.00 | 0.00 |
| 17 | 1 | 0 | 0 | 7  | 0.00 | 0.00 |
|    | 2 | 0 | 0 | 7  | 0.00 | 0.00 |

## Collections

### Point to Point Journey Time

Note: Auto Calculate disabled on this Local Matrix (Paths and Flow Allocation might not be up to date).

#### Average Journey Time (s) for Local Matrix: 1

|      | To  |        |        |        |        |        |        |        |     |
|------|-----|--------|--------|--------|--------|--------|--------|--------|-----|
|      | A28 | B28    | C28    | D28    | E28    | F28    | G28    | H28    |     |
| From | A28 | 0.0    | 1472.5 | 1457.8 | 1202.2 | 1741.0 | 3022.1 | 2435.9 | 0.0 |
|      | B28 | 528.0  | 0.0    | 546.4  | 1133.2 | 748.3  | 834.9  | 833.8  | 0.0 |
|      | C28 | 1525.1 | 1534.9 | 0.0    | 1982.2 | 1717.4 | 3008.4 | 2521.2 | 0.0 |
|      | D28 | 149.5  | 224.6  | 228.2  | 0.0    | 1289.0 | 94.3   | 101.6  | 0.0 |
|      | E28 | 83.9   | 89.3   | 122.1  | 43.2   | 0.0    | 82.3   | 89.3   | 0.0 |
|      | F28 | 123.5  | 192.1  | 183.6  | 1357.6 | 174.7  | 0.0    | 14.6   | 0.0 |
|      | G28 | 64.3   | 130.8  | 381.9  | 2258.4 | 2054.8 | 2055.4 | 0.0    | 0.0 |
|      | H28 | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0 |

#### Path Journey Time

| Path | From Location | To Location | Normal Calculated Flow (PCU/hr) | Normal journey time (s) | Normal journey dist (m) | Bus journeydist (m) | Tram journey dist (m) | Pedestrian journey dist (m) | Calculated Total Flow (PCU/hr) | Avg journey time (s) | Avg journey dist (m) |
|------|---------------|-------------|---------------------------------|-------------------------|-------------------------|---------------------|-----------------------|-----------------------------|--------------------------------|----------------------|----------------------|
| 32   | C28           | E28         | 159                             | 1717.44                 | 526.66                  | 0.00                | 0.00                  | 0.00                        | 159                            | 1717.44              | 526.66               |
| 36   | C28           | E28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 41   | E28           | A28         | 470                             | 83.91                   | 693.15                  | 0.00                | 0.00                  | 0.00                        | 470                            | 83.91                | 693.15               |
| 49   | C28           | D28         | 335                             | 1982.21                 | 509.82                  | 0.00                | 0.00                  | 0.00                        | 335                            | 1982.21              | 509.82               |
| 50   | E28           | D28         | 50                              | 43.19                   | 365.90                  | 0.00                | 0.00                  | 0.00                        | 50                             | 43.19                | 365.90               |
| 68   | E28           | G28         | 132                             | 89.59                   | 732.90                  | 0.00                | 0.00                  | 0.00                        | 132                            | 89.59                | 732.90               |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 92  | E28 | F28 | 36  | 82.27   | 640.05  | 0.00 | 0.00 | 0.00 | 36  | 82.27   | 640.05  |
| 100 | E28 | B28 | 212 | 86.26   | 623.35  | 0.00 | 0.00 | 0.00 | 212 | 86.26   | 623.35  |
| 102 | A28 | C28 | 309 | 1456.86 | 694.76  | 0.00 | 0.00 | 0.00 | 309 | 1456.86 | 694.76  |
| 103 | F28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 105 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 107 | A28 | B28 | 48  | 1472.45 | 716.08  | 0.00 | 0.00 | 0.00 | 48  | 1472.45 | 716.08  |
| 110 | E28 | G28 | 54  | 88.64   | 724.83  | 0.00 | 0.00 | 0.00 | 54  | 88.64   | 724.83  |
| 112 | F28 | G28 | 34  | 14.62   | 149.60  | 0.00 | 0.00 | 0.00 | 34  | 14.62   | 149.60  |
| 113 | F28 | A28 | 64  | 123.52  | 347.66  | 0.00 | 0.00 | 0.00 | 64  | 123.52  | 347.66  |
| 115 | B28 | C28 | 9   | 545.92  | 556.36  | 0.00 | 0.00 | 0.00 | 9   | 545.92  | 556.36  |
| 125 | H28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 130 | G28 | C28 | 208 | 559.76  | 769.88  | 0.00 | 0.00 | 0.00 | 208 | 559.76  | 769.88  |
| 137 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 138 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 140 | B28 | G28 | 271 | 842.44  | 1059.21 | 0.00 | 0.00 | 0.00 | 271 | 842.44  | 1059.21 |
| 141 | B28 | F28 | 36  | 834.88  | 966.36  | 0.00 | 0.00 | 0.00 | 36  | 834.88  | 966.36  |
| 142 | B28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 143 | E28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 144 | B28 | G28 | 200 | 822.15  | 1048.14 | 0.00 | 0.00 | 0.00 | 200 | 822.15  | 1048.14 |
| 145 | B28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 146 | B28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 147 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 148 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 149 | B28 | A28 | 35  | 528.00  | 1015.84 | 0.00 | 0.00 | 0.00 | 35  | 528.00  | 1015.84 |
| 150 | E28 | B28 | 242 | 91.94   | 625.89  | 0.00 | 0.00 | 0.00 | 242 | 91.94   | 625.89  |
| 151 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 152 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 153 | F28 | B28 | 13  | 192.08  | 750.62  | 0.00 | 0.00 | 0.00 | 13  | 192.08  | 750.62  |
| 154 | E28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 155 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 156 | G28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 157 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 158 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 159 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 160 | B28 | D28 | 256 | 1133.24 | 693.92  | 0.00 | 0.00 | 0.00 | 256 | 1133.24 | 693.92  |
| 161 | B28 | E28 | 224 | 954.78  | 713.02  | 0.00 | 0.00 | 0.00 | 224 | 954.78  | 713.02  |
| 162 | B28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 163 | B28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 164 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 165 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 166 | B28 | C28 | 95  | 546.42  | 553.47  | 0.00 | 0.00 | 0.00 | 95  | 546.42  | 553.47  |
| 167 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 168 | G28 | A28 | 318 | 64.25   | 385.76  | 0.00 | 0.00 | 0.00 | 318 | 64.25   | 385.76  |
| 169 | G28 | B28 | 10  | 129.89  | 788.72  | 0.00 | 0.00 | 0.00 | 10  | 129.89  | 788.72  |
| 170 | G28 | B28 | 113 | 130.91  | 789.10  | 0.00 | 0.00 | 0.00 | 113 | 130.91  | 789.10  |
| 171 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 172 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 173 | F28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 174 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 175 | A28 | D28 | 1   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 1   | 0.00    | 0.00    |
| 176 | H28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 177 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 178 | B28 | E28 | 210 | 659.10  | 710.57  | 0.00 | 0.00 | 0.00 | 210 | 659.10  | 710.57  |
| 179 | B28 | E28 | 113 | 505.81  | 711.82  | 0.00 | 0.00 | 0.00 | 113 | 505.81  | 711.82  |
| 180 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 181 | F28 | C28 | 17  | 183.60  | 729.68  | 0.00 | 0.00 | 0.00 | 17  | 183.60  | 729.68  |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 182 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 183 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 184 | C28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 185 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 186 | A28 | C28 | 66  | 1462.03 | 699.04  | 0.00 | 0.00 | 0.00 | 66  | 1462.03 | 699.04  |
| 187 | G28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 188 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 189 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 190 | G28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 191 | D28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 192 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 193 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 194 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 195 | D28 | G28 | 219 | 101.62  | 744.99  | 0.00 | 0.00 | 0.00 | 219 | 101.62  | 744.99  |
| 196 | D28 | F28 | 103 | 94.30   | 652.14  | 0.00 | 0.00 | 0.00 | 103 | 94.30   | 652.14  |
| 197 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 198 | D28 | A28 | 3   | 149.48  | 704.24  | 0.00 | 0.00 | 0.00 | 3   | 149.48  | 704.24  |
| 199 | D28 | B28 | 204 | 224.63  | 1101.39 | 0.00 | 0.00 | 0.00 | 204 | 224.63  | 1101.39 |
| 200 | D28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 201 | F28 | E28 | 7   | 194.97  | 884.60  | 0.00 | 0.00 | 0.00 | 7   | 194.97  | 884.60  |
| 202 | F28 | D28 | 4   | 682.98  | 867.96  | 0.00 | 0.00 | 0.00 | 4   | 682.98  | 867.96  |
| 203 | F28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 204 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 205 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 206 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 207 | F28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 208 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 209 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 210 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 211 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 212 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 213 | H28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 214 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 215 | F28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 216 | A28 | G28 | 547 | 2164.89 | 1111.71 | 0.00 | 0.00 | 0.00 | 547 | 2164.89 | 1111.71 |
| 217 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 218 | A28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 219 | A28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 220 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 221 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 222 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 223 | A28 | G28 | 250 | 3029.57 | 1118.58 | 0.00 | 0.00 | 0.00 | 250 | 3029.57 | 1118.58 |
| 224 | A28 | F28 | 122 | 3022.07 | 1025.73 | 0.00 | 0.00 | 0.00 | 122 | 3022.07 | 1025.73 |
| 225 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 226 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 235 | E28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 236 | E28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 246 | E28 | C28 | 74  | 122.14  | 1066.04 | 0.00 | 0.00 | 0.00 | 74  | 122.14  | 1066.04 |
| 248 | D28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 249 | H28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 252 | F28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 283 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 284 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 285 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 286 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 307 | G28 | C28 | 112 | 116.48  | 769.88  | 0.00 | 0.00 | 0.00 | 112 | 116.48  | 769.88  |

|     |     |     |     |         |        |      |      |      |     |         |        |
|-----|-----|-----|-----|---------|--------|------|------|------|-----|---------|--------|
| 317 | C28 | G28 | 602 | 2149.71 | 864.44 | 0.00 | 0.00 | 0.00 | 602 | 2149.71 | 864.44 |
| 318 | C28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 319 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 320 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 322 | C28 | G28 | 441 | 3015.72 | 875.73 | 0.00 | 0.00 | 0.00 | 441 | 3015.72 | 875.73 |
| 323 | C28 | F28 | 42  | 3008.39 | 782.88 | 0.00 | 0.00 | 0.00 | 42  | 3008.39 | 782.88 |
| 324 | C28 | G28 | 12  | 3016.18 | 871.15 | 0.00 | 0.00 | 0.00 | 12  | 3016.18 | 871.15 |
| 325 | C28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 330 | C28 | A28 | 567 | 1525.06 | 834.69 | 0.00 | 0.00 | 0.00 | 567 | 1525.06 | 834.69 |
| 331 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 332 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 334 | C28 | C28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 342 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 343 | C28 | B28 | 41  | 1534.87 | 753.20 | 0.00 | 0.00 | 0.00 | 41  | 1534.87 | 753.20 |
| 364 | B28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 379 | B28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 380 | B28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 381 | B28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 382 | G28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 383 | G28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 384 | A28 | A28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 385 | A28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 386 | A28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 387 | A28 | A28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 388 | A28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 389 | E28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 390 | E28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 391 | D28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 392 | D28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 393 | D28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 394 | D28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 395 | H28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 396 | H28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 397 | F28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 398 | F28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 399 | F28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 400 | F28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 401 | G28 | F28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 402 | G28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 403 | G28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 404 | A28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 405 | A28 | F28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 406 | A28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 407 | D28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 408 | H28 | F28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 409 | H28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 410 | H28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 411 | F28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 412 | F28 | F28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 413 | F28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 414 | F28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 415 | A28 | D28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 417 | A28 | E28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 418 | G28 | C28 | 28  | 120.79  | 767.78 | 0.00 | 0.00 | 0.00 | 28  | 120.79  | 767.78 |
| 423 | C28 | C28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 424 | C28 | C28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 425 | E28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 428 | E28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 431 | D28 | C28 | 255 | 228.18  | 1080.45 | 0.00 | 0.00 | 0.00 | 255 | 228.18  | 1080.45 |
| 439 | G28 | E28 | 37  | 574.17  | 923.21  | 0.00 | 0.00 | 0.00 | 37  | 574.17  | 923.21  |
| 440 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 441 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 442 | E28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 443 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 444 | E28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 445 | D28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 446 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 447 | D28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 448 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 449 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 450 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 451 | G28 | D28 | 52  | 2546.06 | 906.47  | 0.00 | 0.00 | 0.00 | 52  | 2546.06 | 906.47  |
| 452 | G28 | E28 | 162 | 2389.11 | 925.57  | 0.00 | 0.00 | 0.00 | 162 | 2389.11 | 925.57  |
| 453 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 454 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 455 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 456 | E28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 457 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 458 | D28 | E28 | 38  | 1289.01 | 1232.00 | 0.00 | 0.00 | 0.00 | 38  | 1289.01 | 1232.00 |
| 459 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 460 | F28 | E28 | 1   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 1   | 0.00    | 0.00    |
| 461 | A28 | E28 | 62  | 3330.56 | 857.33  | 0.00 | 0.00 | 0.00 | 62  | 3330.56 | 857.33  |
| 462 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 463 | A28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 464 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 465 | A28 | E28 | 371 | 1473.95 | 852.36  | 0.00 | 0.00 | 0.00 | 371 | 1473.95 | 852.36  |
| 466 | A28 | D28 | 1   | 1959.81 | 835.72  | 0.00 | 0.00 | 0.00 | 1   | 1959.81 | 835.72  |
| 467 | G28 | D28 | 62  | 2019.32 | 819.82  | 0.00 | 0.00 | 0.00 | 62  | 2019.32 | 819.82  |
| 468 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 469 | G28 | F28 | 60  | 2055.38 | 1093.97 | 0.00 | 0.00 | 0.00 | 60  | 2055.38 | 1093.97 |
| 470 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 471 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 472 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 473 | B28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 474 | C28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 475 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 476 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 477 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 478 | D28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 479 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 480 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 481 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 482 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 483 | H28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 484 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 485 | H28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 486 | F28 | D28 | 56  | 1413.26 | 780.75  | 0.00 | 0.00 | 0.00 | 56  | 1413.26 | 780.75  |
| 487 | F28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |

## Final Prediction Table

## Traffic Stream Results

|      |                |            |              | SIGNALS           |       | FLOWS                             |                              | PERFORMANCE               |                                 |                          |                                | PER PCU         |                        |                        | QUEUES               | WEIGHTS                        |                               | PENALTIES                            | P.I.      |
|------|----------------|------------|--------------|-------------------|-------|-----------------------------------|------------------------------|---------------------------|---------------------------------|--------------------------|--------------------------------|-----------------|------------------------|------------------------|----------------------|--------------------------------|-------------------------------|--------------------------------------|-----------|
| Arm  | Traffic Stream | Name       | Traffic node | Controller stream | Phase | Calculated flow entering (PCU/hr) | Calculated sat flow (PCU/hr) | Actual greens (per cycle) | Wasted time total (s per cycle) | Degree of saturation (%) | Practical reserve capacity (%) | JourneyTime (s) | Mean Delay per Veh (s) | Mean stops per Veh (%) | Mean max queue (PCU) | Delay weighting multiplier (%) | Stop weighting multiplier (%) | Cost of traffic penalties (£ per hr) | P.I.      |
| A    | 1              | (untitled) | 6            | 771-2             | E     | 382                               | 2050                         | 32                        | 0.00                            | 66                       | 37                             | 26.14           | 20.56                  | 85.33                  | 7.66                 | 20                             | 0                             | 0.00                                 | 6.20      |
|      | 2              | (untitled) | 6            | 771-2             | E     | 181                               | 2050                         | 32                        | 0.00                            | 31                       | 189                            | 19.61           | 13.86                  | 63.33                  | 2.46                 | 20                             | 0                             | 0.00                                 | 1.98      |
|      | 3              | (untitled) | 6            | 771-2             | E     | 294                               | 2050                         | 32                        | 0.00                            | 51                       | 78                             | 26.27           | 20.39                  | 73.39                  | 4.90                 | 20                             | 0                             | 0.00                                 | 4.74      |
|      | 4              | (untitled) | 6            | 771-2             | E     | 315 <                             | 2050                         | 32                        | 15.69                           | 101                      | -11                            | 243.00          | 236.99                 | 248.10                 | 22.85+               | 20                             | 0                             | 0.00                                 | 58.86     |
| Ac   | 1              | (untitled) | 6            | 771-2             | D     | 629                               | 2263                         | 68                        | 18.00                           | 48                       | 89                             | 8.93            | 1.74                   | 17.47                  | 2.58                 | 100                            | 500                           | 0.00                                 | 21.97     |
|      | 2              | (untitled) | 6            | 771-2             | D     | 459                               | 2263                         | 68                        | 44.45                           | 36                       | 150                            | 29.41           | 19.91                  | 103.03                 | 8.58                 | 100                            | 50                            | 0.00                                 | 40.09     |
|      | 3              | (untitled) | 6            | 771-2             | D     | 112                               | 2263                         | 68                        | 32.22                           | 15                       | 488                            | 19.74           | 13.15                  | 45.67                  | 2.33                 | 100                            | 500                           | 0.00                                 | 14.02     |
| Ac f | 1              | (untitled) | 6            |                   |       | 1088                              | 2263                         | 120                       | 40.00                           | 48                       | 87                             | 5.96            | 0.74                   | 0.00                   | 0.22                 | 100                            | 100                           | 0.00                                 | 3.16      |
|      | 2              | (untitled) | 6            |                   |       | 112                               | 2263                         | 120                       | 76.00                           | 5                        | 1718                           | 7.28            | 0.04                   | 0.00                   | 0.00                 | 100                            | 100                           | 0.00                                 | 0.02      |
| Af   | 1              | (untitled) | 6            |                   |       | 563                               | 2050                         | 120                       | 18.00                           | 27                       | 228                            | 6.76            | 0.33                   | 0.00                   | 0.05                 | 100                            | 100                           | 0.00                                 | 0.74      |
|      | 2              | (untitled) | 6            |                   |       | 295                               | 2050                         | 120                       | 23.00                           | 14                       | 526                            | 6.53            | 0.15                   | 0.08                   | 0.01                 | 100                            | 100                           | 0.00                                 | 0.17      |
|      | 3              | (untitled) | 6            |                   |       | 316 <                             | 2050                         | 120                       | 101.57                          | 100                      | -10                            | 182.85          | 176.49                 | 170.46                 | 17.37+               | 100                            | 100                           | 0.00                                 | 226.61    |
| B    | 1              | (untitled) | 1            | 769-1             | B     | 87                                | 2050                         | 34                        | 12.00                           | 14                       | 534                            | 18.04           | 10.94                  | 77.05                  | 2.33                 | 20                             | 0                             | 0.00                                 | 0.75      |
|      | 2              | (untitled) | 1            | 769-1             | B     | 107                               | 2150                         | 34                        | 10.00                           | 17                       | 442                            | 18.44           | 11.15                  | 77.17                  | 2.34                 | 20                             | 0                             | 0.00                                 | 0.94      |
|      | 3              | (untitled) | 1            | 769-1             | B     | 111 <                             | 2100                         | 34                        | 29.63                           | 100                      | -10                            | 658.87          | 651.39                 | 314.24                 | 21.02+               | 20                             | 0                             | 0.00                                 | 57.24     |
|      | 4              | (untitled) | 1            | 769-1             | B     | 140                               | 2050                         | 34                        | 27.00                           | 23                       | 294                            | 37.02           | 24.73                  | 105.16                 | 2.37                 | 20                             | 0                             | 0.00                                 | 2.74      |
| Bc   | 1              | (untitled) | 1            | 769-1             | A     | 640                               | 2050                         | 62                        | 2.00                            | 59                       | 54                             | 32.20           | 20.24                  | 82.46                  | 12.01                | 100                            | 500                           | 0.00                                 | 109.92    |
|      | 2              | (untitled) | 1            | 769-1             | A     | 370                               | 2050                         | 62                        | 8.00                            | 34                       | 166                            | 13.38           | 1.55                   | 14.48                  | 2.02                 | 100                            | 500                           | 0.00                                 | 8.35      |
|      | 3              | (untitled) | 1            | 769-1             | A     | 351 <                             | 2050                         | 62                        | 44.53                           | 106                      | -15                            | 342.86          | 331.15                 | 268.59                 | 35.87+               | 100                            | 500                           | 13042.62                             | 130979.56 |
| Bc f | 1              | (untitled) | 1            |                   |       | 1011                              | 2263                         | 120                       | 34.00                           | 45                       | 101                            | 4.89            | 0.64                   | 0.00                   | 0.18                 | 100                            | 100                           | 0.00                                 | 2.56      |
|      | 2              | (untitled) | 1            |                   |       | 640                               | 2263                         | 120                       | 58.00                           | 28                       | 218                            | 5.02            | 0.31                   | 0.00                   | 0.06                 | 100                            | 100                           | 0.00                                 | 0.79      |
|      | 3              | (untitled) | 1            |                   |       | 370                               | 2263                         | 120                       | 48.00                           | 16                       | 450                            | 6.24            | 0.16                   | 0.00                   | 0.02                 | 100                            | 100                           | 0.00                                 | 0.23      |
|      | 4              | (untitled) | 1            |                   |       | 351 <                             | 2263                         | 120                       | 101.38                          | 100                      | -10                            | 175.36          | 169.05                 | 178.87                 | 19.21+               | 100                            | 100                           | 0.00                                 | 245.96    |
| Bf   | 1              | (untitled) | 1            |                   |       | 189                               | 1800                         | 120                       | 34.00                           | 11                       | 757                            | 27.45           | 0.12                   | 3.79                   | 0.01                 | 100                            | 100                           | 0.00                                 | 0.18      |
|      | 2              | (untitled) | 1            |                   |       | 233 <                             | 1800                         | 120                       | 103.21                          | 93                       | -3                             | 607.11          | 579.69                 | 381.14                 | 42.97+               | 100                            | 100                           | 0.00                                 | 545.42    |
| C    | 1              | (untitled) | 2            | 769-2             | G     | 87                                | 2100                         | 36                        | 32.00                           | 13                       | 590                            | 31.14           | 16.60                  | 100.25                 | 1.46                 | 20                             | 0                             | 0.00                                 | 1.14      |

|     |   |            |     |       |   |        |      |     |        |      |      |         |         |         |         |     |     |           |           |
|-----|---|------------|-----|-------|---|--------|------|-----|--------|------|------|---------|---------|---------|---------|-----|-----|-----------|-----------|
|     | 2 | (untitled) | 2   | 769-2 | G | 669 <  | 2200 | 36  | 0.00   | 96   | -6   | 128.32  | 113.60  | 212.17  | 27.63+  | 20  | 0   | 0.00      | 59.99     |
|     | 3 | (untitled) | 2   | 769-2 | G | 452    | 2050 | 36  | 10.00  | 70   | 29   | 47.72   | 32.80   | 110.16  | 8.32    | 20  | 0   | 0.00      | 11.69     |
| Cf  | 1 | (untitled) | 2   |       |   | 662 <  | 1965 | 120 | 79.58  | 100  | -10  | 169.15  | 151.80  | 271.75  | 37.02+  | 100 | 100 | 0.00      | 418.89    |
|     | 2 | (untitled) | 2   |       |   | 546    | 1965 | 120 | 72.85  | 47   | 92   | 24.59   | 7.09    | 59.79   | 6.09    | 100 | 100 | 0.00      | 19.36     |
| D   | 1 | (untitled) | 3   | 770-1 | B | 46     | 2050 | 22  | 18.00  | 11   | 707  | 34.39   | 30.27   | 68.18   | 0.52    | 20  | 0   | 0.00      | 1.09      |
|     | 2 | (untitled) | 3   | 770-1 | B | 46 <   | 1850 | 22  | 21.03  | 100  | -10  | 951.96  | 947.84  | 357.09  | 12.25+  | 20  | 0   | 0.00      | 34.25     |
|     | 3 | (untitled) | 3   | 770-1 | B | 135 <  | 2250 | 22  | 16.80  | 100  | -10  | 323.08  | 319.11  | 227.62  | 12.31+  | 20  | 0   | 0.00      | 33.99     |
|     | 4 | (untitled) | 3   | 770-1 | B | 136    | 2250 | 22  | 10.00  | 30   | 197  | 25.84   | 21.69   | 46.49   | 2.38    | 20  | 0   | 0.00      | 2.33      |
| Dc  | 1 | (untitled) | 3   | 770-1 | A | 397    | 2100 | 78  | 29.00  | 28   | 217  | 8.16    | 2.05    | 32.84   | 2.19    | 100 | 500 | 0.00      | 11.39     |
|     | 2 | (untitled) | 3   | 770-1 | A | 621 <  | 2100 | 78  | 44.70  | 101  | -11  | 110.20  | 104.32  | 140.61  | 20.15+  | 100 | 500 | 11716.326 | 117473.40 |
|     | 3 | (untitled) | 3   | 770-1 | A | 256    | 2100 | 78  | 63.69  | 52   | 74   | 39.47   | 33.83   | 110.02  | 4.66    | 100 | 500 | 0.00      | 51.81     |
|     | 4 | (untitled) | 3   | 770-1 | A | 196    | 2100 | 78  | 67.96  | 31   | 190  | 30.88   | 25.47   | 102.28  | 3.34    | 100 | 500 | 0.00      | 32.24     |
| Dcf | 1 | (untitled) | 3   |       |   | 457    | 2050 | 120 | 73.00  | 22   | 304  | 5.16    | 0.25    | 0.00    | 0.03    | 100 | 100 | 0.00      | 0.45      |
|     | 2 | (untitled) | 3   |       |   | 365    | 2100 | 120 | 75.00  | 17   | 417  | 5.08    | 0.18    | 0.00    | 0.02    | 100 | 100 | 0.00      | 0.26      |
|     | 3 | (untitled) | 3   |       |   | 397    | 2100 | 120 | 55.00  | 19   | 376  | 6.07    | 0.20    | 0.00    | 0.02    | 100 | 100 | 0.00      | 0.31      |
|     | 4 | (untitled) | 3   |       |   | 620 <  | 2100 | 120 | 84.50  | 100  | -10  | 108.63  | 102.47  | 152.92  | 21.33+  | 100 | 100 | 0.00      | 274.20    |
|     | 5 | (untitled) | 3   |       |   | 256    | 2100 | 120 | 92.00  | 12   | 638  | 5.08    | 0.12    | 0.00    | 0.01    | 100 | 100 | 0.00      | 0.12      |
|     | 6 | (untitled) | 3   |       |   | 196    | 2050 | 120 | 92.00  | 10   | 842  | 8.03    | 0.09    | 0.00    | 0.01    | 100 | 100 | 0.00      | 0.07      |
| Df  | 1 | (untitled) | 3-2 |       |   | 989 <  | 1900 | 120 | 114.22 | 1081 | -92  | 1659.60 | 1635.60 | 2258.74 | 451.82+ | 100 | 100 | 0.00      | 6406.48   |
|     | 2 | (untitled) | 3-2 |       |   | 1210 < | 2250 | 120 | 105.53 | 446  | -80  | 1425.38 | 1401.38 | 990.79  | 473.91+ | 100 | 100 | 0.00      | 6722.20   |
| Dxp | 1 | (untitled) | 3-2 | 770-2 | D | 688    | 2050 | 103 | 28.00  | 39   | 132  | 4.83    | 1.40    | 6.34    | 1.46    | 100 | 100 | 0.00      | 5.20      |
|     | 2 | (untitled) | 3-2 | 770-2 | D | 467    | 2050 | 103 | 46.00  | 26   | 242  | 4.09    | 0.48    | 2.67    | 3.50    | 100 | 100 | 0.00      | 1.28      |
| Ec  | 1 | (untitled) | 4   | 770-3 | F | 287 <  | 2150 | 14  | 0.00   | 100  | -10  | 178.63  | 174.87  | 205.99  | 15.01+  | 100 | 500 | 65196.40  | 65489.05  |
|     | 2 | (untitled) | 4   | 770-3 | F | 302 <  | 2263 | 14  | 0.00   | 100  | -10  | 173.55  | 169.92  | 189.26  | 15.17+  | 100 | 500 | 68591.11  | 68884.99  |
|     | 3 | (untitled) | 4   | 770-3 | F | 302 <  | 2263 | 14  | 0.00   | 100  | -10  | 173.42  | 169.92  | 189.26  | 15.17+  | 100 | 500 | 68591.11  | 68884.99  |
|     | 4 | (untitled) | 4   | 770-3 | F | 156    | 2250 | 14  | 6.00   | 52   | 73   | 27.88   | 22.47   | 112.52  | 2.89    | 100 | 500 | 0.00      | 24.88     |
| Ecf | 1 | (untitled) | 4   |       |   | 412    | 2100 | 120 | 63.04  | 20   | 359  | 3.66    | 0.21    | 0.24    | 2.34    | 100 | 100 | 0.00      | 0.37      |
|     | 2 | (untitled) | 4   |       |   | 649 <  | 2100 | 120 | 83.34  | 101  | -11  | 107.33  | 103.86  | 125.88  | 21.16+  | 100 | 100 | 0.00      | 291.58    |
|     | 3 | (untitled) | 4   |       |   | 302 <  | 2263 | 120 | 104.00 | 100  | -10  | 174.23  | 170.39  | 172.27  | 15.34+  | 100 | 100 | 0.00      | 217.94    |
|     | 4 | (untitled) | 4   |       |   | 302 <  | 2300 | 120 | 104.26 | 100  | -10  | 165.13  | 160.61  | 178.09  | 14.88+  | 100 | 100 | 0.00      | 203.70    |
|     | 5 | (untitled) | 4   |       |   | 166    | 2300 | 120 | 88.00  | 7    | 1151 | 5.50    | 0.06    | 0.00    | 0.00    | 100 | 100 | 0.00      | 0.04      |

|     |   |           |     |       |   |      |              |     |        |    |              |       |       |        |       |     |     |      |       |
|-----|---|-----------|-----|-------|---|------|--------------|-----|--------|----|--------------|-------|-------|--------|-------|-----|-----|------|-------|
| Ef  | 1 | (untiled) | 4   |       |   | 816  | 1900         | 120 | 0.00   | 43 | 110          | 16.02 | 0.71  | 0.00   | 0.16  | 100 | 100 | 0.00 | 2.29  |
|     | 2 | (untiled) | 4   |       |   | 454  | 1900         | 120 | 0.00   | 24 | 277          | 15.60 | 0.30  | 0.00   | 0.04  | 100 | 100 | 0.00 | 0.53  |
| Exp | 1 | (untiled) | 4-2 | 770-4 | L | 412  | 2050         | 99  | 50.00  | 24 | 273          | 7.16  | 3.27  | 34.73  | 4.91  | 100 | 100 | 0.00 | 9.90  |
|     | 2 | (untiled) | 4-2 | 770-4 | L | 355  | 2050         | 99  | 46.00  | 21 | 334          | 4.31  | 0.28  | 0.52   | 0.03  | 100 | 100 | 0.00 | 0.45  |
| F   | 1 | (untiled) | 5   | 771-1 | B | 322  | 2100         | 26  | 0.00   | 66 | 37           | 34.16 | 27.77 | 91.30  | 5.26  | 20  | 0   | 0.00 | 7.05  |
|     | 2 | (untiled) | 5   | 771-1 | B | 462  | 2100         | 26  | 0.00   | 94 | -5           | 70.84 | 64.41 | 143.12 | 12.33 | 20  | 0   | 0.00 | 23.48 |
|     | 3 | (untiled) | 5   | 771-1 | B | 38   | 2100         | 26  | 26.00  | 8  | 1061         | 24.87 | 18.33 | 77.18  | 0.49  | 20  | 0   | 0.00 | 0.55  |
| Fc  | 1 | (untiled) | 5   | 771-1 | A | 588  | 2263         | 74  | 15.00  | 41 | 119          | 22.42 | 2.93  | 27.31  | 3.04  | 100 | 500 | 0.00 | 19.14 |
|     | 2 | (untiled) | 5   | 771-1 | A | 493  | 2263         | 74  | 39.06  | 34 | 161          | 21.69 | 2.65  | 32.81  | 4.86  | 100 | 500 | 0.00 | 17.69 |
|     | 3 | (untiled) | 5   | 771-1 | A | 700  | 2263         | 74  | 24.00  | 49 | 84           | 23.80 | 3.91  | 17.65  | 2.06  | 100 | 500 | 0.00 | 20.01 |
| Ff  | 1 | (untiled) | 5   |       |   | 784  | 1900         | 120 | 0.00   | 41 | 118          | 33.75 | 0.66  | 0.00   | 0.14  | 100 | 100 | 0.00 | 2.06  |
|     | 2 | (untiled) | 5   |       |   | 38   | 1900         | 120 | 120.00 | 2  | 4400         | 33.07 | 0.02  | 0.00   | 0.00  | 100 | 100 | 0.00 | 0.00  |
| G   | 1 | (untiled) | 2   | 769-2 | F | 242  | 2050         | 34  | 0.88   | 40 | 123          | 27.43 | 11.45 | 62.92  | 3.69  | 100 | 500 | 0.00 | 23.93 |
|     | 2 | (untiled) | 2   | 769-2 | F | 221  | 2050         | 34  | 0.73   | 37 | 145          | 23.36 | 11.97 | 76.06  | 4.76  | 100 | 500 | 0.00 | 37.45 |
| Gf  | 1 | (untiled) | 4   |       |   | 242  | 2050         | 120 | 56.00  | 12 | 662          | 3.15  | 0.12  | 0.00   | 0.01  | 100 | 100 | 0.00 | 0.11  |
|     | 2 | (untiled) | 4   |       |   | 212  | 2050         | 120 | 56.00  | 10 | 770          | 3.11  | 0.10  | 0.00   | 0.01  | 100 | 100 | 0.00 | 0.08  |
| xA  | 1 | (untiled) | 10  |       |   | 909  | 2263         | 120 | 41.25  | 47 | 92           | 20.40 | 3.18  | 18.58  | 5.15  | 100 | 100 | 0.00 | 16.91 |
|     | 2 | (untiled) | 10  |       |   | 494  | 2263         | 120 | 88.01  | 26 | 240          | 24.15 | 6.90  | 37.59  | 7.12  | 100 | 100 | 0.00 | 19.47 |
| xB  | 1 | (untiled) |     |       |   | 1011 | Unrestricted | 120 | 7.00   | 0  | Unrestricted | 5.79  | 0.00  | 0.00   | 0.00  | 100 | 100 | 0.00 | 0.00  |
| xC  | 1 | (untiled) |     |       |   | 469  | 1900         | 120 | 70.21  | 33 | 176          | 12.55 | 3.88  | 31.81  | 4.82  | 100 | 100 | 0.00 | 11.96 |
|     | 2 | (untiled) |     |       |   | 346  | 1900         | 120 | 95.29  | 25 | 261          | 13.26 | 4.56  | 52.92  | 4.71  | 100 | 100 | 0.00 | 12.11 |
| xD  | 1 | (untiled) |     |       |   | 688  | Unrestricted | 120 | 22.00  | 0  | Unrestricted | 9.11  | 0.00  | 0.00   | 0.00  | 100 | 100 | 0.00 | 0.00  |
|     | 2 | (untiled) |     |       |   | 467  | Unrestricted | 120 | 48.00  | 0  | Unrestricted | 9.16  | 0.00  | 0.00   | 0.00  | 100 | 100 | 0.00 | 0.00  |
| xE  | 1 | (untiled) |     |       |   | 412  | Unrestricted | 120 | 48.00  | 0  | Unrestricted | 13.04 | 0.00  | 0.00   | 0.00  | 100 | 100 | 0.00 | 0.00  |
|     | 2 | (untiled) |     |       |   | 355  | Unrestricted | 120 | 53.00  | 0  | Unrestricted | 13.04 | 0.00  | 0.00   | 0.00  | 100 | 100 | 0.00 | 0.00  |
| xF  | 1 | (untiled) |     |       |   | 458  | Unrestricted | 120 | 42.00  | 0  | Unrestricted | 13.76 | 0.00  | 0.00   | 0.00  | 100 | 100 | 0.00 | 0.00  |
| Cc1 | 1 | (untiled) | 2   | 769-2 | E | 352  | 2050         | 58  | 24.01  | 34 | 162          | 18.67 | 12.20 | 46.13  | 2.88  | 100 | 100 | 0.00 | 23.44 |
| E1  | 1 | (untiled) | 4   | 770-3 | G | 272  | 2050         | 58  | 0.00   | 27 | 239          | 15.29 | 9.29  | 53.27  | 2.52  | 20  | 0   | 0.00 | 1.99  |
|     | 2 | (untiled) | 4   | 770-3 | G | 544  | 2200         | 58  | 0.00   | 49 | 82           | 17.57 | 11.57 | 59.59  | 5.48  | 20  | 0   | 0.00 | 4.97  |
| Gf1 | 1 | (untiled) | 4   |       |   | 9    | 705          | 120 | 116.00 | 1  | 6803         | 5.77  | 0.03  | 0.00   | 0.00  | 100 | 100 | 0.00 | 0.00  |
| Cc2 | 2 | (untiled) | 2   | 769-2 | D | 378  | 2150         | 60  | 21.51  | 34 | 163          | 21.00 | 10.58 | 51.38  | 3.81  | 100 | 500 | 0.00 | 29.87 |
|     | 3 | (untiled) | 2   | 769-2 | D | 131  | 2050         | 60  | 35.00  | 12 | 629          | 16.51 | 5.58  | 35.11  | 1.50  | 100 | 500 | 0.00 | 5.79  |

|       |   |            |          |          |   |        |              |     |        |     |              |        |        |        |          |     |     |          |          |
|-------|---|------------|----------|----------|---|--------|--------------|-----|--------|-----|--------------|--------|--------|--------|----------|-----|-----|----------|----------|
|       | 4 | (untitled) | 2        | 769-2    | D | 357    | 2150         | 60  | 23.35  | 32  | 179          | 25.76  | 19.64  | 84.59  | 6.30     | 100 | 500 | 0.00     | 87.68    |
|       | 5 | (untitled) | 2        | 769-2    | D | 215 <  | 2050         | 60  | 49.40  | 100 | -10          | 333.98 | 327.59 | 234.86 | 21.09 +  | 100 | 500 | 58143.51 | 58518.58 |
|       | 6 | (untitled) | 2        | 769-2    | D | 0      | 2050         | 60  | 62.00  | 0   | Unrestricted | 0.00   | 0.00   | 0.00   | 0.00     | 100 | 500 | 0.00     | 0.00     |
| E2    | 3 | (untitled) | 4        | 770-3    | H | 242    | 2150         | 62  | 0.28   | 21  | 325          | 11.84  | 7.84   | 47.37  | 2.35     | 20  | 0   | 0.00     | 1.50     |
|       | 4 | (untitled) | 4        | 770-3    | H | 212    | 2050         | 62  | 0.00   | 19  | 364          | 11.77  | 7.70   | 47.33  | 2.34     | 20  | 0   | 0.00     | 1.29     |
| T C5  | 2 | (untitled) | TC 771-6 | TC77 7-1 | A | 679    | 2263         | 95  | 21.00  | 37  | 142          | 5.81   | 3.04   | 13.29  | 3.01     | 100 | 100 | 0.00     | 9.29     |
|       | 3 | (untitled) | TC 771-6 | TC77 7-1 | A | 498    | 2263         | 95  | 65.00  | 27  | 230          | 6.96   | 4.20   | 17.76  | 2.95     | 100 | 100 | 0.00     | 9.37     |
|       | 4 | (untitled) | TC 771-6 | TC77 7-1 | C | 0      | 1800         | 7   | 8.00   | 0   | Unrestricted | 0.00   | 0.00   | 0.00   | 0.00     | 100 | 100 | 0.00     | 0.00     |
| T C9  | 1 | (untitled) | TC 771-6 | TC77 7-1 | B | 469    | 1925         | 84  | 0.00   | 34  | 168          | 17.66  | 6.65   | 33.18  | 5.19     | 100 | 100 | 0.00     | 14.26    |
|       | 2 | (untitled) | TC 771-6 | TC77 7-1 | B | 301    | 1966         | 84  | 0.00   | 21  | 326          | 14.09  | 3.03   | 17.35  | 1.48     | 100 | 100 | 0.00     | 4.21     |
|       | 3 | (untitled) | TC 771-6 | TC77 7-1 | B | 259 <  | 1947         | 84  | 70.98  | 100 | -10          | 306.86 | 295.73 | 305.32 | 23.43 +  | 100 | 100 | 0.00     | 312.63   |
| T C35 | 1 | (untitled) | TC 771-6 | TC77 7-1 | A | 249    | 1900         | 95  | 38.00  | 16  | 455          | 6.11   | 3.21   | 15.13  | 1.46     | 100 | 100 | 0.00     | 3.62     |
| T C36 | 1 | (untitled) | TC 771-6 |          |   | 195    | 1800         | 120 | 0.00   | 11  | 731          | 3.15   | 0.12   | 0.00   | 0.01     | 100 | 100 | 0.00     | 0.09     |
| T C37 | 1 | (untitled) | TC 771-6 | TC77 7-2 | J | 34     | 1850         | 103 | 103.00 | 2   | 4144         | 4.35   | 1.16   | 13.35  | 0.15     | 100 | 100 | 0.00     | 0.31     |
| T C38 | 1 | (untitled) | TC 771-6 |          |   | 34     | 500          | 120 | 91.00  | 7   | 1224         | 2.90   | 1.36   | 20.66  | 2.42     | 100 | 100 | 0.00     | 0.43     |
| T C39 | 2 | (untitled) | TC 771-6 |          |   | 679    | 2263         | 120 | 44.00  | 30  | 200          | 2.88   | 0.34   | 0.00   | 0.06     | 100 | 100 | 0.00     | 0.91     |
|       | 3 | (untitled) | TC 771-6 |          |   | 498    | 2263         | 120 | 88.00  | 22  | 309          | 2.62   | 0.22   | 0.00   | 0.03     | 100 | 100 | 0.00     | 0.44     |
| T C40 | 2 | (untitled) | TC 771-6 |          |   | 713    | Unrestricted | 120 | 26.00  | 0   | Unrestricted | 4.23   | 0.00   | 0.00   | 0.00     | 100 | 100 | 0.00     | 0.00     |
|       | 3 | (untitled) | TC 771-6 |          |   | 498    | Unrestricted | 120 | 72.00  | 0   | Unrestricted | 4.02   | 0.00   | 0.00   | 0.00     | 100 | 100 | 0.00     | 0.00     |
| T C41 | 1 | (untitled) | TC 771-6 | TC77 7-1 | D | 161    | 1850         | 14  | 0.00   | 70  | 29           | 71.38  | 67.44  | 103.98 | 5.68     | 100 | 100 | 0.00     | 48.66    |
| T C42 | 1 | (untitled) | TC 771-6 | TC77 7-1 | E | 0      | 0            | 0   | 0.00   | 0   | -100         | 0.00   | 0.00   | 0.00   | 0.00     | 100 | 100 | 0.00     | 0.00     |
| T C43 | 1 | (untitled) |          |          |   | 0      | 1800         | 120 | 120.00 | 0   | Unrestricted | 0.00   | 0.00   | 0.00   | 0.00     | 100 | 100 | 0.00     | 0.00     |
| 47    | 1 | (untitled) | 2        |          |   | 815    | 1300         | 120 | 35.00  | 63  | 44           | 18.35  | 2.32   | 0.00   | 0.52     | 100 | 100 | 0.00     | 7.45     |
| 48    | 1 | (untitled) | 2        |          |   | 1449 < | 1965         | 120 | 46.23  | 120 | -25          | 321.30 | 314.69 | 320.71 | 142.76 + | 100 | 100 | 0.00     | 1847.16  |
| 49    | 1 | (untitled) | TC 771-6 |          |   | 581    | 1900         | 120 | 0.00   | 31  | 194          | 3.57   | 0.42   | 0.00   | 0.07     | 100 | 100 | 0.00     | 0.96     |

|    |   |            |          |       |   |        |      |     |        |     |      |         |         |        |         |     |     |      |         |
|----|---|------------|----------|-------|---|--------|------|-----|--------|-----|------|---------|---------|--------|---------|-----|-----|------|---------|
|    | 2 | (untitled) | TC 771-6 |       |   | 581 <  | 1900 | 120 | 91.66  | 129 | -30  | 441.18  | 438.03  | 311.94 | 82.50+  | 100 | 100 | 0.00 | 1021.39 |
| 50 | 1 | (untitled) | 1        |       |   | 1776 < | 1900 | 120 | 93.33  | 421 | -79  | 1380.91 | 1375.13 | 936.88 | 690.73+ | 100 | 100 | 0.00 | 9682.85 |
| 51 | 1 | (untitled) | 4-2      |       |   | 822    | 1900 | 120 | 0.00   | 43  | 108  | 5.22    | 0.72    | 0.00   | 0.16    | 100 | 100 | 0.00 | 2.34    |
| 52 | 1 |            | 1        | 770-3 | A | 234    | 1800 | 14  | 0.00   | 97  | -8   | 318.24  | 297.48  | 470.07 | 23.74   | 100 | 500 | 0.00 | 341.48  |
|    | 2 |            | 1        | 770-3 | A | 130    | 1800 | 14  | 6.00   | 54  | 66   | 67.70   | 46.92   | 110.45 | 2.92    | 100 | 500 | 0.00 | 33.56   |
| 53 | 1 |            | 2        |       |   | 229    | 1800 | 120 | 23.00  | 13  | 607  | 5.42    | 0.15    | 0.00   | 0.01    | 100 | 100 | 0.00 | 0.13    |
|    | 2 |            | 2        |       |   | 130    | 1800 | 120 | 101.00 | 7   | 1147 | 5.15    | 0.08    | 0.09   | 0.50    | 100 | 100 | 0.00 | 0.04    |

### Pedestrian Crossing Results

| Pedestrian | Side | Name       | Traffic node | SIGNALS           |       | FLOWS                             |                                     | PERFORMANCE                |                          |                            | PER PED          |                        | QUES             | WEIG                | PENAL                                | P.I  |
|------------|------|------------|--------------|-------------------|-------|-----------------------------------|-------------------------------------|----------------------------|--------------------------|----------------------------|------------------|------------------------|------------------|---------------------|--------------------------------------|------|
|            |      |            |              | Controller stream | Phase | Calculated Flow Entering (Ped/hr) | Calculated saturation flow (Ped/hr) | Actual green (s per cycle) | Degree of saturation (%) | Practical reserve capacity | Journey Time (s) | Mean Delay per Ped (s) | Mean queue (Ped) | Delay weighting (%) | Cost of traffic penalties (£ per hr) | P.I  |
| 1          | 1    | (untitled) | 3-2          | 770-2             | E     | 0                                 | 11000                               | 5                          | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 3-2          | 770-2             | E     | 0                                 | 11000                               | 5                          | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 2          | 1    | (untitled) | 3            | 770-1             | C     | 0                                 | 11000                               | 74                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 3            | 770-1             | C     | 0                                 | 11000                               | 74                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 3          | 1    | (untitled) | 4-2          | 770-4             | M     | 0                                 | 11000                               | 9                          | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 4-2          | 770-4             | M     | 0                                 | 11000                               | 9                          | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 4          | 1    | (untitled) | 4            | 770-3             | J     | 0                                 | 11000                               | 20                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 4            | 770-3             | J     | 0                                 | 11000                               | 20                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 5          | 1    | (untitled) | 4            | 770-3             | I     | 0                                 | 11000                               | 24                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 4            | 770-3             | I     | 0                                 | 11000                               | 24                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 6          | 1    | (untitled) | 4            | 770-3             | K     | 0                                 | 0                                   | 0                          | 0                        | -100                       | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 4            | 770-3             | K     | 0                                 | 0                                   | 0                          | 0                        | -100                       | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 7          | 1    | (untitled) | 5            | 771-1             | C     | 0                                 | 11000                               | 62                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 5            | 771-1             | C     | 0                                 | 11000                               | 62                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 8          | 1    | (untitled) | 1            | 769-1             | C     | 0                                 | 0                                   | 0                          | 0                        | -100                       | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 1            | 769-1             | C     | 0                                 | 0                                   | 0                          | 0                        | -100                       | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 9          | 1    | (untitled) | 2            | 769-2             | J     | 0                                 | 11000                               | 26                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 2            | 769-2             | J     | 0                                 | 11000                               | 26                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 10         | 1    | (untitled) | 2            | 769-2             | K     | 0                                 | 11000                               | 38                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |

|    |   |            |   |         |   |   |       |    |   |              |      |      |      |     |      |      |
|----|---|------------|---|---------|---|---|-------|----|---|--------------|------|------|------|-----|------|------|
|    | 2 | (untitled) | 2 | 769-2   | K | 0 | 11000 | 38 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 11 | 1 | (untitled) |   | 769-2   | H | 0 | 11000 | 58 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | 769-2   | H | 0 | 11000 | 58 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 12 | 1 | (untitled) | 2 | 769-2   | I | 0 | 11000 | 56 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 2 | 769-2   | I | 0 | 11000 | 56 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 13 | 1 | (untitled) |   | TC777-1 | I | 0 | 11000 | 14 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | I | 0 | 11000 | 14 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 14 | 1 | (untitled) |   | TC777-1 | F | 0 | 11000 | 96 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | F | 0 | 11000 | 96 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 15 | 1 | (untitled) |   | TC777-1 | G | 0 | 11000 | 7  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | G | 0 | 11000 | 7  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 16 | 1 | (untitled) |   | TC777-1 | H | 0 | 11000 | 12 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | H | 0 | 11000 | 12 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 17 | 1 | (untitled) |   | TC777-2 | K | 0 | 11000 | 7  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-2 | K | 0 | 11000 | 7  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |

## Network Results

|                       | Distance travelled (PCU-km/hr) | Time spent (PCU-hr/hr) | Mean journey speed (kph) | Total delay (PCU-hr/hr) | Weighted cost of delay (£ per hr) | Weighted cost of stops (£ per hr) | Excess queue penalty (£ per hr) | Performance Index (£ per hr) |
|-----------------------|--------------------------------|------------------------|--------------------------|-------------------------|-----------------------------------|-----------------------------------|---------------------------------|------------------------------|
| <b>Normal traffic</b> | 4652.73                        | 2383.10                | 1.95                     | 2255.98                 | 30759.90                          | 1266.87                           | 508108.01                       | 540134.78                    |
| <b>Bus</b>            |                                |                        |                          |                         |                                   |                                   |                                 |                              |
| <b>Tram</b>           |                                |                        |                          |                         |                                   |                                   |                                 |                              |
| <b>Pedestrians</b>    | 0.00                           | 0.00                   | 0.00                     | 0.00                    | 0.00                              | 0.00                              | 0.00                            | 0.00                         |
| <b>TOTAL</b>          | 4652.73                        | 2383.10                | 1.95                     | 2255.98                 | 30759.90                          | 1266.87                           | 508108.01                       | 540134.78                    |

- <= adjusted flow warning (upstream links/traffic streams are over-saturated)
- \* = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- **P.I. = PERFORMANCE INDEX**

# TRANSYT 16

Version: 16.0.1.8473  
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** M62 JN 28 CRF Scheme\_Mar 20\_PF\_Sept 20\_RevC\_mitigation  
DS\_optA+B\_2019+Com+CP+Dev\_05.t16  
**Path:** P:\133--\A13398-VAA Land at Chidswell\30 Technical\31 Modelling\Transyt\Option A+B  
**Report generation date:** 24/01/2021 14:18:53

## » Network Diagrams

« A16 - PM Base 2019 + Com Dev + CP + Dev : D16 - PM 2019 + Com Dev + CP + Dev, :

## » Summary

## » Network Options

## » Traffic Nodes

## » Arms and Traffic Streams

## » Pedestrian Crossings

## » Local OD Matrix - Local Matrix: 1

## » Signal Timings

## » Results - Link

## » Results - Traffic Stream

## » Data Entry - Stage Start and End

## » Data Entry - Phase

## » Data Entry - Traffic Stream

## » Data entry - Link

## » Results - Pedestrian

## » Collections

## » Point to Point Journey Time

## » Final Prediction Table

## Summary of network performance

|         | Set ID   | Cycle time (s) | PI (£ per hr) | Total delay (PCU-hr/hr) | Highest DOS    | Number oversaturated |
|---------|--|----------------|---------------|-------------------------|----------------|----------------------|
|         | PM Base 2019 + Com Dev + CP + Dev - PM 2019 + Com Dev + CP + Dev |                |               |                         |                |                      |
| Network | A16<br>D16   | 60             | 5666.18       | 447.06                  | 112% (TS 48/1) | 17 (11%)             |

*There are warnings associated with this model run - see the 'Data Errors and Warnings' tables.*

## File summary

### File description

|             |            |
|-------------|------------|
| File title  | (untitled) |
| Location    |            |
| Site number |            |
| UTCRegion   |            |

|              |                |
|--------------|----------------|
| Driving side | Left           |
| Date         | 01/03/2017     |
| Version      |                |
| Status       | [no status]    |
| Identifier   |                |
| Client       |                |
| Jobnumber    |                |
| Enumerator   | LEEDS\00730414 |
| Description  |                |

## Model and Results

| Enable controller offsets | Enable fuel consumption | Enable quick flares | Display journey time results | Display OD matrix distances | Display level of service results | Display blocking and starvation results | Display end of red and green queue results | Display excess queue results | Display separate uniform and random results | Display unweighted results | Display TRANSYT 12 style timings | Display effective greens in results | Display Red-With-Ambler | Display End-Of-Green Ambler | Display controller phase minimums |
|---------------------------|-------------------------|---------------------|------------------------------|-----------------------------|----------------------------------|---|--|------------------------------|---|----------------------------|----------------------------------|-------------------------------------|-------------------------|-----------------------------|-----------------------------------|
|                           |                         |                     |                              |                             |                                  |   |  |                              |   |                            |                                  |                                     |                         |                             |                                   |

## Units

| Cost units | Speed units | Distance units | Fuel economy units | Fuel rate units | Mass units | Traffic units input | Traffic units results | Flow units | Average delay units | Total delay units | Rate of delay units |
|------------|-------------|----------------|--------------------|-----------------|------------|---------------------|-----------------------|------------|---------------------|-------------------|---------------------|
| £          | kph         | m              | mpg                | l/h             | kg         | PCU                 | PCU                   | perHour    | s                   | -Hour             | perHour             |

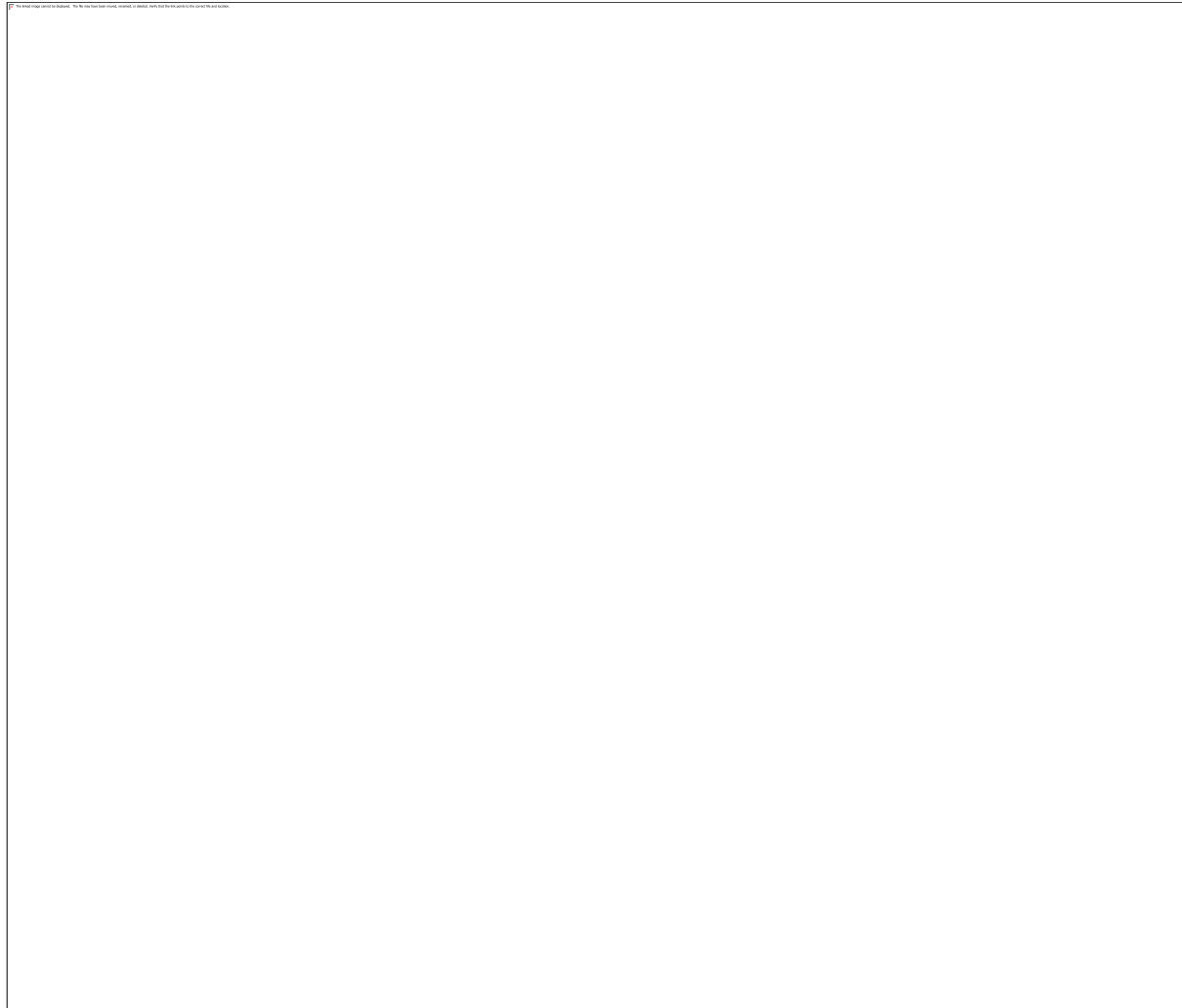
## Sorting

| Show names instead of IDs | Sorting direction | Sorting type | Ignore prefixes when sorting | Analysis/demand set sorting | Link grouping | Source grouping | Colour Analysis/Demand Sets |
|---------------------------|-------------------|--------------|------------------------------|-----------------------------|---------------|-----------------|-----------------------------|
|                           | Ascending         | Numerical    |                              | ID                          | Normal        | Normal          | ✓                           |

## Simulation options

| Criteria type | Stop criteria (%) | Stop criteria time (s) | Stop criteria number of trials | Random seed | Results refresh speed (s) | Average animation capture interval (s) | Use quick response | Do flow sampling | Uniform vehicle generation | Last run random seed | Last run number of trials | Last run time taken (s) |
|---------------|-------------------|------------------------|--------------------------------|-------------|---------------------------|--|--------------------|------------------|----------------------------|----------------------|---------------------------|-------------------------|
| Delay         | 3.00              | 999                    | 200                            | -1          | 3                         | 60                                     | ✓                  |                  |                            | 0                    | 0                         | 0.00                    |

## Network Diagrams



# A16 - PM Base 2019 + Com Dev + CP + Dev D16 - PM 2019 + Com Dev + CP + Dev,

## Summary

### Data Errors and Warnings

| Severity | Area                | Item                        | Description   |
|----------|---------------------|-----------------------------|---|
| Warning  | Traffic Stream Data | Arm Bf - Traffic Stream 1   | Arm Bf - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Bf - Traffic Stream 2   | Arm Bf - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Ff - Traffic Stream 1   | Arm Ff - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Ff - Traffic Stream 2   | Arm Ff - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm xA - Traffic Stream 1   | Arm xA - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm xA - Traffic Stream 2   | Arm xA - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm TC38 - Traffic Stream 1 | Traffic Stream 1: CTM uses a whole number of cells. CTM is using the length adjusted by 30%.  |

|         |                        |  |  |
|---------|------------------------|--|--|
| Warning | Local Matrix           | Local Matrix 1                                     | Local Matrix 1: Auto Calculate option is switched off - OD flows will not be allocated automatically to the network. |
| Warning | Traffic Stream Signals | Arm TC5 - Traffic Stream 4 - Signals (TC777-1, C)  | Traffic Stream 4 controlling phase C never runs in the current stage sequence.                                       |
| Warning | Traffic Stream Signals | Arm TC42 - Traffic Stream 1 - Signals (TC777-1, E) | Traffic Stream 1 controlling phase E never runs in the current stage sequence.                                       |
| Info    | Arm Data               | Arm xC   | No traffic node specified for arm(s): xC   |
| Info    | Traffic Stream Signals | Arm TC5 - Traffic Stream 4 - Signals (TC777-1, C)  | Traffic Stream 4 controlling phase C never runs in stage sequence 1.   |
| Info    | Traffic Stream Signals | Arm TC42 - Traffic Stream 1 - Signals (TC777-1, E) | Traffic Stream 1 controlling phase E never runs in stage sequence 1.   |

## Run Summary

| Analysis set used | Run start time      | Run finish time     | Run duration (s) | Modeling start time (HH:mm) | Network Cycle Time (s) | Performance Index (£ per hr) | Total network delay (PCU - hr/hr) | Highest DOS (%) | Item with highest DOS | Number of oversaturated items | Percentage of oversaturated items (%) | Item with worst signalised PRC | Item with worst unsignalised PRC | Item with worst overall PRC | Network within capacity |
|-------------------|---------------------|---------------------|------------------|-----------------------------|------------------------|------------------------------|-----------------------------------|-----------------|-----------------------|-------------------------------|---------------------------------------|--------------------------------|----------------------------------|-----------------------------|-------------------------|
| 16                | 24/01/2021 14:16:33 | 24/01/2021 14:16:43 | 10.95            | 16:30                       | 60                     | 5666.18                      | 447.06                            | 112.01          | 48/1                  | 17                            | 11                                    | TC5/4                          | 48/1                             | TC5/4                       |                         |

## Analysis Set Details

| Name                              | Use Simulation | Description | Use specific Demand Set(s) | Specific Demand Set(s) | Optimise specific Demand Set(s) | Include in report | Locked |
|-----------------------------------|----------------|-------------|----------------------------|------------------------|---------------------------------|-------------------|--------|
| PM Base 2019 + Com Dev + CP + Dev |                |             | ✓                          | D16                    |                                 | ✓                 |        |

## Demand Set Details

| Scenario name                | Time Period name | Description | Composite | Demand sets | Start time (HH:mm) | Locked | Run automatically |
|------------------------------|------------------|-------------|-----------|-------------|--------------------|--------|-------------------|
| PM 2019 + Com Dev + CP + Dev |                  |             |           |             | 16:30              |        | ✓                 |

## Network Options

### Network timings

| Network cycle time (s) | Minimum possible cycle time (s) | Absolute minimum possible cycle time (s) | Restrict to SCOOT cycle times | Time segment length (min) | Number of time segments | Modelled time period (min) |
|------------------------|---------------------------------|--|-------------------------------|---------------------------|-------------------------|----------------------------|
| 60                     | 37                              | 37                                       |                               | 60                        | 1                       | 60                         |

### Signals options

| Start displacement (s) | End displacement (s) |
|------------------------|----------------------|
| 2                      | 3                    |

### Advanced

| Phase minimum broken penalty (£) | Phase maximum broken penalty (£) | Intergreen broken penalty (£) | Starting Red-with-Amber (s) | Missing stage transition options |
|----------------------------------|----------------------------------|-------------------------------|-----------------------------|----------------------------------|
| 10000.00                         | 10000.00                         | 10000.00                      | 2                           | Assume banned                    |

## Traffic options

| Traffic model            | Vehicle flow scaling factor (%) | Pedestrian flow scaling factor (%) | Cruise times or speeds |
|--------------------------|---------------------------------|------------------------------------|------------------------|
| Platoon Dispersion (PDM) | 100                             | 100                                | Cruise Speeds          |

## Advanced

| Resolution | DOS Threshold (%) | Cruise scaling factor (%) | Use link stop weightings | Use link delay weightings | Exclude pedestrians from traffic model | Exclude pedestrians from results calculation | Random delay mode | Type of Vehicle-in-Service | Type of random parameter | PCU Length (m) | Calculate results for Path Segments | Generate PDM Profile Data |
|------------|-------------------|---------------------------|--------------------------|---------------------------|--|--|-------------------|----------------------------|--------------------------|----------------|-------------------------------------|---------------------------|
| 1          | 90                | 100                       | ✓                        | ✓                         |  |  | Complex           | Uniform (TRANSYT)          | Uniform (TRANSYT)        | 5.75           |                                     | ✓                         |

## Normal Traffic parameters

| Dispersion type | Dispersion coefficient | Travel time coefficient |
|-----------------|------------------------|-------------------------|
| Default         | 35                     | 80                      |

## Normal Traffic Types

| Name   | PCU Factor |
|--------|------------|
| Normal | 1.00       |

## Bus parameters

| Name | PCU Factor | Dispersion type | Acceleration (ms <sup>-2</sup> ) | Stationary time coefficient | Cruise time coefficient |
|------|------------|-----------------|----------------------------------|-----------------------------|-------------------------|
| Bus  | 1.00       | Default         | 0.94                             | 30                          | 85                      |

## Tram parameters

| Name | PCU Factor | Dispersion type | Acceleration (ms <sup>-2</sup> ) | Stationary time coefficient | Cruise time coefficient |
|------|------------|-----------------|----------------------------------|-----------------------------|-------------------------|
| Tram | 1.00       | Default         | 0.94                             | 100                         | 100                     |

## Pedestrian parameters

| Dispersion type |
|-----------------|
| Default         |

## Optimisation options

| Enable optimisation | Auto redistribute | Optimisation level       | Enable OUT Profile accuracy |
|---------------------|-------------------|--------------------------|-----------------------------|
| ✓                   |                   | Offsets And Green Splits | ✓                           |

## Advanced

| Optimisation type            | Hill climb increments        | OUTProfile accuracy (%)            | Use enhanced optimisation | Auto optimisation order | Optimisation order   | Master controller | Offsets relative to master controller | Master controller offset after each run |
|------------------------------|------------------------------|------------------------------------|---------------------------|-------------------------|--|-------------------|---------------------------------------|---|
| Standard accuracy Hill Climb | 15, 40, -1, 15, 40, 1, -1, 1 | 50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05 |                           | ✓                       | 769-1, 769-2, 770-1, 770-2, 770-3, 770-4, 771-1, 771-2, TC777-1, TC777-2 |                   |                                       | Do nothing                              |

## Economics

| Vehicle Monetary Value Of Delay (£ per PCU-hr) | Vehicle Monetary Value Of Stops (£ per 100 stops) | Pedestrian monetary value of delay (£ per Ped-hr) |
|--|---|---|
| 14.20  | 2.60  | 14.20   |

## Traffic Nodes

## Traffic Nodes

| Traffic node | Name       | Description |
|--------------|------------|-------------|
| (ALL)        | (untitled) |             |

## Arms and Traffic Streams

### Arms

| Arm  | Name                      | Description | Traffic node |
|------|---------------------------|-------------|--------------|
| A    | Dewsbury Rd SB            |             | 6            |
| Ac   | (untitled)                |             | 6            |
| Acf  | (untitled)                |             | 6            |
| Af   | Dewsbury Rd SB            |             | 6            |
| B    | M62 WB off slip           |             | 1            |
| Bc   | (untitled)                |             | 1            |
| Bcf  | (untitled)                |             | 1            |
| Bf   | M62 WB off slip           |             | 1            |
| C    | Bradford Rd WB            |             | 2            |
| Cf   | Bradford Rd WB            |             | 2            |
| D    | Dewsbury Rd NB            |             | 3            |
| Dc   | (untitled)                |             | 3            |
| Dcf  | (untitled)                |             | 3            |
| Df   | Dewsbury Rd NB            |             | 3-2          |
| Dxp  | Dewsbury Rd exit SB (ped) |             | 3-2          |
| Ec   | (untitled)                |             | 4            |
| Ecf  | (untitled)                |             | 4            |
| Ef   | Bradford Rd EB            |             | 4            |
| Exp  | Bradford Rd exit WB (ped) |             | 4-2          |
| F    | M62 EB off slip           |             | 5            |
| Fc   | (untitled)                |             | 5            |
| Ff   | M62 EB off slip           |             | 5            |
| G    | (untitled)                |             | 2            |
| Gf   | (untitled)                |             | 4            |
| xA   | Dewsbury Rd exit NB       |             | 10           |
| xB   | M62 EB on slip            |             |              |
| xC   | (untitled)                |             |              |
| xD   | Dewsbury Rd exit SB       |             |              |
| xE   | Bradford Rd exit WB       |             |              |
| xF   | M62 WB on slip            |             |              |
| Cc1  | (untitled)                |             | 2            |
| E1   | Bradford Rd EB (left)     |             | 4            |
| Gf1  | (untitled)                |             | 4            |
| Cc2  | (untitled)                |             | 2            |
| E2   | Bradford Rd EB (ahead)    |             | 4            |
| TC5  | (untitled)                |             | TC771-6      |
| TC9  | (untitled)                |             | TC771-6      |
| TC35 | (untitled)                |             | TC771-6      |
| TC36 | (untitled)                |             | TC771-6      |
| TC37 | (untitled)                |             | TC771-6      |
| TC38 | (untitled)                |             | TC771-6      |
| TC39 | (untitled)                |             | TC771-6      |
| TC40 | (untitled)                |             | TC771-6      |
| TC41 | (untitled)                |             | TC771-6      |
| TC42 | (untitled)                |             | TC771-6      |
| TC43 | (untitled)                |             |              |

|    |            |  |         |
|----|------------|--|---------|
| 47 | (untitled) |  | 2       |
| 48 | (untitled) |  | 2       |
| 49 | (untitled) |  | TC771-6 |
| 50 | (untitled) |  | 1       |
| 51 | (untitled) |  | 4-2     |
| 52 |            |  | 1       |
| 53 |            |  | 2       |

## Traffic Streams

| Arm | Traffic Stream | Name       | Description | Auto length | Length (m) | Has Saturation Flow | Saturation flow source | Saturation flow (PCU/hr) | Auto-calculated cell saturation flow | Cell saturation flow (PCU/hr) | Is signal controlled | Is give way | Traffic type | Allow Nearside Turn On Red |
|-----|----------------|------------|-------------|-------------|------------|---------------------|------------------------|--------------------------|--------------------------------------|-------------------------------|----------------------|-------------|--------------|----------------------------|
| A   | 1              | (untitled) | M62E        | ✓           | 74.35      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Wake        | ✓           | 76.69      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Dews        | ✓           | 78.40      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 4              | (untitled) | Brad/M62W   | ✓           | 80.11      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Ac  | 1              | (untitled) | M62E        | ✓           | 95.80      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Wake        | ✓           | 92.34      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Dews/Brad   | ✓           | 87.95      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
| Acf | 1              | (untitled) |             | ✓           | 69.59      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |             | ✓           | 70.42      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
| Af  | 1              | (untitled) | M62E/Wake   | ✓           | 53.54      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 2              | (untitled) | Dews        | ✓           | 53.19      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 3              | (untitled) | Brad/M62W   | ✓           | 53.01      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
| B   | 1              | (untitled) | Wake/Dews   | ✓           | 94.67      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Brad        | ✓           | 97.18      | ✓                   | Directly entered       | 2150                     |                                      | 2150                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Leeds       | ✓           | 99.69      | ✓                   | Directly entered       | 2100                     |                                      | 2100                          | ✓                    |             | Normal       |                            |
|     | 4              | (untitled) |             | ✓           | 102.42     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Bc  | 1              | (untitled) | Wake        | ✓           | 132.85     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Dews        | ✓           | 131.47     | ✓                   | Directly entered       | 2050                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Brad/M62W   | ✓           | 130.10     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Bcf | 1              | (untitled) |             | ✓           | 62.77      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |             | ✓           | 62.62      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 3              | (untitled) |             | ✓           | 62.46      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 4              | (untitled) |             | ✓           | 62.38      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
| Bf  | 1              | (untitled) |             | ✓           | 227.81     | ✓                   | Sum of lanes           | 1800                     |                                      | 1600                          |                      |             | Normal       |                            |

|     |   |            |                 |   |        |   |                  |      |  |      |   |  |        |
|-----|---|------------|-----------------|---|--------|---|------------------|------|--|------|---|--|--------|
|     | 2 | (untitled) |                 | ✓ | 228.44 | ✓ | Sum of lanes     | 1800 |  | 1700 |   |  | Normal |
| C   | 1 | (untitled) | Dews/Brad       | ✓ | 121.13 | ✓ | Directly entered | 2100 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) | M62W/Brad/Leeds | ✓ | 122.73 | ✓ | Directly entered | 2200 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds/M62E      | ✓ | 124.35 | ✓ | Directly entered | 2050 |  | 1900 | ✓ |  | Normal |
| Cf  | 1 | (untitled) |                 | ✓ | 144.60 | ✓ | Sum of lanes     | 1965 |  | 1965 |   |  | Normal |
|     | 2 | (untitled) |                 | ✓ | 145.86 | ✓ | Sum of lanes     | 1965 |  | 1965 |   |  | Normal |
| D   | 1 | (untitled) | Brad/M62        |   | 55.00  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds           |   | 55.00  | ✓ | Directly entered | 1850 |  | 2075 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds/M62/Wake  | ✓ | 52.87  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
|     | 4 | (untitled) | Leeds/M62/Wake  | ✓ | 55.42  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
| Dc  | 1 | (untitled) | Brad            | ✓ | 50.91  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) | Brad/M62W       | ✓ | 48.96  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds           | ✓ | 47.02  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 4 | (untitled) | Leeds/M62E      | ✓ | 45.07  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
| Dcf | 1 | (untitled) |                 | ✓ | 65.43  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
|     | 2 | (untitled) |                 | ✓ | 65.28  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 3 | (untitled) |                 | ✓ | 65.54  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 4 | (untitled) |                 | ✓ | 67.69  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 5 | (untitled) |                 | ✓ | 66.13  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 6 | (untitled) |                 | ✓ | 66.17  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
| Df  | 1 | (untitled) |                 |   | 200.00 | ✓ | Sum of lanes     | 1900 |  |      |   |  | Normal |
|     | 2 | (untitled) |                 |   | 200.00 | ✓ | Directly entered | 2250 |  |      |   |  | Normal |
| Dxp | 1 | (untitled) |                 | ✓ | 45.75  | ✓ | Directly entered | 2050 |  |      | ✓ |  | Normal |
|     | 2 | (untitled) |                 | ✓ | 48.11  | ✓ | Directly entered | 2050 |  |      | ✓ |  | Normal |
| Ec  | 1 | (untitled) | M62W            | ✓ | 50.09  | ✓ | Directly entered | 2150 |  | 2150 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds           | ✓ | 48.43  | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds           | ✓ | 46.77  | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 4 | (untitled) | M62E            | ✓ | 45.11  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
| Ecf | 1 | (untitled) |                 | ✓ | 45.94  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 2 | (untitled) |                 | ✓ | 46.37  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 3 | (untitled) |                 | ✓ | 46.95  | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
|     | 4 | (untitled) |                 | ✓ | 47.51  | ✓ | Directly entered | 2300 |  | 2300 |   |  | Normal |

|     |   |            |            |   |        |   |                  |      |  |      |   |  |        |
|-----|---|------------|------------|---|--------|---|------------------|------|--|------|---|--|--------|
|     | 5 | (untitled) |            | ✓ | 48.55  | ✓ | Directly entered | 2300 |  | 2300 |   |  | Normal |
| Ef  | 1 | (untitled) |            | ✓ | 127.54 | ✓ | Directly entered | 1900 |  |      |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 127.54 | ✓ | Sum of lanes     | 1900 |  |      |   |  | Normal |
| Exp | 1 | (untitled) |            | ✓ | 51.83  | ✓ | Directly entered | 2050 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) |            | ✓ | 53.71  | ✓ | Directly entered | 2050 |  | 2100 | ✓ |  | Normal |
| F   | 1 | (untitled) | Leeds      | ✓ | 85.13  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) | Wake       | ✓ | 85.72  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Dews/Brad  | ✓ | 87.25  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
| Fc  | 1 | (untitled) | Leeds      | ✓ | 178.68 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds      | ✓ | 175.19 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 3 | (untitled) | M62E/Dews  | ✓ | 180.28 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
| Ff  | 1 | (untitled) |            | ✓ | 275.73 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 275.39 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
| G   | 1 | (untitled) |            | ✓ | 155.36 | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) |            | ✓ | 151.80 | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
| Gf  | 1 | (untitled) |            | ✓ | 40.48  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 40.06  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
| xA  | 1 | (untitled) |            | ✓ | 229.66 | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 229.97 | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
| xB  | 1 | (untitled) |            | ✓ | 77.15  |   |                  |      |  |      |   |  | Normal |
| xC  | 1 | (untitled) |            | ✓ | 115.60 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 115.98 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
| xD  | 1 | (untitled) |            | ✓ | 121.44 |   |                  |      |  |      |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 122.12 |   |                  |      |  |      |   |  | Normal |
| xE  | 1 | (untitled) |            | ✓ | 173.89 |   |                  |      |  |      |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 173.83 |   |                  |      |  |      |   |  | Normal |
| xF  | 1 | (untitled) |            | ✓ | 158.35 |   |                  |      |  |      |   |  | Normal |
| Cc1 | 1 | (untitled) | Wake       | ✓ | 95.84  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
| E1  | 1 | (untitled) | M62W/Leeds |   | 80.00  | ✓ | Directly entered | 2050 |  | 1900 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds/M62E |   | 80.00  | ✓ | Directly entered | 2200 |  | 2100 | ✓ |  | Normal |
| Gf1 | 1 | (untitled) |            | ✓ | 47.81  |   |                  |      |  |      | ✓ |  | Normal |
| Cc2 | 2 | (untitled) | Dews       | ✓ | 91.52  | ✓ | Directly entered | 2150 |  | 2100 | ✓ |  | Normal |

|      |   |            |           |   |        |   |                  |      |   |      |   |   |        |
|------|---|------------|-----------|---|--------|---|------------------|------|---|------|---|---|--------|
|      | 3 | (untitled) | Brad/M62W | ✓ | 91.11  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |
|      | 4 | (untitled) | Dews/Brad | ✓ | 90.39  | ✓ | Directly entered | 2150 |   | 2100 | ✓ |   | Normal |
|      | 5 | (untitled) | Leeds     | ✓ | 90.48  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |
|      | 6 | (untitled) | Leeds     | ✓ | 88.08  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |
| E2   | 3 | (untitled) | Wake      | ✓ | 53.28  | ✓ | Directly entered | 2150 |   | 2050 | ✓ |   | Normal |
|      | 4 | (untitled) | Wake      | ✓ | 54.33  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |
| TC5  | 2 | (untitled) |           | ✓ | 23.03  | ✓ | Sum of lanes     | 2263 |   | 2263 | ✓ |   | Normal |
|      | 3 | (untitled) |           | ✓ | 23.02  | ✓ | Directly entered | 2263 |   | 2263 | ✓ |   | Normal |
|      | 4 | (untitled) |           | ✓ | 24.43  | ✓ | Sum of lanes     | 1800 |   | 2263 | ✓ |   | Normal |
| TC9  | 1 | (untitled) |           | ✓ | 91.71  | ✓ | Directly entered | 1925 |   | 1925 | ✓ |   | Normal |
|      | 2 | (untitled) |           | ✓ | 92.21  | ✓ | Sum of lanes     | 1966 |   | 1966 | ✓ |   | Normal |
|      | 3 | (untitled) |           | ✓ | 92.69  | ✓ | Sum of lanes     | 1947 |   | 1947 | ✓ |   | Normal |
| TC35 | 1 | (untitled) |           | ✓ | 24.16  | ✓ | Directly entered | 1900 |   | 2263 | ✓ |   | Normal |
| TC36 | 1 | (untitled) |           | ✓ | 25.22  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |
| TC37 | 1 | (untitled) |           | ✓ | 44.32  | ✓ | Directly entered | 1850 |   | 1850 | ✓ |   | Normal |
| TC38 | 1 | (untitled) |           | ✓ | 21.32  | ✓ | Directly entered | 1850 |   | 1850 |   | ✓ | Normal |
| TC39 | 2 | (untitled) |           | ✓ | 35.24  | ✓ | Directly entered | 2263 |   | 2263 |   |   | Normal |
|      | 3 | (untitled) |           | ✓ | 33.28  | ✓ | Directly entered | 2263 |   | 2263 |   |   | Normal |
| TC40 | 2 | (untitled) |           | ✓ | 58.74  |   |                  |      |   |      |   |   | Normal |
|      | 3 | (untitled) |           | ✓ | 55.82  |   |                  |      |   |      |   |   | Normal |
| TC41 | 1 | (untitled) |           | ✓ | 54.63  | ✓ | Directly entered | 1850 |   | 1850 | ✓ |   | Normal |
| TC42 | 1 | (untitled) |           | ✓ | 23.35  | ✓ | Sum of lanes     | 1771 |   |      | ✓ |   | Normal |
| TC43 | 1 | (untitled) |           | ✓ | 51.77  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |
| 47   | 1 | (untitled) |           | ✓ | 133.63 | ✓ | Directly entered | 1300 |   | 1300 |   |   | Normal |
| 48   | 1 | (untitled) |           | ✓ | 55.12  | ✓ | Sum of lanes     | 1965 |   |      |   |   | Normal |
| 49   | 1 | (untitled) |           | ✓ | 26.24  | ✓ | Directly entered | 1900 |   |      |   |   | Normal |
|      | 2 | (untitled) |           | ✓ | 26.24  | ✓ | Directly entered | 1900 |   |      |   |   | Normal |
| 50   | 1 | (untitled) |           | ✓ | 48.15  | ✓ | Sum of lanes     | 1900 |   |      |   |   | Normal |
| 51   | 1 | (untitled) |           | ✓ | 37.47  | ✓ | Sum of lanes     | 1900 |   |      |   |   | Normal |
| 52   | 1 |            |           | ✓ | 173.00 | ✓ | Sum of lanes     | 1800 | ✓ | 1800 | ✓ |   | Normal |
|      | 2 |            |           | ✓ | 173.18 | ✓ | Sum of lanes     | 1800 | ✓ | 1800 | ✓ |   | Normal |
| 53   | 1 |            |           | ✓ | 43.95  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |







|      |   |   |            |  |   |     |              |   |      |   |   |          |   |  |      |
|------|---|---|------------|--|---|-----|--------------|---|------|---|---|----------|---|--|------|
| E2   | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 4 | 4 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC5  | 2 | 1 | (untitled) |  | ✓ | N/A | Clearly Good | 0 | 3.50 | ✓ | 0 | 99999.00 |   |  | 2263 |
|      | 3 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 4 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
| TC9  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 2 | 1 | (untitled) |  | ✓ | N/A | Average      | 0 | 3.70 | ✓ | 0 | 99999.00 |   |  | 1966 |
|      | 3 | 1 | (untitled) |  | ✓ | N/A | Average      | 0 | 3.50 | ✓ | 0 | 99999.00 |   |  | 1947 |
| TC35 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC36 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
| TC37 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC38 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC39 | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 3 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC40 | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 3 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC41 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC42 | 1 | 1 | (untitled) |  | ✓ | N/A | Average      | 0 | 3.00 | ✓ | 0 | 9.44     | ✓ |  | 1771 |
| TC43 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
| 47   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| 48   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1965 |
| 49   | 1 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| 50   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1900 |
| 51   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1900 |
| 52   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
|      | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
| 53   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
|      | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |

## Modelling

| Arm | Traffic Stream | Traffic model | Stop weighting multiplier (%) | Delay weighting multiplier (%) | Assignment Cost Weighting (%) | Exclude from results calculation | Max queue storage | Has queue limit | Queue limit (PCU) | Excess queue | Has degree of saturation limit | Degree of saturation limit (%) | Excess degree of saturation | Low degree of saturation |
|-----|----------------|---------------|-------------------------------|--------------------------------|-------------------------------|----------------------------------|-------------------|-----------------|-------------------|--------------|--------------------------------|--------------------------------|-----------------------------|--------------------------|
|-----|----------------|---------------|-------------------------------|--------------------------------|-------------------------------|----------------------------------|-------------------|-----------------|-------------------|--------------|--------------------------------|--------------------------------|-----------------------------|--------------------------|

|     |   |                 |     |     |     | (PCU ) |      |   | penal ty (£) |         |  | penalty (£) | penalty (£) |
|-----|---|-----------------|-----|-----|-----|--------|------|---|--------------|---------|--|-------------|-------------|
| A   | 1 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
| Ac  | 1 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 16.50        | 9999.00 |  |             |             |
|     | 2 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 16.50        | 9999.00 |  |             |             |
|     | 3 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 16.50        | 9999.00 |  |             |             |
| Acf | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| Af  | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| B   | 1 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
| Bc  | 1 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 22.50        | 9999.00 |  |             |             |
|     | 2 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 22.50        | 9999.00 |  |             |             |
|     | 3 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 22.50        | 9999.00 |  |             |             |
| Bcf | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| Bf  | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| C   | 1 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
| Cf  | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| D   | 1 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
| Dc  | 1 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 8.00         | 9999.00 |  |             |             |
|     | 2 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 8.00         | 9999.00 |  |             |             |
|     | 3 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 8.00         | 9999.00 |  |             |             |
|     | 4 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 8.00         | 9999.00 |  |             |             |
| Dcf | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 5 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 6 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| Df  | 1 | NetworkDe fault | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |



|          |   |                    |     |     |     |  |      |   |           |             |  |  |  |  |  |  |  |  |  |
|----------|---|--------------------|-----|-----|-----|--|------|---|-----------|-------------|--|--|--|--|--|--|--|--|--|
| Gf1      | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| Cc2      | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 4 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 5 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 6 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
| E2       | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 4 | CTM                | 0   | 20  | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>5  | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 4 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>9  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>35 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>36 | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>37 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>38 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>39 | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>40 | 2 | PDM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 3 | PDM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>41 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>42 | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>43 | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 47       | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 48       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 49       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 50       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 51       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 52       | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 30.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 30.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
| 53       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |

### Modelling - Advanced

| Arm   | Traffic Stream | Initial queue (PCU) | Type of Vehicle-in-Service | Vehicle-in-Service | Type of random parameter | Random parameter | Auto cycle time | Cycle time |
|-------|----------------|---------------------|----------------------------|--------------------|--------------------------|------------------|-----------------|------------|
| (ALL) | (ALL)          | 0.00                | NetworkDefault             | Not-Included       | NetworkDefault           | 0.50             | ✓               | 60         |

### Normal traffic - Modelling

| Arm   | Traffic Stream | Stop weighting (%) | Delay weighting (%) |
|-------|----------------|--------------------|---------------------|
| (ALL) | (ALL)          | 100                | 100                 |

### Normal traffic - Advanced

| Arm   | Traffic Stream | Dispersion type for Normal Traffic |
|-------|----------------|------------------------------------|
| (ALL) | (ALL)          | NetworkDefault                     |

### Flows

| Arm | Traffic Stream | Total Flow (PCU/hr) | Normal Flow (PCU/hr) |
|-----|----------------|---------------------|----------------------|
| A   | 1              | 847                 | 847                  |
|     | 2              | 653                 | 653                  |
|     | 3              | 694                 | 694                  |
|     | 4              | 505                 | 505                  |
| Ac  | 1              | 821                 | 821                  |
|     | 2              | 426                 | 426                  |
|     | 3              | 365                 | 365                  |
| Acf | 1              | 1247                | 1247                 |
|     | 2              | 365                 | 365                  |
| Af  | 1              | 1500                | 1500                 |
|     | 2              | 694                 | 694                  |
|     | 3              | 505                 | 505                  |
| B   | 1              | 366                 | 366                  |
|     | 2              | 308                 | 308                  |
|     | 3              | 295                 | 295                  |
|     | 4              | 344                 | 344                  |
| Bc  | 1              | 1079                | 1079                 |
|     | 2              | 1023                | 1023                 |
|     | 3              | 541                 | 541                  |
| Bcf | 1              | 1668                | 1668                 |
|     | 2              | 1079                | 1079                 |
|     | 3              | 1023                | 1023                 |
|     | 4              | 541                 | 541                  |
| Bf  | 1              | 674                 | 674                  |
|     | 2              | 639                 | 639                  |
| C   | 1              | 89                  | 89                   |
|     | 2              | 593                 | 593                  |
|     | 3              | 283                 | 283                  |
| Cf  | 1              | 577                 | 577                  |
|     | 2              | 388                 | 388                  |
| D   | 1              | 385                 | 385                  |
|     | 2              | 237                 | 237                  |
|     | 3              | 333                 | 333                  |
|     | 4              | 348                 | 348                  |
| Dc  | 1              | 614                 | 614                  |
|     | 2              | 657                 | 657                  |
|     | 3              | 169                 | 169                  |
|     | 4              | 113                 | 113                  |
| Dcf | 1              | 804                 | 804                  |
|     | 2              | 1101                | 1101                 |
|     | 3              | 614                 | 614                  |
|     | 4              | 657                 | 657                  |
|     | 5              | 169                 | 169                  |
|     | 6              | 113                 | 113                  |
| Df  | 1              | 622                 | 622                  |

|     |   |      |      |
|-----|---|------|------|
|     | 2 | 681  | 681  |
| Dxp | 1 | 804  | 804  |
|     | 2 | 1101 | 1101 |
| Ec  | 1 | 433  | 433  |
|     | 2 | 407  | 407  |
|     | 3 | 409  | 409  |
|     | 4 | 343  | 343  |
| Ecf | 1 | 705  | 705  |
|     | 2 | 951  | 951  |
|     | 3 | 407  | 407  |
|     | 4 | 409  | 409  |
|     | 5 | 385  | 385  |
| Ef  | 1 | 771  | 771  |
|     | 2 | 551  | 551  |
| Exp | 1 | 705  | 705  |
|     | 2 | 518  | 518  |
| F   | 1 | 211  | 211  |
|     | 2 | 349  | 349  |
|     | 3 | 344  | 344  |
| Fc  | 1 | 692  | 692  |
|     | 2 | 869  | 869  |
|     | 3 | 744  | 744  |
| Ff  | 1 | 560  | 560  |
|     | 2 | 344  | 344  |
| G   | 1 | 292  | 292  |
|     | 2 | 301  | 301  |
| Gf  | 1 | 288  | 288  |
|     | 2 | 263  | 263  |
| xA  | 1 | 835  | 835  |
|     | 2 | 762  | 762  |
| xB  | 1 | 1668 | 1668 |
| xC  | 1 | 679  | 679  |
|     | 2 | 640  | 640  |
| xD  | 1 | 804  | 804  |
|     | 2 | 1101 | 1101 |
| xE  | 1 | 705  | 705  |
|     | 2 | 518  | 518  |
| xF  | 1 | 794  | 794  |
| Cc1 | 1 | 726  | 726  |
| E1  | 1 | 370  | 370  |
|     | 2 | 401  | 401  |
| Gf1 | 1 | 42   | 42   |
| Cc2 | 2 | 719  | 719  |
|     | 3 | 334  | 334  |
|     | 4 | 1097 | 1097 |
|     | 5 | 344  | 344  |
|     | 6 | 0    | 0    |
| E2  | 3 | 288  | 288  |
|     | 4 | 263  | 263  |
| TC5 | 2 | 663  | 663  |
|     | 3 | 762  | 762  |
|     | 4 | 0    | 0    |
| TC9 | 1 | 1294 | 1294 |
|     | 2 | 694  | 694  |
|     | 3 | 383  | 383  |

|      |   |      |      |
|------|---|------|------|
| TC35 | 1 | 172  | 172  |
| TC36 | 1 | 401  | 401  |
| TC37 | 1 | 73   | 73   |
| TC38 | 1 | 73   | 73   |
| TC39 | 2 | 663  | 663  |
|      | 3 | 762  | 762  |
| TC40 | 2 | 736  | 736  |
|      | 3 | 762  | 762  |
| TC41 | 1 | 328  | 328  |
| TC42 | 1 | 0    | 0    |
| TC43 | 1 | 0    | 0    |
| 47   | 1 | 1319 | 1319 |
| 48   | 1 | 965  | 965  |
| 49   | 1 | 1294 | 1294 |
|      | 2 | 1077 | 1077 |
| 50   | 1 | 1313 | 1313 |
| 51   | 1 | 904  | 904  |
| 52   | 1 | 392  | 392  |
|      | 2 | 344  | 344  |
| 53   | 1 | 392  | 392  |
|      | 2 | 344  | 344  |

## Signals

| Arm | Traffic Stream | Controller stream | Phase | Second phase enabled |
|-----|----------------|-------------------|-------|----------------------|
| A   | 1              | 771-2             | E     |                      |
|     | 2              | 771-2             | E     |                      |
|     | 3              | 771-2             | E     |                      |
|     | 4              | 771-2             | E     |                      |
| Ac  | 1              | 771-2             | D     |                      |
|     | 2              | 771-2             | D     |                      |
|     | 3              | 771-2             | D     |                      |
| B   | 1              | 769-1             | B     |                      |
|     | 2              | 769-1             | B     |                      |
|     | 3              | 769-1             | B     |                      |
|     | 4              | 769-1             | B     |                      |
| Bc  | 1              | 769-1             | A     |                      |
|     | 2              | 769-1             | A     |                      |
|     | 3              | 769-1             | A     |                      |
| C   | 1              | 769-2             | G     |                      |
|     | 2              | 769-2             | G     |                      |
|     | 3              | 769-2             | G     |                      |
| D   | 1              | 770-1             | B     |                      |
|     | 2              | 770-1             | B     |                      |
|     | 3              | 770-1             | B     |                      |
|     | 4              | 770-1             | B     |                      |
| Dc  | 1              | 770-1             | A     |                      |
|     | 2              | 770-1             | A     |                      |
|     | 3              | 770-1             | A     |                      |
|     | 4              | 770-1             | A     |                      |
| Dxp | 1              | 770-2             | D     |                      |
|     | 2              | 770-2             | D     |                      |
| Ec  | 1              | 770-3             | F     |                      |
|     | 2              | 770-3             | F     |                      |
|     | 3              | 770-3             | F     |                      |
|     | 4              | 770-3             | F     |                      |

|      |   |         |   |  |
|------|---|---------|---|--|
| Exp  | 1 | 770-4   | L |  |
|      | 2 | 770-4   | L |  |
| F    | 1 | 771-1   | B |  |
|      | 2 | 771-1   | B |  |
|      | 3 | 771-1   | B |  |
| Fc   | 1 | 771-1   | A |  |
|      | 2 | 771-1   | A |  |
|      | 3 | 771-1   | A |  |
| G    | 1 | 769-2   | F |  |
|      | 2 | 769-2   | F |  |
| Cc1  | 1 | 769-2   | E |  |
| E1   | 1 | 770-3   | G |  |
|      | 2 | 770-3   | G |  |
| Cc2  | 2 | 769-2   | D |  |
|      | 3 | 769-2   | D |  |
|      | 4 | 769-2   | D |  |
|      | 5 | 769-2   | D |  |
|      | 6 | 769-2   | D |  |
| E2   | 3 | 770-3   | H |  |
|      | 4 | 770-3   | H |  |
| TC5  | 2 | TC777-1 | A |  |
|      | 3 | TC777-1 | A |  |
|      | 4 | TC777-1 | C |  |
| TC9  | 1 | TC777-1 | B |  |
|      | 2 | TC777-1 | B |  |
|      | 3 | TC777-1 | B |  |
| TC35 | 1 | TC777-1 | A |  |
| TC37 | 1 | TC777-2 | J |  |
| TC41 | 1 | TC777-1 | D |  |
| TC42 | 1 | TC777-1 | E |  |
| 52   | 1 | 770-3   | A |  |
|      | 2 | 770-3   | A |  |

### Entry Sources

| Arm  | Traffic Stream | Cruise time for Normal Traffic (s) | Cruise speed for Normal Traffic (kph) |
|------|----------------|------------------------------------|---------------------------------------|
| Df   | 1              | 24.00                              | 30.00                                 |
|      | 2              | 24.00                              | 30.00                                 |
| Ef   | 1              | 15.31                              | 30.00                                 |
|      | 2              | 15.31                              | 30.00                                 |
| TC36 | 1              | 3.03                               | 30.00                                 |
| TC42 | 1              | 2.80                               | 30.00                                 |
| 48   | 1              | 6.61                               | 30.00                                 |
| 49   | 1              | 3.15                               | 30.00                                 |
|      | 2              | 3.15                               | 30.00                                 |
| 50   | 1              | 5.78                               | 30.00                                 |
| 51   | 1              | 4.50                               | 30.00                                 |

### Sources

| Arm | Traffic Stream | Source | Source traffic stream | Destination traffic stream | Cruise time for Normal Traffic (s) | Cruise speed for Normal Traffic (kph) | Auto turning radius | Traffic turn style | Turning radius (m) |
|-----|----------------|--------|-----------------------|----------------------------|------------------------------------|---------------------------------------|---------------------|--------------------|--------------------|
| A   | 1              | 1      | Af/1                  | A/1                        | 5.58                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
|     | 2              | 1      | Af/1                  | A/2                        | 5.75                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |

|     |   |   |        |       |       |       |   |          |                   |
|-----|---|---|--------|-------|-------|-------|---|----------|-------------------|
|     | 3 | 1 | Af/2   | A/3   | 5.88  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Af/3   | A/4   | 6.01  | 48.00 | ✓ | Straight | Straight Movement |
| Ac  | 1 | 1 | Acf/1  | Ac/1  | 7.19  | 48.00 | ✓ | Offside  | 48.59             |
|     | 2 | 1 | Acf/1  | Ac/2  | 9.50  | 35.00 | ✓ | Offside  | 46.08             |
|     | 3 | 1 | Acf/2  | Ac/3  | 6.60  | 48.00 | ✓ | Offside  | 42.76             |
| Acf | 1 | 1 | F/2    | Acf/1 | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | F/3    | Acf/2 | 7.24  | 35.00 | ✓ | Straight | Straight Movement |
| Af  | 1 | 1 | TC42/1 | Af/1  | 6.42  | 30.00 | ✓ | Nearside | 10.60             |
|     | 2 | 1 | TC42/1 | Af/2  | 6.38  | 30.00 | ✓ | Nearside | 10.60             |
|     | 3 | 1 | TC42/1 | Af/3  | 6.36  | 30.00 | ✓ | Nearside | 10.60             |
| B   | 1 | 1 | Bf/1   | B/1   | 7.10  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Bf/1   | B/2   | 7.29  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Bf/2   | B/3   | 7.48  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Bf/2   | B/4   | 12.29 | 30.00 | ✓ | Straight | Straight Movement |
| Bc  | 1 | 1 | Bcf/2  | Bc/1  | 11.96 | 40.00 | ✓ | Offside  | 51.76             |
|     | 2 | 1 | Bcf/3  | Bc/2  | 11.83 | 40.00 | ✓ | Offside  | 48.45             |
|     | 3 | 1 | Bcf/4  | Bc/3  | 11.71 | 40.00 | ✓ | Offside  | 45.13             |
| Bcf | 1 | 1 | A/1    | Bcf/1 | 4.71  | 48.00 | ✓ | Nearside | 68.09             |
|     | 2 | 1 | A/2    | Bcf/2 | 6.63  | 34.00 | ✓ | Nearside | 71.40             |
|     | 3 | 1 | A/3    | Bcf/3 | 6.61  | 34.00 | ✓ | Nearside | 74.72             |
|     | 4 | 1 | A/4    | Bcf/4 | 6.60  | 34.00 | ✓ | Nearside | 78.03             |
| Bf  | 1 | 1 | 50/1   | Bf/1  | 27.34 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 50/1   | Bf/2  | 27.41 | 30.00 | ✓ | Straight | Straight Movement |
| C   | 1 | 1 | Cf/1   | C/1   | 14.54 | 30.00 | ✓ | Offside  | 59.30             |
|     | 2 | 1 | Cf/2   | C/2   | 14.73 | 30.00 | ✓ | Offside  | 55.98             |
|     | 3 | 1 | Cf/2   | C/3   | 14.92 | 30.00 | ✓ | Offside  | 53.27             |
| Cf  | 1 | 1 | 48/1   | Cf/1  | 17.35 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 48/1   | Cf/2  | 17.50 | 30.00 | ✓ | Straight | Straight Movement |
| D   | 1 | 1 | Df/1   | D/1   | 4.13  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Df/1   | D/2   | 4.13  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Df/2   | D/3   | 3.97  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Df/2   | D/4   | 4.16  | 48.00 | ✓ | Straight | Straight Movement |
| Dc  | 1 | 1 | Dcf/3  | Dc/1  | 6.11  | 30.00 | ✓ | Offside  | 56.19             |
|     | 2 | 1 | Dcf/4  | Dc/2  | 5.88  | 30.00 | ✓ | Offside  | 52.87             |
|     | 3 | 1 | Dcf/5  | Dc/3  | 5.64  | 30.00 | ✓ | Offside  | 49.56             |
|     | 4 | 1 | Dcf/6  | Dc/4  | 5.41  | 30.00 | ✓ | Offside  | 46.25             |
| Dcf | 1 | 1 | Cc2/2  | Dcf/1 | 4.91  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Cc2/4  | Dcf/2 | 4.90  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | C/2    | Dcf/3 | 4.92  | 48.00 | ✓ | Nearside | 58.12             |
|     | 4 | 1 | C/2    | Dcf/4 | 5.08  | 48.00 | ✓ | Nearside | 58.12             |

|     |   |   |       |       |       |       |   |          |                   |
|-----|---|---|-------|-------|-------|-------|---|----------|-------------------|
|     | 5 | 1 | C/3   | Dcf/5 | 4.96  | 48.00 | ✓ | Nearside | 61.43             |
|     | 6 | 1 | C/3   | Dcf/6 | 7.94  | 30.00 | ✓ | Nearside | 61.43             |
| Dxp | 1 | 1 | Dcf/1 | Dxp/1 | 3.43  | 48.00 | ✓ | Nearside | 60.22             |
|     | 2 | 1 | Dcf/2 | Dxp/2 | 3.61  | 48.00 | ✓ | Nearside | 63.54             |
| Ec  | 1 | 1 | Ecf/2 | Ec/1  | 3.76  | 48.00 | ✓ | Offside  | 76.42             |
|     | 2 | 1 | Ecf/3 | Ec/2  | 3.63  | 48.00 | ✓ | Offside  | 73.10             |
|     | 3 | 1 | Ecf/4 | Ec/3  | 3.51  | 48.00 | ✓ | Offside  | 69.79             |
|     | 4 | 1 | Ecf/5 | Ec/4  | 5.41  | 30.00 | ✓ | Offside  | 66.48             |
| Ecf | 1 | 1 | Dc/1  | Ecf/1 | 3.45  | 48.00 | ✓ | Offside  | 76.11             |
|     | 2 | 1 | Dc/2  | Ecf/2 | 3.48  | 48.00 | ✓ | Offside  | 72.80             |
|     | 3 | 1 | Dc/3  | Ecf/3 | 3.52  | 48.00 | ✓ | Offside  | 69.49             |
|     | 4 | 1 | Dc/4  | Ecf/4 | 3.56  | 48.00 | ✓ | Offside  | 66.17             |
|     | 5 | 1 | Dc/4  | Ecf/5 | 3.64  | 48.00 | ✓ | Offside  | 62.86             |
| Exp | 1 | 1 | Ecf/1 | Exp/1 | 3.89  | 48.00 | ✓ | Nearside | 52.96             |
|     | 2 | 1 | Ecf/2 | Exp/2 | 4.03  | 48.00 | ✓ | Nearside | 56.27             |
| F   | 1 | 1 | Ff/1  | F/1   | 6.38  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Ff/1  | F/2   | 6.43  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Ff/2  | F/3   | 6.54  | 48.00 | ✓ | Straight | Straight Movement |
| Fc  | 1 | 1 | Ec/2  | Fc/1  | 18.38 | 35.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Ec/3  | Fc/2  | 18.02 | 35.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Ec/4  | Fc/3  | 18.54 | 35.00 | ✓ | Straight | Straight Movement |
| Ff  | 1 | 1 | 51/1  | Ff/1  | 33.09 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 51/1  | Ff/2  | 33.05 | 30.00 | ✓ | Straight | Straight Movement |
| G   | 1 | 1 | Gf/1  | G/1   | 15.98 | 35.00 | ✓ | Offside  | 88.54             |
|     | 2 | 1 | Gf/2  | G/2   | 11.38 | 48.00 | ✓ | Offside  | 85.22             |
| Gf  | 1 | 1 | E2/3  | Gf/1  | 3.04  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | E2/4  | Gf/2  | 3.00  | 48.00 | ✓ | Straight | Straight Movement |
| xA  | 1 | 1 | F/1   | xA/1  | 17.22 | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | F/1   | xA/2  | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xB  | 1 | 1 | Bcf/1 | xB/1  | 5.79  | 48.00 | ✓ | Nearside | 59.55             |
| xC  | 1 | 1 | G/1   | xC/1  | 8.67  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | G/2   | xC/2  | 8.70  | 48.00 | ✓ | Straight | Straight Movement |
| xD  | 1 | 1 | Dxp/1 | xD/1  | 9.11  | 48.00 | ✓ | Nearside | 44.59             |
|     | 2 | 1 | Dxp/2 | xD/2  | 9.16  | 48.00 | ✓ | Nearside | 47.90             |
| xE  | 1 | 1 | Exp/1 | xE/1  | 13.04 | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Exp/2 | xE/2  | 13.04 | 48.00 | ✓ | Straight | Straight Movement |
| xF  | 1 | 1 | Ec/1  | xF/1  | 11.88 | 48.00 | ✓ | Straight | Straight Movement |
| Cc1 | 1 | 1 | B/1   | Cc1/1 | 8.63  | 40.00 | ✓ | Straight | Straight Movement |
| E1  | 1 | 1 | Ef/1  | E1/1  | 6.00  | 48.00 | ✓ | Nearside | 26.33             |
|     | 2 | 1 | Ef/1  | E1/2  | 6.00  | 48.00 | ✓ | Nearside | 28.96             |

|             |   |   |        |        |       |       |   |          |                   |
|-------------|---|---|--------|--------|-------|-------|---|----------|-------------------|
| <b>Gf1</b>  | 1 | 1 | Ecf/5  | Gf1/1  | 5.74  | 30.00 | ✓ | Offside  | 21.77             |
| <b>Cc2</b>  | 2 | 1 | B/1    | Cc2/2  | 8.24  | 40.00 | ✓ | Straight | Straight Movement |
|             | 3 | 1 | B/3    | Cc2/3  | 8.20  | 40.00 | ✓ | Straight | Straight Movement |
|             | 4 | 1 | B/2    | Cc2/4  | 8.14  | 40.00 | ✓ | Straight | Straight Movement |
|             | 5 | 1 | Bc/3   | Cc2/5  | 6.03  | 54.00 | ✓ | Offside  | 96.53             |
|             | 6 | 1 | Bc/3   | Cc2/6  | 5.87  | 54.00 | ✓ | Offside  | 93.22             |
| <b>E2</b>   | 3 | 1 | Ef/2   | E2/3   | 4.00  | 48.00 | ✓ | Nearside | 43.25             |
|             | 4 | 1 | Ef/2   | E2/4   | 4.07  | 48.00 | ✓ | Nearside | 43.25             |
| <b>TC5</b>  | 2 | 1 | xA/1   | TC5/2  | 2.76  | 30.00 | ✓ | Straight | Straight Movement |
|             | 3 | 1 | xA/2   | TC5/3  | 2.76  | 30.00 | ✓ | Straight | Straight Movement |
|             | 4 | 1 | xA/2   | TC5/4  | 2.93  | 30.00 | ✓ | Straight | Straight Movement |
| <b>TC9</b>  | 1 | 1 | 49/1   | TC9/1  | 11.00 | 30.00 | ✓ | Straight | Straight Movement |
|             | 2 | 1 | 49/2   | TC9/2  | 11.07 | 30.00 | ✓ | Straight | Straight Movement |
|             | 3 | 1 | 49/2   | TC9/3  | 11.12 | 30.00 | ✓ | Straight | Straight Movement |
| <b>TC35</b> | 1 | 1 | xA/1   | TC35/1 | 2.90  | 30.00 | ✓ | Straight | Straight Movement |
| <b>TC37</b> | 1 | 1 | TC36/1 | TC37/1 | 3.19  | 50.00 | ✓ | Nearside | 46.04             |
| <b>TC38</b> | 1 | 1 | TC37/1 | TC38/1 | 1.53  | 50.00 | ✓ | Straight | Straight Movement |
| <b>TC39</b> | 2 | 1 | TC5/2  | TC39/2 | 2.54  | 50.00 | ✓ | Straight | Straight Movement |
|             | 3 | 1 | TC5/3  | TC39/3 | 2.40  | 50.00 | ✓ | Straight | Straight Movement |
| <b>TC40</b> | 2 | 1 | TC38/1 | TC40/2 | 4.23  | 50.00 | ✓ | Nearside | 11.92             |
|             | 3 | 1 | TC39/3 | TC40/3 | 4.02  | 50.00 | ✓ | Offside  | 77.43             |
| <b>TC41</b> | 1 | 1 | TC36/1 | TC41/1 | 3.93  | 50.00 | ✓ | Straight | Straight Movement |
| <b>TC43</b> | 1 | 1 | TC9/1  | TC43/1 | 3.73  | 50.00 | ✓ | Nearside | 6.11              |
| <b>47</b>   | 1 | 1 | xC/1   | 47/1   | 16.04 | 30.00 | ✓ | Straight | Straight Movement |
| <b>52</b>   | 1 | 1 | 53/1   | 52/1   | 20.76 | 30.00 | ✓ | Straight | Straight Movement |
|             | 2 | 1 | 53/2   | 52/2   | 20.78 | 30.00 | ✓ | Straight | Straight Movement |
| <b>53</b>   | 1 | 1 | Bc/3   | 53/1   | 5.27  | 30.00 | ✓ | Offside  | 5.00              |
|             | 2 | 1 | Bc/3   | 53/2   | 5.07  | 30.00 | ✓ | Offside  | 5.00              |
| <b>Acf</b>  | 1 | 2 | Fc/3   | Acf/1  | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
|             | 2 | 2 | Fc/3   | Acf/2  | 7.24  | 35.00 | ✓ | Straight | Straight Movement |
| <b>Af</b>   | 1 | 2 | TC9/1  | Af/1   | 6.42  | 30.00 | ✓ | Straight | Straight Movement |
|             | 2 | 2 | TC9/2  | Af/2   | 6.38  | 30.00 | ✓ | Straight | Straight Movement |
|             | 3 | 2 | TC9/3  | Af/3   | 6.36  | 30.00 | ✓ | Straight | Straight Movement |
| <b>Bcf</b>  | 1 | 2 | Ac/1   | Bcf/1  | 3.96  | 57.00 | ✓ | Offside  | 93.05             |
|             | 2 | 2 | Ac/2   | Bcf/2  | 3.95  | 57.00 | ✓ | Offside  | 89.74             |
|             | 3 | 2 | Ac/3   | Bcf/3  | 3.95  | 57.00 | ✓ | Offside  | 86.42             |
|             | 4 | 2 | Ac/3   | Bcf/4  | 3.94  | 57.00 | ✓ | Offside  | 86.42             |
| <b>C</b>    | 2 | 2 | Cf/1   | C/2    | 14.73 | 30.00 | ✓ | Offside  | 56.58             |

|      |   |   |        |        |       |       |   |          |                   |
|------|---|---|--------|--------|-------|-------|---|----------|-------------------|
| Dcf  | 1 | 2 | C/1    | Dcf/1  | 4.91  | 48.00 | ✓ | Nearside | 54.80             |
|      | 2 | 2 | C/1    | Dcf/2  | 4.90  | 48.00 | ✓ | Nearside | 54.80             |
|      | 3 | 2 | Cc2/3  | Dcf/3  | 7.87  | 30.00 | ✓ | Straight | Straight Movement |
|      | 4 | 2 | Cc2/3  | Dcf/4  | 8.12  | 30.00 | ✓ | Straight | Straight Movement |
|      | 5 | 2 | Cc2/5  | Dcf/5  | 7.94  | 30.00 | ✓ | Offside  | 99.16             |
|      | 6 | 2 | Cc2/6  | Dcf/6  | 7.94  | 30.00 | ✓ | Offside  | 95.85             |
| Ecf  | 1 | 2 | D/1    | Ecf/1  | 3.45  | 48.00 | ✓ | Nearside | 43.36             |
|      | 2 | 2 | D/1    | Ecf/2  | 3.48  | 48.00 | ✓ | Nearside | 43.36             |
|      | 3 | 2 | D/2    | Ecf/3  | 5.63  | 30.00 | ✓ | Nearside | 46.68             |
|      | 4 | 2 | D/3    | Ecf/4  | 5.70  | 30.00 | ✓ | Nearside | 49.99             |
|      | 5 | 2 | D/4    | Ecf/5  | 5.83  | 30.00 | ✓ | Nearside | 53.30             |
| Fc   | 1 | 2 | E1/1   | Fc/1   | 20.10 | 32.00 | ✓ | Nearside | 58.94             |
|      | 2 | 2 | E1/1   | Fc/2   | 19.71 | 32.00 | ✓ | Nearside | 60.85             |
|      | 3 | 2 | E1/2   | Fc/3   | 20.28 | 32.00 | ✓ | Nearside | 64.16             |
| G    | 1 | 2 | Gf1/1  | G/1    | 15.98 | 35.00 | ✓ | Offside  | 17.91             |
|      | 2 | 2 | Gf1/1  | G/2    | 11.38 | 48.00 | ✓ | Offside  | 15.13             |
| xA   | 1 | 2 | Fc/1   | xA/1   | 17.22 | 48.00 | ✓ | Straight | Straight Movement |
|      | 2 | 2 | Fc/2   | xA/2   | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xC   | 1 | 2 | Cc1/1  | xC/1   | 8.67  | 48.00 | ✓ | Nearside | 56.51             |
|      | 2 | 2 | Cc1/1  | xC/2   | 8.70  | 48.00 | ✓ | Nearside | 57.28             |
| xF   | 1 | 2 | E1/1   | xF/1   | 11.88 | 48.00 | ✓ | Nearside | 40.67             |
| Cc1  | 1 | 2 | Bc/1   | Cc1/1  | 6.39  | 54.00 | ✓ | Straight | Straight Movement |
| Cc2  | 2 | 2 | Bc/1   | Cc2/2  | 10.98 | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 2 | Bc/2   | Cc2/3  | 10.93 | 30.00 | ✓ | Offside  | 99.84             |
|      | 4 | 2 | Bc/2   | Cc2/4  | 6.03  | 54.00 | ✓ | Straight | Straight Movement |
|      | 5 | 2 | B/4    | Cc2/5  | 8.14  | 40.00 | ✓ | Straight | Straight Movement |
|      | 6 | 2 | B/4    | Cc2/6  | 7.93  | 40.00 | ✓ | Straight | Straight Movement |
| TC9  | 2 | 2 | 49/1   | TC9/2  | 11.07 | 30.00 | ✓ | Straight | Straight Movement |
| TC39 | 2 | 2 | TC42/1 | TC39/2 | 2.54  | 50.00 | ✓ | Offside  | 9.44              |
|      | 3 | 2 | TC42/1 | TC39/3 | 2.40  | 50.00 | ✓ | Offside  | 9.44              |
| TC40 | 2 | 2 | TC39/2 | TC40/2 | 4.23  | 50.00 | ✓ | Offside  | 80.74             |
| TC43 | 1 | 2 | TC5/4  | TC43/1 | 3.73  | 50.00 | ✓ | Offside  | 21.45             |
| 47   | 1 | 2 | xC/2   | 47/1   | 16.04 | 30.00 | ✓ | Straight | Straight Movement |
| 53   | 1 | 2 | B/3    | 53/1   | 5.27  | 30.00 | ✓ | Offside  | 40.30             |
|      | 2 | 2 | B/4    | 53/2   | 5.07  | 30.00 | ✓ | Offside  | 36.99             |
| Acf  | 1 | 3 | Fc/2   | Acf/1  | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
| Af   | 1 | 3 | TC41/1 | Af/1   | 6.42  | 30.00 | ✓ | Offside  | 6.19              |
|      | 2 | 3 | TC41/1 | Af/2   | 6.38  | 30.00 | ✓ | Offside  | 6.19              |
|      | 3 | 3 | TC41/1 | Af/3   | 6.36  | 30.00 | ✓ | Offside  | 6.19              |
| Dcf  | 4 | 3 | Cc2/5  | Dcf/4  | 8.12  | 30.00 | ✓ | Straight | Straight Movement |
| Fc   | 1 | 3 | 52/1   | Fc/1   | 21.44 | 30.00 | ✓ | Offside  | 13.89             |
|      | 2 | 3 | 52/2   | Fc/2   | 21.02 | 30.00 | ✓ | Offside  | 10.58             |

|     |   |   |      |       |       |       |   |          |                   |
|-----|---|---|------|-------|-------|-------|---|----------|-------------------|
| xA  | 2 | 3 | Fc/1 | xA/2  | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xF  | 1 | 3 | 52/1 | xF/1  | 19.00 | 30.00 | ✓ | Offside  | 19.56             |
| Cc2 | 3 | 3 | B/2  | Cc2/3 | 10.93 | 30.00 | ✓ | Straight | Straight Movement |
|     | 5 | 3 | B/3  | Cc2/5 | 10.86 | 30.00 | ✓ | Straight | Straight Movement |

### Give Way Data

| Arm   | Traffic Stream | Opposed traffic | Use Step-wise Opposed Turn Model | Visibility restricted |
|-------|----------------|-----------------|----------------------------------|-----------------------|
| (ALL) | 1              | AllTraffic      |                                  |                       |

### Give Way Data - All Movements - Conflicts

| Traffic Stream | Description | Controlling type | Controlling traffic stream | Percentage opposing (%) | Slope coefficient | Upstream signals visible |
|----------------|-------------|------------------|----------------------------|-------------------------|-------------------|--------------------------|
| 1              |             | TrafficStream    | Gf/1                       | 100                     | 0.22              |                          |
|                |             | TrafficStream    | Gf/2                       | 100                     | 0.22              |                          |
|                |             | TrafficStream    | TC39/2                     | 100                     | 0.22              |                          |
|                |             | TrafficStream    | TC39/3                     | 100                     | 0.22              |                          |

## Pedestrian Crossings

### Pedestrian Crossings

| Crossing | Name       | Description | Traffic node | Allow walk on red | Crossing type | Length (m) | Cruise time (seconds) | Cruise speed (kph) |
|----------|------------|-------------|--------------|-------------------|---------------|------------|-----------------------|--------------------|
| 1        | (untitled) |             | 3-2          |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 2        | (untitled) |             | 3            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 3        | (untitled) |             | 4-2          |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 4        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 5        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 6        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 7        | (untitled) |             | 5            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 8        | (untitled) |             | 1            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 9        | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 10       | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 11       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 12       | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 13       | (untitled) |             |              |                   | Farside       | 3.00       | 2.00                  | 5.40               |
| 14       | (untitled) |             |              |                   | Farside       | 3.00       | 2.00                  | 5.40               |
| 15       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 16       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 17       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |

### Pedestrian Crossings - Signals

| Crossing | Controller stream | Phase | Second phase enabled |
|----------|-------------------|-------|----------------------|
| 1        | 770-2             | E     |                      |
| 2        | 770-1             | C     |                      |
| 3        | 770-4             | M     |                      |
| 4        | 770-3             | J     |                      |
| 5        | 770-3             | I     |                      |
| 6        | 770-3             | K     |                      |
| 7        | 771-1             | C     |                      |
| 8        | 769-1             | C     |                      |
| 9        | 769-2             | J     |                      |
| 10       | 769-2             | K     |                      |

|    |         |   |  |
|----|---------|---|--|
| 11 | 769-2   | H |  |
| 12 | 769-2   | I |  |
| 13 | TC777-1 | I |  |
| 14 | TC777-1 | F |  |
| 15 | TC777-1 | G |  |
| 16 | TC777-1 | H |  |
| 17 | TC777-2 | K |  |

### Pedestrian Crossings - Sides

| Crossing | Side  | Saturation flow (Ped/hr) |
|----------|-------|--------------------------|
| (ALL)    | (ALL) | 11000                    |

### Pedestrian Crossings - Modelling

| Crossing | Side  | Delay weighting (%) | Assignment Cost Weighting (%) | Exclude from results calculation | Max queue storage (Ped) | Has queue limit | Has degree of saturation limit |
|----------|-------|---------------------|-------------------------------|----------------------------------|-------------------------|-----------------|--------------------------------|
| (ALL)    | (ALL) | 100                 | 100                           |                                  | 0.00                    |                 |                                |

## Local OD Matrix - Local Matrix: 1

### Local Matrix Options

| OD Matrix | Name       | Use for point to point table | Allocation mode  | Allow paths past exit locations | Allow looped paths on arms | Allow looped paths on traffic nodes | Copy flows | Matrix to copy flows from | Limit paths by length | Path length limit multiplier | Limit paths by number | Path number limit | Limit paths by flow | Low path flow threshold |
|-----------|------------|------------------------------|------------------|---------------------------------|----------------------------|-------------------------------------|------------|---------------------------|-----------------------|------------------------------|-----------------------|-------------------|---------------------|-------------------------|
| 1         | (untitled) | ✓                            | User Equilibrium |                                 |                            | ✓                                   |            |                           |                       |                              |                       |                   |                     |                         |

Note: Auto Calculate disabled on this Local Matrix - Paths and Flow Allocation might not be up to date.

### Normal Input Flows (PCU/hr)

|      |     | To  |     |     |     |     |     |     |     |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|      |     | A28 | B28 | C28 | D28 | E28 | F28 | G28 | H28 |
| From | A28 | 3   | 51  | 389 | 12  | 411 | 54  | 393 | 0   |
|      | B28 | 17  | 0   | 89  | 159 | 454 | 12  | 234 | 0   |
|      | C28 | 362 | 42  | 0   | 294 | 91  | 19  | 495 | 0   |
|      | D28 | 5   | 344 | 329 | 0   | 15  | 54  | 157 | 0   |
|      | E28 | 434 | 551 | 82  | 100 | 1   | 8   | 146 | 0   |
|      | F28 | 118 | 27  | 61  | 100 | 22  | 0   | 73  | 0   |
|      | G28 | 729 | 304 | 955 | 129 | 229 | 25  | 0   | 0   |
|      | H28 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

### Locations

| OD Matrix | Location | Name       | Entries    | Exits      | Colour  |
|-----------|----------|------------|------------|------------|---------|
| 1         | A28      | (untitled) | 50/1       | xB/1       | #FF0000 |
|           | B28      | (untitled) | 48/1       | 47/1       | #00FF40 |
|           | C28      | (untitled) | Df/2, Df/1 | xD/1, xD/2 | #804000 |

|  |            |            |            |                |         |
|--|------------|------------|------------|----------------|---------|
|  | <b>D28</b> | (untitled) | 51/1       | xF/1           | #FF00FF |
|  | <b>E28</b> | (untitled) | Ef/2, Ef/1 | xE/1, xE/2     | #FF8000 |
|  | <b>F28</b> | (untitled) | TC36/1     | TC35/1         | #FFA500 |
|  | <b>G28</b> | (untitled) | 49/2, 49/1 | TC40/2, TC40/3 | #0000FF |
|  | <b>H28</b> | (untitled) | TC42/1     | TC43/1         | #008000 |

### Normal Paths and Flows

| OD Matrix | Path | Description | From location | To location | Path items   | Allocation type | Normal Calculated Flow (PCU/hr) |
|-----------|------|-------------|---------------|-------------|--|-----------------|---------------------------------|
| 1         | 32   | I1          | C28           | E28         | Df/1, D/1, Ecf/1, Exp/1, xE/1  | Normal          | 91                              |
|           | 36   |             | C28           | E28         | Df/1, D/1, Ecf/2, Exp/2, xE/2  | Disabled        | 0                               |
|           | 41   |             | E28           | A28         | Ef/1, E1/2, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1   | Normal          | 350                             |
|           | 49   | I1          | C28           | D28         | Df/1, D/1, Ecf/2, Ec/1, xF/1   | Normal          | 294                             |
|           | 50   |             | E28           | D28         | Ef/1, E1/1, xF/1   | Normal          | 100                             |
|           | 68   |             | E28           | G28         | Ef/1, E1/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2  | Normal          | 146                             |
|           | 92   |             | E28           | F28         | Ef/1, E1/1, Fc/1, xA/1, TC35/1   | Normal          | 8                               |
|           | 100  |             | E28           | B28         | Ef/2, E2/4, Gf/2, G/2, xC/2, 47/1  | Normal          | 263                             |
|           | 102  |             | A28           | C28         | 50/1, Bf/1, B/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal          | 315                             |
|           | 103  |             | F28           | B28         | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                                    | Fixed           | 0                               |
|           | 105  |             | D28           | H28         | 51/1, Ff/1, F/1, xA/2, TC5/4, TC43/1   | Normal          | 0                               |
|           | 107  |             | A28           | B28         | 50/1, Bf/1, B/1, Cc1/1, xC/2, 47/1   | Normal          | 51                              |
|           | 110  |             | E28           | G28         | Ef/1, E1/1, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal          | 0                               |
|           | 112  |             | F28           | G28         | TC36/1, TC37/1, TC38/1, TC40/2   | Normal          | 73                              |
|           | 113  |             | F28           | A28         | TC36/1, TC41/1, Af/1, A/1, Bcf/1, xB/1   | Normal          | 118                             |
|           | 115  |             | B28           | C28         | 48/1, Cf/1, C/1, Dcf/2, Dxp/2, xD/2  | Fixed           | 4                               |
|           | 125  |             | H28           | A28         | TC42/1, Af/1, A/1, Bcf/1, xB/1   | Normal          | 0                               |
|           | 130  |             | G28           | C28         | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                               | Normal          | 694                             |
|           | 137  |             | H28           | G28         | TC42/1, TC39/2, TC40/2   | Normal          | 0                               |
|           | 138  |             | H28           | G28         | TC42/1, TC39/3, TC40/3   | Normal          | 0                               |
|           | 140  |             | B28           | G28         | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                 | Normal          | 157                             |
|           | 141  |             | B28           | F28         | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                                | Normal          | 12                              |
|           | 142  |             | B28           | G28         | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                 | Normal          | 0                               |
|           | 143  |             | E28           | H28         | Ef/1, E1/1, Fc/2, xA/2, TC5/4, TC43/1  | Normal          | 0                               |
|           | 144  |             | B28           | G28         | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                 | Normal          | 77                              |
|           | 145  |             | B28           | H28         | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                         | Normal          | 0                               |
|           | 146  |             | B28           | A28         | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                    | Normal          | 0                               |
|           | 147  |             | B28           | B28         | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1 | Normal          | 0                               |

|     |  |     |     |   |        |     |
|-----|--|-----|-----|---|--------|-----|
| 148 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1        | Normal | 0   |
| 149 |  | B28 | A28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                           | Normal | 17  |
| 150 |  | E28 | B28 | Ef/2, E2/3, Gf/1, G/1, xC/1, 47/1   | Normal | 288 |
| 151 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1        | Normal | 0   |
| 152 |  | H28 | B28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1   | Normal | 0   |
| 153 |  | F28 | B28 | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1   | Normal | 27  |
| 154 |  | E28 | A28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1  | Normal | 84  |
| 155 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1     | Normal | 0   |
| 156 |  | G28 | B28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1              | Normal | 0   |
| 157 |  | H28 | B28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1   | Normal | 0   |
| 158 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                 | Normal | 0   |
| 159 |  | A28 | H28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                         | Normal | 0   |
| 160 |  | B28 | D28 | 48/1, Cf/1, C/2, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 118 |
| 161 |  | B28 | E28 | 48/1, Cf/1, C/2, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 32  |
| 162 |  | B28 | D28 | 48/1, Cf/2, C/2, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 21  |
| 163 |  | B28 | E28 | 48/1, Cf/2, C/2, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 164 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1 | Normal | 0   |
| 165 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1 | Normal | 0   |
| 166 |  | B28 | C28 | 48/1, Cf/1, C/1, Dcf/1, Dxp/1, xD/1   | Normal | 85  |
| 167 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                                  | Normal | 0   |
| 168 |  | G28 | A28 | 49/1, TC9/1, Af/1, A/1, Bcf/1, xB/1   | Normal | 729 |
| 169 |  | G28 | B28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1  | Normal | 93  |
| 170 |  | G28 | B28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1  | Normal | 211 |
| 171 |  | G28 | H28 | 49/1, TC9/1, TC43/1   | Normal | 0   |
| 172 |  | H28 | E28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                              | Normal | 0   |
| 173 |  | F28 | D28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                       | Normal | 0   |
| 174 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 0   |
| 175 |  | A28 | D28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1  | Normal | 0   |
| 176 |  | H28 | C28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 0   |
| 177 |  | H28 | B28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                   | Normal | 0   |
| 178 |  | B28 | E28 | 48/1, Cf/1, C/2, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 338 |
| 179 |  | B28 | E28 | 48/1, Cf/2, C/2, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 84  |
| 180 |  | A28 | H28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                         | Normal | 0   |

|         |     |     |   |        |     |
|---------|-----|-----|---|--------|-----|
| 18<br>1 | F28 | C28 | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 61  |
| 18<br>2 | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2       | Normal | 0   |
| 18<br>3 | A28 | E28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 43  |
| 18<br>4 | C28 | A28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1  | Normal | 56  |
| 18<br>5 | A28 | B28 | 50/1, Bf/1, B/1, Cc1/1, xC/1, 47/1  | Normal | 0   |
| 18<br>6 | A28 | C28 | 50/1, Bf/1, B/2, Cc2/4, Dcf/2, Dxp/2, xD/2  | Normal | 74  |
| 18<br>7 | G28 | D28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 18<br>8 | A28 | G28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                           | Normal | 0   |
| 18<br>9 | G28 | E28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                   | Normal | 0   |
| 19<br>0 | G28 | D28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 19<br>1 | D28 | F28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                | Normal | 0   |
| 19<br>2 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0   |
| 19<br>3 | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 19<br>4 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2            | Normal | 0   |
| 19<br>5 | D28 | G28 | 51/1, Ff/1, F/1, xA/1, TC5/2, TC39/2, TC40/2  | Normal | 92  |
| 19<br>6 | D28 | F28 | 51/1, Ff/1, F/1, xA/1, TC35/1   | Normal | 54  |
| 19<br>7 | D28 | G28 | 51/1, Ff/1, F/1, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 65  |
| 19<br>8 | D28 | A28 | 51/1, Ff/1, F/2, Acf/1, Ac/1, Bcf/1, xB/1   | Normal | 5   |
| 19<br>9 | D28 | B28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1  | Normal | 266 |
| 20<br>0 | D28 | B28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1  | Normal | 78  |
| 20<br>1 | F28 | E28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                | Normal | 0   |
| 20<br>2 | F28 | D28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                 | Normal | 0   |
| 20<br>3 | F28 | E28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 0   |
| 20<br>4 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                         | Normal | 0   |
| 20<br>5 | A28 | E28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 99  |
| 20<br>6 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 0   |
| 20<br>7 | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 20<br>8 | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                            | Normal | 0   |
| 20<br>9 | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                                    | Normal | 0   |
| 21<br>0 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                      | Normal | 0   |
| 21<br>1 | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                              | Normal | 0   |
| 21<br>2 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                                 | Normal | 0   |
| 21<br>3 | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1   | Normal | 0   |

|     |     |     |  |        |     |
|-----|-----|-----|--|--------|-----|
| 214 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 0   |
| 215 | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1          | Normal | 0   |
| 216 | A28 | G28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 341 |
| 217 | A28 | H28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 218 | A28 | A28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                            | Normal | 3   |
| 219 | A28 | C28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1 | Normal | 0   |
| 220 | A28 | B28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1         | Normal | 0   |
| 221 | A28 | B28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1         | Normal | 0   |
| 222 | A28 | D28 | 50/1, Bf/2, B/3, 53/1, 52/1, xF/1  | Normal | 12  |
| 223 | A28 | G28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                         | Normal | 52  |
| 224 | A28 | F28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/1, TC35/1  | Normal | 54  |
| 225 | A28 | G28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 0   |
| 226 | A28 | H28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 235 | E28 | G28 | Ef/1, E1/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3  | Fixed  | 0   |
| 236 | E28 | H28 | Ef/1, E1/1, Fc/1, xA/2, TC5/4, TC43/1  | Normal | 0   |
| 246 | E28 | C28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                  | Normal | 0   |
| 248 | D28 | C28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                   | Normal | 329 |
| 249 | H28 | C28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                              | Normal | 0   |
| 252 | F28 | C28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                      | Normal | 0   |
| 283 | E28 | B28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                          | Normal | 0   |
| 284 | E28 | B28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                          | Normal | 0   |
| 285 | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                          | Normal | 0   |
| 286 | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                          | Normal | 0   |
| 307 | G28 | C28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                         | Normal | 0   |
| 317 | C28 | G28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                              | Normal | 277 |
| 318 | C28 | H28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                                      | Normal | 0   |
| 319 | C28 | B28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1              | Normal | 0   |
| 320 | C28 | B28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1              | Normal | 0   |
| 322 | C28 | G28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                              | Normal | 215 |
| 323 | C28 | F28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1   | Normal | 19  |
| 324 | C28 | G28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                              | Normal | 3   |
| 325 | C28 | H28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                                      | Normal | 0   |
| 330 | C28 | A28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                                 | Normal | 306 |

|     |  |     |     |   |        |    |
|-----|--|-----|-----|---|--------|----|
| 331 |  | C28 | B28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                                     | Normal | 0  |
| 332 |  | C28 | B28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                                     | Normal | 0  |
| 334 |  | C28 | C28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                             | Normal | 0  |
| 342 |  | C28 | B28 | Df/2, D/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1  | Normal | 4  |
| 343 |  | C28 | B28 | Df/2, D/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1  | Normal | 38 |
| 364 |  | B28 | H28 | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1  | Normal | 0  |
| 379 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                  | Normal | 0  |
| 380 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1   | Normal | 0  |
| 381 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1   | Normal | 0  |
| 382 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3       | Normal | 0  |
| 383 |  | G28 | B28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                        | Normal | 0  |
| 384 |  | A28 | A28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                              | Normal | 0  |
| 385 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1           | Normal | 0  |
| 386 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1           | Normal | 0  |
| 387 |  | A28 | A28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                              | Normal | 0  |
| 388 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1  | Normal | 0  |
| 389 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                 | Normal | 0  |
| 390 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                 | Normal | 0  |
| 391 |  | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0  |
| 392 |  | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1         | Normal | 0  |
| 393 |  | D28 | B28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                  | Normal | 0  |
| 394 |  | D28 | B28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                  | Normal | 0  |
| 395 |  | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                    | Normal | 0  |
| 396 |  | H28 | B28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                             | Normal | 0  |
| 397 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3    | Normal | 0  |
| 398 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1            | Normal | 0  |
| 399 |  | F28 | B28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                     | Normal | 0  |
| 400 |  | F28 | B28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                     | Normal | 0  |
| 401 |  | G28 | F28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                      | Normal | 0  |
| 402 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3       | Normal | 0  |
| 403 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1               | Normal | 0  |
| 404 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                           | Normal | 0  |
| 405 |  | A28 | F28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1  | Normal | 0  |

|     |     |     |   |        |     |
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| 406 | A28 | H28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                                   | Normal | 0   |
| 407 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2 | Normal | 0   |
| 408 | H28 | F28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                           | Normal | 0   |
| 409 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3            | Normal | 0   |
| 410 | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                    | Normal | 0   |
| 411 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2    | Normal | 0   |
| 412 | F28 | F28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                   | Normal | 0   |
| 413 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3    | Normal | 0   |
| 414 | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1            | Normal | 0   |
| 415 | A28 | D28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1  | Normal | 0   |
| 417 | A28 | E28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1   | Normal | 0   |
| 418 | G28 | C28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1  | Normal | 261 |
| 423 | C28 | C28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                             | Normal | 0   |
| 424 | C28 | C28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                             | Normal | 0   |
| 425 | E28 | C28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 32  |
| 428 | E28 | C28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 50  |
| 431 | D28 | C28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1  | Normal | 0   |
| 439 | G28 | E28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                   | Normal | 0   |
| 440 | G28 | E28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                   | Normal | 0   |
| 441 | G28 | E28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                   | Normal | 0   |
| 442 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                            | Normal | 0   |
| 443 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                             | Normal | 0   |
| 444 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                            | Normal | 0   |
| 445 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                             | Normal | 0   |
| 446 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                              | Normal | 0   |
| 447 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                             | Normal | 0   |
| 448 | H28 | E28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 0   |
| 449 | H28 | D28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 450 | H28 | E28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 451 | G28 | D28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 452 | G28 | E28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                   | Normal | 229 |
| 453 | A28 | D28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1  | Normal | 0   |
| 454 | A28 | E28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 0   |

|     |     |     |  |        |     |
|-----|-----|-----|--|--------|-----|
| 455 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                  | Normal | 0   |
| 456 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                 | Normal | 1   |
| 457 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                   | Normal | 0   |
| 458 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                  | Normal | 15  |
| 459 | H28 | D28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                              | Normal | 0   |
| 460 | F28 | E28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                     | Normal | 22  |
| 461 | A28 | E28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 77  |
| 462 | A28 | G28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                | Normal | 0   |
| 463 | A28 | F28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                               | Normal | 0   |
| 464 | A28 | G28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                | Normal | 0   |
| 465 | A28 | E28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 192 |
| 466 | A28 | D28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 467 | G28 | D28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1  | Normal | 129 |
| 468 | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                 | Normal | 0   |
| 469 | G28 | F28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                                | Normal | 25  |
| 470 | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                 | Normal | 0   |
| 471 | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                         | Normal | 0   |
| 472 | A28 | D28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1 | Normal | 0   |
| 473 | B28 | D28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1        | Normal | 20  |
| 474 | C28 | D28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1                           | Normal | 0   |
| 475 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1                                       | Normal | 0   |
| 476 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1  | Normal | 0   |
| 477 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2           | Normal | 0   |
| 478 | D28 | F28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                          | Normal | 0   |
| 479 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3           | Normal | 0   |
| 480 | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                   | Normal | 0   |
| 481 | H28 | D28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1   | Normal | 0   |
| 482 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                      | Normal | 0   |
| 483 | H28 | F28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                                     | Normal | 0   |
| 484 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                      | Normal | 0   |
| 485 | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                              | Normal | 0   |
| 486 | F28 | D28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1   | Normal | 100 |
| 487 | F28 | F28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                             | Normal | 0   |

# Signal Timings

Network Default: 60s cycle time; 60 steps

## Resultant penalties

| Time Segment | Controller stream | Phase min max penalty (£ per hr) | Intergreen broken penalty (£ per hr) | Stage constraint broken penalty (£ per hr) | Cost of controller stream penalties (£ per hr) |
|--------------|-------------------|----------------------------------|--------------------------------------|--|--|
| 16:30-17:30  | (ALL)             | 0.00                             | 0.00                                 | 0.00                                       | 0.00   |

## Results - Link

## Results - Traffic Stream

### Results - Traffic Stream: Vehicle summary

| Time Segment | Arm | Traffic Stream | Name       | Phase | Calculated flow entering (PCU/hr) | Calculated sat flow (PCU/hr) | Actual green (s (per cycle)) | Calculated capacity (PCU/hr) | Degree of saturation (%) | Practical reserve capacity (%) | Mean Delay per Veh (s) | Mean max queue (PCU) | Utilised storage (%) | JourneyTime (s) |      |
|--------------|-----|----------------|------------|-------|-----------------------------------|------------------------------|------------------------------|------------------------------|--------------------------|--------------------------------|------------------------|----------------------|----------------------|-----------------|------|
| 16:30-17:30  | A   | 1              | (untitled) | E     | 847                               | 2050                         | 24                           | 854                          | 99                       | -9                             | 66.55                  | 22.79                | 176.25               | 72.13           |      |
|              |     | 2              | (untitled) | E     | 653                               | 2050                         | 24                           | 854                          | 76                       | 18                             | 18.32                  | 8.34                 | 62.56                | 24.07           |      |
|              |     | 3              | (untitled) | E     | 694                               | 2050                         | 24                           | 854                          | 81                       | 11                             | 20.56                  | 11.04                | 80.96                | 26.44           |      |
|              |     | 4              | (untitled) | E     | 505                               | 2050                         | 24                           | 854                          | 59                       | 52                             | 16.54                  | 7.46                 | 53.55                | 22.55           |      |
|              | Ac  | 1              | (untitled) | D     | 819                               | 2263                         | 26                           | 1018                         | 80                       | 12                             | 16.42                  | 10.90                | 65.39                | 23.61           |      |
|              |     | 2              | (untitled) | D     | 392                               | 2263                         | 26                           | 986                          | 40                       | 126                            | 1.92                   | 1.82                 | 11.35                | 11.42           |      |
|              |     | 3              | (untitled) | D     | 334                               | 2263                         | 26                           | 1018                         | 33                       | 175                            | 2.20                   | 0.38                 | 2.48                 | 8.80            |      |
|              | Acf | 1              | (untitled) |       |                                   | 1211                         | 2263                         | 60                           | 2263                     | 54                             | 68                     | 0.91                 | 0.31                 | 2.54            | 6.13 |
|              |     | 2              | (untitled) |       |                                   | 334                          | 2263                         | 60                           | 2263                     | 15                             | 510                    | 0.14                 | 0.01                 | 0.10            | 7.38 |
|              | Af  | 1              | (untitled) |       |                                   | 1500                         | 2050                         | 60                           | 2043                     | 73                             | 23                     | 2.42                 | 2.46                 | 26.40           | 8.85 |
|              |     | 2              | (untitled) |       |                                   | 694                          | 2050                         | 60                           | 2050                     | 34                             | 166                    | 0.45                 | 0.09                 | 0.94            | 6.83 |
|              |     | 3              | (untitled) |       |                                   | 505                          | 2050                         | 60                           | 2050                     | 25                             | 265                    | 0.29                 | 0.04                 | 0.44            | 6.65 |
|              | B   | 1              | (untitled) | B     | 366                               | 2050                         | 11                           | 410                          | 89                       | 1                              | 54.25                  | 8.47                 | 51.46                | 61.35           |      |
|              |     | 2              | (untitled) | B     | 309                               | 2150                         | 11                           | 381                          | 81                       | 11                             | 42.15                  | 5.92                 | 35.00                | 49.44           |      |
|              |     | 3              | (untitled) | B     | 294                               | 2100                         | 11                           | 420                          | 70                       | 29                             | 32.10                  | 4.88                 | 28.15                | 39.58           |      |
|              |     | 4              | (untitled) | B     | 344                               | 2050                         | 11                           | 410                          | 84                       | 7                              | 44.15                  | 7.17                 | 40.27                | 56.44           |      |
|              | Bc  | 1              | (untitled) | A     | 1045                              | 2050                         | 37                           | 1298                         | 81                       | 12                             | 14.48                  | 20.96                | 90.73                | 26.44           |      |
|              |     | 2              | (untitled) | A     | 995                               | 2050                         | 37                           | 1298                         | 77                       | 17                             | 11.63                  | 7.15                 | 31.25                | 23.47           |      |
|              |     | 3              | (untitled) | A     | 538                               | 2050                         | 37                           | 1298                         | 41                       | 117                            | 2.15                   | 0.68                 | 3.01                 | 13.86           |      |
|              | Bcf | 1              | (untitled) |       |                                   | 1666                         | 2263                         | 60                           | 2263                     | 74                             | 22                     | 2.21                 | 1.02                 | 9.35            | 6.55 |

|            |   |            |   |      |      |    |      |     |      |        |       |        |        |
|------------|---|------------|---|------|------|----|------|-----|------|--------|-------|--------|--------|
|            | 2 | (untitled) |   | 1045 | 2263 | 60 | 2263 | 46  | 95   | 0.68   | 0.20  | 1.82   | 6.31   |
|            | 3 | (untitled) |   | 995  | 2263 | 60 | 2263 | 44  | 105  | 0.62   | 0.17  | 1.59   | 6.43   |
|            | 4 | (untitled) |   | 538  | 2263 | 60 | 2263 | 24  | 279  | 0.25   | 0.04  | 0.34   | 6.69   |
| <b>Bf</b>  | 1 | (untitled) |   | 675  | 1800 | 60 | 1800 | 38  | 140  | 0.60   | 0.11  | 0.28   | 27.94  |
|            | 2 | (untitled) |   | 638  | 1800 | 60 | 1800 | 35  | 154  | 0.55   | 0.10  | 0.24   | 27.96  |
| <b>C</b>   | 1 | (untitled) | G | 79   | 2100 | 14 | 525  | 15  | 495  | 18.31  | 1.46  | 6.94   | 32.84  |
|            | 2 | (untitled) | G | 529  | 2200 | 14 | 550  | 96  | -7   | 150.52 | 27.28 | 127.80 | 165.25 |
|            | 3 | (untitled) | G | 253  | 2050 | 14 | 513  | 49  | 83   | 29.71  | 4.45  | 20.57  | 44.63  |
| <b>Cf</b>  | 1 | (untitled) |   | 515  | 1965 | 60 | 515  | 100 | -10  | 201.34 | 35.51 | 141.19 | 218.69 |
|            | 2 | (untitled) |   | 346  | 1965 | 60 | 1106 | 31  | 187  | 7.95   | 4.64  | 18.30  | 25.46  |
| <b>D</b>   | 1 | (untitled) | B | 385  | 2050 | 12 | 444  | 87  | 4    | 46.33  | 8.03  | 83.99  | 50.45  |
|            | 2 | (untitled) | B | 237  | 1850 | 12 | 401  | 59  | 52   | 27.53  | 3.65  | 38.14  | 31.66  |
|            | 3 | (untitled) | B | 333  | 2250 | 12 | 488  | 68  | 32   | 29.43  | 5.49  | 59.71  | 33.39  |
|            | 4 | (untitled) | B | 348  | 2250 | 12 | 488  | 71  | 26   | 30.79  | 5.82  | 60.42  | 34.95  |
| <b>Dc</b>  | 1 | (untitled) | A | 569  | 2100 | 38 | 1365 | 42  | 116  | 4.46   | 1.88  | 21.21  | 10.57  |
|            | 2 | (untitled) | A | 637  | 2100 | 38 | 1365 | 47  | 93   | 8.44   | 5.82  | 68.38  | 14.32  |
|            | 3 | (untitled) | A | 151  | 2100 | 38 | 1365 | 11  | 714  | 0.16   | 0.01  | 0.08   | 5.81   |
|            | 4 | (untitled) | A | 102  | 2100 | 38 | 1365 | 7   | 1107 | 0.11   | 0.00  | 0.04   | 5.51   |
| <b>Dcf</b> | 1 | (untitled) |   | 795  | 2050 | 60 | 2050 | 39  | 132  | 0.56   | 0.12  | 1.08   | 5.46   |
|            | 2 | (untitled) |   | 1073 | 2100 | 60 | 2100 | 51  | 76   | 0.89   | 0.27  | 2.35   | 5.79   |
|            | 3 | (untitled) |   | 569  | 2100 | 60 | 2100 | 27  | 232  | 0.32   | 0.05  | 0.44   | 6.23   |
|            | 4 | (untitled) |   | 637  | 2100 | 60 | 2100 | 30  | 197  | 0.37   | 0.07  | 0.56   | 7.77   |
|            | 5 | (untitled) |   | 151  | 2100 | 60 | 2100 | 7   | 1153 | 0.07   | 0.00  | 0.02   | 5.03   |
|            | 6 | (untitled) |   | 102  | 2050 | 60 | 2050 | 5   | 1713 | 0.05   | 0.00  | 0.01   | 7.99   |
| <b>Df</b>  | 1 | (untitled) |   | 622  | 1900 | 60 | 1900 | 33  | 175  | 0.46   | 0.08  | 0.23   | 24.46  |
|            | 2 | (untitled) |   | 681  | 2250 | 60 | 2250 | 30  | 197  | 0.35   | 0.07  | 0.19   | 24.35  |
| <b>Dxp</b> | 1 | (untitled) | D | 804  | 2050 | 43 | 1503 | 53  | 68   | 2.63   | 1.73  | 21.70  | 6.06   |
|            | 2 | (untitled) | D | 1073 | 2050 | 43 | 1503 | 71  | 26   | 3.03   | 0.98  | 11.65  | 6.64   |
| <b>Ec</b>  | 1 | (untitled) | F | 418  | 2150 | 18 | 681  | 61  | 47   | 10.22  | 2.81  | 32.24  | 13.98  |
|            | 2 | (untitled) | F | 388  | 2263 | 18 | 717  | 54  | 66   | 13.14  | 3.00  | 35.59  | 16.77  |
|            | 3 | (untitled) | F | 402  | 2263 | 18 | 717  | 56  | 61   | 6.80   | 2.67  | 32.88  | 10.31  |
|            | 4 | (untitled) | F | 339  | 2250 | 18 | 713  | 48  | 89   | 4.72   | 1.66  | 21.22  | 10.14  |

|     |   |            |   |      |              |    |              |     |              |        |       |        |        |
|-----|---|------------|---|------|--------------|----|--------------|-----|--------------|--------|-------|--------|--------|
| Ecf | 1 | (untitled) |   | 660  | 2100         | 60 | 2100         | 31  | 186          | 0.39   | 0.07  | 0.90   | 3.84   |
|     | 2 | (untitled) |   | 931  | 2100         | 60 | 2100         | 44  | 103          | 0.68   | 2.50  | 30.94  | 4.16   |
|     | 3 | (untitled) |   | 388  | 2263         | 60 | 2263         | 17  | 425          | 0.16   | 0.02  | 0.22   | 4.98   |
|     | 4 | (untitled) |   | 402  | 2300         | 60 | 2300         | 17  | 415          | 0.17   | 0.02  | 0.22   | 5.50   |
|     | 5 | (untitled) |   | 381  | 2300         | 60 | 2300         | 17  | 443          | 0.16   | 0.02  | 0.19   | 5.79   |
| Ef  | 1 | (untitled) |   | 771  | 1900         | 60 | 1900         | 41  | 122          | 0.65   | 0.14  | 0.62   | 15.95  |
|     | 2 | (untitled) |   | 551  | 1900         | 60 | 1900         | 29  | 210          | 0.39   | 0.06  | 0.27   | 15.69  |
| Exp | 1 | (untitled) | L | 660  | 2050         | 42 | 1469         | 45  | 100          | 2.54   | 2.50  | 27.78  | 6.43   |
|     | 2 | (untitled) | L | 513  | 2050         | 42 | 1469         | 35  | 158          | 3.38   | 7.06  | 75.53  | 7.41   |
| F   | 1 | (untitled) | B | 190  | 2100         | 8  | 315          | 60  | 49           | 42.96  | 3.63  | 24.51  | 49.35  |
|     | 2 | (untitled) | B | 315  | 2100         | 8  | 315          | 100 | -10          | 231.14 | 22.31 | 149.67 | 237.57 |
|     | 3 | (untitled) | B | 315  | 2100         | 8  | 315          | 100 | -10          | 231.16 | 22.31 | 147.05 | 237.71 |
| Fc  | 1 | (untitled) | A | 673  | 2263         | 42 | 1622         | 41  | 117          | 3.23   | 2.71  | 8.73   | 22.60  |
|     | 2 | (untitled) | A | 862  | 2263         | 42 | 1514         | 57  | 58           | 3.26   | 2.43  | 7.99   | 22.71  |
|     | 3 | (untitled) | A | 740  | 2263         | 42 | 1464         | 51  | 78           | 10.23  | 7.15  | 22.80  | 29.71  |
| Ff  | 1 | (untitled) |   | 505  | 1900         | 60 | 505          | 100 | -10          | 326.56 | 58.58 | 122.15 | 359.65 |
|     | 2 | (untitled) |   | 310  | 1900         | 60 | 315          | 99  | -9           | 280.62 | 29.28 | 61.13  | 313.67 |
| G   | 1 | (untitled) | F | 292  | 2050         | 14 | 490          | 60  | 51           | 39.14  | 5.59  | 20.68  | 55.12  |
|     | 2 | (untitled) | F | 301  | 2050         | 14 | 493          | 61  | 47           | 39.41  | 7.43  | 28.16  | 50.80  |
| Gf  | 1 | (untitled) |   | 288  | 2050         | 60 | 2050         | 14  | 541          | 0.14   | 0.01  | 0.16   | 3.18   |
|     | 2 | (untitled) |   | 263  | 2050         | 60 | 2050         | 13  | 602          | 0.13   | 0.01  | 0.14   | 3.13   |
| xA  | 1 | (untitled) |   | 802  | 2263         | 60 | 2263         | 35  | 154          | 0.44   | 0.10  | 0.24   | 17.66  |
|     | 2 | (untitled) |   | 748  | 2263         | 60 | 2263         | 33  | 172          | 0.39   | 0.08  | 0.20   | 17.64  |
| xB  | 1 | (untitled) |   | 1666 | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 5.79   |
| xC  | 1 | (untitled) |   | 652  | 1900         | 60 | 677          | 96  | -7           | 49.89  | 16.84 | 83.77  | 58.56  |
|     | 2 | (untitled) |   | 633  | 1900         | 60 | 692          | 92  | -2           | 30.27  | 11.26 | 55.84  | 38.97  |
| xD  | 1 | (untitled) |   | 804  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 9.11   |
|     | 2 | (untitled) |   | 1073 | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 9.16   |
| xE  | 1 | (untitled) |   | 660  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.04  |
|     | 2 | (untitled) |   | 513  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.04  |
| xF  | 1 | (untitled) |   | 779  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 14.26  |
| Cc1 | 1 | (untitled) | E | 692  | 2050         | 31 | 1091         | 63  | 42           | 4.69   | 3.11  | 18.66  | 11.25  |

|      |   |            |   |      |              |    |              |     |              |        |       |        |        |
|------|---|------------|---|------|--------------|----|--------------|-----|--------------|--------|-------|--------|--------|
| E1   | 1 | (untitled) | G | 370  | 2050         | 11 | 410          | 90  | 0            | 56.86  | 8.84  | 63.51  | 62.86  |
|      | 2 | (untitled) | G | 401  | 2200         | 11 | 440          | 91  | -1           | 57.43  | 9.61  | 69.10  | 63.43  |
| Gf1  | 1 | (untitled) |   | 42   | 689          | 60 | 689          | 6   | 1377         | 0.18   | 0.00  | 0.02   | 5.92   |
| Cc2  | 2 | (untitled) | D | 719  | 2150         | 32 | 1164         | 62  | 46           | 9.99   | 7.44  | 46.76  | 19.77  |
|      | 3 | (untitled) | D | 334  | 2050         | 32 | 1128         | 30  | 204          | 8.61   | 5.68  | 35.88  | 18.73  |
|      | 4 | (untitled) | D | 1069 | 2150         | 32 | 1180         | 91  | -1           | 15.49  | 6.58  | 41.86  | 21.66  |
|      | 5 | (untitled) | D | 343  | 2050         | 32 | 1052         | 33  | 176          | 4.69   | 2.43  | 15.43  | 11.81  |
|      | 6 | (untitled) | D | 0    | 2050         | 32 | 1128         | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 0.00   |
| E2   | 3 | (untitled) | H | 288  | 2150         | 13 | 490          | 59  | 53           | 25.71  | 4.25  | 45.92  | 29.71  |
|      | 4 | (untitled) | H | 263  | 2050         | 13 | 478          | 55  | 64           | 24.80  | 3.84  | 40.64  | 28.87  |
| TC5  | 2 | (untitled) | A | 636  | 2263         | 39 | 1546         | 41  | 119          | 1.85   | 1.72  | 42.96  | 4.62   |
|      | 3 | (untitled) | A | 748  | 2263         | 39 | 1546         | 48  | 86           | 1.95   | 1.68  | 41.86  | 4.72   |
|      | 4 | (untitled) | C | 0    | 0            | 0  | 0            | 0   | -100         | 0.00   | 0.00  | 0.00   | 0.00   |
| TC9  | 1 | (untitled) | B | 1294 | 1925         | 40 | 1380         | 94  | -4           | 24.26  | 21.22 | 133.03 | 35.27  |
|      | 2 | (untitled) | B | 694  | 1966         | 40 | 1409         | 49  | 83           | 4.96   | 4.76  | 29.70  | 16.03  |
|      | 3 | (untitled) | B | 383  | 1947         | 40 | 1395         | 27  | 228          | 3.49   | 2.07  | 12.86  | 14.61  |
| TC35 | 1 | (untitled) | A | 165  | 1900         | 39 | 1298         | 13  | 606          | 1.82   | 1.46  | 34.72  | 4.71   |
| TC36 | 1 | (untitled) |   | 401  | 1800         | 60 | 1800         | 22  | 304          | 0.29   | 0.03  | 0.73   | 3.31   |
| TC37 | 1 | (untitled) | J | 73   | 1850         | 45 | 1418         | 5   | 1649         | 1.82   | 0.29  | 3.70   | 5.01   |
| TC38 | 1 | (untitled) |   | 73   | 433          | 60 | 433          | 17  | 434          | 1.17   | 2.43  | 65.61  | 2.70   |
| TC39 | 2 | (untitled) |   | 636  | 2263         | 60 | 2263         | 28  | 220          | 0.31   | 0.05  | 0.90   | 2.85   |
|      | 3 | (untitled) |   | 748  | 2263         | 60 | 2263         | 33  | 172          | 0.39   | 0.08  | 1.41   | 2.79   |
| TC40 | 2 | (untitled) |   | 709  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 4.23   |
|      | 3 | (untitled) |   | 748  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 4.02   |
| TC41 | 1 | (untitled) | D | 328  | 1850         | 10 | 339          | 97  | -7           | 92.59  | 11.18 | 117.68 | 96.52  |
| TC42 | 1 | (untitled) | E | 0    | 0            | 0  | 0            | 0   | -100         | 0.00   | 0.00  | 0.00   | 0.00   |
| TC43 | 1 | (untitled) |   | 0    | 1800         | 60 | 1800         | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 0.00   |
| 47   | 1 | (untitled) |   | 1285 | 1300         | 60 | 1300         | 99  | -9           | 39.71  | 14.18 | 61.01  | 55.74  |
| 48   | 1 | (untitled) |   | 965  | 1965         | 60 | 862          | 112 | -20          | 221.07 | 69.66 | 726.67 | 227.69 |
| 49   | 1 | (untitled) |   | 1294 | 1900         | 60 | 1835         | 71  | 28           | 2.37   | 3.00  | 65.65  | 5.52   |
|      | 2 | (untitled) |   | 1077 | 1900         | 60 | 1900         | 57  | 59           | 1.24   | 0.37  | 8.11   | 4.39   |
| 50   | 1 | (untitled) |   | 1313 | 1900         | 60 | 1900         | 69  | 30           | 2.11   | 0.77  | 9.18   | 7.89   |

|  |    |   |            |   |     |      |    |      |     |     |        |       |        |        |
|--|----|---|------------|---|-----|------|----|------|-----|-----|--------|-------|--------|--------|
|  | 51 | 1 | (untitled) |   | 904 | 1900 | 60 | 816  | 111 | -19 | 202.95 | 61.34 | 941.37 | 207.45 |
|  | 52 | 1 |            | A | 392 | 1800 | 14 | 450  | 87  | 3   | 45.78  | 8.50  | 28.24  | 66.54  |
|  |    | 2 |            | A | 344 | 1800 | 14 | 450  | 76  | 18  | 15.06  | 1.53  | 5.08   | 35.85  |
|  | 53 | 1 |            |   | 392 | 1800 | 60 | 1800 | 22  | 313 | 0.28   | 0.03  | 0.40   | 5.55   |
|  |    | 2 |            |   | 344 | 1800 | 60 | 1800 | 19  | 371 | 0.42   | 4.12  | 56.11  | 5.49   |

## Data Entry - Stage Start and End

### Resultant Stage

| Controller Stream | Resultant Stage | Is base stage | Library Stage ID | Phases in this stage | Stage start (s) | Stage end (s) | Stage duration (s) | User stage minimum (s) | Stage minimum (s) |
|-------------------|-----------------|---------------|------------------|----------------------|-----------------|---------------|--------------------|------------------------|-------------------|
| 769-1             | 1               | ✓             | 1                | A,C                  | 43              | 16            | 33                 | 1                      | 7                 |
|                   | 2               | ✓             | 2                | B                    | 27              | 38            | 11                 | 1                      | 7                 |
| 769-2             | 1               | ✓             | 4                | D,E,H,I              | 46              | 9             | 23                 | 1                      | 1                 |
|                   | 2               | ✓             | 5                | F,G,J,K              | 23              | 31            | 8                  | 1                      | 7                 |
| 770-1             | 1               | ✓             | 1                | A,C                  | 21              | 57            | 36                 | 1                      | 5                 |
|                   | 2               | ✓             | 2                | B                    | 4               | 16            | 12                 | 1                      | 7                 |
| 770-2             | 1               | ✓             | 4                | D                    | 44              | 27            | 43                 | 1                      | 7                 |
|                   | 2               | ✓             | 5                | E                    | 32              | 37            | 5                  | 1                      | 5                 |
| 770-3             | 1               | ✓             | 4                | A                    | 48              | 2             | 14                 | 1                      | 7                 |
|                   | 2               | ✓             | 7                | F,I,J                | 7               | 21            | 14                 | 1                      | 3                 |
|                   | 3               | ✓             | 9                | G,H                  | 32              | 43            | 11                 | 1                      | 4                 |
| 770-4             | 1               | ✓             | 11               | L                    | 12              | 54            | 42                 | 1                      | 7                 |
|                   | 2               | ✓             | 12               | M                    | 59              | 5             | 6                  | 1                      | 6                 |
| 771-1             | 1               | ✓             | 1                | A,C                  | 5               | 41            | 36                 | 1                      | 9                 |
|                   | 2               | ✓             | 3                | B                    | 52              | 0             | 8                  | 1                      | 7                 |
| 771-2             | 1               | ✓             | 5                | D                    | 4               | 30            | 26                 | 1                      | 7                 |
|                   | 2               | ✓             | 6                | E                    | 35              | 59            | 24                 | 1                      | 7                 |
| TC777-1           | 1               | ✓             | 1                | A,B,F                | 18              | 57            | 39                 | 1                      | 7                 |
|                   | 2               | ✓             | 5                | D,H,I                | 4               | 12            | 8                  | 1                      | 6                 |
| TC777-2           | 1               | ✓             | 1                | J                    | 58              | 43            | 45                 | 1                      | 7                 |
|                   | 2               | ✓             | 2                | K                    | 48              | 53            | 5                  | 1                      | 5                 |

## Data Entry - Phase

### Phase

| Controller Stream | Phase | Phase | Street minimum green (s) | Maximum green (s) | Relative start displacement (s) | Relative end displacement (s) | Type       |
|-------------------|-------|-------|--------------------------|-------------------|---------------------------------|-------------------------------|------------|
| 769-1             | A     | A     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | B     | B     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | C     | C     | 7                        | 300               | 0                               | 0                             | Pedestrian |
| 769-2             | D     | D     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | E     | E     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | F     | F     | 4                        | 300               | 0                               | 0                             | Traffic    |
|                   | G     | G     | 4                        | 300               | 0                               | 0                             | Traffic    |
|                   | H     | H     | 5                        | 300               | 0                               | 0                             | Pedestrian |
|                   | I     | I     | 7                        | 300               | 0                               | 0                             | Pedestrian |
|                   | J     | J     | 10                       | 300               | 0                               | 0                             | Pedestrian |
|                   | K     | K     | 5                        | 300               | 0                               | 0                             | Pedestrian |

|         |   |   |    |     |   |   |            |
|---------|---|---|----|-----|---|---|------------|
| 770-1   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | B | B | 7  | 300 | 0 | 0 | Traffic    |
|         | C | C | 5  | 300 | 0 | 0 | Pedestrian |
| 770-2   | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 5  | 300 | 0 | 0 | Pedestrian |
| 770-3   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | F | F | 7  | 300 | 0 | 0 | Traffic    |
|         | G | G | 4  | 300 | 0 | 0 | Traffic    |
|         | H | H | 4  | 300 | 0 | 0 | Traffic    |
|         | I | I | 5  | 300 | 0 | 0 | Pedestrian |
|         | J | J | 5  | 300 | 0 | 0 | Pedestrian |
|         | K | K | 10 | 300 | 0 | 0 | Pedestrian |
| 770-4   | L | L | 7  | 300 | 0 | 0 | Traffic    |
|         | M | M | 6  | 300 | 0 | 0 | Pedestrian |
| 771-1   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | B | B | 7  | 300 | 0 | 0 | Traffic    |
|         | C | C | 9  | 300 | 0 | 0 | Pedestrian |
| 771-2   | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 7  | 300 | 0 | 0 | Traffic    |
| TC777-1 | A | A | 7  | 300 | 0 | 1 | Traffic    |
|         | B | B | 7  | 300 | 0 | 2 | Traffic    |
|         | C | C | 7  | 300 | 0 | 0 | Traffic    |
|         | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 7  | 300 | 0 | 0 | Traffic    |
|         | F | F | 5  | 300 | 0 | 0 | Pedestrian |
|         | G | G | 7  | 300 | 0 | 0 | Pedestrian |
|         | H | H | 6  | 300 | 0 | 0 | Pedestrian |
|         | I | I | 5  | 300 | 0 | 0 | Pedestrian |
| TC777-2 | J | J | 7  | 300 | 0 | 0 | Traffic    |
|         | K | K | 5  | 300 | 0 | 0 | Pedestrian |

## Data Entry - Traffic Stream

### Traffic Stream

| Arm | Traffic Stream | Auto length | Length (m) | Traffic model | Max queue storage (PCU) | Traffic type | Has Saturation Flow | Is signal controlled | Is give way | Saturation flow source | Saturation flow (PCU/hr) | Delay weighting multiplier (%) | Stop weighting multiplier (%) |
|-----|----------------|-------------|------------|---------------|-------------------------|--------------|---------------------|----------------------|-------------|------------------------|--------------------------|--------------------------------|-------------------------------|
| A   | 1              | ✓           | 74.35      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 2              | ✓           | 76.69      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 3              | ✓           | 78.40      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 4              | ✓           | 80.11      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
| Ac  | 1              | ✓           | 95.80      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2263                     | 100                            | 500                           |
|     | 2              | ✓           | 92.34      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2263                     | 100                            | 500                           |
|     | 3              | ✓           | 87.95      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2263                     | 100                            | 500                           |
| Acf | 1              | ✓           | 69.59      | CTM           | 0.00                    | Normal       | ✓                   |                      |             | Directly entered       | 2263                     | 100                            | 100                           |
|     | 2              | ✓           | 70.42      | CTM           | 0.00                    | Normal       | ✓                   |                      |             | Directly entered       | 2263                     | 100                            | 100                           |

|     |   |   |        |     |      |        |   |   |  |                  |      |     |     |
|-----|---|---|--------|-----|------|--------|---|---|--|------------------|------|-----|-----|
| Af  | 1 | ✓ | 53.54  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 53.19  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 3 | ✓ | 53.01  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
| B   | 1 | ✓ | 94.67  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 2 | ✓ | 97.18  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2150 | 20  | 0   |
|     | 3 | ✓ | 99.69  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 4 | ✓ | 102.42 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Bc  | 1 | ✓ | 132.85 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 2 | ✓ | 131.47 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 3 | ✓ | 130.10 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
| Bcf | 1 | ✓ | 62.77  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 2 | ✓ | 62.62  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 3 | ✓ | 62.46  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 62.38  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
| Bf  | 1 | ✓ | 227.81 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
|     | 2 | ✓ | 228.44 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
| C   | 1 | ✓ | 121.13 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 2 | ✓ | 122.73 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2200 | 20  | 0   |
|     | 3 | ✓ | 124.35 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Cf  | 1 | ✓ | 144.60 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
|     | 2 | ✓ | 145.86 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
| D   | 1 |   | 55.00  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 2 |   | 55.00  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 1850 | 20  | 0   |
|     | 3 | ✓ | 52.87  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 20  | 0   |
|     | 4 | ✓ | 55.42  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 20  | 0   |
| Dc  | 1 | ✓ | 50.91  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 2 | ✓ | 48.96  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 3 | ✓ | 47.02  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 4 | ✓ | 45.07  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
| Dcf | 1 | ✓ | 65.43  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 65.28  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 3 | ✓ | 65.54  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |

|     |   |   |        |                |      |        |   |   |  |                  |      |     |     |
|-----|---|---|--------|----------------|------|--------|---|---|--|------------------|------|-----|-----|
|     | 4 | ✓ | 67.69  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 5 | ✓ | 66.13  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 6 | ✓ | 66.17  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
| Df  | 1 |   | 200.00 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 |   | 200.00 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 2250 | 100 | 100 |
| Dxp | 1 | ✓ | 45.75  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 48.11  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
| Ec  | 1 | ✓ | 50.09  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2150 | 100 | 500 |
|     | 2 | ✓ | 48.43  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 3 | ✓ | 46.77  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 4 | ✓ | 45.11  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 100 | 500 |
| Ecf | 1 | ✓ | 45.94  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 2 | ✓ | 46.37  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 3 | ✓ | 46.95  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 47.51  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2300 | 100 | 100 |
|     | 5 | ✓ | 48.55  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2300 | 100 | 100 |
| Ef  | 1 | ✓ | 127.54 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 1900 | 100 | 100 |
|     | 2 | ✓ | 127.54 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| Exp | 1 | ✓ | 51.83  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 53.71  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
| F   | 1 | ✓ | 85.13  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 2 | ✓ | 85.72  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 3 | ✓ | 87.25  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
| Fc  | 1 | ✓ | 178.68 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 2 | ✓ | 175.19 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 3 | ✓ | 180.28 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
| Ff  | 1 | ✓ | 275.73 | CTM            | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 | ✓ | 275.39 | CTM            | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| G   | 1 | ✓ | 155.36 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 2 | ✓ | 151.80 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
| Gf  | 1 | ✓ | 40.48  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 40.06  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |

|      |   |   |        |                |      |        |   |   |   |                  |      |     |     |
|------|---|---|--------|----------------|------|--------|---|---|---|------------------|------|-----|-----|
| xA   | 1 | ✓ | 229.66 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
|      | 2 | ✓ | 229.97 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
| xB   | 1 | ✓ | 77.15  | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xC   | 1 | ✓ | 115.60 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
|      | 2 | ✓ | 115.98 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
| xD   | 1 | ✓ | 121.44 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|      | 2 | ✓ | 122.12 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xE   | 1 | ✓ | 173.89 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|      | 2 | ✓ | 173.83 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xF   | 1 | ✓ | 158.35 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| Cc1  | 1 | ✓ | 95.84  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 100 |
| E1   | 1 |   | 80.00  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 20  | 0   |
|      | 2 |   | 80.00  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2200 | 20  | 0   |
| Gf1  | 1 | ✓ | 47.81  | NetworkDefault | 0.00 | Normal |   |   | ✓ |                  |      | 100 | 100 |
| Cc2  | 2 | ✓ | 91.52  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 100 | 500 |
|      | 3 | ✓ | 91.11  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|      | 4 | ✓ | 90.39  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 100 | 500 |
|      | 5 | ✓ | 90.48  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|      | 6 | ✓ | 88.08  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
| E2   | 3 | ✓ | 53.28  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 20  | 0   |
|      | 4 | ✓ | 54.33  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 20  | 0   |
| TC5  | 2 | ✓ | 23.03  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 2263 | 100 | 100 |
|      | 3 | ✓ | 23.02  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2263 | 100 | 100 |
|      | 4 | ✓ | 24.43  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1800 | 100 | 100 |
| TC9  | 1 | ✓ | 91.71  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1925 | 100 | 100 |
|      | 2 | ✓ | 92.21  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1966 | 100 | 100 |
|      | 3 | ✓ | 92.69  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1947 | 100 | 100 |
| TC35 | 1 | ✓ | 24.16  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1900 | 100 | 100 |
| TC36 | 1 | ✓ | 25.22  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1800 | 100 | 100 |
| TC37 | 1 | ✓ | 44.32  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1850 | 100 | 100 |
| TC38 | 1 | ✓ | 21.32  | CTM            | 0.00 | Normal | ✓ |   | ✓ | Directly entered | 1850 | 100 | 100 |
| TC39 | 2 | ✓ | 35.24  | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |

|       |   |   |        |                |      |        |   |   |  |                  |      |     |     |
|-------|---|---|--------|----------------|------|--------|---|---|--|------------------|------|-----|-----|
|       | 3 | ✓ | 33.28  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
| TC4 0 | 2 | ✓ | 58.74  | PDM            | 0.00 | Normal |   |   |  |                  |      | 100 | 100 |
|       | 3 | ✓ | 55.82  | PDM            | 0.00 | Normal |   |   |  |                  |      | 100 | 100 |
| TC4 1 | 1 | ✓ | 54.63  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 1850 | 100 | 100 |
| TC4 2 | 1 | ✓ | 23.35  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Sum of lanes     | 1771 | 100 | 100 |
| TC4 3 | 1 | ✓ | 51.77  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
| 47    | 1 | ✓ | 133.63 | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 1300 | 100 | 100 |
| 48    | 1 | ✓ | 55.12  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
| 49    | 1 | ✓ | 26.24  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 1900 | 100 | 100 |
|       | 2 | ✓ | 26.24  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 1900 | 100 | 100 |
| 50    | 1 | ✓ | 48.15  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| 51    | 1 | ✓ | 37.47  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| 52    | 1 | ✓ | 173.00 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Sum of lanes     | 1800 | 100 | 500 |
|       | 2 | ✓ | 173.18 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Sum of lanes     | 1800 | 100 | 500 |
| 53    | 1 | ✓ | 43.95  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
|       | 2 | ✓ | 42.23  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |

## Data entry - Link

## Results - Pedestrian

### Pedestrian Crossings: Pedestrian summary

| Time Segment | Pedestrian crossing | Side | Calculated Flow Entering (Ped/hr) | Degree of saturation (%) | Actual green (s (per cycle)) | Mean Delay Per Ped (s) | Mean max queue (Ped) |
|--------------|---------------------|------|-----------------------------------|--------------------------|------------------------------|------------------------|----------------------|
| 16:30-17:30  | 1                   | 1    | 0                                 | 0                        | 5                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 5                            | 0.00                   | 0.00                 |
|              | 2                   | 1    | 0                                 | 0                        | 36                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 36                           | 0.00                   | 0.00                 |
|              | 3                   | 1    | 0                                 | 0                        | 6                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 6                            | 0.00                   | 0.00                 |
|              | 4                   | 1    | 0                                 | 0                        | 21                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 21                           | 0.00                   | 0.00                 |
|              | 5                   | 1    | 0                                 | 0                        | 23                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 23                           | 0.00                   | 0.00                 |
|              | 6                   | 1    | 0                                 | 0                        | 0                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 0                            | 0.00                   | 0.00                 |
|              | 7                   | 1    | 0                                 | 0                        | 36                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 36                           | 0.00                   | 0.00                 |
|              | 8                   | 1    | 0                                 | 0                        | 33                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 33                           | 0.00                   | 0.00                 |
|              | 9                   | 1    | 0                                 | 0                        | 11                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 11                           | 0.00                   | 0.00                 |

|  |    |   |   |   |    |      |      |
|--|----|---|---|---|----|------|------|
|  | 10 | 1 | 0 | 0 | 16 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 16 | 0.00 | 0.00 |
|  | 11 | 1 | 0 | 0 | 29 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 29 | 0.00 | 0.00 |
|  | 12 | 1 | 0 | 0 | 29 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 29 | 0.00 | 0.00 |
|  | 13 | 1 | 0 | 0 | 10 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 10 | 0.00 | 0.00 |
|  | 14 | 1 | 0 | 0 | 40 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 40 | 0.00 | 0.00 |
|  | 15 | 1 | 0 | 0 | 0  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 0  | 0.00 | 0.00 |
|  | 16 | 1 | 0 | 0 | 8  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 8  | 0.00 | 0.00 |
|  | 17 | 1 | 0 | 0 | 5  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 5  | 0.00 | 0.00 |

## Collections

### Point to Point Journey Time

Note: Auto Calculate disabled on this Local Matrix (Paths and Flow Allocation might not be up to date).

#### Average Journey Time (s) for Local Matrix: 1

|      |     | To    |       |       |       |       |       |       |     |
|------|-----|-------|-------|-------|-------|-------|-------|-------|-----|
|      |     | A28   | B28   | C28   | D28   | E28   | F28   | G28   | H28 |
| From | A28 | 196.4 | 212.8 | 137.2 | 149.4 | 152.3 | 173.4 | 184.3 | 0.0 |
|      | B28 | 419.6 | 0.0   | 510.4 | 628.0 | 609.7 | 385.0 | 391.9 | 0.0 |
|      | C28 | 145.3 | 197.9 | 0.0   | 98.9  | 97.9  | 109.3 | 118.3 | 0.0 |
|      | D28 | 842.2 | 983.2 | 857.6 | 0.0   | 872.8 | 642.3 | 650.3 | 0.0 |
|      | E28 | 148.6 | 209.7 | 203.5 | 90.7  | 219.6 | 131.0 | 138.6 | 0.0 |
|      | F28 | 202.4 | 296.1 | 203.6 | 254.3 | 211.1 | 0.0   | 15.3  | 0.0 |
|      | G28 | 133.0 | 209.4 | 126.5 | 162.2 | 122.2 | 186.4 | 0.0   | 0.0 |
|      | H28 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 |

#### Path Journey Time

| Path | From Location | To Location | Normal Calculated Flow (PCU/hr) | Normal journey time (s) | Normal journey dist (m) | Bus journeydist (m) | Tram journey dist (m) | Pedestrian journey dist (m) | Calculated Total Flow (PCU/hr) | Avg journey time (s) | Avg journey dist (m) |
|------|---------------|-------------|---------------------------------|-------------------------|-------------------------|---------------------|-----------------------|-----------------------------|--------------------------------|----------------------|----------------------|
| 32   | C28           | E28         | 91                              | 97.92                   | 526.66                  | 0.00                | 0.00                  | 0.00                        | 91                             | 97.92                | 526.66               |
| 36   | C28           | E28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 41   | E28           | A28         | 350                             | 149.72                  | 693.15                  | 0.00                | 0.00                  | 0.00                        | 350                            | 149.72               | 693.15               |
| 49   | C28           | D28         | 294                             | 98.90                   | 509.82                  | 0.00                | 0.00                  | 0.00                        | 294                            | 98.90                | 509.82               |
| 50   | E28           | D28         | 100                             | 90.68                   | 365.90                  | 0.00                | 0.00                  | 0.00                        | 100                            | 90.68                | 365.90               |
| 68   | E28           | G28         | 146                             | 138.59                  | 732.90                  | 0.00                | 0.00                  | 0.00                        | 146                            | 138.59               | 732.90               |
| 92   | E28           | F28         | 8                               | 131.04                  | 640.05                  | 0.00                | 0.00                  | 0.00                        | 8                              | 131.04               | 640.05               |
| 100  | E28           | B28         | 263                             | 199.46                  | 623.35                  | 0.00                | 0.00                  | 0.00                        | 263                            | 199.46               | 623.35               |
| 102  | A28           | C28         | 315                             | 137.21                  | 694.76                  | 0.00                | 0.00                  | 0.00                        | 315                            | 137.21               | 694.76               |
| 103  | F28           | B28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 105  | D28           | H28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 107  | A28           | B28         | 51                              | 212.81                  | 716.08                  | 0.00                | 0.00                  | 0.00                        | 51                             | 212.81               | 716.08               |
| 110  | E28           | G28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 112  | F28           | G28         | 73                              | 15.25                   | 149.60                  | 0.00                | 0.00                  | 0.00                        | 73                             | 15.25                | 149.60               |

|     |     |     |     |        |         |      |      |      |     |        |         |
|-----|-----|-----|-----|--------|---------|------|------|------|-----|--------|---------|
| 113 | F28 | A28 | 118 | 202.43 | 347.66  | 0.00 | 0.00 | 0.00 | 118 | 202.43 | 347.66  |
| 115 | B28 | C28 | 4   | 511.64 | 556.36  | 0.00 | 0.00 | 0.00 | 4   | 511.64 | 556.36  |
| 125 | H28 | A28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 130 | G28 | C28 | 694 | 121.20 | 769.88  | 0.00 | 0.00 | 0.00 | 694 | 121.20 | 769.88  |
| 137 | H28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 138 | H28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 140 | B28 | G28 | 157 | 392.54 | 1059.21 | 0.00 | 0.00 | 0.00 | 157 | 392.54 | 1059.21 |
| 141 | B28 | F28 | 12  | 384.99 | 966.36  | 0.00 | 0.00 | 0.00 | 12  | 384.99 | 966.36  |
| 142 | B28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 143 | E28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 144 | B28 | G28 | 77  | 390.72 | 1048.14 | 0.00 | 0.00 | 0.00 | 77  | 390.72 | 1048.14 |
| 145 | B28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 146 | B28 | A28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 147 | B28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 148 | B28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 149 | B28 | A28 | 17  | 419.60 | 1015.84 | 0.00 | 0.00 | 0.00 | 17  | 419.60 | 1015.84 |
| 150 | E28 | B28 | 288 | 218.97 | 625.89  | 0.00 | 0.00 | 0.00 | 288 | 218.97 | 625.89  |
| 151 | B28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 152 | H28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 153 | F28 | B28 | 27  | 296.14 | 750.62  | 0.00 | 0.00 | 0.00 | 27  | 296.14 | 750.62  |
| 154 | E28 | A28 | 84  | 144.05 | 688.05  | 0.00 | 0.00 | 0.00 | 84  | 144.05 | 688.05  |
| 155 | G28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 156 | G28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 157 | H28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 158 | A28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 159 | A28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 160 | B28 | D28 | 118 | 671.07 | 693.92  | 0.00 | 0.00 | 0.00 | 118 | 671.07 | 693.92  |
| 161 | B28 | E28 | 32  | 651.16 | 713.02  | 0.00 | 0.00 | 0.00 | 32  | 651.16 | 713.02  |
| 162 | B28 | D28 | 21  | 462.66 | 695.18  | 0.00 | 0.00 | 0.00 | 21  | 462.66 | 695.18  |
| 163 | B28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 164 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 165 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 166 | B28 | C28 | 85  | 510.33 | 553.47  | 0.00 | 0.00 | 0.00 | 85  | 510.33 | 553.47  |
| 167 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 168 | G28 | A28 | 729 | 133.02 | 385.76  | 0.00 | 0.00 | 0.00 | 729 | 133.02 | 385.76  |
| 169 | G28 | B28 | 93  | 225.22 | 788.72  | 0.00 | 0.00 | 0.00 | 93  | 225.22 | 788.72  |
| 170 | G28 | B28 | 211 | 202.35 | 789.10  | 0.00 | 0.00 | 0.00 | 211 | 202.35 | 789.10  |
| 171 | G28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 172 | H28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 173 | F28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 174 | H28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 175 | A28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 176 | H28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 177 | H28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 178 | B28 | E28 | 338 | 648.28 | 710.57  | 0.00 | 0.00 | 0.00 | 338 | 648.28 | 710.57  |
| 179 | B28 | E28 | 84  | 440.29 | 711.82  | 0.00 | 0.00 | 0.00 | 84  | 440.29 | 711.82  |
| 180 | A28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 181 | F28 | C28 | 61  | 203.55 | 729.68  | 0.00 | 0.00 | 0.00 | 61  | 203.55 | 729.68  |
| 182 | G28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 183 | A28 | E28 | 43  | 158.21 | 854.82  | 0.00 | 0.00 | 0.00 | 43  | 158.21 | 854.82  |
| 184 | C28 | A28 | 56  | 142.24 | 827.67  | 0.00 | 0.00 | 0.00 | 56  | 142.24 | 827.67  |
| 185 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 186 | A28 | C28 | 74  | 136.92 | 699.04  | 0.00 | 0.00 | 0.00 | 74  | 136.92 | 699.04  |
| 187 | G28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 188 | A28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 189 | G28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |

|     |     |     |     |        |         |      |      |      |     |        |         |
|-----|-----|-----|-----|--------|---------|------|------|------|-----|--------|---------|
| 190 | G28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 191 | D28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 192 | D28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 193 | D28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 194 | H28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 195 | D28 | G28 | 92  | 650.41 | 744.99  | 0.00 | 0.00 | 0.00 | 92  | 650.41 | 744.99  |
| 196 | D28 | F28 | 54  | 642.33 | 652.14  | 0.00 | 0.00 | 0.00 | 54  | 642.33 | 652.14  |
| 197 | D28 | G28 | 65  | 650.20 | 740.41  | 0.00 | 0.00 | 0.00 | 65  | 650.20 | 740.41  |
| 198 | D28 | A28 | 5   | 842.24 | 704.24  | 0.00 | 0.00 | 0.00 | 5   | 842.24 | 704.24  |
| 199 | D28 | B28 | 266 | 987.52 | 1101.39 | 0.00 | 0.00 | 0.00 | 266 | 987.52 | 1101.39 |
| 200 | D28 | B28 | 78  | 968.58 | 1101.77 | 0.00 | 0.00 | 0.00 | 78  | 968.58 | 1101.77 |
| 201 | F28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 202 | F28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 203 | F28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 204 | F28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 205 | A28 | E28 | 99  | 144.84 | 857.96  | 0.00 | 0.00 | 0.00 | 99  | 144.84 | 857.96  |
| 206 | F28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 207 | F28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 208 | G28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 209 | G28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 210 | D28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 211 | D28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 212 | H28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 213 | H28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 214 | F28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 215 | F28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 216 | A28 | G28 | 341 | 184.84 | 1111.71 | 0.00 | 0.00 | 0.00 | 341 | 184.84 | 1111.71 |
| 217 | A28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 218 | A28 | A28 | 3   | 196.37 | 1074.93 | 0.00 | 0.00 | 0.00 | 3   | 196.37 | 1074.93 |
| 219 | A28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 220 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 221 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 222 | A28 | D28 | 12  | 149.36 | 751.58  | 0.00 | 0.00 | 0.00 | 12  | 149.36 | 751.58  |
| 223 | A28 | G28 | 52  | 180.99 | 1118.58 | 0.00 | 0.00 | 0.00 | 52  | 180.99 | 1118.58 |
| 224 | A28 | F28 | 54  | 173.44 | 1025.73 | 0.00 | 0.00 | 0.00 | 54  | 173.44 | 1025.73 |
| 225 | A28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 226 | A28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 235 | E28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 236 | E28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 246 | E28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 248 | D28 | C28 | 329 | 857.57 | 1078.32 | 0.00 | 0.00 | 0.00 | 329 | 857.57 | 1078.32 |
| 249 | H28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 252 | F28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 283 | E28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 284 | E28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 285 | E28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 286 | E28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 307 | G28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 317 | C28 | G28 | 277 | 119.36 | 864.44  | 0.00 | 0.00 | 0.00 | 277 | 119.36 | 864.44  |
| 318 | C28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 319 | C28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 320 | C28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 322 | C28 | G28 | 215 | 116.88 | 875.73  | 0.00 | 0.00 | 0.00 | 215 | 116.88 | 875.73  |
| 323 | C28 | F28 | 19  | 109.33 | 782.88  | 0.00 | 0.00 | 0.00 | 19  | 109.33 | 782.88  |
| 324 | C28 | G28 | 3   | 116.86 | 871.15  | 0.00 | 0.00 | 0.00 | 3   | 116.86 | 871.15  |
| 325 | C28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |

|     |     |     |     |        |         |      |      |      |     |        |         |
|-----|-----|-----|-----|--------|---------|------|------|------|-----|--------|---------|
| 330 | C28 | A28 | 306 | 145.85 | 834.69  | 0.00 | 0.00 | 0.00 | 306 | 145.85 | 834.69  |
| 331 | C28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 332 | C28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 334 | C28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 342 | C28 | B28 | 4   | 222.37 | 756.38  | 0.00 | 0.00 | 0.00 | 4   | 222.37 | 756.38  |
| 343 | C28 | B28 | 38  | 195.57 | 753.20  | 0.00 | 0.00 | 0.00 | 38  | 195.57 | 753.20  |
| 364 | B28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 379 | B28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 380 | B28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 381 | B28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 382 | G28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 383 | G28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 384 | A28 | A28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 385 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 386 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 387 | A28 | A28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 388 | A28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 389 | E28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 390 | E28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 391 | D28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 392 | D28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 393 | D28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 394 | D28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 395 | H28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 396 | H28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 397 | F28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 398 | F28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 399 | F28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 400 | F28 | B28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 401 | G28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 402 | G28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 403 | G28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 404 | A28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 405 | A28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 406 | A28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 407 | D28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 408 | H28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 409 | H28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 410 | H28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 411 | F28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 412 | F28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 413 | F28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 414 | F28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 415 | A28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 417 | A28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 418 | G28 | C28 | 261 | 140.77 | 767.78  | 0.00 | 0.00 | 0.00 | 261 | 140.77 | 767.78  |
| 423 | C28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 424 | C28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 425 | E28 | C28 | 32  | 198.25 | 1064.27 | 0.00 | 0.00 | 0.00 | 32  | 198.25 | 1064.27 |
| 428 | E28 | C28 | 50  | 206.92 | 1069.36 | 0.00 | 0.00 | 0.00 | 50  | 206.92 | 1069.36 |
| 431 | D28 | C28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 439 | G28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 440 | G28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 441 | G28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 442 | E28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 443 | E28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |

|     |     |     |     |        |         |      |      |      |     |        |         |
|-----|-----|-----|-----|--------|---------|------|------|------|-----|--------|---------|
| 444 | E28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 445 | D28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 446 | D28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 447 | D28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 448 | H28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 449 | H28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 450 | H28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 451 | G28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 452 | G28 | E28 | 229 | 122.19 | 925.57  | 0.00 | 0.00 | 0.00 | 229 | 122.19 | 925.57  |
| 453 | A28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 454 | A28 | E28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 455 | E28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 456 | E28 | E28 | 1   | 219.59 | 1219.72 | 0.00 | 0.00 | 0.00 | 1   | 219.59 | 1219.72 |
| 457 | D28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 458 | D28 | E28 | 15  | 872.85 | 1232.00 | 0.00 | 0.00 | 0.00 | 15  | 872.85 | 1232.00 |
| 459 | H28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 460 | F28 | E28 | 22  | 211.08 | 886.49  | 0.00 | 0.00 | 0.00 | 22  | 211.08 | 886.49  |
| 461 | A28 | E28 | 77  | 147.20 | 857.33  | 0.00 | 0.00 | 0.00 | 77  | 147.20 | 857.33  |
| 462 | A28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 463 | A28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 464 | A28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 465 | A28 | E28 | 192 | 156.92 | 852.36  | 0.00 | 0.00 | 0.00 | 192 | 156.92 | 852.36  |
| 466 | A28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 467 | G28 | D28 | 129 | 162.21 | 819.82  | 0.00 | 0.00 | 0.00 | 129 | 162.21 | 819.82  |
| 468 | G28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 469 | G28 | F28 | 25  | 186.38 | 1093.97 | 0.00 | 0.00 | 0.00 | 25  | 186.38 | 1093.97 |
| 470 | G28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 471 | G28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 472 | A28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 473 | B28 | D28 | 20  | 548.94 | 1436.67 | 0.00 | 0.00 | 0.00 | 20  | 548.94 | 1436.67 |
| 474 | C28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 475 | E28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 476 | D28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 477 | D28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 478 | D28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 479 | D28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 480 | D28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 481 | H28 | D28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 482 | H28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 483 | H28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 484 | H28 | G28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 485 | H28 | H28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |
| 486 | F28 | D28 | 100 | 254.30 | 780.75  | 0.00 | 0.00 | 0.00 | 100 | 254.30 | 780.75  |
| 487 | F28 | F28 | 0   | 0.00   | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00   | 0.00    |

## Final Prediction Table

### Traffic Stream Results

|     |                     |              | SIGNALS           |       | FLOWS                    |                                     | PERFORMANCE        |                 |                          |                            | PER PCU          |                   |                   | QUEUES     | WEIGHTS                    |                               | PENALTIES                     | P.I. |
|-----|---------------------|--------------|-------------------|-------|--------------------------|-------------------------------------|--------------------|-----------------|--------------------------|----------------------------|------------------|-------------------|-------------------|------------|----------------------------|-------------------------------|-------------------------------|------|
| Arm | Traffic Stream Name | Traffic Node | Controller stream | Phase | Calculated flow entering | Calculated saturation flow (PCU/hr) | Actual greens (pe) | Wasted time (s) | Degree of saturation (%) | Practical reserve capacity | Journey Time (s) | Mean Delay per Ve | Mean stops per Ve | Mean queue | Delay weighting multiplier | Stop weighting multiplier (%) | Cost of traffic penalties (£) | P.I. |

|      |   |            |   |       | (PCU/<br>hr) |       | r<br>cyc<br>le) | l (s<br>(per<br>cyc<br>le)) |       | ity<br>(%) |     | h<br>(s) | h<br>(%) | (PC<br>U) | plier<br>(%) |     | per<br>hr) |      |        |
|------|---|------------|---|-------|--------------|-------|-----------------|-----------------------------|-------|------------|-----|----------|----------|-----------|--------------|-----|------------|------|--------|
| A    | 1 | (untitled) | 6 | 771-2 | E            | 847 < | 2050            | 24                          | 0.00  | 99         | -9  | 72.13    | 66.55    | 141.50    | 22.79+       | 20  | 0          | 0.00 | 44.47  |
|      | 2 | (untitled) | 6 | 771-2 | E            | 653   | 2050            | 24                          | 0.00  | 76         | 18  | 24.07    | 18.32    | 69.50     | 8.34         | 20  | 0          | 0.00 | 9.44   |
|      | 3 | (untitled) | 6 | 771-2 | E            | 694   | 2050            | 24                          | 0.00  | 81         | 11  | 26.44    | 20.56    | 83.82     | 11.04        | 20  | 0          | 0.00 | 11.26  |
|      | 4 | (untitled) | 6 | 771-2 | E            | 505   | 2050            | 24                          | 0.00  | 59         | 52  | 22.55    | 16.54    | 79.65     | 7.46         | 20  | 0          | 0.00 | 6.59   |
| Ac   | 1 | (untitled) | 6 | 771-2 | D            | 819   | 2263            | 26                          | 2.00  | 80         | 12  | 23.61    | 16.42    | 60.84     | 10.90        | 100 | 500        | 0.00 | 132.97 |
|      | 2 | (untitled) | 6 | 771-2 | D            | 392   | 2263            | 26                          | 4.85  | 40         | 126 | 11.42    | 1.92     | 6.81      | 1.82         | 100 | 500        | 0.00 | 5.25   |
|      | 3 | (untitled) | 6 | 771-2 | D            | 334   | 2263            | 26                          | 17.00 | 33         | 175 | 8.80     | 2.20     | 6.80      | 0.38         | 100 | 500        | 0.00 | 6.55   |
| Ac f | 1 | (untitled) | 6 |       |              | 1211  | 2263            | 60                          | 22.00 | 54         | 68  | 6.13     | 0.91     | 0.00      | 0.31         | 100 | 100        | 0.00 | 4.37   |
|      | 2 | (untitled) | 6 |       |              | 334   | 2263            | 60                          | 50.00 | 15         | 510 | 7.38     | 0.14     | 0.00      | 0.01         | 100 | 100        | 0.00 | 0.18   |
| Af   | 1 | (untitled) | 6 |       |              | 1500  | 2050            | 60                          | 6.22  | 73         | 23  | 8.85     | 2.42     | 4.12      | 2.46         | 100 | 100        | 0.00 | 15.11  |
|      | 2 | (untitled) | 6 |       |              | 694   | 2050            | 60                          | 17.00 | 34         | 166 | 6.83     | 0.45     | 0.00      | 0.09         | 100 | 100        | 0.00 | 1.23   |
|      | 3 | (untitled) | 6 |       |              | 505   | 2050            | 60                          | 6.00  | 25         | 265 | 6.65     | 0.29     | 0.00      | 0.04         | 100 | 100        | 0.00 | 0.57   |
| B    | 1 | (untitled) | 1 | 769-1 | B            | 366   | 2050            | 11                          | 0.00  | 89         | 1   | 61.35    | 54.25    | 132.52    | 8.47         | 20  | 0          | 0.00 | 15.67  |
|      | 2 | (untitled) | 1 | 769-1 | B            | 309   | 2150            | 11                          | 1.36  | 81         | 11  | 49.44    | 42.15    | 112.51    | 5.92         | 20  | 0          | 0.00 | 10.27  |
|      | 3 | (untitled) | 1 | 769-1 | B            | 294   | 2100            | 11                          | 0.00  | 70         | 29  | 39.58    | 32.10    | 98.97     | 4.88         | 20  | 0          | 0.00 | 7.45   |
|      | 4 | (untitled) | 1 | 769-1 | B            | 344   | 2050            | 11                          | 0.00  | 84         | 7   | 56.44    | 44.15    | 122.20    | 7.17         | 20  | 0          | 0.00 | 11.98  |
| Bc   | 1 | (untitled) | 1 | 769-1 | A            | 1045  | 2050            | 37                          | 4.00  | 81         | 12  | 26.44    | 14.48    | 67.82     | 20.96        | 100 | 500        | 0.00 | 138.75 |
|      | 2 | (untitled) | 1 | 769-1 | A            | 995   | 2050            | 37                          | 5.00  | 77         | 17  | 23.47    | 11.63    | 39.35     | 7.15         | 100 | 500        | 0.00 | 89.32  |
|      | 3 | (untitled) | 1 | 769-1 | A            | 538   | 2050            | 37                          | 12.00 | 41         | 117 | 13.86    | 2.15     | 7.60      | 0.68         | 100 | 500        | 0.00 | 9.11   |
| Bc f | 1 | (untitled) | 1 |       |              | 1666  | 2263            | 60                          | 10.00 | 74         | 22  | 6.55     | 2.21     | 0.00      | 1.02         | 100 | 100        | 0.00 | 14.49  |
|      | 2 | (untitled) | 1 |       |              | 1045  | 2263            | 60                          | 12.00 | 46         | 95  | 6.31     | 0.68     | 0.00      | 0.20         | 100 | 100        | 0.00 | 2.81   |
|      | 3 | (untitled) | 1 |       |              | 995   | 2263            | 60                          | 26.00 | 44         | 105 | 6.43     | 0.62     | 0.00      | 0.17         | 100 | 100        | 0.00 | 2.45   |
|      | 4 | (untitled) | 1 |       |              | 538   | 2263            | 60                          | 25.00 | 24         | 279 | 6.69     | 0.25     | 0.00      | 0.04         | 100 | 100        | 0.00 | 0.53   |
| Bf   | 1 | (untitled) | 1 |       |              | 675   | 1800            | 60                          | 0.00  | 38         | 140 | 27.94    | 0.60     | 0.00      | 0.11         | 100 | 100        | 0.00 | 1.60   |
|      | 2 | (untitled) | 1 |       |              | 638   | 1800            | 60                          | 0.00  | 35         | 154 | 27.96    | 0.55     | 0.00      | 0.10         | 100 | 100        | 0.00 | 1.38   |
| C    | 1 | (untitled) | 2 | 769-2 | G            | 79    | 2100            | 14                          | 12.00 | 15         | 495 | 32.84    | 18.31    | 100.96    | 1.46         | 20  | 0          | 0.00 | 1.15   |
|      | 2 | (untitled) | 2 | 769-2 | G            | 529 < | 2200            | 14                          | 0.00  | 96         | -7  | 165.25   | 150.52   | 294.87    | 27.28+       | 20  | 0          | 0.00 | 62.86  |

|     |   |            |     |       |   |      |      |    |       |     |      |        |        |        |        |     |     |      |        |
|-----|---|------------|-----|-------|---|------|------|----|-------|-----|------|--------|--------|--------|--------|-----|-----|------|--------|
|     | 3 | (untitled) | 2   | 769-2 | G | 253  | 2050 | 14 | 7.00  | 49  | 83   | 44.63  | 29.71  | 105.58 | 4.45   | 20  | 0   | 0.00 | 5.92   |
| Cf  | 1 | (untitled) | 2   |       |   | 515  | 1965 | 60 | 44.27 | 100 | -10  | 218.69 | 201.34 | 37.07  | 35.51+ | 100 | 100 | 0.00 | 43.304 |
|     | 2 | (untitled) | 2   |       |   | 346  | 1965 | 60 | 46.23 | 31  | 187  | 25.46  | 7.95   | 73.40  | 4.64   | 100 | 100 | 0.00 | 14.05  |
| D   | 1 | (untitled) | 3   | 770-1 | B | 385  | 2050 | 12 | 0.00  | 87  | 4    | 50.45  | 46.33  | 121.40 | 8.03   | 20  | 0   | 0.00 | 14.07  |
|     | 2 | (untitled) | 3   | 770-1 | B | 237  | 1850 | 12 | 0.00  | 59  | 52   | 31.66  | 27.53  | 92.07  | 3.65   | 20  | 0   | 0.00 | 5.15   |
|     | 3 | (untitled) | 3   | 770-1 | B | 333  | 2250 | 12 | 0.00  | 68  | 32   | 33.39  | 29.43  | 96.26  | 5.49   | 20  | 0   | 0.00 | 7.73   |
|     | 4 | (untitled) | 3   | 770-1 | B | 348  | 2250 | 12 | 0.00  | 71  | 26   | 34.95  | 30.79  | 99.04  | 5.82   | 20  | 0   | 0.00 | 8.45   |
| Dc  | 1 | (untitled) | 3   | 770-1 | A | 569  | 2100 | 38 | 16.00 | 42  | 116  | 10.57  | 4.46   | 19.80  | 1.88   | 100 | 500 | 0.00 | 17.06  |
|     | 2 | (untitled) | 3   | 770-1 | A | 637  | 2100 | 38 | 10.00 | 47  | 93   | 14.32  | 8.44   | 54.83  | 5.82   | 100 | 500 | 0.00 | 43.13  |
|     | 3 | (untitled) | 3   | 770-1 | A | 151  | 2100 | 38 | 31.00 | 11  | 714  | 5.81   | 0.16   | 0.00   | 0.01   | 100 | 500 | 0.00 | 0.10   |
|     | 4 | (untitled) | 3   | 770-1 | A | 102  | 2100 | 38 | 31.00 | 7   | 1107 | 5.51   | 0.11   | 0.00   | 0.00   | 100 | 500 | 0.00 | 0.04   |
| Dcf | 1 | (untitled) | 3   |       |   | 795  | 2050 | 60 | 28.00 | 39  | 132  | 5.46   | 0.56   | 0.00   | 0.12   | 100 | 100 | 0.00 | 1.74   |
|     | 2 | (untitled) | 3   |       |   | 1073 | 2100 | 60 | 26.00 | 51  | 76   | 5.79   | 0.89   | 0.00   | 0.27   | 100 | 100 | 0.00 | 3.78   |
|     | 3 | (untitled) | 3   |       |   | 569  | 2100 | 60 | 35.00 | 27  | 232  | 6.23   | 0.32   | 0.00   | 0.05   | 100 | 100 | 0.00 | 0.71   |
|     | 4 | (untitled) | 3   |       |   | 637  | 2100 | 60 | 16.00 | 30  | 197  | 7.77   | 0.37   | 0.00   | 0.07   | 100 | 100 | 0.00 | 0.94   |
|     | 5 | (untitled) | 3   |       |   | 151  | 2100 | 60 | 52.00 | 7   | 1153 | 5.03   | 0.07   | 0.00   | 0.00   | 100 | 100 | 0.00 | 0.04   |
|     | 6 | (untitled) | 3   |       |   | 102  | 2050 | 60 | 52.00 | 5   | 1713 | 7.99   | 0.05   | 0.00   | 0.00   | 100 | 100 | 0.00 | 0.02   |
| Df  | 1 | (untitled) | 3-2 |       |   | 622  | 1900 | 60 | 0.00  | 33  | 175  | 24.46  | 0.46   | 0.00   | 0.08   | 100 | 100 | 0.00 | 1.13   |
|     | 2 | (untitled) | 3-2 |       |   | 681  | 2250 | 60 | 0.00  | 30  | 197  | 24.35  | 0.35   | 0.00   | 0.07   | 100 | 100 | 0.00 | 0.93   |
| Dxp | 1 | (untitled) | 3-2 | 770-2 | D | 804  | 2050 | 43 | 5.00  | 53  | 68   | 6.06   | 2.63   | 12.54  | 1.73   | 100 | 100 | 0.00 | 11.58  |
|     | 2 | (untitled) | 3-2 | 770-2 | D | 1073 | 2050 | 43 | 6.00  | 71  | 26   | 6.64   | 3.03   | 5.38   | 0.98   | 100 | 100 | 0.00 | 14.67  |
| Ec  | 1 | (untitled) | 4   | 770-3 | F | 418  | 2150 | 18 | 3.00  | 61  | 47   | 13.98  | 10.22  | 36.59  | 2.81   | 100 | 500 | 0.00 | 41.41  |
|     | 2 | (untitled) | 4   | 770-3 | F | 388  | 2263 | 18 | 2.00  | 54  | 66   | 16.77  | 13.14  | 46.31  | 3.00   | 100 | 500 | 0.00 | 48.93  |
|     | 3 | (untitled) | 4   | 770-3 | F | 402  | 2263 | 18 | 4.00  | 56  | 61   | 10.31  | 6.80   | 22.35  | 2.67   | 100 | 500 | 0.00 | 25.19  |
|     | 4 | (untitled) | 4   | 770-3 | F | 339  | 2250 | 18 | 6.00  | 48  | 89   | 10.14  | 4.72   | 15.02  | 1.66   | 100 | 500 | 0.00 | 9.51   |
| Ecf | 1 | (untitled) | 4   |       |   | 660  | 2100 | 60 | 24.00 | 31  | 186  | 3.84   | 0.39   | 0.00   | 0.07   | 100 | 100 | 0.00 | 1.02   |
|     | 2 | (untitled) | 4   |       |   | 931  | 2100 | 60 | 18.00 | 44  | 103  | 4.16   | 0.68   | 1.14   | 2.50   | 100 | 100 | 0.00 | 2.85   |
|     | 3 | (untitled) | 4   |       |   | 388  | 2263 | 60 | 39.00 | 17  | 425  | 4.98   | 0.16   | 0.00   | 0.02   | 100 | 100 | 0.00 | 0.25   |
|     | 4 | (untitled) | 4   |       |   | 402  | 2300 | 60 | 39.00 | 17  | 415  | 5.50   | 0.17   | 0.00   | 0.02   | 100 | 100 | 0.00 | 0.26   |
|     | 5 | (untitled) | 4   |       |   | 381  | 2300 | 60 | 39.00 | 17  | 443  | 5.79   | 0.16   | 0.00   | 0.02   | 100 | 100 | 0.00 | 0.23   |
| Ef  | 1 | (untitled) | 4   |       |   | 771  | 1900 | 60 | 0.00  | 41  | 122  | 15.95  | 0.65   | 0.00   | 0.14   | 100 | 100 | 0.00 | 1.97   |

|     |   |            |     |       |   |       |              |    |       |     |              |        |        |        |        |     |     |      |        |
|-----|---|------------|-----|-------|---|-------|--------------|----|-------|-----|--------------|--------|--------|--------|--------|-----|-----|------|--------|
|     | 2 | (untitled) | 4   |       |   | 551   | 1900         | 60 | 0.00  | 29  | 210          | 15.69  | 0.39   | 0.00   | 0.06   | 100 | 100 | 0.00 | 0.84   |
| ExP | 1 | (untitled) | 4-2 | 770-4 | L | 660   | 2050         | 42 | 14.00 | 45  | 100          | 6.43   | 2.54   | 19.88  | 2.50   | 100 | 100 | 0.00 | 10.82  |
|     | 2 | (untitled) | 4-2 | 770-4 | L | 513   | 2050         | 42 | 14.00 | 35  | 158          | 7.41   | 3.38   | 36.73  | 7.06   | 100 | 100 | 0.00 | 12.90  |
| F   | 1 | (untitled) | 5   | 771-1 | B | 190   | 2100         | 8  | 3.00  | 60  | 49           | 49.35  | 42.96  | 113.81 | 3.63   | 20  | 0   | 0.00 | 6.45   |
|     | 2 | (untitled) | 5   | 771-1 | B | 315 < | 2100         | 8  | 0.00  | 100 | -10          | 237.57 | 231.14 | 311.35 | 22.31+ | 20  | 0   | 0.00 | 57.44  |
|     | 3 | (untitled) | 5   | 771-1 | B | 315 < | 2100         | 8  | 0.00  | 100 | -10          | 237.71 | 231.16 | 311.35 | 22.31+ | 20  | 0   | 0.00 | 57.44  |
| Fc  | 1 | (untitled) | 5   | 771-1 | A | 673   | 2263         | 42 | 10.00 | 41  | 117          | 22.60  | 3.23   | 24.20  | 2.71   | 100 | 500 | 0.00 | 21.22  |
|     | 2 | (untitled) | 5   | 771-1 | A | 862   | 2263         | 42 | 13.86 | 57  | 58           | 22.71  | 3.26   | 17.01  | 2.43   | 100 | 500 | 0.00 | 21.99  |
|     | 3 | (untitled) | 5   | 771-1 | A | 740   | 2263         | 42 | 20.18 | 51  | 78           | 29.71  | 10.23  | 61.27  | 7.15   | 100 | 500 | 0.00 | 65.10  |
| Ff  | 1 | (untitled) | 5   |       |   | 505 < | 1900         | 60 | 44.04 | 100 | -10          | 359.65 | 326.56 | 563.45 | 58.58+ | 100 | 100 | 0.00 | 686.74 |
|     | 2 | (untitled) | 5   |       |   | 310   | 1900         | 60 | 50.05 | 99  | -9           | 313.67 | 280.62 | 350.15 | 29.28  | 100 | 100 | 0.00 | 357.49 |
| G   | 1 | (untitled) | 2   | 769-2 | F | 292   | 2050         | 14 | 5.66  | 60  | 51           | 55.12  | 39.14  | 109.52 | 5.59   | 100 | 500 | 0.00 | 72.37  |
|     | 2 | (untitled) | 2   | 769-2 | F | 301   | 2050         | 14 | 0.59  | 61  | 47           | 50.80  | 39.41  | 104.44 | 7.43   | 100 | 500 | 0.00 | 97.25  |
| Gf  | 1 | (untitled) | 4   |       |   | 288   | 2050         | 60 | 46.00 | 14  | 541          | 3.18   | 0.14   | 0.00   | 0.01   | 100 | 100 | 0.00 | 0.16   |
|     | 2 | (untitled) | 4   |       |   | 263   | 2050         | 60 | 46.00 | 13  | 602          | 3.13   | 0.13   | 0.00   | 0.01   | 100 | 100 | 0.00 | 0.13   |
| xA  | 1 | (untitled) | 10  |       |   | 802   | 2263         | 60 | 21.00 | 35  | 154          | 17.66  | 0.44   | 0.00   | 0.10   | 100 | 100 | 0.00 | 1.38   |
|     | 2 | (untitled) | 10  |       |   | 748   | 2263         | 60 | 27.00 | 33  | 172          | 17.64  | 0.39   | 0.00   | 0.08   | 100 | 100 | 0.00 | 1.16   |
| xB  | 1 | (untitled) |     |       |   | 1666  | Unrestricted | 60 | 0.00  | 0   | Unrestricted | 5.79   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00 | 0.00   |
| xC  | 1 | (untitled) |     |       |   | 652   | 1900         | 60 | 38.63 | 96  | -7           | 58.56  | 49.89  | 111.33 | 16.84  | 100 | 100 | 0.00 | 151.63 |
|     | 2 | (untitled) |     |       |   | 633   | 1900         | 60 | 39.16 | 92  | -2           | 38.97  | 30.27  | 78.71  | 11.26  | 100 | 100 | 0.00 | 91.64  |
| xD  | 1 | (untitled) |     |       |   | 804   | Unrestricted | 60 | 11.00 | 0   | Unrestricted | 9.11   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00 | 0.00   |
|     | 2 | (untitled) |     |       |   | 1073  | Unrestricted | 60 | 14.00 | 0   | Unrestricted | 9.16   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00 | 0.00   |
| xE  | 1 | (untitled) |     |       |   | 660   | Unrestricted | 60 | 4.00  | 0   | Unrestricted | 13.04  | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00 | 0.00   |
|     | 2 | (untitled) |     |       |   | 513   | Unrestricted | 60 | 14.00 | 0   | Unrestricted | 13.04  | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00 | 0.00   |
| xF  | 1 | (untitled) |     |       |   | 779   | Unrestricted | 60 | 2.00  | 0   | Unrestricted | 14.26  | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00 | 0.00   |
| Cc1 | 1 | (untitled) | 2   | 769-2 | E | 692   | 2050         | 31 | 1.07  | 63  | 42           | 11.25  | 4.69   | 16.42  | 3.11   | 100 | 100 | 0.00 | 17.28  |
| E1  | 1 | (untitled) | 4   | 770-3 | G | 370   | 2050         | 11 | 0.00  | 90  | 0            | 62.86  | 56.86  | 135.90 | 8.84   | 20  | 0   | 0.00 | 16.60  |
|     | 2 | (untitled) | 4   | 770-3 | G | 401   | 2200         | 11 | 0.00  | 91  | -1           | 63.43  | 57.43  | 136.51 | 9.61   | 20  | 0   | 0.00 | 18.17  |

|        |   |            |          |          |   |        |              |    |       |    |              |       |       |        |         |     |     |      |        |
|--------|---|------------|----------|----------|---|--------|--------------|----|-------|----|--------------|-------|-------|--------|---------|-----|-----|------|--------|
| Gf 1   | 1 | (untitled) | 4        |          |   | 42     | 689          | 60 | 47.00 | 6  | 1377         | 5.92  | 0.18  | 0.22   | 0.00    | 100 | 100 | 0.00 | 0.03   |
| Cc 2   | 2 | (untitled) | 2        | 769-2    | D | 719    | 2150         | 32 | 4.51  | 62 | 46           | 19.77 | 9.99  | 61.63  | 7.44    | 100 | 500 | 0.00 | 65.57  |
|        | 3 | (untitled) | 2        | 769-2    | D | 334    | 2050         | 32 | 23.00 | 30 | 204          | 18.73 | 8.61  | 100.81 | 5.68    | 100 | 500 | 0.00 | 37.31  |
|        | 4 | (untitled) | 2        | 769-2    | D | 1069   | 2150         | 32 | 1.07  | 91 | -1           | 21.66 | 15.49 | 33.54  | 6.58    | 100 | 500 | 0.00 | 135.88 |
|        | 5 | (untitled) | 2        | 769-2    | D | 343    | 2050         | 32 | 10.20 | 33 | 176          | 11.81 | 4.69  | 30.14  | 2.43    | 100 | 500 | 0.00 | 24.07  |
|        | 6 | (untitled) | 2        | 769-2    | D | 0      | 2050         | 32 | 33.00 | 0  | Unrestricted | 0.00  | 0.00  | 0.00   | 0.00    | 100 | 500 | 0.00 | 0.00   |
| E2     | 3 | (untitled) | 4        | 770-3    | H | 288    | 2150         | 13 | 0.33  | 59 | 53           | 29.71 | 25.71 | 88.46  | 4.25    | 20  | 0   | 0.00 | 5.84   |
|        | 4 | (untitled) | 4        | 770-3    | H | 263    | 2050         | 13 | 0.00  | 55 | 64           | 28.87 | 24.80 | 87.45  | 3.84    | 20  | 0   | 0.00 | 5.14   |
| T C5   | 2 | (untitled) | TC 771-6 | TC77 7-1 | A | 636    | 2263         | 39 | 13.00 | 41 | 119          | 4.62  | 1.85  | 16.19  | 1.72    | 100 | 100 | 0.00 | 5.95   |
|        | 3 | (untitled) | TC 771-6 | TC77 7-1 | A | 748    | 2263         | 39 | 15.00 | 48 | 86           | 4.72  | 1.95  | 12.13  | 1.68    | 100 | 100 | 0.00 | 6.91   |
|        | 4 | (untitled) | TC 771-6 | TC77 7-1 | C | 0      | 0            | 0  | 0.00  | 0  | -100         | 0.00  | 0.00  | 0.00   | 0.00    | 100 | 100 | 0.00 | 0.00   |
| T C9   | 1 | (untitled) | TC 771-6 | TC77 7-1 | B | 1294 < | 1925         | 40 | 0.00  | 94 | -4           | 35.27 | 24.26 | 91.41  | 21.22 + | 100 | 100 | 0.00 | 138.66 |
|        | 2 | (untitled) | TC 771-6 | TC77 7-1 | B | 694    | 1966         | 40 | 0.00  | 49 | 83           | 16.03 | 4.96  | 38.57  | 4.76    | 100 | 100 | 0.00 | 16.94  |
|        | 3 | (untitled) | TC 771-6 | TC77 7-1 | B | 383    | 1947         | 40 | 0.00  | 27 | 228          | 14.61 | 3.49  | 32.45  | 2.07    | 100 | 100 | 0.00 | 6.83   |
| T C3 5 | 1 | (untitled) | TC 771-6 | TC77 7-1 | A | 165    | 1900         | 39 | 12.00 | 13 | 606          | 4.71  | 1.82  | 30.37  | 1.46    | 100 | 100 | 0.00 | 1.82   |
| T C3 6 | 1 | (untitled) | TC 771-6 |          |   | 401    | 1800         | 60 | 0.00  | 22 | 304          | 3.31  | 0.29  | 0.00   | 0.03    | 100 | 100 | 0.00 | 0.45   |
| T C3 7 | 1 | (untitled) | TC 771-6 | TC77 7-2 | J | 73     | 1850         | 45 | 0.00  | 5  | 1649         | 5.01  | 1.82  | 23.45  | 0.29    | 100 | 100 | 0.00 | 1.12   |
| T C3 8 | 1 | (untitled) | TC 771-6 |          |   | 73     | 433          | 60 | 14.00 | 17 | 434          | 2.70  | 1.17  | 25.29  | 2.43    | 100 | 100 | 0.00 | 0.98   |
| T C3 9 | 2 | (untitled) | TC 771-6 |          |   | 636    | 2263         | 60 | 32.00 | 28 | 220          | 2.85  | 0.31  | 0.00   | 0.05    | 100 | 100 | 0.00 | 0.78   |
|        | 3 | (untitled) | TC 771-6 |          |   | 748    | 2263         | 60 | 34.00 | 33 | 172          | 2.79  | 0.39  | 0.00   | 0.08    | 100 | 100 | 0.00 | 1.16   |
| T C4 0 | 2 | (untitled) | TC 771-6 |          |   | 709    | Unrestricted | 60 | 1.00  | 0  | Unrestricted | 4.23  | 0.00  | 0.00   | 0.00    | 100 | 100 | 0.00 | 0.00   |
|        | 3 | (untitled) | TC 771-6 |          |   | 748    | Unrestricted | 60 | 19.00 | 0  | Unrestricted | 4.02  | 0.00  | 0.00   | 0.00    | 100 | 100 | 0.00 | 0.00   |
| T C4 1 | 1 | (untitled) | TC 771-6 | TC77 7-1 | D | 328 <  | 1850         | 10 | 0.00  | 97 | -7           | 96.52 | 92.59 | 173.83 | 11.18 + | 100 | 100 | 0.00 | 139.65 |
| T C4 2 | 1 | (untitled) | TC 771-6 | TC77 7-1 | E | 0      | 0            | 0  | 0.00  | 0  | -100         | 0.00  | 0.00  | 0.00   | 0.00    | 100 | 100 | 0.00 | 0.00   |
| T C4 3 | 1 | (untitled) |          |          |   | 0      | 1800         | 60 | 60.00 | 0  | Unrestricted | 0.00  | 0.00  | 0.00   | 0.00    | 100 | 100 | 0.00 | 0.00   |

|    |   |            |          |       |   |       |      |    |       |     |     |        |        |        |        |     |     |      |        |
|----|---|------------|----------|-------|---|-------|------|----|-------|-----|-----|--------|--------|--------|--------|-----|-----|------|--------|
| 47 | 1 | (untitled) | 2        |       |   | 1285  | 1300 | 60 | 0.00  | 99  | -9  | 55.74  | 39.71  | 0.00   | 14.18  | 100 | 100 | 0.00 | 201.34 |
| 48 | 1 | (untitled) | 2        |       |   | 965 < | 1965 | 60 | 33.69 | 112 | -20 | 227.69 | 22.107 | 28.215 | 69.66+ | 100 | 100 | 0.00 | 871.96 |
| 49 | 1 | (untitled) | TC 771-6 |       |   | 1294  | 1900 | 60 | 2.07  | 71  | 28  | 5.52   | 2.37   | 5.64   | 3.00   | 100 | 100 | 0.00 | 13.00  |
|    | 2 | (untitled) | TC 771-6 |       |   | 1077  | 1900 | 60 | 0.00  | 57  | 59  | 4.39   | 1.24   | 0.00   | 0.37   | 100 | 100 | 0.00 | 5.25   |
| 50 | 1 | (untitled) | 1        |       |   | 1313  | 1900 | 60 | 0.00  | 69  | 30  | 7.89   | 2.11   | 0.00   | 0.77   | 100 | 100 | 0.00 | 10.92  |
| 51 | 1 | (untitled) | 4-2      |       |   | 904 < | 1900 | 60 | 34.23 | 111 | -19 | 207.45 | 20.295 | 27.181 | 61.34+ | 100 | 100 | 0.00 | 751.48 |
| 52 | 1 |            | 1        | 770-3 | A | 392   | 1800 | 14 | 0.00  | 87  | 3   | 66.54  | 45.78  | 11.788 | 8.50   | 100 | 500 | 0.00 | 99.76  |
|    | 2 |            | 1        | 770-3 | A | 344   | 1800 | 14 | 2.00  | 76  | 18  | 35.85  | 15.06  | 25.66  | 1.53   | 100 | 500 | 0.00 | 25.97  |
| 53 | 1 |            | 2        |       |   | 392   | 1800 | 60 | 15.00 | 22  | 313 | 5.55   | 0.28   | 0.00   | 0.03   | 100 | 100 | 0.00 | 0.43   |
|    | 2 |            | 2        |       |   | 344   | 1800 | 60 | 44.00 | 19  | 371 | 5.49   | 0.42   | 10.56  | 4.12   | 100 | 100 | 0.00 | 1.03   |

### Pedestrian Crossing Results

|            |      |            |              | SIGNALS           |       | FLOWS                             |                              | PERFORMANCE                  |                          |                            | PER PED          |                        | QUES             | WEIG                | PENAL                                | P.I  |
|------------|------|------------|--------------|-------------------|-------|-----------------------------------|------------------------------|------------------------------|--------------------------|----------------------------|------------------|------------------------|------------------|---------------------|--------------------------------------|------|
| Pedestrian | Side | Name       | Traffic node | Controller stream | Phase | Calculated Flow Entering (Ped/hr) | Calculated sat flow (Ped/hr) | Actual green (s (per cycle)) | Degree of saturation (%) | Practical reserve capacity | Journey Time (s) | Mean Delay per Ped (s) | Mean queue (Ped) | Delay weighting (%) | Cost of traffic penalties (£ per hr) | P.I  |
| 1          | 1    | (untitled) | 3-2          | 770-2             | E     | 0                                 | 11000                        | 5                            | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 3-2          | 770-2             | E     | 0                                 | 11000                        | 5                            | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 2          | 1    | (untitled) | 3            | 770-1             | C     | 0                                 | 11000                        | 36                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 3            | 770-1             | C     | 0                                 | 11000                        | 36                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 3          | 1    | (untitled) | 4-2          | 770-4             | M     | 0                                 | 11000                        | 6                            | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 4-2          | 770-4             | M     | 0                                 | 11000                        | 6                            | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 4          | 1    | (untitled) | 4            | 770-3             | J     | 0                                 | 11000                        | 21                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 4            | 770-3             | J     | 0                                 | 11000                        | 21                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 5          | 1    | (untitled) | 4            | 770-3             | I     | 0                                 | 11000                        | 23                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 4            | 770-3             | I     | 0                                 | 11000                        | 23                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 6          | 1    | (untitled) | 4            | 770-3             | K     | 0                                 | 0                            | 0                            | 0                        | -100                       | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 4            | 770-3             | K     | 0                                 | 0                            | 0                            | 0                        | -100                       | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
| 7          | 1    | (untitled) | 5            | 771-1             | C     | 0                                 | 11000                        | 36                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |
|            | 2    | (untitled) | 5            | 771-1             | C     | 0                                 | 11000                        | 36                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00             | 100                 | 0.00                                 | 0.00 |

|    |   |            |   |         |   |   |       |    |   |              |      |      |      |     |      |      |
|----|---|------------|---|---------|---|---|-------|----|---|--------------|------|------|------|-----|------|------|
| 8  | 1 | (untitled) | 1 | 769-1   | C | 0 | 11000 | 33 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 1 | 769-1   | C | 0 | 11000 | 33 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 9  | 1 | (untitled) | 2 | 769-2   | J | 0 | 11000 | 11 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 2 | 769-2   | J | 0 | 11000 | 11 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 10 | 1 | (untitled) | 2 | 769-2   | K | 0 | 11000 | 16 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 2 | 769-2   | K | 0 | 11000 | 16 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 11 | 1 | (untitled) |   | 769-2   | H | 0 | 11000 | 29 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | 769-2   | H | 0 | 11000 | 29 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 12 | 1 | (untitled) | 2 | 769-2   | I | 0 | 11000 | 29 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 2 | 769-2   | I | 0 | 11000 | 29 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 13 | 1 | (untitled) |   | TC777-1 | I | 0 | 11000 | 10 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | I | 0 | 11000 | 10 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 14 | 1 | (untitled) |   | TC777-1 | F | 0 | 11000 | 40 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | F | 0 | 11000 | 40 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 15 | 1 | (untitled) |   | TC777-1 | G | 0 | 0     | 0  | 0 | -100         | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | G | 0 | 0     | 0  | 0 | -100         | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 16 | 1 | (untitled) |   | TC777-1 | H | 0 | 11000 | 8  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | H | 0 | 11000 | 8  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 17 | 1 | (untitled) |   | TC777-2 | K | 0 | 11000 | 5  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-2 | K | 0 | 11000 | 5  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |

## Network Results

|                | Distance travelled (PCU-km/hr) | Time spent (PCU-hr/hr) | Mean journey speed (kph) | Total delay (PCU-hr/hr) | Weighted cost of delay (£ per hr) | Weighted cost of stops (£ per hr) | Excess queue penalty (£ per hr) | Performance Index (£ per hr) |
|----------------|--------------------------------|------------------------|--------------------------|-------------------------|-----------------------------------|-----------------------------------|---------------------------------|------------------------------|
| Normal traffic | 6361.23                        | 616.80                 | 10.31                    | 447.06                  | 4790.11                           | 876.07                            | 0.00                            | 5666.18                      |
| Bus            |                                |                        |                          |                         |                                   |                                   |                                 |                              |
| Tram           |                                |                        |                          |                         |                                   |                                   |                                 |                              |
| Pedestrians    | 0.00                           | 0.00                   | 0.00                     | 0.00                    | 0.00                              | 0.00                              | 0.00                            | 0.00                         |
| <b>TOTAL</b>   | 6361.23                        | 616.80                 | 10.31                    | 447.06                  | 4790.11                           | 876.07                            | 0.00                            | 5666.18                      |

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- \* = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- **P.I. = PERFORMANCE INDEX**

# TRANSYT 16

Version: 16.0.1.8473  
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**The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution**

**Filename:** M62 JN 28 CRF Scheme\_Mar 20\_PF\_Sept 20\_RevC\_mitigation  
DS\_optA+B\_2032+Com+CP+Dev\_04.t16  
**Path:** P:\133--\A13398-VAA Land at Chidswell\30 Technical\31 Modelling\Transyt\Option A+B  
**Report generation date:** 24/01/2021 14:34:12

## » Network Diagrams

« A15 - AM Base 2032 + Com Dev + CP + Dev : D15 - AM 2032 + Com Dev + CP + Dev, :

## » Summary

## » Network Options

## » Traffic Nodes

## » Arms and Traffic Streams

## » Pedestrian Crossings

## » Local OD Matrix - Local Matrix: 1

## » Signal Timings

## » Results - Link

## » Results - Traffic Stream

## » Data Entry - Stage Start and End

## » Data Entry - Phase

## » Data Entry - Traffic Stream

## » Data entry - Link

## » Results - Pedestrian

## » Collections

## » Point to Point Journey Time

## » Final Prediction Table

## Summary of network performance

|         | Set ID   | Cycle time (s) | PI (£ per hr) | Total delay (PCU-hr/hr) | Highest DOS    | Number oversaturated |
|---------|--|----------------|---------------|-------------------------|----------------|----------------------|
|         | AM Base 2032 + Com Dev + CP + Dev - AM 2032 + Com Dev + CP + Dev |                |               |                         |                |                      |
| Network | A15<br>D15   | 120            | 567213.90     | 2169.36                 | 371% (TS Df/1) | 25 (16%)             |

*There are warnings associated with this model run - see the 'Data Errors and Warnings' tables.*

## File summary

### File description

|             |            |
|-------------|------------|
| File title  | (untitled) |
| Location    |            |
| Site number |            |
| UTCRegion   |            |

|              |                |
|--------------|----------------|
| Driving side | Left           |
| Date         | 01/03/2017     |
| Version      |                |
| Status       | [no status]    |
| Identifier   |                |
| Client       |                |
| Jobnumber    |                |
| Enumerator   | LEEDS\00730414 |
| Description  |                |

## Model and Results

| Enable controller offsets | Enable fuel consumption | Enable quick flares | Display journey time results | Display OD matrix distances | Display level of service results | Display blocking and starvation results | Display end of red and green queue results | Display excess queue results | Display separate uniform and random results | Display unweighted results | Display TRANSYT 12 style timings | Display effective greens in results | Display Red-With-Ambler | Display End-Of-Green Ambler | Display controller phase minimums |
|---------------------------|-------------------------|---------------------|------------------------------|-----------------------------|----------------------------------|---|--|------------------------------|---|----------------------------|----------------------------------|-------------------------------------|-------------------------|-----------------------------|-----------------------------------|
|                           |                         |                     |                              |                             |                                  |   |  |                              |   |                            |                                  |                                     |                         |                             |                                   |

## Units

| Cost units | Speed units | Distance units | Fuel economy units | Fuel rate units | Mass units | Traffic units input | Traffic units results | Flow units | Average delay units | Total delay units | Rate of delay units |
|------------|-------------|----------------|--------------------|-----------------|------------|---------------------|-----------------------|------------|---------------------|-------------------|---------------------|
| £          | kph         | m              | mpg                | l/h             | kg         | PCU                 | PCU                   | perHour    | s                   | -Hour             | perHour             |

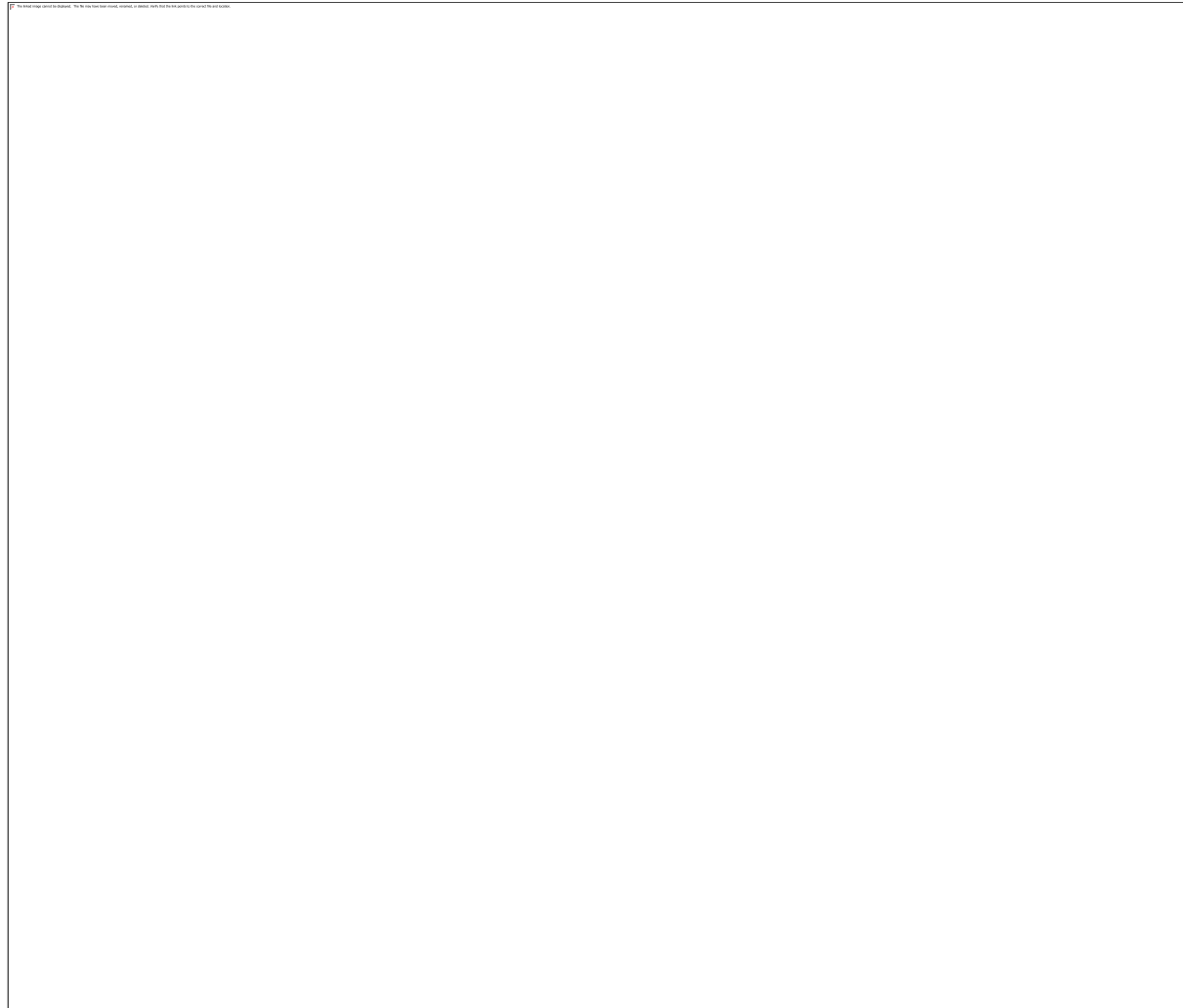
## Sorting

| Show names instead of IDs | Sorting direction | Sorting type | Ignore prefixes when sorting | Analysis/demand set sorting | Link grouping | Source grouping | Colour Analysis/Demand Sets |
|---------------------------|-------------------|--------------|------------------------------|-----------------------------|---------------|-----------------|-----------------------------|
|                           | Ascending         | Numerical    |                              | ID                          | Normal        | Normal          | ✓                           |

## Simulation options

| Criteria type | Stop criteria (%) | Stop criteria time (s) | Stop criteria number of trials | Random seed | Results refresh speed (s) | Average animation capture interval (s) | Use quick response | Do flow sampling | Uniform vehicle generation | Last run random seed | Last run number of trials | Last run time taken (s) |
|---------------|-------------------|------------------------|--------------------------------|-------------|---------------------------|--|--------------------|------------------|----------------------------|----------------------|---------------------------|-------------------------|
| Delay         | 3.00              | 999                    | 200                            | -1          | 3                         | 60                                     | ✓                  |                  |                            | 0                    | 0                         | 0.00                    |

## Network Diagrams



# A15 - AM Base 2032 + Com Dev + CP + Dev D15 - AM 2032 + Com Dev + CP + Dev,

## Summary

### Data Errors and Warnings

| Severity | Area                | Item                        | Description   |
|----------|---------------------|-----------------------------|---|
| Warning  | Traffic Stream Data | Arm Bf - Traffic Stream 1   | Arm Bf - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Bf - Traffic Stream 2   | Arm Bf - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Ff - Traffic Stream 1   | Arm Ff - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Ff - Traffic Stream 2   | Arm Ff - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm xA - Traffic Stream 1   | Arm xA - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm xA - Traffic Stream 2   | Arm xA - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm TC38 - Traffic Stream 1 | Traffic Stream 1: CTM uses a whole number of cells. CTM is using the length adjusted by 30%.  |

|         |                        |  |  |
|---------|------------------------|--|--|
| Warning | Local Matrix           | Local Matrix 1                                     | Local Matrix 1: Auto Calculate option is switched off - OD flows will not be allocated automatically to the network. |
| Warning | Traffic Stream Signals | Arm TC42 - Traffic Stream 1 - Signals (TC777-1, E) | Traffic Stream 1 controlling phase E never runs in the current stage sequence.                                       |
| Info    | Arm Data               | Arm xC   | No traffic node specified for arm(s): xC   |
| Info    | Traffic Stream Signals | Arm TC42 - Traffic Stream 1 - Signals (TC777-1, E) | Traffic Stream 1 controlling phase E never runs in stage sequence 1.   |

## Run Summary

| Analysis set used | Run start time      | Run finish time     | Run duration (s) | Modeling start time (HH:mm) | Network Cycle Time (s) | Performance Index (£ per hr) | Total network delay (PCU - hr/hr) | Highest DOS (%) | Item with highest DOS | Number of oversaturated items | Percentage of oversaturated items (%) | Item with worst signalised PRC | Item with worst unsignalised PRC | Item with worst over all PRC | Network within capacity |
|-------------------|---------------------|---------------------|------------------|-----------------------------|------------------------|------------------------------|-----------------------------------|-----------------|-----------------------|-------------------------------|---------------------------------------|--------------------------------|----------------------------------|------------------------------|-------------------------|
| 15                | 24/01/2021 14:32:59 | 24/01/2021 14:33:14 | 15.30            | 07:30                       | 120                    | 567213.90                    | 2169.36                           | 371.16          | Df/1                  | 25                            | 16                                    | TC42/1                         | Df/1                             | TC42/1                       |                         |

## Analysis Set Details

| Name                              | Use Simulation | Description | Use specific Demand Set(s) | Specific Demand Set(s) | Optimise specific Demand Set(s) | Include in report | Locked |
|-----------------------------------|----------------|-------------|----------------------------|------------------------|---------------------------------|-------------------|--------|
| AM Base 2032 + Com Dev + CP + Dev |                |             | ✓                          | D15                    |                                 | ✓                 |        |

## Demand Set Details

| Scenario name                | Time Period name | Description | Composite | Demand sets | Start time (HH:mm) | Locked | Run automatically |
|------------------------------|------------------|-------------|-----------|-------------|--------------------|--------|-------------------|
| AM 2032 + Com Dev + CP + Dev |                  |             |           |             | 07:30              |        | ✓                 |

## Network Options

### Network timings

| Network cycle time (s) | Minimum possible cycle time (s) | Absolute minimum possible cycle time (s) | Restrict to SCOOT cycle times | Time segment length (min) | Number of time segments | Modelled time period (min) |
|------------------------|---------------------------------|--|-------------------------------|---------------------------|-------------------------|----------------------------|
| 120                    | 72                              | 70                                       |                               | 60                        | 1                       | 60                         |

### Signals options

| Start displacement (s) | End displacement (s) |
|------------------------|----------------------|
| 2                      | 3                    |

### Advanced

| Phase minimum broken penalty (£) | Phase maximum broken penalty (£) | Intergreen broken penalty (£) | Starting Red-with-Amber (s) | Missing stage transition options |
|----------------------------------|----------------------------------|-------------------------------|-----------------------------|----------------------------------|
| 10000.00                         | 10000.00                         | 10000.00                      | 2                           | Assume banned                    |

### Traffic options

| Traffic model            | Vehicle flow scaling factor (%) | Pedestrian flow scaling factor (%) | Cruise times or speeds |
|--------------------------|---------------------------------|------------------------------------|------------------------|
| Platoon Dispersion (PDM) | 100                             | 100                                | Cruise Speeds          |

### Advanced

| Resolution | DOS Threshold (%) | Cruise scaling factor (%) | Use link stop weightings | Use link delay weightings | Exclude pedestrians from traffic model | Exclude pedestrians from results calculation | Random delay mode | Type of Vehicle-in-Service | Type of random parameter | PCU Length (m) | Calculate results for Path Segments | Generate PDM Profile Data |
|------------|-------------------|---------------------------|--------------------------|---------------------------|--|--|-------------------|----------------------------|--------------------------|----------------|-------------------------------------|---------------------------|
| 1          | 90                | 100                       | ✓                        | ✓                         |  |  | Complex           | Uniform (TRANSYT)          | Uniform (TRANSYT)        | 5.75           |                                     | ✓                         |

### Normal Traffic parameters

| Dispersion type | Dispersion coefficient | Travel time coefficient |
|-----------------|------------------------|-------------------------|
| Default         | 35                     | 80                      |

### Normal Traffic Types

| Name   | PCU Factor |
|--------|------------|
| Normal | 1.00       |

### Bus parameters

| Name | PCU Factor | Dispersion type | Acceleration (ms <sup>[-2]</sup> ) | Stationary time coefficient | Cruise time coefficient |
|------|------------|-----------------|------------------------------------|-----------------------------|-------------------------|
| Bus  | 1.00       | Default         | 0.94                               | 30                          | 85                      |

### Tram parameters

| Name | PCU Factor | Dispersion type | Acceleration (ms <sup>[-2]</sup> ) | Stationary time coefficient | Cruise time coefficient |
|------|------------|-----------------|------------------------------------|-----------------------------|-------------------------|
| Tram | 1.00       | Default         | 0.94                               | 100                         | 100                     |

### Pedestrian parameters

| Dispersion type |
|-----------------|
| Default         |

### Optimisation options

| Enable optimisation | Auto redistribute | Optimisation level       | Enable OUT Profile accuracy |
|---------------------|-------------------|--------------------------|-----------------------------|
| ✓                   |                   | Offsets And Green Splits | ✓                           |

### Advanced

| Optimisation type            | Hill climb increments        | OUTProfile accuracy (%)            | Use enhanced optimisation | Auto optimisation order | Optimisation order   | Master controller | Offsets relative to master controller | Master controller offset after each run |
|------------------------------|------------------------------|------------------------------------|---------------------------|-------------------------|--|-------------------|---------------------------------------|---|
| Standard accuracy Hill Climb | 15, 40, -1, 15, 40, 1, -1, 1 | 50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05 |                           | ✓                       | 769-1, 769-2, 770-1, 770-2, 770-3, 770-4, 771-1, 771-2, TC777-1, TC777-2 |                   |                                       | Do nothing                              |

### Economics

| Vehicle Monetary Value Of Delay (£ per PCU-hr) | Vehicle Monetary Value Of Stops (£ per 100 stops) | Pedestrian monetary value of delay (£ per Ped-hr) |
|--|---|---|
| 14.20  | 2.60  | 14.20   |

## Traffic Nodes

### Traffic Nodes

| Traffic node | Name       | Description |
|--------------|------------|-------------|
| (ALL)        | (untitled) |             |

## Arms and Traffic Streams

### Arms

| Arm  | Name                      | Description | Traffic node |
|------|---------------------------|-------------|--------------|
| A    | Dewsbury Rd SB            |             | 6            |
| Ac   | (untitled)                |             | 6            |
| Acf  | (untitled)                |             | 6            |
| Af   | Dewsbury Rd SB            |             | 6            |
| B    | M62 WB off slip           |             | 1            |
| Bc   | (untitled)                |             | 1            |
| Bcf  | (untitled)                |             | 1            |
| Bf   | M62 WB off slip           |             | 1            |
| C    | Bradford Rd WB            |             | 2            |
| Cf   | Bradford Rd WB            |             | 2            |
| D    | Dewsbury Rd NB            |             | 3            |
| Dc   | (untitled)                |             | 3            |
| Dcf  | (untitled)                |             | 3            |
| Df   | Dewsbury Rd NB            |             | 3-2          |
| Dxp  | Dewsbury Rd exit SB (ped) |             | 3-2          |
| Ec   | (untitled)                |             | 4            |
| Ecf  | (untitled)                |             | 4            |
| Ef   | Bradford Rd EB            |             | 4            |
| Exp  | Bradford Rd exit WB (ped) |             | 4-2          |
| F    | M62 EB off slip           |             | 5            |
| Fc   | (untitled)                |             | 5            |
| Ff   | M62 EB off slip           |             | 5            |
| G    | (untitled)                |             | 2            |
| Gf   | (untitled)                |             | 4            |
| xA   | Dewsbury Rd exit NB       |             | 10           |
| xB   | M62 EB on slip            |             |              |
| xC   | (untitled)                |             |              |
| xD   | Dewsbury Rd exit SB       |             |              |
| xE   | Bradford Rd exit WB       |             |              |
| xF   | M62 WB on slip            |             |              |
| Cc1  | (untitled)                |             | 2            |
| E1   | Bradford Rd EB (left)     |             | 4            |
| Gf1  | (untitled)                |             | 4            |
| Cc2  | (untitled)                |             | 2            |
| E2   | Bradford Rd EB (ahead)    |             | 4            |
| TC5  | (untitled)                |             | TC771-6      |
| TC9  | (untitled)                |             | TC771-6      |
| TC35 | (untitled)                |             | TC771-6      |
| TC36 | (untitled)                |             | TC771-6      |
| TC37 | (untitled)                |             | TC771-6      |
| TC38 | (untitled)                |             | TC771-6      |
| TC39 | (untitled)                |             | TC771-6      |
| TC40 | (untitled)                |             | TC771-6      |
| TC41 | (untitled)                |             | TC771-6      |
| TC42 | (untitled)                |             | TC771-6      |
| TC43 | (untitled)                |             |              |
| 47   | (untitled)                |             | 2            |
| 48   | (untitled)                |             | 2            |
| 49   | (untitled)                |             | TC771-6      |
| 50   | (untitled)                |             | 1            |
| 51   | (untitled)                |             | 4-2          |

|    |  |  |   |
|----|--|--|---|
| 52 |  |  | 1 |
| 53 |  |  | 2 |

## Traffic Streams

| Arm | Traffic Stream | Name       | Description     | Auto length | Length (m) | Has Saturation Flow | Saturation flow source | Saturation flow (PCU/hr) | Auto-calculated cell saturation flow | Cell saturation flow (PCU/hr) | Is signal controlled | Is give way | Traffic type | Allow Nearside Turn On Red |
|-----|----------------|------------|-----------------|-------------|------------|---------------------|------------------------|--------------------------|--------------------------------------|-------------------------------|----------------------|-------------|--------------|----------------------------|
| A   | 1              | (untitled) | M62E            | ✓           | 74.35      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Wake            | ✓           | 76.69      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Dews            | ✓           | 78.40      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 4              | (untitled) | Brad/M62W       | ✓           | 80.11      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Ac  | 1              | (untitled) | M62E            | ✓           | 95.80      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Wake            | ✓           | 92.34      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Dews/Brad       | ✓           | 87.95      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
| Acf | 1              | (untitled) |                 | ✓           | 69.59      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |                 | ✓           | 70.42      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
| Af  | 1              | (untitled) | M62E/Wake       | ✓           | 53.54      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 2              | (untitled) | Dews            | ✓           | 53.19      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 3              | (untitled) | Brad/M62W       | ✓           | 53.01      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
| B   | 1              | (untitled) | Wake/Dews       | ✓           | 94.67      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Brad            | ✓           | 97.18      | ✓                   | Directly entered       | 2150                     |                                      | 2150                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Leeds           | ✓           | 99.69      | ✓                   | Directly entered       | 2100                     |                                      | 2100                          | ✓                    |             | Normal       |                            |
|     | 4              | (untitled) |                 | ✓           | 102.42     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Bc  | 1              | (untitled) | Wake            | ✓           | 132.85     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Dews            | ✓           | 131.47     | ✓                   | Directly entered       | 2050                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Brad/M62W       | ✓           | 130.10     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Bcf | 1              | (untitled) |                 | ✓           | 62.77      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |                 | ✓           | 62.62      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 3              | (untitled) |                 | ✓           | 62.46      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 4              | (untitled) |                 | ✓           | 62.38      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
| Bf  | 1              | (untitled) |                 | ✓           | 227.81     | ✓                   | Sum of lanes           | 1800                     |                                      | 1600                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |                 | ✓           | 228.44     | ✓                   | Sum of lanes           | 1800                     |                                      | 1700                          |                      |             | Normal       |                            |
| C   | 1              | (untitled) | Dews/Brad       | ✓           | 121.13     | ✓                   | Directly entered       | 2100                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | M62W/Brad/Leeds | ✓           | 122.73     | ✓                   | Directly entered       | 2200                     |                                      | 2100                          | ✓                    |             | Normal       |                            |

|     |   |            |                |   |        |   |                  |      |  |      |   |  |        |
|-----|---|------------|----------------|---|--------|---|------------------|------|--|------|---|--|--------|
|     | 3 | (untitled) | Leeds/M62E     | ✓ | 124.35 | ✓ | Directly entered | 2050 |  | 1900 | ✓ |  | Normal |
| Cf  | 1 | (untitled) |                | ✓ | 144.60 | ✓ | Sum of lanes     | 1965 |  | 1965 |   |  | Normal |
|     | 2 | (untitled) |                | ✓ | 145.86 | ✓ | Sum of lanes     | 1965 |  | 1965 |   |  | Normal |
| D   | 1 | (untitled) | Brad/M62       |   | 55.00  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds          |   | 55.00  | ✓ | Directly entered | 1850 |  | 2075 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds/M62/Wake | ✓ | 52.87  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
|     | 4 | (untitled) | Leeds/M62/Wake | ✓ | 55.42  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
| Dc  | 1 | (untitled) | Brad           | ✓ | 50.91  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) | Brad/M62W      | ✓ | 48.96  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds          | ✓ | 47.02  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 4 | (untitled) | Leeds/M62E     | ✓ | 45.07  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
| Dcf | 1 | (untitled) |                | ✓ | 65.43  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
|     | 2 | (untitled) |                | ✓ | 65.28  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 3 | (untitled) |                | ✓ | 65.54  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 4 | (untitled) |                | ✓ | 67.69  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 5 | (untitled) |                | ✓ | 66.13  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 6 | (untitled) |                | ✓ | 66.17  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
| Df  | 1 | (untitled) |                |   | 200.00 | ✓ | Sum of lanes     | 1900 |  |      |   |  | Normal |
|     | 2 | (untitled) |                |   | 200.00 | ✓ | Directly entered | 2250 |  |      |   |  | Normal |
| Dxp | 1 | (untitled) |                | ✓ | 45.75  | ✓ | Directly entered | 2050 |  |      | ✓ |  | Normal |
|     | 2 | (untitled) |                | ✓ | 48.11  | ✓ | Directly entered | 2050 |  |      | ✓ |  | Normal |
| Ec  | 1 | (untitled) | M62W           | ✓ | 50.09  | ✓ | Directly entered | 2150 |  | 2150 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds          | ✓ | 48.43  | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds          | ✓ | 46.77  | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 4 | (untitled) | M62E           | ✓ | 45.11  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
| Ecf | 1 | (untitled) |                | ✓ | 45.94  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 2 | (untitled) |                | ✓ | 46.37  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 3 | (untitled) |                | ✓ | 46.95  | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
|     | 4 | (untitled) |                | ✓ | 47.51  | ✓ | Directly entered | 2300 |  | 2300 |   |  | Normal |
|     | 5 | (untitled) |                | ✓ | 48.55  | ✓ | Directly entered | 2300 |  | 2300 |   |  | Normal |
| Ef  | 1 | (untitled) |                | ✓ | 127.54 | ✓ | Directly entered | 1900 |  |      |   |  | Normal |
|     | 2 | (untitled) |                | ✓ | 127.54 | ✓ | Sum of lanes     | 1900 |  |      |   |  | Normal |

|     |   |            |            |   |        |   |                  |      |  |      |   |  |        |
|-----|---|------------|------------|---|--------|---|------------------|------|--|------|---|--|--------|
| Exp | 1 | (untitled) |            | ✓ | 51.83  | ✓ | Directly entered | 2050 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) |            | ✓ | 53.71  | ✓ | Directly entered | 2050 |  | 2100 | ✓ |  | Normal |
| F   | 1 | (untitled) | Leeds      | ✓ | 85.13  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) | Wake       | ✓ | 85.72  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Dews/Brad  | ✓ | 87.25  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
| Fc  | 1 | (untitled) | Leeds      | ✓ | 178.68 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds      | ✓ | 175.19 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 3 | (untitled) | M62E/Dews  | ✓ | 180.28 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
| Ff  | 1 | (untitled) |            | ✓ | 275.73 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 275.39 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
| G   | 1 | (untitled) |            | ✓ | 155.36 | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) |            | ✓ | 151.80 | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
| Gf  | 1 | (untitled) |            | ✓ | 40.48  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 40.06  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
| xA  | 1 | (untitled) |            | ✓ | 229.66 | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 229.97 | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
| xB  | 1 | (untitled) |            | ✓ | 77.15  |   |                  |      |  |      |   |  | Normal |
| xC  | 1 | (untitled) |            | ✓ | 115.60 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 115.98 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |  | Normal |
| xD  | 1 | (untitled) |            | ✓ | 121.44 |   |                  |      |  |      |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 122.12 |   |                  |      |  |      |   |  | Normal |
| xE  | 1 | (untitled) |            | ✓ | 173.89 |   |                  |      |  |      |   |  | Normal |
|     | 2 | (untitled) |            | ✓ | 173.83 |   |                  |      |  |      |   |  | Normal |
| xF  | 1 | (untitled) |            | ✓ | 158.35 |   |                  |      |  |      |   |  | Normal |
| Cc1 | 1 | (untitled) | Wake       | ✓ | 95.84  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
| E1  | 1 | (untitled) | M62W/Leeds |   | 80.00  | ✓ | Directly entered | 2050 |  | 1900 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds/M62E |   | 80.00  | ✓ | Directly entered | 2200 |  | 2100 | ✓ |  | Normal |
| Gf1 | 1 | (untitled) |            | ✓ | 47.81  |   |                  |      |  |      | ✓ |  | Normal |
| Cc2 | 2 | (untitled) | Dews       | ✓ | 91.52  | ✓ | Directly entered | 2150 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Brad/M62W  | ✓ | 91.11  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 4 | (untitled) | Dews/Brad  | ✓ | 90.39  | ✓ | Directly entered | 2150 |  | 2100 | ✓ |  | Normal |
|     | 5 | (untitled) | Leeds      | ✓ | 90.48  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |

|      |   |            |       |   |        |   |                  |      |   |      |   |   |        |  |
|------|---|------------|-------|---|--------|---|------------------|------|---|------|---|---|--------|--|
|      | 6 | (untitled) | Leeds | ✓ | 88.08  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |  |
| E2   | 3 | (untitled) | Wake  | ✓ | 53.28  | ✓ | Directly entered | 2150 |   | 2050 | ✓ |   | Normal |  |
|      | 4 | (untitled) | Wake  | ✓ | 54.33  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |  |
| TC5  | 2 | (untitled) |       | ✓ | 23.03  | ✓ | Sum of lanes     | 2263 |   | 2263 | ✓ |   | Normal |  |
|      | 3 | (untitled) |       | ✓ | 23.02  | ✓ | Directly entered | 2263 |   | 2263 | ✓ |   | Normal |  |
|      | 4 | (untitled) |       | ✓ | 24.43  | ✓ | Sum of lanes     | 1800 |   | 2263 | ✓ |   | Normal |  |
| TC9  | 1 | (untitled) |       | ✓ | 91.71  | ✓ | Directly entered | 1925 |   | 1925 | ✓ |   | Normal |  |
|      | 2 | (untitled) |       | ✓ | 92.21  | ✓ | Sum of lanes     | 1966 |   | 1966 | ✓ |   | Normal |  |
|      | 3 | (untitled) |       | ✓ | 92.69  | ✓ | Sum of lanes     | 1947 |   | 1947 | ✓ |   | Normal |  |
| TC35 | 1 | (untitled) |       | ✓ | 24.16  | ✓ | Directly entered | 1900 |   | 2263 | ✓ |   | Normal |  |
| TC36 | 1 | (untitled) |       | ✓ | 25.22  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |  |
| TC37 | 1 | (untitled) |       | ✓ | 44.32  | ✓ | Directly entered | 1850 |   | 1850 | ✓ |   | Normal |  |
| TC38 | 1 | (untitled) |       | ✓ | 21.32  | ✓ | Directly entered | 1850 |   | 1850 |   | ✓ | Normal |  |
| TC39 | 2 | (untitled) |       | ✓ | 35.24  | ✓ | Directly entered | 2263 |   | 2263 |   |   | Normal |  |
|      | 3 | (untitled) |       | ✓ | 33.28  | ✓ | Directly entered | 2263 |   | 2263 |   |   | Normal |  |
| TC40 | 2 | (untitled) |       | ✓ | 58.74  |   |                  |      |   |      |   |   | Normal |  |
|      | 3 | (untitled) |       | ✓ | 55.82  |   |                  |      |   |      |   |   | Normal |  |
| TC41 | 1 | (untitled) |       | ✓ | 54.63  | ✓ | Directly entered | 1850 |   | 1850 | ✓ |   | Normal |  |
| TC42 | 1 | (untitled) |       | ✓ | 23.35  | ✓ | Sum of lanes     | 1771 |   |      | ✓ |   | Normal |  |
| TC43 | 1 | (untitled) |       | ✓ | 51.77  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |  |
| 47   | 1 | (untitled) |       | ✓ | 133.63 | ✓ | Directly entered | 1300 |   | 1300 |   |   | Normal |  |
| 48   | 1 | (untitled) |       | ✓ | 55.12  | ✓ | Sum of lanes     | 1965 |   |      |   |   | Normal |  |
| 49   | 1 | (untitled) |       | ✓ | 26.24  | ✓ | Directly entered | 1900 |   |      |   |   | Normal |  |
|      | 2 | (untitled) |       | ✓ | 26.24  | ✓ | Directly entered | 1900 |   |      |   |   | Normal |  |
| 50   | 1 | (untitled) |       | ✓ | 48.15  | ✓ | Sum of lanes     | 1900 |   |      |   |   | Normal |  |
| 51   | 1 | (untitled) |       | ✓ | 37.47  | ✓ | Sum of lanes     | 1900 |   |      |   |   | Normal |  |
| 52   | 1 |            |       | ✓ | 173.00 | ✓ | Sum of lanes     | 1800 | ✓ | 1800 | ✓ |   | Normal |  |
|      | 2 |            |       | ✓ | 173.18 | ✓ | Sum of lanes     | 1800 | ✓ | 1800 | ✓ |   | Normal |  |
| 53   | 1 |            |       | ✓ | 43.95  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |  |
|      | 2 |            |       | ✓ | 42.23  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |  |

## Lanes

| Arm | Traffic | Lane | Name | Description | Use RR67 | Surface condition | Site quality | Gradient (%) | Width (m) | Use connector | Proportion that turn (%) | Turning | Nearside of lane | Saturation flow (PCU/hr) |
|-----|---------|------|------|-------------|----------|-------------------|--------------|--------------|-----------|---------------|--------------------------|---------|------------------|--------------------------|
|-----|---------|------|------|-------------|----------|-------------------|--------------|--------------|-----------|---------------|--------------------------|---------|------------------|--------------------------|





|     |   |   |            |  |   |     |              |   |      |   |   |          |      |      |
|-----|---|---|------------|--|---|-----|--------------|---|------|---|---|----------|------|------|
|     | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| Fc  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| Ff  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      | 1900 |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      | 1900 |
| G   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| Gf  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| xA  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| xB  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| xC  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      | 1900 |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      | 1900 |
| xD  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| xE  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| xF  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| Cc1 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| E1  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| Gf1 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| Cc2 | 2 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 4 | 4 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 5 | 5 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 6 | 5 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| E2  | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
|     | 4 | 4 | (untitled) |  |   |     |              |   |      |   |   |          |      |      |
| TC5 | 2 | 1 | (untitled) |  | ✓ | N/A | Clearly Good | 0 | 3.50 | ✓ | 0 | 99999.00 | 2263 |      |



|         |   |                    |     |     |     |  |      |   |       |         |  |  |  |  |
|---------|---|--------------------|-----|-----|-----|--|------|---|-------|---------|--|--|--|--|
| Ac      | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 16.50 | 9999.00 |  |  |  |  |
|         | 2 | CTM                | 50  | 100 | 100 |  | 0.00 | ✓ | 16.50 | 9999.00 |  |  |  |  |
|         | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 16.50 | 9999.00 |  |  |  |  |
| Acf     | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Af      | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| B       | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 4 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Bc      | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 22.50 | 9999.00 |  |  |  |  |
|         | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 22.50 | 9999.00 |  |  |  |  |
|         | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 22.50 | 9999.00 |  |  |  |  |
| Bcf     | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 4 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Bf      | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| C       | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Cf      | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| D       | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 4 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Dc      | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |
|         | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |
|         | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |
|         | 4 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |
| Dcf     | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 4 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 5 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 6 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Df      | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Dx<br>P | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|         | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| Ec      | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |  |  |  |  |

|     |   |                    |     |     |     |  |      |   |       |         |   |   |      |      |
|-----|---|--------------------|-----|-----|-----|--|------|---|-------|---------|---|---|------|------|
|     | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |   |   |      |      |
|     | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |   |   |      |      |
|     | 4 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 8.00  | 9999.00 |   |   |      |      |
| Ecf | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 4 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 5 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Ef  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Exp | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| F   | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Fc  | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 32.00 | 9999.00 |   |   |      |      |
|     | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 32.00 | 9999.00 |   |   |      |      |
|     | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 32.00 | 9999.00 |   |   |      |      |
| Ff  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 | ✓ | 0.00  | 0.00    | ✓ | 2 | 0.00 | 0.00 |
| G   | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 26.00 | 9999.00 |   |   |      |      |
|     | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 26.00 | 9999.00 |   |   |      |      |
| Gf  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xA  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xB  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xC  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xD  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xE  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| xF  | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Cc1 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| E1  | 1 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
|     | 2 | CTM                | 0   | 20  | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Gf1 | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |       |         |   |   |      |      |
| Cc2 | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |   |   |      |      |
|     | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |   |   |      |      |
|     | 4 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |   |   |      |      |

|       |   |                 |     |     |     |  |      |   |       |         |  |  |  |  |
|-------|---|-----------------|-----|-----|-----|--|------|---|-------|---------|--|--|--|--|
|       | 5 | CTM             | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |  |  |  |  |
|       | 6 | CTM             | 500 | 100 | 100 |  | 0.00 | ✓ | 15.00 | 9999.00 |  |  |  |  |
| E2    | 3 | CTM             | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 4 | CTM             | 0   | 20  | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 5  | 2 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 3 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 4 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 9  | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 2 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 3 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 35 | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 36 | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 37 | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 38 | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 39 | 2 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 3 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 40 | 2 | PDM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 3 | PDM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 41 | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 42 | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| TC 43 | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 47    | 1 | CTM             | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 48    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 49    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 2 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 50    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 51    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
| 52    | 1 | CTM             | 500 | 100 | 100 |  | 0.00 | ✓ | 30.00 | 9999.00 |  |  |  |  |
|       | 2 | CTM             | 500 | 100 | 100 |  | 0.00 | ✓ | 30.00 | 9999.00 |  |  |  |  |
| 53    | 1 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |
|       | 2 | NetworkDe fault | 100 | 100 | 100 |  | 0.00 |   |       |         |  |  |  |  |

### Modelling - Advanced

| Arm   | Traffic Stream | Initial queue (PCU) | Type of Vehicle-in-Service | Vehicle-in-Service | Type of random parameter | Random parameter | Auto cycle time | Cycle time |
|-------|----------------|---------------------|----------------------------|--------------------|--------------------------|------------------|-----------------|------------|
| (ALL) | (ALL)          | 0.00                | NetworkDefault             | Not-Included       | NetworkDefault           | 0.50             | ✓               | 120        |

### Normal traffic - Modelling

| Arm   | Traffic Stream | Stop weighting (%) | Delay weighting (%) |
|-------|----------------|--------------------|---------------------|
| (ALL) | (ALL)          | 100                | 100                 |

### Normal traffic - Advanced

| Arm   | Traffic Stream | Dispersion type for Normal Traffic |
|-------|----------------|------------------------------------|
| (ALL) | (ALL)          | NetworkDefault                     |

## Flows

| Arm | Traffic Stream | Total Flow (PCU/hr) | Normal Flow (PCU/hr) |
|-----|----------------|---------------------|----------------------|
| A   | 1              | 431                 | 431                  |
|     | 2              | 249                 | 249                  |
|     | 3              | 392                 | 392                  |
|     | 4              | 402                 | 402                  |
| Ac  | 1              | 1220                | 1220                 |
|     | 2              | 509                 | 509                  |
|     | 3              | 128                 | 128                  |
| Acf | 1              | 1729                | 1729                 |
|     | 2              | 128                 | 128                  |
| Af  | 1              | 680                 | 680                  |
|     | 2              | 392                 | 392                  |
|     | 3              | 402                 | 402                  |
| B   | 1              | 382                 | 382                  |
|     | 2              | 521                 | 521                  |
|     | 3              | 525                 | 525                  |
|     | 4              | 589                 | 589                  |
| Bc  | 1              | 758                 | 758                  |
|     | 2              | 476                 | 476                  |
|     | 3              | 446                 | 446                  |
| Bcf | 1              | 1651                | 1651                 |
|     | 2              | 758                 | 758                  |
|     | 3              | 476                 | 476                  |
|     | 4              | 446                 | 446                  |
| Bf  | 1              | 903                 | 903                  |
|     | 2              | 1114                | 1114                 |
| C   | 1              | 115                 | 115                  |
|     | 2              | 921                 | 921                  |
|     | 3              | 617                 | 617                  |
| Cf  | 1              | 886                 | 886                  |
|     | 2              | 767                 | 767                  |
| D   | 1              | 548                 | 548                  |
|     | 2              | 551                 | 551                  |
|     | 3              | 671                 | 671                  |
|     | 4              | 682                 | 682                  |
| Dc  | 1              | 878                 | 878                  |
|     | 2              | 946                 | 946                  |
|     | 3              | 348                 | 348                  |
|     | 4              | 269                 | 269                  |
| Dcf | 1              | 803                 | 803                  |
|     | 2              | 484                 | 484                  |
|     | 3              | 878                 | 878                  |
|     | 4              | 946                 | 946                  |
|     | 5              | 348                 | 348                  |
|     | 6              | 269                 | 269                  |
| Df  | 1              | 1099                | 1099                 |
|     | 2              | 1353                | 1353                 |
| Dxp | 1              | 803                 | 803                  |
|     | 2              | 484                 | 484                  |
| Ec  | 1              | 785                 | 785                  |
|     | 2              | 899                 | 899                  |

|             |   |      |      |
|-------------|---|------|------|
|             | 3 | 900  | 900  |
|             | 4 | 677  | 677  |
| <b>Ecf</b>  | 1 | 1060 | 1060 |
|             | 2 | 1312 | 1312 |
|             | 3 | 899  | 899  |
|             | 4 | 900  | 900  |
|             | 5 | 722  | 722  |
| <b>Ef</b>   | 1 | 935  | 935  |
|             | 2 | 521  | 521  |
| <b>Exp</b>  | 1 | 1060 | 1060 |
|             | 2 | 526  | 526  |
| <b>F</b>    | 1 | 360  | 360  |
|             | 2 | 512  | 512  |
|             | 3 | 44   | 44   |
| <b>Fc</b>   | 1 | 1581 | 1581 |
|             | 2 | 1582 | 1582 |
|             | 3 | 1301 | 1301 |
| <b>Ff</b>   | 1 | 872  | 872  |
|             | 2 | 44   | 44   |
| <b>G</b>    | 1 | 278  | 278  |
|             | 2 | 288  | 288  |
| <b>Gf</b>   | 1 | 277  | 277  |
|             | 2 | 244  | 244  |
| <b>xA</b>   | 1 | 1926 | 1926 |
|             | 2 | 1597 | 1597 |
| <b>xB</b>   | 1 | 1651 | 1651 |
| <b>xC</b>   | 1 | 529  | 529  |
|             | 2 | 480  | 480  |
| <b>xD</b>   | 1 | 803  | 803  |
|             | 2 | 484  | 484  |
| <b>xE</b>   | 1 | 1060 | 1060 |
|             | 2 | 526  | 526  |
| <b>xF</b>   | 1 | 912  | 912  |
| <b>Cc1</b>  | 1 | 443  | 443  |
| <b>E1</b>   | 1 | 311  | 311  |
|             | 2 | 624  | 624  |
| <b>Gf1</b>  | 1 | 45   | 45   |
| <b>Cc2</b>  | 2 | 697  | 697  |
|             | 3 | 521  | 521  |
|             | 4 | 475  | 475  |
|             | 5 | 381  | 381  |
|             | 6 | 0    | 0    |
| <b>E2</b>   | 3 | 277  | 277  |
|             | 4 | 244  | 244  |
| <b>TC5</b>  | 2 | 1498 | 1498 |
|             | 3 | 1597 | 1597 |
|             | 4 | 0    | 0    |
| <b>TC9</b>  | 1 | 583  | 583  |
|             | 2 | 370  | 370  |
|             | 3 | 355  | 355  |
| <b>TC35</b> | 1 | 428  | 428  |
| <b>TC36</b> | 1 | 201  | 201  |
| <b>TC37</b> | 1 | 35   | 35   |
| <b>TC38</b> | 1 | 35   | 35   |
| <b>TC39</b> | 2 | 1498 | 1498 |

|      |   |      |      |
|------|---|------|------|
|      | 3 | 1597 | 1597 |
| TC40 | 2 | 1533 | 1533 |
|      | 3 | 1597 | 1597 |
| TC41 | 1 | 166  | 166  |
| TC42 | 1 | 0    | 0    |
| TC43 | 1 | 0    | 0    |
| 47   | 1 | 1009 | 1009 |
| 48   | 1 | 1653 | 1653 |
| 49   | 1 | 654  | 654  |
|      | 2 | 654  | 654  |
| 50   | 1 | 2017 | 2017 |
| 51   | 1 | 916  | 916  |
| 52   | 1 | 590  | 590  |
|      | 2 | 589  | 589  |
| 53   | 1 | 590  | 590  |
|      | 2 | 589  | 589  |

## Signals

| Arm | Traffic Stream | Controller stream | Phase | Second phase enabled |
|-----|----------------|-------------------|-------|----------------------|
| A   | 1              | 771-2             | E     |                      |
|     | 2              | 771-2             | E     |                      |
|     | 3              | 771-2             | E     |                      |
|     | 4              | 771-2             | E     |                      |
| Ac  | 1              | 771-2             | D     |                      |
|     | 2              | 771-2             | D     |                      |
|     | 3              | 771-2             | D     |                      |
| B   | 1              | 769-1             | B     |                      |
|     | 2              | 769-1             | B     |                      |
|     | 3              | 769-1             | B     |                      |
|     | 4              | 769-1             | B     |                      |
| Bc  | 1              | 769-1             | A     |                      |
|     | 2              | 769-1             | A     |                      |
|     | 3              | 769-1             | A     |                      |
| C   | 1              | 769-2             | G     |                      |
|     | 2              | 769-2             | G     |                      |
|     | 3              | 769-2             | G     |                      |
| D   | 1              | 770-1             | B     |                      |
|     | 2              | 770-1             | B     |                      |
|     | 3              | 770-1             | B     |                      |
|     | 4              | 770-1             | B     |                      |
| Dc  | 1              | 770-1             | A     |                      |
|     | 2              | 770-1             | A     |                      |
|     | 3              | 770-1             | A     |                      |
|     | 4              | 770-1             | A     |                      |
| Dxp | 1              | 770-2             | D     |                      |
|     | 2              | 770-2             | D     |                      |
| Ec  | 1              | 770-3             | F     |                      |
|     | 2              | 770-3             | F     |                      |
|     | 3              | 770-3             | F     |                      |
|     | 4              | 770-3             | F     |                      |
| Exp | 1              | 770-4             | L     |                      |
|     | 2              | 770-4             | L     |                      |
| F   | 1              | 771-1             | B     |                      |
|     | 2              | 771-1             | B     |                      |
|     | 3              | 771-1             | B     |                      |

|      |   |         |   |  |
|------|---|---------|---|--|
| Fc   | 1 | 771-1   | A |  |
|      | 2 | 771-1   | A |  |
|      | 3 | 771-1   | A |  |
| G    | 1 | 769-2   | F |  |
|      | 2 | 769-2   | F |  |
| Cc1  | 1 | 769-2   | E |  |
| E1   | 1 | 770-3   | G |  |
|      | 2 | 770-3   | G |  |
| Cc2  | 2 | 769-2   | D |  |
|      | 3 | 769-2   | D |  |
|      | 4 | 769-2   | D |  |
|      | 5 | 769-2   | D |  |
|      | 6 | 769-2   | D |  |
| E2   | 3 | 770-3   | H |  |
|      | 4 | 770-3   | H |  |
| TC5  | 2 | TC777-1 | A |  |
|      | 3 | TC777-1 | A |  |
|      | 4 | TC777-1 | C |  |
| TC9  | 1 | TC777-1 | B |  |
|      | 2 | TC777-1 | B |  |
|      | 3 | TC777-1 | B |  |
| TC35 | 1 | TC777-1 | A |  |
| TC37 | 1 | TC777-2 | J |  |
| TC41 | 1 | TC777-1 | D |  |
| TC42 | 1 | TC777-1 | E |  |
| 52   | 1 | 770-3   | A |  |
|      | 2 | 770-3   | A |  |

### Entry Sources

| Arm  | Traffic Stream | Cruise time for Normal Traffic (s) | Cruise speed for Normal Traffic (kph) |
|------|----------------|------------------------------------|---------------------------------------|
| Df   | 1              | 24.00                              | 30.00                                 |
|      | 2              | 24.00                              | 30.00                                 |
| Ef   | 1              | 15.31                              | 30.00                                 |
|      | 2              | 15.31                              | 30.00                                 |
| TC36 | 1              | 3.03                               | 30.00                                 |
| TC42 | 1              | 2.80                               | 30.00                                 |
| 48   | 1              | 6.61                               | 30.00                                 |
| 49   | 1              | 3.15                               | 30.00                                 |
|      | 2              | 3.15                               | 30.00                                 |
| 50   | 1              | 5.78                               | 30.00                                 |
| 51   | 1              | 4.50                               | 30.00                                 |

### Sources

| Arm | Traffic Stream | Source | Source traffic stream | Destination traffic stream | Cruise time for Normal Traffic (s) | Cruise speed for Normal Traffic (kph) | Auto turning radius | Traffic turn style | Turning radius (m) |
|-----|----------------|--------|-----------------------|----------------------------|------------------------------------|---------------------------------------|---------------------|--------------------|--------------------|
| A   | 1              | 1      | Af/1                  | A/1                        | 5.58                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
|     | 2              | 1      | Af/1                  | A/2                        | 5.75                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
|     | 3              | 1      | Af/2                  | A/3                        | 5.88                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
|     | 4              | 1      | Af/3                  | A/4                        | 6.01                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
| Ac  | 1              | 1      | Ac/1                  | Ac/1                       | 7.19                               | 48.00                                 | ✓                   | Offside            | 48.59              |
|     | 2              | 1      | Ac/1                  | Ac/2                       | 9.50                               | 35.00                                 | ✓                   | Offside            | 46.08              |

|     |   |   |        |       |       |       |   |          |                   |
|-----|---|---|--------|-------|-------|-------|---|----------|-------------------|
|     | 3 | 1 | Acf/2  | Ac/3  | 6.60  | 48.00 | ✓ | Offside  | 42.76             |
| Acf | 1 | 1 | F/2    | Acf/1 | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | F/3    | Acf/2 | 7.24  | 35.00 | ✓ | Straight | Straight Movement |
| Af  | 1 | 1 | TC42/1 | Af/1  | 6.42  | 30.00 | ✓ | Nearside | 10.60             |
|     | 2 | 1 | TC42/1 | Af/2  | 6.38  | 30.00 | ✓ | Nearside | 10.60             |
|     | 3 | 1 | TC42/1 | Af/3  | 6.36  | 30.00 | ✓ | Nearside | 10.60             |
| B   | 1 | 1 | Bf/1   | B/1   | 7.10  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Bf/1   | B/2   | 7.29  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Bf/2   | B/3   | 7.48  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Bf/2   | B/4   | 12.29 | 30.00 | ✓ | Straight | Straight Movement |
| Bc  | 1 | 1 | Bcf/2  | Bc/1  | 11.96 | 40.00 | ✓ | Offside  | 51.76             |
|     | 2 | 1 | Bcf/3  | Bc/2  | 11.83 | 40.00 | ✓ | Offside  | 48.45             |
|     | 3 | 1 | Bcf/4  | Bc/3  | 11.71 | 40.00 | ✓ | Offside  | 45.13             |
| Bcf | 1 | 1 | A/1    | Bcf/1 | 4.71  | 48.00 | ✓ | Nearside | 68.09             |
|     | 2 | 1 | A/2    | Bcf/2 | 6.63  | 34.00 | ✓ | Nearside | 71.40             |
|     | 3 | 1 | A/3    | Bcf/3 | 6.61  | 34.00 | ✓ | Nearside | 74.72             |
|     | 4 | 1 | A/4    | Bcf/4 | 6.60  | 34.00 | ✓ | Nearside | 78.03             |
| Bf  | 1 | 1 | 50/1   | Bf/1  | 27.34 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 50/1   | Bf/2  | 27.41 | 30.00 | ✓ | Straight | Straight Movement |
| C   | 1 | 1 | Cf/1   | C/1   | 14.54 | 30.00 | ✓ | Offside  | 59.30             |
|     | 2 | 1 | Cf/2   | C/2   | 14.73 | 30.00 | ✓ | Offside  | 55.98             |
|     | 3 | 1 | Cf/2   | C/3   | 14.92 | 30.00 | ✓ | Offside  | 53.27             |
| Cf  | 1 | 1 | 48/1   | Cf/1  | 17.35 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 48/1   | Cf/2  | 17.50 | 30.00 | ✓ | Straight | Straight Movement |
| D   | 1 | 1 | Df/1   | D/1   | 4.13  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Df/1   | D/2   | 4.13  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Df/2   | D/3   | 3.97  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Df/2   | D/4   | 4.16  | 48.00 | ✓ | Straight | Straight Movement |
| Dc  | 1 | 1 | Dcf/3  | Dc/1  | 6.11  | 30.00 | ✓ | Offside  | 56.19             |
|     | 2 | 1 | Dcf/4  | Dc/2  | 5.88  | 30.00 | ✓ | Offside  | 52.87             |
|     | 3 | 1 | Dcf/5  | Dc/3  | 5.64  | 30.00 | ✓ | Offside  | 49.56             |
|     | 4 | 1 | Dcf/6  | Dc/4  | 5.41  | 30.00 | ✓ | Offside  | 46.25             |
| Dcf | 1 | 1 | Cc2/2  | Dcf/1 | 4.91  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Cc2/4  | Dcf/2 | 4.90  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | C/2    | Dcf/3 | 4.92  | 48.00 | ✓ | Nearside | 58.12             |
|     | 4 | 1 | C/2    | Dcf/4 | 5.08  | 48.00 | ✓ | Nearside | 58.12             |
|     | 5 | 1 | C/3    | Dcf/5 | 4.96  | 48.00 | ✓ | Nearside | 61.43             |
|     | 6 | 1 | C/3    | Dcf/6 | 7.94  | 30.00 | ✓ | Nearside | 61.43             |
| Dxp | 1 | 1 | Dcf/1  | Dxp/1 | 3.43  | 48.00 | ✓ | Nearside | 60.22             |
|     | 2 | 1 | Dcf/2  | Dxp/2 | 3.61  | 48.00 | ✓ | Nearside | 63.54             |
| Ec  | 1 | 1 | Ecf/2  | Ec/1  | 3.76  | 48.00 | ✓ | Offside  | 76.42             |

|     |   |   |       |       |       |       |   |          |                   |
|-----|---|---|-------|-------|-------|-------|---|----------|-------------------|
|     | 2 | 1 | Ecf/3 | Ec/2  | 3.63  | 48.00 | ✓ | Offside  | 73.10             |
|     | 3 | 1 | Ecf/4 | Ec/3  | 3.51  | 48.00 | ✓ | Offside  | 69.79             |
|     | 4 | 1 | Ecf/5 | Ec/4  | 5.41  | 30.00 | ✓ | Offside  | 66.48             |
| Ecf | 1 | 1 | Dc/1  | Ecf/1 | 3.45  | 48.00 | ✓ | Offside  | 76.11             |
|     | 2 | 1 | Dc/2  | Ecf/2 | 3.48  | 48.00 | ✓ | Offside  | 72.80             |
|     | 3 | 1 | Dc/3  | Ecf/3 | 3.52  | 48.00 | ✓ | Offside  | 69.49             |
|     | 4 | 1 | Dc/4  | Ecf/4 | 3.56  | 48.00 | ✓ | Offside  | 66.17             |
|     | 5 | 1 | Dc/4  | Ecf/5 | 3.64  | 48.00 | ✓ | Offside  | 62.86             |
| Exp | 1 | 1 | Ecf/1 | Exp/1 | 3.89  | 48.00 | ✓ | Nearside | 52.96             |
|     | 2 | 1 | Ecf/2 | Exp/2 | 4.03  | 48.00 | ✓ | Nearside | 56.27             |
| F   | 1 | 1 | Ff/1  | F/1   | 6.38  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Ff/1  | F/2   | 6.43  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Ff/2  | F/3   | 6.54  | 48.00 | ✓ | Straight | Straight Movement |
| Fc  | 1 | 1 | Ec/2  | Fc/1  | 18.38 | 35.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Ec/3  | Fc/2  | 18.02 | 35.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Ec/4  | Fc/3  | 18.54 | 35.00 | ✓ | Straight | Straight Movement |
| Ff  | 1 | 1 | 5f/1  | Ff/1  | 33.09 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 5f/1  | Ff/2  | 33.05 | 30.00 | ✓ | Straight | Straight Movement |
| G   | 1 | 1 | Gf/1  | G/1   | 15.98 | 35.00 | ✓ | Offside  | 88.54             |
|     | 2 | 1 | Gf/2  | G/2   | 11.38 | 48.00 | ✓ | Offside  | 85.22             |
| Gf  | 1 | 1 | E2/3  | Gf/1  | 3.04  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | E2/4  | Gf/2  | 3.00  | 48.00 | ✓ | Straight | Straight Movement |
| xA  | 1 | 1 | F/1   | xA/1  | 17.22 | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | F/1   | xA/2  | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xB  | 1 | 1 | Bcf/1 | xB/1  | 5.79  | 48.00 | ✓ | Nearside | 59.55             |
| xC  | 1 | 1 | G/1   | xC/1  | 8.67  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | G/2   | xC/2  | 8.70  | 48.00 | ✓ | Straight | Straight Movement |
| xD  | 1 | 1 | Dxp/1 | xD/1  | 9.11  | 48.00 | ✓ | Nearside | 44.59             |
|     | 2 | 1 | Dxp/2 | xD/2  | 9.16  | 48.00 | ✓ | Nearside | 47.90             |
| xE  | 1 | 1 | Exp/1 | xE/1  | 13.04 | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Exp/2 | xE/2  | 13.04 | 48.00 | ✓ | Straight | Straight Movement |
| xF  | 1 | 1 | Ec/1  | xF/1  | 11.88 | 48.00 | ✓ | Straight | Straight Movement |
| Cc1 | 1 | 1 | B/1   | Cc1/1 | 8.63  | 40.00 | ✓ | Straight | Straight Movement |
| E1  | 1 | 1 | Ef/1  | E1/1  | 6.00  | 48.00 | ✓ | Nearside | 26.33             |
|     | 2 | 1 | Ef/1  | E1/2  | 6.00  | 48.00 | ✓ | Nearside | 28.96             |
| Gf1 | 1 | 1 | Ecf/5 | Gf1/1 | 5.74  | 30.00 | ✓ | Offside  | 21.77             |
| Cc2 | 2 | 1 | B/1   | Cc2/2 | 8.24  | 40.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | B/3   | Cc2/3 | 8.20  | 40.00 | ✓ | Straight | Straight Movement |

|      |   |   |        |        |       |       |   |          |                   |
|------|---|---|--------|--------|-------|-------|---|----------|-------------------|
|      | 4 | 1 | B/2    | Cc2/4  | 8.14  | 40.00 | ✓ | Straight | Straight Movement |
|      | 5 | 1 | Bc/3   | Cc2/5  | 6.03  | 54.00 | ✓ | Offside  | 96.53             |
|      | 6 | 1 | Bc/3   | Cc2/6  | 5.87  | 54.00 | ✓ | Offside  | 93.22             |
| E2   | 3 | 1 | Ef/2   | E2/3   | 4.00  | 48.00 | ✓ | Nearside | 43.25             |
|      | 4 | 1 | Ef/2   | E2/4   | 4.07  | 48.00 | ✓ | Nearside | 43.25             |
| TC5  | 2 | 1 | xA/1   | TC5/2  | 2.76  | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 1 | xA/2   | TC5/3  | 2.76  | 30.00 | ✓ | Straight | Straight Movement |
|      | 4 | 1 | xA/2   | TC5/4  | 2.93  | 30.00 | ✓ | Straight | Straight Movement |
| TC9  | 1 | 1 | 49/1   | TC9/1  | 11.00 | 30.00 | ✓ | Straight | Straight Movement |
|      | 2 | 1 | 49/2   | TC9/2  | 11.07 | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 1 | 49/2   | TC9/3  | 11.12 | 30.00 | ✓ | Straight | Straight Movement |
| TC35 | 1 | 1 | xA/1   | TC35/1 | 2.90  | 30.00 | ✓ | Straight | Straight Movement |
| TC37 | 1 | 1 | TC36/1 | TC37/1 | 3.19  | 50.00 | ✓ | Nearside | 46.04             |
| TC38 | 1 | 1 | TC37/1 | TC38/1 | 1.53  | 50.00 | ✓ | Straight | Straight Movement |
| TC39 | 2 | 1 | TC5/2  | TC39/2 | 2.54  | 50.00 | ✓ | Straight | Straight Movement |
|      | 3 | 1 | TC5/3  | TC39/3 | 2.40  | 50.00 | ✓ | Straight | Straight Movement |
| TC40 | 2 | 1 | TC38/1 | TC40/2 | 4.23  | 50.00 | ✓ | Nearside | 11.92             |
|      | 3 | 1 | TC39/3 | TC40/3 | 4.02  | 50.00 | ✓ | Offside  | 77.43             |
| TC41 | 1 | 1 | TC36/1 | TC41/1 | 3.93  | 50.00 | ✓ | Straight | Straight Movement |
| TC43 | 1 | 1 | TC9/1  | TC43/1 | 3.73  | 50.00 | ✓ | Nearside | 6.11              |
| 47   | 1 | 1 | xC/1   | 47/1   | 16.04 | 30.00 | ✓ | Straight | Straight Movement |
| 52   | 1 | 1 | 53/1   | 52/1   | 20.76 | 30.00 | ✓ | Straight | Straight Movement |
|      | 2 | 1 | 53/2   | 52/2   | 20.78 | 30.00 | ✓ | Straight | Straight Movement |
| 53   | 1 | 1 | Bc/3   | 53/1   | 5.27  | 30.00 | ✓ | Offside  | 5.00              |
|      | 2 | 1 | Bc/3   | 53/2   | 5.07  | 30.00 | ✓ | Offside  | 5.00              |
| Acf  | 1 | 2 | Fc/3   | Acf/1  | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
|      | 2 | 2 | Fc/3   | Acf/2  | 7.24  | 35.00 | ✓ | Straight | Straight Movement |
| Af   | 1 | 2 | TC9/1  | Af/1   | 6.42  | 30.00 | ✓ | Straight | Straight Movement |
|      | 2 | 2 | TC9/2  | Af/2   | 6.38  | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 2 | TC9/3  | Af/3   | 6.36  | 30.00 | ✓ | Straight | Straight Movement |
| Bcf  | 1 | 2 | Ac/1   | Bcf/1  | 3.96  | 57.00 | ✓ | Offside  | 93.05             |
|      | 2 | 2 | Ac/2   | Bcf/2  | 3.95  | 57.00 | ✓ | Offside  | 89.74             |
|      | 3 | 2 | Ac/3   | Bcf/3  | 3.95  | 57.00 | ✓ | Offside  | 86.42             |
|      | 4 | 2 | Ac/3   | Bcf/4  | 3.94  | 57.00 | ✓ | Offside  | 86.42             |
| C    | 2 | 2 | Cf/1   | C/2    | 14.73 | 30.00 | ✓ | Offside  | 56.58             |
| Dcf  | 1 | 2 | C/1    | Dcf/1  | 4.91  | 48.00 | ✓ | Nearside | 54.80             |
|      | 2 | 2 | C/1    | Dcf/2  | 4.90  | 48.00 | ✓ | Nearside | 54.80             |
|      | 3 | 2 | Cc2/3  | Dcf/3  | 7.87  | 30.00 | ✓ | Straight | Straight Movement |

|      |   |   |        |        |       |       |   |          |                   |
|------|---|---|--------|--------|-------|-------|---|----------|-------------------|
|      | 4 | 2 | Cc2/3  | Dcf/4  | 8.12  | 30.00 | ✓ | Straight | Straight Movement |
|      | 5 | 2 | Cc2/5  | Dcf/5  | 7.94  | 30.00 | ✓ | Offside  | 99.16             |
|      | 6 | 2 | Cc2/6  | Dcf/6  | 7.94  | 30.00 | ✓ | Offside  | 95.85             |
| Ecf  | 1 | 2 | D/1    | Ecf/1  | 3.45  | 48.00 | ✓ | Nearside | 43.36             |
|      | 2 | 2 | D/1    | Ecf/2  | 3.48  | 48.00 | ✓ | Nearside | 43.36             |
|      | 3 | 2 | D/2    | Ecf/3  | 5.63  | 30.00 | ✓ | Nearside | 46.68             |
|      | 4 | 2 | D/3    | Ecf/4  | 5.70  | 30.00 | ✓ | Nearside | 49.99             |
|      | 5 | 2 | D/4    | Ecf/5  | 5.83  | 30.00 | ✓ | Nearside | 53.30             |
| Fc   | 1 | 2 | E1/1   | Fc/1   | 20.10 | 32.00 | ✓ | Nearside | 58.94             |
|      | 2 | 2 | E1/1   | Fc/2   | 19.71 | 32.00 | ✓ | Nearside | 60.85             |
|      | 3 | 2 | E1/2   | Fc/3   | 20.28 | 32.00 | ✓ | Nearside | 64.16             |
| G    | 1 | 2 | Gf1/1  | G/1    | 15.98 | 35.00 | ✓ | Offside  | 17.91             |
|      | 2 | 2 | Gf1/1  | G/2    | 11.38 | 48.00 | ✓ | Offside  | 15.13             |
| xA   | 1 | 2 | Fc/1   | xA/1   | 17.22 | 48.00 | ✓ | Straight | Straight Movement |
|      | 2 | 2 | Fc/2   | xA/2   | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xC   | 1 | 2 | Cc1/1  | xC/1   | 8.67  | 48.00 | ✓ | Nearside | 56.51             |
|      | 2 | 2 | Cc1/1  | xC/2   | 8.70  | 48.00 | ✓ | Nearside | 57.28             |
| xF   | 1 | 2 | E1/1   | xF/1   | 11.88 | 48.00 | ✓ | Nearside | 40.67             |
| Cc1  | 1 | 2 | Bc/1   | Cc1/1  | 6.39  | 54.00 | ✓ | Straight | Straight Movement |
| Cc2  | 2 | 2 | Bc/1   | Cc2/2  | 10.98 | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 2 | Bc/2   | Cc2/3  | 10.93 | 30.00 | ✓ | Offside  | 99.84             |
|      | 4 | 2 | Bc/2   | Cc2/4  | 6.03  | 54.00 | ✓ | Straight | Straight Movement |
|      | 5 | 2 | B/4    | Cc2/5  | 8.14  | 40.00 | ✓ | Straight | Straight Movement |
|      | 6 | 2 | B/4    | Cc2/6  | 7.93  | 40.00 | ✓ | Straight | Straight Movement |
| TC9  | 2 | 2 | 49/1   | TC9/2  | 11.07 | 30.00 | ✓ | Straight | Straight Movement |
| TC39 | 2 | 2 | TC42/1 | TC39/2 | 2.54  | 50.00 | ✓ | Offside  | 9.44              |
|      | 3 | 2 | TC42/1 | TC39/3 | 2.40  | 50.00 | ✓ | Offside  | 9.44              |
| TC40 | 2 | 2 | TC39/2 | TC40/2 | 4.23  | 50.00 | ✓ | Offside  | 80.74             |
| TC43 | 1 | 2 | TC5/4  | TC43/1 | 3.73  | 50.00 | ✓ | Offside  | 21.45             |
| 47   | 1 | 2 | xC/2   | 47/1   | 16.04 | 30.00 | ✓ | Straight | Straight Movement |
| 53   | 1 | 2 | B/3    | 53/1   | 5.27  | 30.00 | ✓ | Offside  | 40.30             |
|      | 2 | 2 | B/4    | 53/2   | 5.07  | 30.00 | ✓ | Offside  | 36.99             |
| Acf  | 1 | 3 | Fc/2   | Acf/1  | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
| Af   | 1 | 3 | TC41/1 | Af/1   | 6.42  | 30.00 | ✓ | Offside  | 6.19              |
|      | 2 | 3 | TC41/1 | Af/2   | 6.38  | 30.00 | ✓ | Offside  | 6.19              |
|      | 3 | 3 | TC41/1 | Af/3   | 6.36  | 30.00 | ✓ | Offside  | 6.19              |
| Dcf  | 4 | 3 | Cc2/5  | Dcf/4  | 8.12  | 30.00 | ✓ | Straight | Straight Movement |
| Fc   | 1 | 3 | 52/1   | Fc/1   | 21.44 | 30.00 | ✓ | Offside  | 13.89             |
|      | 2 | 3 | 52/2   | Fc/2   | 21.02 | 30.00 | ✓ | Offside  | 10.58             |
| xA   | 2 | 3 | Fc/1   | xA/2   | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xF   | 1 | 3 | 52/1   | xF/1   | 19.00 | 30.00 | ✓ | Offside  | 19.56             |
| Cc2  | 3 | 3 | B/2    | Cc2/3  | 10.93 | 30.00 | ✓ | Straight | Straight Movement |

|  |   |   |     |       |       |       |   |          |                   |
|--|---|---|-----|-------|-------|-------|---|----------|-------------------|
|  | 5 | 3 | B/3 | Cc2/5 | 10.86 | 30.00 | ✓ | Straight | Straight Movement |
|--|---|---|-----|-------|-------|-------|---|----------|-------------------|

### Give Way Data

| Arm   | Traffic Stream | Opposed traffic | Use Step-wise Opposed Turn Model | Visibility restricted |
|-------|----------------|-----------------|----------------------------------|-----------------------|
| (ALL) | 1              | AllTraffic      |                                  |                       |

### Give Way Data - All Movements - Conflicts

| Traffic Stream | Description | Controlling type | Controlling traffic stream | Percentage opposing (%) | Slope coefficient | Upstream signals visible |
|----------------|-------------|------------------|----------------------------|-------------------------|-------------------|--------------------------|
| 1              |             | TrafficStream    | Gf/1                       | 100                     | 0.22              |                          |
|                |             | TrafficStream    | Gf/2                       | 100                     | 0.22              |                          |
|                |             | TrafficStream    | TC39/2                     | 100                     | 0.22              |                          |
|                |             | TrafficStream    | TC39/3                     | 100                     | 0.22              |                          |

## Pedestrian Crossings

### Pedestrian Crossings

| Crossing | Name       | Description | Traffic node | Allow walk on red | Crossing type | Length (m) | Cruise time (seconds) | Cruise speed (kph) |
|----------|------------|-------------|--------------|-------------------|---------------|------------|-----------------------|--------------------|
| 1        | (untitled) |             | 3-2          |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 2        | (untitled) |             | 3            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 3        | (untitled) |             | 4-2          |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 4        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 5        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 6        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 7        | (untitled) |             | 5            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 8        | (untitled) |             | 1            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 9        | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 10       | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 11       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 12       | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 13       | (untitled) |             |              |                   | Farside       | 3.00       | 2.00                  | 5.40               |
| 14       | (untitled) |             |              |                   | Farside       | 3.00       | 2.00                  | 5.40               |
| 15       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 16       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 17       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |

### Pedestrian Crossings - Signals

| Crossing | Controller stream | Phase | Second phase enabled |
|----------|-------------------|-------|----------------------|
| 1        | 770-2             | E     |                      |
| 2        | 770-1             | C     |                      |
| 3        | 770-4             | M     |                      |
| 4        | 770-3             | J     |                      |
| 5        | 770-3             | I     |                      |
| 6        | 770-3             | K     |                      |
| 7        | 771-1             | C     |                      |
| 8        | 769-1             | C     |                      |
| 9        | 769-2             | J     |                      |
| 10       | 769-2             | K     |                      |
| 11       | 769-2             | H     |                      |
| 12       | 769-2             | I     |                      |
| 13       | TC777-1           | I     |                      |
| 14       | TC777-1           | F     |                      |
| 15       | TC777-1           | G     |                      |

|    |         |   |  |
|----|---------|---|--|
| 16 | TC777-1 | H |  |
| 17 | TC777-2 | K |  |

### Pedestrian Crossings - Sides

| Crossing | Side  | Saturation flow (Ped/hr) |
|----------|-------|--------------------------|
| (ALL)    | (ALL) | 11000                    |

### Pedestrian Crossings - Modelling

| Crossing | Side  | Delay weighting (%) | Assignment Cost Weighting (%) | Exclude from results calculation | Max queue storage (Ped) | Has queue limit | Has degree of saturation limit |
|----------|-------|---------------------|-------------------------------|----------------------------------|-------------------------|-----------------|--------------------------------|
| (ALL)    | (ALL) | 100                 | 100                           |                                  | 0.00                    |                 |                                |

## Local OD Matrix - Local Matrix: 1

### Local Matrix Options

| OD Matrix | Name       | Use for point to point table | Allocation mode  | Allow paths past exit locations | Allow looped paths on arms | Allow looped paths on traffic nodes | Copy flows | Matrix to copy flows from | Limit paths by length | Path length limit multiplier | Limit paths by number | Path number limit | Limit paths by flow | Low path flow threshold |
|-----------|------------|------------------------------|------------------|---------------------------------|----------------------------|-------------------------------------|------------|---------------------------|-----------------------|------------------------------|-----------------------|-------------------|---------------------|-------------------------|
| 1         | (untitled) | ✓                            | User Equilibrium |                                 |                            | ✓                                   |            |                           |                       |                              |                       |                   |                     |                         |

Note: Auto Calculate disabled on this Local Matrix - Paths and Flow Allocation might not be up to date.

### Normal Input Flows (PCU/hr)

|      | To  |     |     |     |     |     |     |      |   |
|------|-----|-----|-----|-----|-----|-----|-----|------|---|
|      | A28 | B28 | C28 | D28 | E28 | F28 | G28 | H28  |   |
| From | A28 | 0   | 55  | 416 | 2   | 497 | 131 | 916  | 0 |
|      | B28 | 40  | 0   | 115 | 294 | 627 | 39  | 538  | 0 |
|      | C28 | 637 | 45  | 0   | 366 | 182 | 45  | 1177 | 0 |
|      | D28 | 3   | 234 | 275 | 0   | 44  | 109 | 251  | 0 |
|      | E28 | 540 | 521 | 84  | 58  | 0   | 40  | 213  | 0 |
|      | F28 | 66  | 14  | 17  | 61  | 8   | 0   | 35   | 0 |
|      | G28 | 365 | 140 | 380 | 131 | 228 | 64  | 0    | 0 |
|      | H28 | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0 |

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

### Locations

| OD Matrix | Location | Name       | Entries    | Exits          | Colour  |
|-----------|----------|------------|------------|----------------|---------|
| 1         | A28      | (untitled) | 50/1       | xB/1           | #FF0000 |
|           | B28      | (untitled) | 48/1       | 47/1           | #00FF40 |
|           | C28      | (untitled) | Df/2, Df/1 | xD/1, xD/2     | #804000 |
|           | D28      | (untitled) | 51/1       | xF/1           | #FF00FF |
|           | E28      | (untitled) | Ef/2, Ef/1 | xE/1, xE/2     | #FF8000 |
|           | F28      | (untitled) | TC36/1     | TC35/1         | #FFA500 |
|           | G28      | (untitled) | 49/2, 49/1 | TC40/2, TC40/3 | #0000FF |
|           | H28      | (untitled) | TC42/1     | TC43/1         | #008000 |

## Normal Paths and Flows

| OD Matrix | Path | Description | From location | To location  | Path items   | Allocation type | Normal Calculated Flow (PCU/hr) |
|-----------|------|-------------|---------------|--|--|-----------------|---------------------------------|
| 1         | 32   | I1          | C28           | E28  | Df/1, D/1, Ecf/1, Exp/1, xE/1  | Normal          | 182                             |
|           | 36   |             | C28           | E28  | Df/1, D/1, Ecf/2, Exp/2, xE/2  | Disabled        | 0                               |
|           | 41   |             | E28           | A28  | Ef/1, E1/2, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1   | Normal          | 540                             |
|           | 49   | I1          | C28           | D28  | Df/1, D/1, Ecf/2, Ec/1, xF/1   | Normal          | 366                             |
|           | 50   |             | E28           | D28  | Ef/1, E1/1, xF/1   | Normal          | 58                              |
|           | 68   |             | E28           | G28  | Ef/1, E1/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2  | Normal          | 120                             |
|           | 92   |             | E28           | F28  | Ef/1, E1/1, Fc/1, xA/1, TC35/1   | Normal          | 40                              |
|           | 100  |             | E28           | B28  | Ef/2, E2/4, Gf/2, G/2, xC/2, 47/1  | Normal          | 244                             |
|           | 102  |             | A28           | C28  | 50/1, Bf/1, B/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal          | 327                             |
|           | 103  |             | F28           | B28  | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                                    | Fixed           | 0                               |
|           | 105  |             | D28           | H28  | 51/1, Ff/1, F/1, xA/2, TC5/4, TC43/1   | Normal          | 0                               |
|           | 107  |             | A28           | B28  | 50/1, Bf/1, B/1, Cc1/1, xC/2, 47/1   | Normal          | 55                              |
|           | 110  |             | E28           | G28  | Ef/1, E1/1, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal          | 93                              |
|           | 112  |             | F28           | G28  | TC36/1, TC37/1, TC38/1, TC40/2   | Normal          | 35                              |
|           | 113  |             | F28           | A28  | TC36/1, TC41/1, Af/1, A/1, Bcf/1, xB/1   | Normal          | 66                              |
|           | 115  |             | B28           | C28  | 48/1, Cf/1, C/1, Dcf/2, Dxp/2, xD/2  | Fixed           | 9                               |
|           | 125  |             | H28           | A28  | TC42/1, Af/1, A/1, Bcf/1, xB/1   | Normal          | 0                               |
|           | 130  |             | G28           | C28  | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                               | Normal          | 231                             |
|           | 137  |             | H28           | G28  | TC42/1, TC39/2, TC40/2   | Normal          | 0                               |
|           | 138  |             | H28           | G28  | TC42/1, TC39/3, TC40/3   | Normal          | 0                               |
|           | 140  |             | B28           | G28  | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                 | Normal          | 309                             |
|           | 141  |             | B28           | F28  | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                                | Normal          | 39                              |
|           | 142  |             | B28           | G28  | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                 | Normal          | 0                               |
|           | 143  |             | E28           | H28  | Ef/1, E1/1, Fc/2, xA/2, TC5/4, TC43/1  | Normal          | 0                               |
|           | 144  |             | B28           | G28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                 | Normal          | 229                             |
|           | 145  |             | B28           | H28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                         | Normal          | 0                               |
|           | 146  |             | B28           | A28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                    | Normal          | 0                               |
|           | 147  |             | B28           | B28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1 | Normal          | 0                               |
|           | 148  |             | B28           | B28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1 | Normal          | 0                               |
|           | 149  |             | B28           | A28  | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                    | Normal          | 40                              |
| 150       |      | E28         | B28           | Ef/2, E2/3, Gf/1, G/1, xC/1, 47/1  | Normal   | 277             |                                 |
| 151       |      | B28         | B28           | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1 | Normal   | 0               |                                 |

|         |  |     |     |   |        |     |
|---------|--|-----|-----|---|--------|-----|
| 15<br>2 |  | H28 | B28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1   | Normal | 0   |
| 15<br>3 |  | F28 | B28 | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1   | Normal | 14  |
| 15<br>4 |  | E28 | A28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1  | Normal | 0   |
| 15<br>5 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 15<br>6 |  | G28 | B28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                  | Normal | 0   |
| 15<br>7 |  | H28 | B28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1   | Normal | 0   |
| 15<br>8 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                     | Normal | 0   |
| 15<br>9 |  | A28 | H28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                             | Normal | 0   |
| 16<br>0 |  | B28 | D28 | 48/1, Cf/1, C/2, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 294 |
| 16<br>1 |  | B28 | E28 | 48/1, Cf/1, C/2, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 252 |
| 16<br>2 |  | B28 | D28 | 48/1, Cf/2, C/2, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 16<br>3 |  | B28 | E28 | 48/1, Cf/2, C/2, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 16<br>4 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1     | Normal | 0   |
| 16<br>5 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1     | Normal | 0   |
| 16<br>6 |  | B28 | C28 | 48/1, Cf/1, C/1, Dcf/1, Dxp/1, xD/1   | Normal | 106 |
| 16<br>7 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                                      | Normal | 0   |
| 16<br>8 |  | G28 | A28 | 49/1, TC9/1, Af/1, A/1, Bcf/1, xB/1   | Normal | 365 |
| 16<br>9 |  | G28 | B28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1  | Normal | 3   |
| 17<br>0 |  | G28 | B28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1  | Normal | 137 |
| 17<br>1 |  | G28 | H28 | 49/1, TC9/1, TC43/1   | Normal | 0   |
| 17<br>2 |  | H28 | E28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                  | Normal | 0   |
| 17<br>3 |  | F28 | D28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                           | Normal | 14  |
| 17<br>4 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3      | Normal | 0   |
| 17<br>5 |  | A28 | D28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1  | Normal | 2   |
| 17<br>6 |  | H28 | C28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 0   |
| 17<br>7 |  | H28 | B28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                       | Normal | 0   |
| 17<br>8 |  | B28 | E28 | 48/1, Cf/1, C/2, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 225 |
| 17<br>9 |  | B28 | E28 | 48/1, Cf/2, C/2, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 150 |
| 18<br>0 |  | A28 | H28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                             | Normal | 0   |
| 18<br>1 |  | F28 | C28 | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                                       | Normal | 17  |
| 18<br>2 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2 | Normal | 0   |
| 18<br>3 |  | A28 | E28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 0   |
| 18<br>4 |  | C28 | A28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1  | Normal | 0   |

|     |  |     |     |   |        |     |
|-----|--|-----|-----|---|--------|-----|
| 185 |  | A28 | B28 | 50/1, Bf/1, B/1, Cc1/1, xC/1, 47/1  | Normal | 0   |
| 186 |  | A28 | C28 | 50/1, Bf/1, B/2, Cc2/4, Dcf/2, Dxp/2, xD/2  | Normal | 89  |
| 187 |  | G28 | D28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 188 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                           | Normal | 0   |
| 189 |  | G28 | E28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                   | Normal | 0   |
| 190 |  | G28 | D28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 191 |  | D28 | F28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                | Normal | 0   |
| 192 |  | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0   |
| 193 |  | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 194 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2            | Normal | 0   |
| 195 |  | D28 | G28 | 51/1, Ff/1, F/1, xA/1, TC5/2, TC39/2, TC40/2  | Normal | 251 |
| 196 |  | D28 | F28 | 51/1, Ff/1, F/1, xA/1, TC35/1   | Normal | 109 |
| 197 |  | D28 | G28 | 51/1, Ff/1, F/1, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 0   |
| 198 |  | D28 | A28 | 51/1, Ff/1, F/2, Acf/1, Ac/1, Bcf/1, xB/1   | Normal | 3   |
| 199 |  | D28 | B28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1  | Normal | 234 |
| 200 |  | D28 | B28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1  | Normal | 0   |
| 201 |  | F28 | E28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                | Normal | 3   |
| 202 |  | F28 | D28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                 | Normal | 19  |
| 203 |  | F28 | E28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 0   |
| 204 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                         | Normal | 0   |
| 205 |  | A28 | E28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 0   |
| 206 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 0   |
| 207 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 208 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                            | Normal | 0   |
| 209 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                                    | Normal | 0   |
| 210 |  | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                      | Normal | 0   |
| 211 |  | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                              | Normal | 0   |
| 212 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                                 | Normal | 0   |
| 213 |  | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1   | Normal | 0   |
| 214 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 0   |
| 215 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 216 |  | A28 | G28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 589 |
| 217 |  | A28 | H28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1  | Normal | 0   |

|     |  |     |     |  |          |     |
|-----|--|-----|-----|--|----------|-----|
| 218 |  | A28 | A28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                            | Normal   | 0   |
| 219 |  | A28 | C28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1 | Normal   | 0   |
| 220 |  | A28 | B28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1         | Normal   | 0   |
| 221 |  | A28 | B28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1         | Normal   | 0   |
| 222 |  | A28 | D28 | 50/1, Bf/2, B/3, 53/1, 52/1, xF/1  | Normal   | 0   |
| 223 |  | A28 | G28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                         | Normal   | 327 |
| 224 |  | A28 | F28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/1, TC35/1  | Normal   | 131 |
| 225 |  | A28 | G28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                         | Normal   | 0   |
| 226 |  | A28 | H28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                                 | Normal   | 0   |
| 235 |  | E28 | G28 | Ef/1, E1/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3  | Fixed    | 0   |
| 236 |  | E28 | H28 | Ef/1, E1/1, Fc/1, xA/2, TC5/4, TC43/1  | Normal   | 0   |
| 246 |  | E28 | C28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                  | Normal   | 84  |
| 248 |  | D28 | C28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                   | Disabled | 0   |
| 249 |  | H28 | C28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                              | Normal   | 0   |
| 252 |  | F28 | C28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                      | Normal   | 0   |
| 283 |  | E28 | B28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                          | Normal   | 0   |
| 284 |  | E28 | B28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                          | Normal   | 0   |
| 285 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                          | Normal   | 0   |
| 286 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                          | Normal   | 0   |
| 307 |  | G28 | C28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                         | Normal   | 70  |
| 317 |  | C28 | G28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                              | Normal   | 671 |
| 318 |  | C28 | H28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                                      | Normal   | 0   |
| 319 |  | C28 | B28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1              | Normal   | 0   |
| 320 |  | C28 | B28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1              | Normal   | 0   |
| 322 |  | C28 | G28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                              | Normal   | 491 |
| 323 |  | C28 | F28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1   | Normal   | 45  |
| 324 |  | C28 | G28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                              | Normal   | 15  |
| 325 |  | C28 | H28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                                      | Normal   | 0   |
| 330 |  | C28 | A28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                                 | Normal   | 637 |
| 331 |  | C28 | B28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1              | Normal   | 0   |
| 332 |  | C28 | B28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1              | Normal   | 0   |
| 334 |  | C28 | C28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2      | Normal   | 0   |
| 342 |  | C28 | B28 | Df/2, D/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1   | Normal   | 0   |

|     |  |     |     |   |        |    |
|-----|--|-----|-----|---|--------|----|
| 343 |  | C28 | B28 | Df/2, D/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1  | Normal | 45 |
| 364 |  | B28 | H28 | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1  | Normal | 0  |
| 379 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Act/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                  | Normal | 0  |
| 380 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1   | Normal | 0  |
| 381 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1   | Normal | 0  |
| 382 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3       | Normal | 0  |
| 383 |  | G28 | B28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                        | Normal | 0  |
| 384 |  | A28 | A28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Act/1, Ac/1, Bcf/1, xB/1                              | Normal | 0  |
| 385 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Act/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1           | Normal | 0  |
| 386 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Act/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1           | Normal | 0  |
| 387 |  | A28 | A28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Act/1, Ac/1, Bcf/1, xB/1                              | Normal | 0  |
| 388 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1  | Normal | 0  |
| 389 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                 | Normal | 0  |
| 390 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                 | Normal | 0  |
| 391 |  | D28 | G28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0  |
| 392 |  | D28 | H28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1         | Normal | 0  |
| 393 |  | D28 | B28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                  | Normal | 0  |
| 394 |  | D28 | B28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                  | Normal | 0  |
| 395 |  | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                    | Normal | 0  |
| 396 |  | H28 | B28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                             | Normal | 0  |
| 397 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3    | Normal | 0  |
| 398 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1            | Normal | 0  |
| 399 |  | F28 | B28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                     | Normal | 0  |
| 400 |  | F28 | B28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                     | Normal | 0  |
| 401 |  | G28 | F28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                      | Normal | 0  |
| 402 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3       | Normal | 0  |
| 403 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1               | Normal | 0  |
| 404 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                           | Normal | 0  |
| 405 |  | A28 | F28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1  | Normal | 0  |
| 406 |  | A28 | H28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                                   | Normal | 0  |
| 407 |  | D28 | G28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2 | Normal | 0  |
| 408 |  | H28 | F28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                           | Normal | 0  |
| 409 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3            | Normal | 0  |

|     |     |     |  |        |     |
|-----|-----|-----|--|--------|-----|
| 410 | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                 | Normal | 0   |
| 411 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2 | Normal | 0   |
| 412 | F28 | F28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                | Normal | 0   |
| 413 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0   |
| 414 | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 415 | A28 | D28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 417 | A28 | E28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 0   |
| 418 | G28 | C28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 78  |
| 423 | C28 | C28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                          | Normal | 0   |
| 424 | C28 | C28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                          | Normal | 0   |
| 425 | E28 | C28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                                      | Normal | 0   |
| 428 | E28 | C28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                                      | Normal | 0   |
| 431 | D28 | C28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                                       | Normal | 275 |
| 439 | G28 | E28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                | Normal | 67  |
| 440 | G28 | E28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 0   |
| 441 | G28 | E28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 0   |
| 442 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                         | Normal | 0   |
| 443 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                          | Normal | 0   |
| 444 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                         | Normal | 0   |
| 445 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                          | Normal | 0   |
| 446 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                           | Normal | 0   |
| 447 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                          | Normal | 0   |
| 448 | H28 | E28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                     | Normal | 0   |
| 449 | H28 | D28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                      | Normal | 0   |
| 450 | H28 | E28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                     | Normal | 0   |
| 451 | G28 | D28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                 | Normal | 91  |
| 452 | G28 | E28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 160 |
| 453 | A28 | D28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 454 | A28 | E28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 455 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                          | Normal | 0   |
| 456 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                         | Normal | 0   |
| 457 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                           | Normal | 0   |
| 458 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                          | Normal | 44  |

|     |  |     |     |  |        |     |
|-----|--|-----|-----|--|--------|-----|
| 459 |  | H28 | D28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                              | Normal | 0   |
| 460 |  | F28 | E28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                     | Normal | 5   |
| 461 |  | A28 | E28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 65  |
| 462 |  | A28 | G28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                | Normal | 0   |
| 463 |  | A28 | F28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                               | Normal | 0   |
| 464 |  | A28 | G28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                | Normal | 0   |
| 465 |  | A28 | E28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 432 |
| 466 |  | A28 | D28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 467 |  | G28 | D28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1  | Normal | 40  |
| 468 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                 | Normal | 0   |
| 469 |  | G28 | F28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                                | Normal | 64  |
| 470 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                 | Normal | 0   |
| 471 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                         | Normal | 0   |
| 472 |  | A28 | D28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1 | Normal | 0   |
| 473 |  | B28 | D28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1        | Normal | 0   |
| 474 |  | C28 | D28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1                           | Normal | 0   |
| 475 |  | E28 | D28 | Ef/1, E1/2, Fc/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1                                       | Normal | 0   |
| 476 |  | D28 | D28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1  | Normal | 0   |
| 477 |  | D28 | G28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2           | Normal | 0   |
| 478 |  | D28 | F28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                          | Normal | 0   |
| 479 |  | D28 | G28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3           | Normal | 0   |
| 480 |  | D28 | H28 | 51/1, Ff/2, F/3, Act/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                   | Normal | 0   |
| 481 |  | H28 | D28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1   | Normal | 0   |
| 482 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                      | Normal | 0   |
| 483 |  | H28 | F28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                                     | Normal | 0   |
| 484 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                      | Normal | 0   |
| 485 |  | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                              | Normal | 0   |
| 486 |  | F28 | D28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1   | Normal | 28  |
| 487 |  | F28 | F28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                             | Normal | 0   |

## Signal Timings

Network Default: 120s cycle time; 120 steps

## Resultant penalties

| Time Segment | Controller stream | Phase min max penalty (£ per hr) | Intergreen broken penalty (£ per hr) | Stage constraint broken penalty (£ per hr) | Cost of controller stream penalties (£ per hr) |
|--------------|-------------------|----------------------------------|--------------------------------------|--|--|
| 07:30-08:30  | (ALL)             | 0.00                             | 0.00                                 | 0.00                                       | 0.00   |

## Results - Link

## Results - Traffic Stream

### Results - Traffic Stream: Vehicle summary

| Time Segment | Arm | Traffic Stream | Name       | Phase | Calculated flow entering (PCU/hr) | Calculated saturation flow (PCU/hr) | Actual green (s per cycle) | Calculated capacity (PCU/hr) | Degree of saturation (%) | Practical reserve capacity (%) | Mean Delay per Veh (s) | Mean max queue (PCU) | Utilised storage (%) | Journey Time (s) |        |
|--------------|-----|----------------|------------|-------|-----------------------------------|-------------------------------------|----------------------------|------------------------------|--------------------------|--------------------------------|------------------------|----------------------|----------------------|------------------|--------|
| 07:30-08:30  | A   | 1              | (untitled) | E     | 431                               | 2050                                | 26                         | 478                          | 90                       | 0                              | 59.57                  | 12.18                | 94.16                | 65.15            |        |
|              |     | 2              | (untitled) | E     | 249                               | 2050                                | 26                         | 478                          | 52                       | 73                             | 25.77                  | 5.04                 | 37.79                | 31.52            |        |
|              |     | 3              | (untitled) | E     | 390                               | 2050                                | 26                         | 478                          | 82                       | 10                             | 38.89                  | 9.02                 | 66.16                | 44.77            |        |
|              |     | 4              | (untitled) | E     | 364                               | 2050                                | 26                         | 364                          | 100                      | -10                            | 202.64                 | 22.96                | 164.79               | 208.65           |        |
|              | Ac  | 1              | (untitled) | D     | 795                               | 2263                                | 74                         | 1433                         | 55                       | 62                             | 7.18                   | 5.92                 | 35.50                | 14.37            |        |
|              |     | 2              | (untitled) | D     | 509                               | 2263                                | 74                         | 1384                         | 37                       | 145                            | 0.89                   | 1.80                 | 11.19                | 10.38            |        |
|              |     | 3              | (untitled) | D     | 128                               | 2263                                | 74                         | 1430                         | 9                        | 905                            | 4.23                   | 2.33                 | 15.20                | 10.83            |        |
|              | Acf | 1              | (untitled) |       |                                   | 1304                                | 2263                       | 120                          | 2263                     | 58                             | 56                     | 1.08                 | 0.39                 | 3.23             | 6.30   |
|              |     | 2              | (untitled) |       |                                   | 128                                 | 2263                       | 120                          | 2263                     | 6                              | 1491                   | 0.05                 | 0.00                 | 0.01             | 7.29   |
|              | Af  | 1              | (untitled) |       |                                   | 680                                 | 2050                       | 120                          | 2050                     | 33                             | 171                    | 0.44                 | 0.08                 | 0.88             | 6.86   |
|              |     | 2              | (untitled) |       |                                   | 390                                 | 2050                       | 120                          | 2050                     | 19                             | 373                    | 0.21                 | 0.02                 | 0.24             | 6.59   |
|              |     | 3              | (untitled) |       |                                   | 402                                 | 2050                       | 120                          | 364                      | 110                            | -19                    | 245.83               | 31.44                | 341.00           | 252.19 |
|              | B   | 1              | (untitled) | B     | 360                               | 2050                                | 40                         | 718                          | 50                       | 79                             | 17.90                  | 4.35                 | 26.42                | 25.00            |        |
|              |     | 2              | (untitled) | B     | 491                               | 2150                                | 40                         | 753                          | 65                       | 38                             | 20.87                  | 6.53                 | 38.66                | 28.16            |        |
|              |     | 3              | (untitled) | B     | 495                               | 2100                                | 40                         | 605                          | 82                       | 10                             | 32.58                  | 8.16                 | 47.05                | 40.06            |        |
|              |     | 4              | (untitled) | B     | 555                               | 2050                                | 40                         | 718                          | 77                       | 16                             | 25.73                  | 8.93                 | 50.14                | 38.02            |        |
|              | Bc  | 1              | (untitled) | A     | 758                               | 2050                                | 56                         | 991                          | 77                       | 18                             | 17.92                  | 18.63                | 80.62                | 29.88            |        |
|              |     | 2              | (untitled) | A     | 474                               | 2050                                | 56                         | 991                          | 48                       | 88                             | 18.57                  | 9.03                 | 39.51                | 30.40            |        |
|              |     | 3              | (untitled) | A     | 404                               | 2050                                | 56                         | 404                          | 100                      | -10                            | 237.33                 | 30.83                | 136.27               | 249.04           |        |
|              | Bcf | 1              | (untitled) |       |                                   | 1226                                | 2263                       | 120                          | 2263                     | 54                             | 66                     | 0.94                 | 0.32                 | 2.93             | 5.16   |
|              |     | 2              | (untitled) |       |                                   | 758                                 | 2263                       | 120                          | 2263                     | 33                             | 169                    | 0.40                 | 0.08                 | 0.77             | 5.23   |
|              |     | 3              | (untitled) |       |                                   | 474                                 | 2263                       | 120                          | 2263                     | 21                             | 330                    | 0.21                 | 0.03                 | 0.26             | 6.35   |

|     |   |            |   |      |      |     |      |     |      |         |        |         |         |
|-----|---|------------|---|------|------|-----|------|-----|------|---------|--------|---------|---------|
|     | 4 | (untitled) |   | 408  | 2263 | 120 | 404  | 101 | -11  | 141.16  | 20.42  | 188.23  | 147.48  |
| Bf  | 1 | (untitled) |   | 851  | 1800 | 120 | 1800 | 47  | 90   | 0.89    | 0.21   | 0.53    | 28.23   |
|     | 2 | (untitled) |   | 1049 | 1800 | 120 | 1800 | 58  | 54   | 1.39    | 0.41   | 1.02    | 28.81   |
| C   | 1 | (untitled) | G | 44   | 2100 | 34  | 630  | 7   | 1186 | 12.74   | 1.45   | 6.89    | 27.27   |
|     | 2 | (untitled) | G | 354  | 2200 | 34  | 362  | 98  | -8   | 243.35  | 27.34  | 128.08  | 258.08  |
|     | 3 | (untitled) | G | 239  | 2050 | 34  | 615  | 39  | 132  | 23.30   | 4.55   | 21.05   | 38.22   |
| Cf  | 1 | (untitled) |   | 342  | 1965 | 120 | 340  | 101 | -11  | 313.14  | 33.98  | 135.12  | 330.50  |
|     | 2 | (untitled) |   | 296  | 1965 | 120 | 1001 | 30  | 204  | 9.95    | 4.89   | 19.27   | 27.45   |
| D   | 1 | (untitled) | B | 148  | 2050 | 20  | 148  | 100 | -10  | 348.97  | 14.89  | 155.66  | 353.10  |
|     | 2 | (untitled) | B | 148  | 1850 | 20  | 339  | 44  | 106  | 44.57   | 3.21   | 33.58   | 48.70   |
|     | 3 | (untitled) | B | 250  | 2250 | 20  | 250  | 100 | -10  | 196.71  | 14.39  | 156.54  | 200.68  |
|     | 4 | (untitled) | B | 254  | 2250 | 20  | 413  | 62  | 46   | 43.36   | 3.86   | 40.05   | 47.51   |
| Dc  | 1 | (untitled) | A | 622  | 2100 | 80  | 1435 | 43  | 108  | 1.95    | 2.47   | 27.86   | 8.06    |
|     | 2 | (untitled) | A | 584  | 2100 | 80  | 581  | 100 | -10  | 108.12  | 19.56  | 229.70  | 113.99  |
|     | 3 | (untitled) | A | 134  | 2100 | 80  | 1435 | 9   | 867  | 16.49   | 2.31   | 28.30   | 22.13   |
|     | 4 | (untitled) | A | 103  | 2100 | 80  | 681  | 15  | 494  | 33.89   | 1.81   | 23.03   | 39.30   |
| Dcf | 1 | (untitled) |   | 719  | 2050 | 120 | 2050 | 35  | 157  | 0.47    | 0.09   | 0.83    | 5.38    |
|     | 2 | (untitled) |   | 472  | 2100 | 120 | 2100 | 22  | 300  | 0.25    | 0.03   | 0.29    | 5.14    |
|     | 3 | (untitled) |   | 622  | 2100 | 120 | 2100 | 30  | 204  | 0.36    | 0.06   | 0.55    | 7.54    |
|     | 4 | (untitled) |   | 579  | 2100 | 120 | 584  | 99  | -9   | 113.91  | 21.98  | 186.72  | 120.93  |
|     | 5 | (untitled) |   | 134  | 2100 | 120 | 2100 | 6   | 1315 | 0.06    | 0.00   | 0.02    | 5.02    |
|     | 6 | (untitled) |   | 103  | 2050 | 120 | 2050 | 5   | 1687 | 0.05    | 0.00   | 0.01    | 7.99    |
| Df  | 1 | (untitled) |   | 1099 | 1900 | 120 | 296  | 371 | -76  | 1322.68 | 411.42 | 1182.84 | 1346.68 |
|     | 2 | (untitled) |   | 1353 | 2250 | 120 | 504  | 268 | -66  | 1137.65 | 441.27 | 1268.65 | 1161.65 |
| Dxp | 1 | (untitled) | D | 719  | 2050 | 103 | 1777 | 40  | 122  | 0.70    | 0.15   | 1.86    | 4.13    |
|     | 2 | (untitled) | D | 472  | 2050 | 103 | 1777 | 27  | 239  | 0.39    | 4.11   | 49.15   | 4.00    |
| Ec  | 1 | (untitled) | F | 323  | 2150 | 16  | 323  | 100 | -10  | 159.39  | 15.57  | 178.77  | 163.15  |
|     | 2 | (untitled) | F | 273  | 2263 | 16  | 339  | 80  | 12   | 31.16   | 7.02   | 83.32   | 34.79   |
|     | 3 | (untitled) | F | 339  | 2263 | 16  | 339  | 100 | -10  | 155.38  | 15.69  | 192.93  | 158.89  |
|     | 4 | (untitled) | F | 252  | 2250 | 16  | 338  | 75  | 20   | 30.01   | 5.31   | 67.66   | 35.42   |
| Ecf | 1 | (untitled) |   | 671  | 2100 | 120 | 2100 | 32  | 182  | 0.40    | 0.07   | 0.94    | 3.85    |
|     | 2 | (untitled) |   | 680  | 2100 | 120 | 669  | 102 | -11  | 106.34  | 22.41  | 277.93  | 109.82  |

|     |   |            |   |      |              |     |              |     |              |        |       |        |        |
|-----|---|------------|---|------|--------------|-----|--------------|-----|--------------|--------|-------|--------|--------|
|     | 3 | (untitled) |   | 273  | 2263         | 120 | 2263         | 12  | 647          | 0.11   | 0.01  | 0.10   | 4.71   |
|     | 4 | (untitled) |   | 338  | 2300         | 120 | 339          | 100 | -10          | 136.04 | 15.06 | 182.25 | 141.18 |
|     | 5 | (untitled) |   | 269  | 2300         | 120 | 2300         | 12  | 670          | 0.10   | 0.01  | 0.09   | 5.81   |
| Ef  | 1 | (untitled) |   | 935  | 1900         | 120 | 1900         | 49  | 83           | 0.92   | 0.24  | 1.07   | 16.22  |
|     | 2 | (untitled) |   | 521  | 1900         | 120 | 1900         | 27  | 228          | 0.36   | 0.05  | 0.23   | 15.66  |
| Exp | 1 | (untitled) | L | 671  | 2050         | 102 | 1760         | 38  | 136          | 1.06   | 2.45  | 27.16  | 4.94   |
|     | 2 | (untitled) | L | 347  | 2050         | 102 | 1760         | 20  | 357          | 0.32   | 0.08  | 0.86   | 4.35   |
| F   | 1 | (untitled) | B | 360  | 2100         | 28  | 525          | 69  | 31           | 27.73  | 5.69  | 38.43  | 34.11  |
|     | 2 | (untitled) | B | 512  | 2100         | 28  | 525          | 98  | -8           | 78.92  | 15.53 | 104.18 | 85.35  |
|     | 3 | (untitled) | B | 44   | 2100         | 28  | 525          | 8   | 974          | 17.56  | 0.55  | 3.65   | 24.11  |
| Fc  | 1 | (untitled) | A | 645  | 2263         | 72  | 1396         | 46  | 95           | 2.30   | 1.98  | 6.38   | 22.12  |
|     | 2 | (untitled) | A | 672  | 2263         | 72  | 1392         | 48  | 86           | 1.92   | 6.60  | 21.66  | 21.25  |
|     | 3 | (untitled) | A | 876  | 2263         | 72  | 1396         | 63  | 43           | 7.83   | 4.89  | 15.58  | 27.61  |
| Ff  | 1 | (untitled) |   | 872  | 1900         | 120 | 1900         | 46  | 96           | 0.80   | 0.19  | 0.41   | 33.89  |
|     | 2 | (untitled) |   | 44   | 1900         | 120 | 1900         | 2   | 3786         | 0.02   | 0.00  | 0.00   | 33.07  |
| G   | 1 | (untitled) | F | 277  | 2050         | 32  | 563          | 49  | 83           | 15.50  | 1.98  | 7.33   | 31.48  |
|     | 2 | (untitled) | F | 261  | 2050         | 32  | 566          | 46  | 95           | 14.14  | 2.53  | 9.58   | 25.52  |
| Gf  | 1 | (untitled) |   | 277  | 2050         | 120 | 2050         | 14  | 566          | 0.14   | 0.01  | 0.15   | 3.17   |
|     | 2 | (untitled) |   | 244  | 2050         | 120 | 2050         | 12  | 656          | 0.12   | 0.01  | 0.12   | 3.12   |
| xA  | 1 | (untitled) |   | 1002 | 2263         | 120 | 2217         | 45  | 99           | 0.89   | 4.85  | 12.14  | 18.12  |
|     | 2 | (untitled) |   | 676  | 2263         | 120 | 2263         | 30  | 201          | 0.34   | 0.06  | 0.16   | 17.59  |
| xB  | 1 | (untitled) |   | 1226 | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 5.79   |
| xC  | 1 | (untitled) |   | 528  | 1900         | 120 | 1140         | 46  | 94           | 6.08   | 7.16  | 35.61  | 14.75  |
|     | 2 | (untitled) |   | 450  | 1900         | 120 | 1233         | 36  | 147          | 5.32   | 4.86  | 24.11  | 14.02  |
| xD  | 1 | (untitled) |   | 719  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 9.11   |
|     | 2 | (untitled) |   | 472  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 9.16   |
| xE  | 1 | (untitled) |   | 671  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.04  |
|     | 2 | (untitled) |   | 348  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.04  |
| xF  | 1 | (untitled) |   | 408  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 12.35  |
| Cc1 | 1 | (untitled) | E | 440  | 2050         | 60  | 1039         | 42  | 113          | 18.58  | 7.78  | 46.70  | 25.23  |
| E1  | 1 | (untitled) | G | 311  | 2050         | 56  | 991          | 31  | 187          | 10.28  | 2.93  | 21.08  | 16.28  |
|     | 2 | (untitled) | G | 624  | 2200         | 56  | 1063         | 59  | 53           | 13.61  | 6.60  | 47.44  | 19.61  |

|      |   |            |   |      |              |     |              |     |              |         |        |         |         |
|------|---|------------|---|------|--------------|-----|--------------|-----|--------------|---------|--------|---------|---------|
| Gf1  | 1 | (untitled) |   | 17   | 692          | 120 | 692          | 2   | 3622         | 0.06    | 0.00   | 0.00    | 5.80    |
| Cc2  | 2 | (untitled) | D | 678  | 2150         | 62  | 1128         | 60  | 50           | 10.63   | 7.60   | 47.75   | 20.36   |
|      | 3 | (untitled) | D | 496  | 2050         | 62  | 1084         | 46  | 97           | 6.38    | 2.92   | 18.44   | 17.31   |
|      | 4 | (untitled) | D | 469  | 2150         | 62  | 1138         | 41  | 118          | 17.08   | 7.87   | 50.05   | 23.48   |
|      | 5 | (untitled) | D | 354  | 2050         | 62  | 350          | 101 | -11          | 213.57  | 24.38  | 154.91  | 220.46  |
|      | 6 | (untitled) | D | 0    | 2050         | 62  | 1093         | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 0.00    |
| E2   | 3 | (untitled) | H | 277  | 2150         | 60  | 1104         | 25  | 259          | 8.66    | 2.48   | 26.74   | 12.66   |
|      | 4 | (untitled) | H | 244  | 2050         | 60  | 1059         | 23  | 291          | 8.47    | 2.35   | 24.90   | 12.54   |
| TC5  | 2 | (untitled) | A | 757  | 2263         | 96  | 1848         | 41  | 120          | 1.64    | 2.96   | 74.02   | 4.40    |
|      | 3 | (untitled) | A | 676  | 2263         | 96  | 1848         | 37  | 146          | 1.26    | 1.55   | 38.84   | 4.02    |
|      | 4 | (untitled) | C | 0    | 1800         | 8   | 135          | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 0.00    |
| TC9  | 1 | (untitled) | B | 583  | 1925         | 84  | 1396         | 42  | 115          | 7.43    | 6.89   | 43.20   | 18.44   |
|      | 2 | (untitled) | B | 368  | 1966         | 84  | 1425         | 26  | 249          | 6.03    | 3.83   | 23.87   | 17.09   |
|      | 3 | (untitled) | B | 355  | 1947         | 84  | 1290         | 28  | 227          | 6.21    | 3.70   | 22.96   | 17.33   |
| TC35 | 1 | (untitled) | A | 254  | 1900         | 96  | 1552         | 16  | 449          | 1.06    | 1.47   | 34.88   | 3.95    |
| TC36 | 1 | (untitled) |   | 201  | 1800         | 120 | 1800         | 11  | 706          | 0.13    | 0.01   | 0.16    | 3.15    |
| TC37 | 1 | (untitled) | J | 35   | 1850         | 105 | 1634         | 2   | 4102         | 0.90    | 0.14   | 1.77    | 4.09    |
| TC38 | 1 | (untitled) |   | 35   | 437          | 120 | 437          | 8   | 1024         | 1.03    | 2.42   | 65.24   | 2.57    |
| TC39 | 2 | (untitled) |   | 757  | 2263         | 120 | 2263         | 33  | 169          | 0.40    | 0.08   | 1.37    | 2.94    |
|      | 3 | (untitled) |   | 676  | 2263         | 120 | 2263         | 30  | 201          | 0.34    | 0.06   | 1.10    | 2.74    |
| TC40 | 2 | (untitled) |   | 792  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 4.23    |
|      | 3 | (untitled) |   | 676  | Unrestricted | 120 | Unrestricted | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 4.02    |
| TC41 | 1 | (untitled) | D | 166  | 1850         | 13  | 216          | 77  | 17           | 77.20   | 6.28   | 66.06   | 81.14   |
| TC42 | 1 | (untitled) | E | 0    | 0            | 0   | 0            | 0   | -100         | 0.00    | 0.00   | 0.00    | 0.00    |
| TC43 | 1 | (untitled) |   | 0    | 1800         | 120 | 1800         | 0   | Unrestricted | 0.00    | 0.00   | 0.00    | 0.00    |
| 47   | 1 | (untitled) |   | 977  | 1300         | 120 | 1300         | 75  | 20           | 4.15    | 1.13   | 4.85    | 20.18   |
| 48   | 1 | (untitled) |   | 1653 | 1965         | 120 | 638          | 259 | -65          | 1113.25 | 528.85 | 5516.61 | 1119.86 |
| 49   | 1 | (untitled) |   | 653  | 1900         | 120 | 1900         | 34  | 162          | 0.50    | 0.09   | 1.97    | 3.64    |
|      | 2 | (untitled) |   | 653  | 1900         | 120 | 1900         | 34  | 162          | 0.50    | 0.09   | 1.97    | 3.64    |
| 50   | 1 | (untitled) |   | 2017 | 1900         | 120 | 1900         | 106 | -15          | 117.14  | 65.63  | 783.80  | 122.91  |
| 51   | 1 | (untitled) |   | 916  | 1900         | 120 | 1900         | 48  | 87           | 0.88    | 0.22   | 3.44    | 5.38    |
| 52   | 1 |            | A | 240  | 1800         | 14  | 240          | 100 | -10          | 487.11  | 36.27  | 120.57  | 507.87  |

|    |   |  |   |     |      |     |     |     |     |         |        |         |         |
|----|---|--|---|-----|------|-----|-----|-----|-----|---------|--------|---------|---------|
|    | 2 |  | A | 240 | 1800 | 14  | 240 | 100 | -10 | 487.03  | 36.26  | 120.39  | 507.82  |
| 53 | 1 |  |   | 544 | 1800 | 120 | 240 | 227 | -60 | 1018.74 | 164.03 | 2146.07 | 1024.02 |
|    | 2 |  |   | 555 | 1800 | 120 | 240 | 231 | -61 | 1033.39 | 161.79 | 2202.74 | 1038.46 |

## Data Entry - Stage Start and End

### Resultant Stage

| Controller Stream | Resultant Stage | Is base stage | Library Stage ID | Phases in this stage | Stage start (s) | Stage end (s) | Stage duration (s) | User stage minimum (s) | Stage minimum (s) |
|-------------------|-----------------|---------------|------------------|----------------------|-----------------|---------------|--------------------|------------------------|-------------------|
| 769-1             | 1               | ✓             | 1                | A                    | 49              | 77            | 28                 | 1                      | 7                 |
|                   | 2               | ✓             | 2                | B                    | 84              | 104           | 20                 | 1                      | 7                 |
|                   | 3               |               | 1                | A                    | 109             | 17            | 28                 | 1                      | 7                 |
|                   | 4               |               | 2                | B                    | 24              | 44            | 20                 | 1                      | 7                 |
| 769-2             | 1               | ✓             | 4                | D,E,H,I              | 79              | 104           | 25                 | 1                      | 3                 |
|                   | 2               | ✓             | 5                | F,G,J,K              | 115             | 5             | 10                 | 1                      | 8                 |
|                   | 3               |               | 4                | D,E,H,I              | 19              | 44            | 25                 | 1                      | 3                 |
|                   | 4               |               | 5                | F,G,J,K              | 55              | 65            | 10                 | 1                      | 8                 |
| 770-1             | 1               | ✓             | 1                | A,C                  | 82              | 0             | 38                 | 1                      | 5                 |
|                   | 2               | ✓             | 2                | B                    | 7               | 17            | 10                 | 1                      | 7                 |
|                   | 3               |               | 1                | A,C                  | 22              | 60            | 38                 | 1                      | 5                 |
|                   | 4               |               | 2                | B                    | 67              | 77            | 10                 | 1                      | 7                 |
| 770-2             | 1               | ✓             | 4                | D                    | 24              | 7             | 103                | 1                      | 7                 |
|                   | 2               | ✓             | 5                | E                    | 12              | 17            | 5                  | 1                      | 5                 |
| 770-3             | 1               | ✓             | 4                | A                    | 19              | 26            | 7                  | 1                      | 7                 |
|                   | 2               | ✓             | 7                | F,I,J                | 31              | 35            | 4                  | 1                      | 3                 |
|                   | 3               | ✓             | 9                | G,H                  | 46              | 74            | 28                 | 1                      | 4                 |
|                   | 4               |               | 4                | A                    | 79              | 86            | 7                  | 1                      | 7                 |
|                   | 5               |               | 7                | F,I,J                | 91              | 95            | 4                  | 1                      | 3                 |
|                   | 6               |               | 9                | G,H                  | 106             | 14            | 28                 | 1                      | 4                 |
| 770-4             | 1               | ✓             | 11               | L                    | 84              | 66            | 102                | 1                      | 7                 |
|                   | 2               | ✓             | 12               | M                    | 71              | 77            | 6                  | 1                      | 6                 |
| 771-1             | 1               | ✓             | 1                | A,C                  | 38              | 68            | 30                 | 1                      | 9                 |
|                   | 2               | ✓             | 3                | B                    | 79              | 93            | 14                 | 1                      | 7                 |
|                   | 3               |               | 1                | A,C                  | 98              | 8             | 30                 | 1                      | 9                 |
|                   | 4               |               | 3                | B                    | 19              | 33            | 14                 | 1                      | 7                 |
| 771-2             | 1               | ✓             | 5                | D                    | 32              | 69            | 37                 | 1                      | 7                 |
|                   | 2               | ✓             | 6                | E                    | 74              | 87            | 13                 | 1                      | 7                 |
|                   | 3               |               | 5                | D                    | 92              | 9             | 37                 | 1                      | 7                 |
|                   | 4               |               | 6                | E                    | 14              | 27            | 13                 | 1                      | 7                 |
| TC777-1           | 1               | ✓             | 1                | A,B,F                | 40              | 3             | 83                 | 1                      | 6                 |
|                   | 2               | ✓             | 2                | A,C,F,G              | 8               | 16            | 8                  | 1                      | 7                 |
|                   | 3               | ✓             | 5                | D,H,I                | 23              | 34            | 11                 | 1                      | 6                 |
| TC777-2           | 1               | ✓             | 1                | J                    | 84              | 69            | 105                | 1                      | 7                 |
|                   | 2               | ✓             | 2                | K                    | 74              | 79            | 5                  | 1                      | 5                 |

## Data Entry - Phase

### Phase

| Controller Stream | Phase | Phase | Street minimum green (s) | Maximum green (s) | Relative start displacement (s) | Relative end displacement (s) | Type       |
|-------------------|-------|-------|--------------------------|-------------------|---------------------------------|-------------------------------|------------|
| 769-1             | A     | A     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | B     | B     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | C     | C     | 7                        | 300               | 0                               | 0                             | Pedestrian |
| 769-2             | D     | D     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | E     | E     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | F     | F     | 4                        | 300               | 0                               | 0                             | Traffic    |
|                   | G     | G     | 4                        | 300               | 0                               | 0                             | Traffic    |
|                   | H     | H     | 5                        | 300               | 0                               | 0                             | Pedestrian |
|                   | I     | I     | 7                        | 300               | 0                               | 0                             | Pedestrian |
|                   | J     | J     | 10                       | 300               | 0                               | 0                             | Pedestrian |
| 770-1             | A     | A     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | B     | B     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | C     | C     | 5                        | 300               | 0                               | 0                             | Pedestrian |
| 770-2             | D     | D     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | E     | E     | 5                        | 300               | 0                               | 0                             | Pedestrian |
| 770-3             | A     | A     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | F     | F     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | G     | G     | 4                        | 300               | 0                               | 0                             | Traffic    |
|                   | H     | H     | 4                        | 300               | 0                               | 0                             | Traffic    |
|                   | I     | I     | 5                        | 300               | 0                               | 0                             | Pedestrian |
|                   | J     | J     | 5                        | 300               | 0                               | 0                             | Pedestrian |
|                   | K     | K     | 10                       | 300               | 0                               | 0                             | Pedestrian |
| 770-4             | L     | L     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | M     | M     | 6                        | 300               | 0                               | 0                             | Pedestrian |
| 771-1             | A     | A     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | B     | B     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | C     | C     | 9                        | 300               | 0                               | 0                             | Pedestrian |
| 771-2             | D     | D     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | E     | E     | 7                        | 300               | 0                               | 0                             | Traffic    |
| TC777-1           | A     | A     | 7                        | 300               | 0                               | 1                             | Traffic    |
|                   | B     | B     | 7                        | 300               | 0                               | 2                             | Traffic    |
|                   | C     | C     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | D     | D     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | E     | E     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | F     | F     | 5                        | 300               | 0                               | 0                             | Pedestrian |
|                   | G     | G     | 7                        | 300               | 0                               | 0                             | Pedestrian |
|                   | H     | H     | 6                        | 300               | 0                               | 0                             | Pedestrian |
|                   | I     | I     | 5                        | 300               | 0                               | 0                             | Pedestrian |
| TC777-2           | J     | J     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | K     | K     | 5                        | 300               | 0                               | 0                             | Pedestrian |

## Data Entry - Traffic Stream

### Traffic Stream

| Arm | Traffic Stream | Auto length | Length (m) | Traffic model | Max queue storage (PCU) | Traffic type | Has Saturation Flow | Is signal controlled | Is give way | Saturation flow source | Saturation flow (PCU/hr) | Delay weighting multiplier (%) | Stop weighting multiplier (%) |
|-----|----------------|-------------|------------|---------------|-------------------------|--------------|---------------------|----------------------|-------------|------------------------|--------------------------|--------------------------------|-------------------------------|
| A   | 1              | ✓           | 74.35      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 2              | ✓           | 76.69      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |

|     |   |   |        |     |      |        |   |   |  |                  |      |     |     |
|-----|---|---|--------|-----|------|--------|---|---|--|------------------|------|-----|-----|
|     | 3 | ✓ | 78.40  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 4 | ✓ | 80.11  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Ac  | 1 | ✓ | 95.80  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 2 | ✓ | 92.34  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 50  |
|     | 3 | ✓ | 87.95  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
| Acf | 1 | ✓ | 69.59  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 2 | ✓ | 70.42  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
| Af  | 1 | ✓ | 53.54  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 53.19  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 3 | ✓ | 53.01  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
| B   | 1 | ✓ | 94.67  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 2 | ✓ | 97.18  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2150 | 20  | 0   |
|     | 3 | ✓ | 99.69  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 4 | ✓ | 102.42 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Bc  | 1 | ✓ | 132.85 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 2 | ✓ | 131.47 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 3 | ✓ | 130.10 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
| Bcf | 1 | ✓ | 62.77  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 2 | ✓ | 62.62  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 3 | ✓ | 62.46  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 62.38  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
| Bf  | 1 | ✓ | 227.81 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
|     | 2 | ✓ | 228.44 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
| C   | 1 | ✓ | 121.13 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 2 | ✓ | 122.73 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2200 | 20  | 0   |
|     | 3 | ✓ | 124.35 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Cf  | 1 | ✓ | 144.60 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
|     | 2 | ✓ | 145.86 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
| D   | 1 |   | 55.00  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 2 |   | 55.00  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 1850 | 20  | 0   |
|     | 3 | ✓ | 52.87  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 20  | 0   |
|     | 4 | ✓ | 55.42  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 20  | 0   |

|     |   |   |        |                |      |        |   |   |  |                  |      |     |     |
|-----|---|---|--------|----------------|------|--------|---|---|--|------------------|------|-----|-----|
| Dc  | 1 | ✓ | 50.91  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 2 | ✓ | 48.96  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 3 | ✓ | 47.02  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 4 | ✓ | 45.07  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
| Dcf | 1 | ✓ | 65.43  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 65.28  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 3 | ✓ | 65.54  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 4 | ✓ | 67.69  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 5 | ✓ | 66.13  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 6 | ✓ | 66.17  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
| Df  | 1 |   | 200.00 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 |   | 200.00 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 2250 | 100 | 100 |
| Dxp | 1 | ✓ | 45.75  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 48.11  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
| Ec  | 1 | ✓ | 50.09  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2150 | 100 | 500 |
|     | 2 | ✓ | 48.43  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 3 | ✓ | 46.77  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 4 | ✓ | 45.11  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 100 | 500 |
| Ecf | 1 | ✓ | 45.94  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 2 | ✓ | 46.37  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 3 | ✓ | 46.95  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 47.51  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2300 | 100 | 100 |
|     | 5 | ✓ | 48.55  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2300 | 100 | 100 |
| Ef  | 1 | ✓ | 127.54 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 1900 | 100 | 100 |
|     | 2 | ✓ | 127.54 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| Exp | 1 | ✓ | 51.83  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 53.71  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
| F   | 1 | ✓ | 85.13  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 2 | ✓ | 85.72  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 3 | ✓ | 87.25  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
| Fc  | 1 | ✓ | 178.68 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 2 | ✓ | 175.19 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |

|     |   |   |        |                |      |        |   |   |   |                  |      |     |     |
|-----|---|---|--------|----------------|------|--------|---|---|---|------------------|------|-----|-----|
|     | 3 | ✓ | 180.28 | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2263 | 100 | 500 |
| Ff  | 1 | ✓ | 275.73 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 | ✓ | 275.39 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
| G   | 1 | ✓ | 155.36 | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|     | 2 | ✓ | 151.80 | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
| Gf  | 1 | ✓ | 40.48  | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 40.06  | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2050 | 100 | 100 |
| xA  | 1 | ✓ | 229.66 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
|     | 2 | ✓ | 229.97 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
| xB  | 1 | ✓ | 77.15  | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xC  | 1 | ✓ | 115.60 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 | ✓ | 115.98 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
| xD  | 1 | ✓ | 121.44 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|     | 2 | ✓ | 122.12 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xE  | 1 | ✓ | 173.89 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|     | 2 | ✓ | 173.83 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xF  | 1 | ✓ | 158.35 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| Cc1 | 1 | ✓ | 95.84  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 100 |
| E1  | 1 |   | 80.00  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 20  | 0   |
|     | 2 |   | 80.00  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2200 | 20  | 0   |
| Gf1 | 1 | ✓ | 47.81  | NetworkDefault | 0.00 | Normal |   |   | ✓ |                  |      | 100 | 100 |
| Cc2 | 2 | ✓ | 91.52  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 100 | 500 |
|     | 3 | ✓ | 91.11  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|     | 4 | ✓ | 90.39  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 100 | 500 |
|     | 5 | ✓ | 90.48  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|     | 6 | ✓ | 88.08  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
| E2  | 3 | ✓ | 53.28  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 20  | 0   |
|     | 4 | ✓ | 54.33  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 20  | 0   |
| TC5 | 2 | ✓ | 23.03  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 2263 | 100 | 100 |
|     | 3 | ✓ | 23.02  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 24.43  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1800 | 100 | 100 |
| TC9 | 1 | ✓ | 91.71  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1925 | 100 | 100 |

|     |   |   |        |                |                |        |        |   |   |                  |      |     |     |
|-----|---|---|--------|----------------|----------------|--------|--------|---|---|------------------|------|-----|-----|
|     | 2 | ✓ | 92.21  | CTM            | 0.00           | Normal | ✓      | ✓ |   | Sum of lanes     | 1966 | 100 | 100 |
|     | 3 | ✓ | 92.69  | CTM            | 0.00           | Normal | ✓      | ✓ |   | Sum of lanes     | 1947 | 100 | 100 |
| TC3 | 5 | 1 | ✓      | 24.16          | CTM            | 0.00   | Normal | ✓ | ✓ | Directly entered | 1900 | 100 | 100 |
| TC3 | 6 | 1 | ✓      | 25.22          | NetworkDefault | 0.00   | Normal | ✓ |   | Sum of lanes     | 1800 | 100 | 100 |
| TC3 | 7 | 1 | ✓      | 44.32          | CTM            | 0.00   | Normal | ✓ | ✓ | Directly entered | 1850 | 100 | 100 |
| TC3 | 8 | 1 | ✓      | 21.32          | CTM            | 0.00   | Normal | ✓ |   | Directly entered | 1850 | 100 | 100 |
| TC3 | 9 | 2 | ✓      | 35.24          | CTM            | 0.00   | Normal | ✓ |   | Directly entered | 2263 | 100 | 100 |
|     | 3 | ✓ | 33.28  | CTM            | 0.00           | Normal | ✓      |   |   | Directly entered | 2263 | 100 | 100 |
| TC4 | 0 | 2 | ✓      | 58.74          | PDM            | 0.00   | Normal |   |   |                  |      | 100 | 100 |
|     | 3 | ✓ | 55.82  | PDM            | 0.00           | Normal |        |   |   |                  |      | 100 | 100 |
| TC4 | 1 | 1 | ✓      | 54.63          | CTM            | 0.00   | Normal | ✓ | ✓ | Directly entered | 1850 | 100 | 100 |
| TC4 | 2 | 1 | ✓      | 23.35          | NetworkDefault | 0.00   | Normal | ✓ | ✓ | Sum of lanes     | 1771 | 100 | 100 |
| TC4 | 3 | 1 | ✓      | 51.77          | NetworkDefault | 0.00   | Normal | ✓ |   | Sum of lanes     | 1800 | 100 | 100 |
| 47  | 1 | ✓ | 133.63 | CTM            | 0.00           | Normal | ✓      |   |   | Directly entered | 1300 | 100 | 100 |
| 48  | 1 | ✓ | 55.12  | NetworkDefault | 0.00           | Normal | ✓      |   |   | Sum of lanes     | 1965 | 100 | 100 |
| 49  | 1 | ✓ | 26.24  | NetworkDefault | 0.00           | Normal | ✓      |   |   | Directly entered | 1900 | 100 | 100 |
|     | 2 | ✓ | 26.24  | NetworkDefault | 0.00           | Normal | ✓      |   |   | Directly entered | 1900 | 100 | 100 |
| 50  | 1 | ✓ | 48.15  | NetworkDefault | 0.00           | Normal | ✓      |   |   | Sum of lanes     | 1900 | 100 | 100 |
| 51  | 1 | ✓ | 37.47  | NetworkDefault | 0.00           | Normal | ✓      |   |   | Sum of lanes     | 1900 | 100 | 100 |
| 52  | 1 | ✓ | 173.00 | CTM            | 0.00           | Normal | ✓      | ✓ |   | Sum of lanes     | 1800 | 100 | 500 |
|     | 2 | ✓ | 173.18 | CTM            | 0.00           | Normal | ✓      | ✓ |   | Sum of lanes     | 1800 | 100 | 500 |
| 53  | 1 | ✓ | 43.95  | NetworkDefault | 0.00           | Normal | ✓      |   |   | Sum of lanes     | 1800 | 100 | 100 |
|     | 2 | ✓ | 42.23  | NetworkDefault | 0.00           | Normal | ✓      |   |   | Sum of lanes     | 1800 | 100 | 100 |

## Data entry - Link

## Results - Pedestrian

### Pedestrian Crossings: Pedestrian summary

| Time Segment | Pedestrian crossing | Side | Calculated Flow Entering (Ped/hr) | Degree of saturation (%) | Actual green (s (per cycle)) | Mean Delay Per Ped (s) | Mean max queue (Ped) |
|--------------|---------------------|------|-----------------------------------|--------------------------|------------------------------|------------------------|----------------------|
| 07:30-08:30  | 1                   | 1    | 0                                 | 0                        | 5                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 5                            | 0.00                   | 0.00                 |
|              | 2                   | 1    | 0                                 | 0                        | 76                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 76                           | 0.00                   | 0.00                 |
|              | 3                   | 1    | 0                                 | 0                        | 6                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 6                            | 0.00                   | 0.00                 |

|  |    |   |   |   |    |      |      |
|--|----|---|---|---|----|------|------|
|  | 4  | 1 | 0 | 0 | 22 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 22 | 0.00 | 0.00 |
|  | 5  | 1 | 0 | 0 | 26 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 26 | 0.00 | 0.00 |
|  | 6  | 1 | 0 | 0 | 0  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 0  | 0.00 | 0.00 |
|  | 7  | 1 | 0 | 0 | 60 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 60 | 0.00 | 0.00 |
|  | 8  | 1 | 0 | 0 | 0  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 0  | 0.00 | 0.00 |
|  | 9  | 1 | 0 | 0 | 24 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 24 | 0.00 | 0.00 |
|  | 10 | 1 | 0 | 0 | 36 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 36 | 0.00 | 0.00 |
|  | 11 | 1 | 0 | 0 | 60 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 60 | 0.00 | 0.00 |
|  | 12 | 1 | 0 | 0 | 58 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 58 | 0.00 | 0.00 |
|  | 13 | 1 | 0 | 0 | 13 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 13 | 0.00 | 0.00 |
|  | 14 | 1 | 0 | 0 | 97 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 97 | 0.00 | 0.00 |
|  | 15 | 1 | 0 | 0 | 8  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 8  | 0.00 | 0.00 |
|  | 16 | 1 | 0 | 0 | 11 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 11 | 0.00 | 0.00 |
|  | 17 | 1 | 0 | 0 | 5  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 5  | 0.00 | 0.00 |

## Collections

### Point to Point Journey Time

Note: Auto Calculate disabled on this Local Matrix (Paths and Flow Allocation might not be up to date).

#### Average Journey Time (s) for Local Matrix: 1

|      | To  |        |        |        |        |        |        |        |     |
|------|-----|--------|--------|--------|--------|--------|--------|--------|-----|
|      | A28 | B28    | C28    | D28    | E28    | F28    | G28    | H28    |     |
| From | A28 | 0.0    | 216.3  | 207.6  | 932.0  | 303.8  | 1763.4 | 1780.7 | 0.0 |
|      | B28 | 1340.9 | 0.0    | 1496.3 | 2226.2 | 1794.1 | 1286.2 | 1413.1 | 0.0 |
|      | C28 | 1295.5 | 1279.8 | 0.0    | 1976.5 | 1726.9 | 1481.6 | 1615.8 | 0.0 |
|      | D28 | 153.4  | 231.5  | 215.5  | 0.0    | 1081.1 | 95.3   | 103.1  | 0.0 |
|      | E28 | 100.2  | 95.7   | 151.9  | 44.4   | 0.0    | 83.7   | 90.9   | 0.0 |
|      | F28 | 175.6  | 245.2  | 234.6  | 1792.4 | 1103.7 | 0.0    | 14.0   | 0.0 |
|      | G28 | 104.1  | 164.8  | 155.4  | 1879.5 | 1081.2 | 2476.3 | 0.0    | 0.0 |
|      | H28 | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0 |

#### Path Journey Time

| Path | From Location | To Location | Normal Calculated Flow (PCU/hr) | Normal journey time (s) | Normal journey dist (m) | Bus journeydist (m) | Tram journey dist (m) | Pedestrian journey dist (m) | Calculated Total Flow (PCU/hr) | Avg journey time (s) | Avg journey dist (m) |
|------|---------------|-------------|---------------------------------|-------------------------|-------------------------|---------------------|-----------------------|-----------------------------|--------------------------------|----------------------|----------------------|
| 32   | C28           | E28         | 182                             | 1726.85                 | 526.66                  | 0.00                | 0.00                  | 0.00                        | 182                            | 1726.85              | 526.66               |
| 36   | C28           | E28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 41  | E28 | A28 | 540 | 100.22  | 693.15  | 0.00 | 0.00 | 0.00 | 540 | 100.22  | 693.15  |
| 49  | C28 | D28 | 366 | 1976.52 | 509.82  | 0.00 | 0.00 | 0.00 | 366 | 1976.52 | 509.82  |
| 50  | E28 | D28 | 58  | 44.38   | 365.90  | 0.00 | 0.00 | 0.00 | 58  | 44.38   | 365.90  |
| 68  | E28 | G28 | 120 | 91.44   | 732.90  | 0.00 | 0.00 | 0.00 | 120 | 91.44   | 732.90  |
| 92  | E28 | F28 | 40  | 83.75   | 640.05  | 0.00 | 0.00 | 0.00 | 40  | 83.75   | 640.05  |
| 100 | E28 | B28 | 244 | 92.55   | 623.35  | 0.00 | 0.00 | 0.00 | 244 | 92.55   | 623.35  |
| 102 | A28 | C28 | 327 | 207.54  | 694.76  | 0.00 | 0.00 | 0.00 | 327 | 207.54  | 694.76  |
| 103 | F28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 105 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 107 | A28 | B28 | 55  | 216.35  | 716.08  | 0.00 | 0.00 | 0.00 | 55  | 216.35  | 716.08  |
| 110 | E28 | G28 | 93  | 90.17   | 724.83  | 0.00 | 0.00 | 0.00 | 93  | 90.17   | 724.83  |
| 112 | F28 | G28 | 35  | 14.04   | 149.60  | 0.00 | 0.00 | 0.00 | 35  | 14.04   | 149.60  |
| 113 | F28 | A28 | 66  | 175.60  | 347.66  | 0.00 | 0.00 | 0.00 | 66  | 175.60  | 347.66  |
| 115 | B28 | C28 | 9   | 1496.04 | 556.36  | 0.00 | 0.00 | 0.00 | 9   | 1496.04 | 556.36  |
| 125 | H28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 130 | G28 | C28 | 231 | 156.25  | 769.88  | 0.00 | 0.00 | 0.00 | 231 | 156.25  | 769.88  |
| 137 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 138 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 140 | B28 | G28 | 309 | 1293.72 | 1059.21 | 0.00 | 0.00 | 0.00 | 309 | 1293.72 | 1059.21 |
| 141 | B28 | F28 | 39  | 1286.24 | 966.36  | 0.00 | 0.00 | 0.00 | 39  | 1286.24 | 966.36  |
| 142 | B28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 143 | E28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 144 | B28 | G28 | 229 | 1574.59 | 1048.14 | 0.00 | 0.00 | 0.00 | 229 | 1574.59 | 1048.14 |
| 145 | B28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 146 | B28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 147 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 148 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 149 | B28 | A28 | 40  | 1340.87 | 1015.84 | 0.00 | 0.00 | 0.00 | 40  | 1340.87 | 1015.84 |
| 150 | E28 | B28 | 277 | 98.41   | 625.89  | 0.00 | 0.00 | 0.00 | 277 | 98.41   | 625.89  |
| 151 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 152 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 153 | F28 | B28 | 14  | 245.19  | 750.62  | 0.00 | 0.00 | 0.00 | 14  | 245.19  | 750.62  |
| 154 | E28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 155 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 156 | G28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 157 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 158 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 159 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 160 | B28 | D28 | 294 | 2226.24 | 693.92  | 0.00 | 0.00 | 0.00 | 294 | 2226.24 | 693.92  |
| 161 | B28 | E28 | 252 | 2053.85 | 713.02  | 0.00 | 0.00 | 0.00 | 252 | 2053.85 | 713.02  |
| 162 | B28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 163 | B28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 164 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 165 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 166 | B28 | C28 | 106 | 1496.36 | 553.47  | 0.00 | 0.00 | 0.00 | 106 | 1496.36 | 553.47  |
| 167 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 168 | G28 | A28 | 365 | 104.10  | 385.76  | 0.00 | 0.00 | 0.00 | 365 | 104.10  | 385.76  |
| 169 | G28 | B28 | 3   | 163.34  | 788.72  | 0.00 | 0.00 | 0.00 | 3   | 163.34  | 788.72  |
| 170 | G28 | B28 | 137 | 164.79  | 789.10  | 0.00 | 0.00 | 0.00 | 137 | 164.79  | 789.10  |
| 171 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 172 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 173 | F28 | D28 | 14  | 1788.11 | 867.39  | 0.00 | 0.00 | 0.00 | 14  | 1788.11 | 867.39  |
| 174 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 175 | A28 | D28 | 2   | 932.01  | 838.23  | 0.00 | 0.00 | 0.00 | 2   | 932.01  | 838.23  |
| 176 | H28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 177 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 178 | B28 | E28 | 225 | 1750.69 | 710.57  | 0.00 | 0.00 | 0.00 | 225 | 1750.69 | 710.57  |
| 179 | B28 | E28 | 150 | 1424.01 | 711.82  | 0.00 | 0.00 | 0.00 | 150 | 1424.01 | 711.82  |
| 180 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 181 | F28 | C28 | 17  | 234.55  | 729.68  | 0.00 | 0.00 | 0.00 | 17  | 234.55  | 729.68  |
| 182 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 183 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 184 | C28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 185 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 186 | A28 | C28 | 89  | 207.75  | 699.04  | 0.00 | 0.00 | 0.00 | 89  | 207.75  | 699.04  |
| 187 | G28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 188 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 189 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 190 | G28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 191 | D28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 192 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 193 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 194 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 195 | D28 | G28 | 251 | 103.15  | 744.99  | 0.00 | 0.00 | 0.00 | 251 | 103.15  | 744.99  |
| 196 | D28 | F28 | 109 | 95.30   | 652.14  | 0.00 | 0.00 | 0.00 | 109 | 95.30   | 652.14  |
| 197 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 198 | D28 | A28 | 3   | 153.42  | 704.24  | 0.00 | 0.00 | 0.00 | 3   | 153.42  | 704.24  |
| 199 | D28 | B28 | 234 | 231.61  | 1101.39 | 0.00 | 0.00 | 0.00 | 234 | 231.61  | 1101.39 |
| 200 | D28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 201 | F28 | E28 | 3   | 257.50  | 884.60  | 0.00 | 0.00 | 0.00 | 3   | 257.50  | 884.60  |
| 202 | F28 | D28 | 19  | 755.41  | 867.96  | 0.00 | 0.00 | 0.00 | 19  | 755.41  | 867.96  |
| 203 | F28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 204 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 205 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 206 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 207 | F28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 208 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 209 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 210 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 211 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 212 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 213 | H28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 214 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 215 | F28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 216 | A28 | G28 | 589 | 1786.09 | 1111.71 | 0.00 | 0.00 | 0.00 | 589 | 1786.09 | 1111.71 |
| 217 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 218 | A28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 219 | A28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 220 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 221 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 222 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 223 | A28 | G28 | 327 | 1770.93 | 1118.58 | 0.00 | 0.00 | 0.00 | 327 | 1770.93 | 1118.58 |
| 224 | A28 | F28 | 131 | 1763.45 | 1025.73 | 0.00 | 0.00 | 0.00 | 131 | 1763.45 | 1025.73 |
| 225 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 226 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 235 | E28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 236 | E28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 246 | E28 | C28 | 84  | 151.94  | 1066.04 | 0.00 | 0.00 | 0.00 | 84  | 151.94  | 1066.04 |
| 248 | D28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 249 | H28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 252 | F28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 283 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |

|     |     |     |     |         |        |      |      |      |     |         |        |
|-----|-----|-----|-----|---------|--------|------|------|------|-----|---------|--------|
| 284 | E28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 285 | E28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 286 | E28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 307 | G28 | C28 | 70  | 156.25  | 769.88 | 0.00 | 0.00 | 0.00 | 70  | 156.25  | 769.88 |
| 317 | C28 | G28 | 671 | 1711.43 | 864.44 | 0.00 | 0.00 | 0.00 | 671 | 1711.43 | 864.44 |
| 318 | C28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 319 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 320 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 322 | C28 | G28 | 491 | 1489.06 | 875.73 | 0.00 | 0.00 | 0.00 | 491 | 1489.06 | 875.73 |
| 323 | C28 | F28 | 45  | 1481.58 | 782.88 | 0.00 | 0.00 | 0.00 | 45  | 1481.58 | 782.88 |
| 324 | C28 | G28 | 15  | 1488.23 | 871.15 | 0.00 | 0.00 | 0.00 | 15  | 1488.23 | 871.15 |
| 325 | C28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 330 | C28 | A28 | 637 | 1295.50 | 834.69 | 0.00 | 0.00 | 0.00 | 637 | 1295.50 | 834.69 |
| 331 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 332 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 334 | C28 | C28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 342 | C28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 343 | C28 | B28 | 45  | 1292.05 | 753.20 | 0.00 | 0.00 | 0.00 | 45  | 1292.05 | 753.20 |
| 364 | B28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 379 | B28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 380 | B28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 381 | B28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 382 | G28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 383 | G28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 384 | A28 | A28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 385 | A28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 386 | A28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 387 | A28 | A28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 388 | A28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 389 | E28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 390 | E28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 391 | D28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 392 | D28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 393 | D28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 394 | D28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 395 | H28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 396 | H28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 397 | F28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 398 | F28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 399 | F28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 400 | F28 | B28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 401 | G28 | F28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 402 | G28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 403 | G28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 404 | A28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 405 | A28 | F28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 406 | A28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 407 | D28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 408 | H28 | F28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 409 | H28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 410 | H28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 411 | F28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 412 | F28 | F28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 413 | F28 | G28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 414 | F28 | H28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |
| 415 | A28 | D28 | 0   | 0.00    | 0.00   | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00   |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 417 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 418 | G28 | C28 | 78  | 152.07  | 767.78  | 0.00 | 0.00 | 0.00 | 78  | 152.07  | 767.78  |
| 423 | C28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 424 | C28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 425 | E28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 428 | E28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 431 | D28 | C28 | 275 | 215.50  | 1080.45 | 0.00 | 0.00 | 0.00 | 275 | 215.50  | 1080.45 |
| 439 | G28 | E28 | 67  | 174.57  | 923.21  | 0.00 | 0.00 | 0.00 | 67  | 174.57  | 923.21  |
| 440 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 441 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 442 | E28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 443 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 444 | E28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 445 | D28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 446 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 447 | D28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 448 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 449 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 450 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 451 | G28 | D28 | 91  | 1624.51 | 906.47  | 0.00 | 0.00 | 0.00 | 91  | 1624.51 | 906.47  |
| 452 | G28 | E28 | 160 | 1464.84 | 925.57  | 0.00 | 0.00 | 0.00 | 160 | 1464.84 | 925.57  |
| 453 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 454 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 455 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 456 | E28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 457 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 458 | D28 | E28 | 44  | 1081.12 | 1232.00 | 0.00 | 0.00 | 0.00 | 44  | 1081.12 | 1232.00 |
| 459 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 460 | F28 | E28 | 5   | 1642.50 | 886.49  | 0.00 | 0.00 | 0.00 | 5   | 1642.50 | 886.49  |
| 461 | A28 | E28 | 65  | 785.20  | 857.33  | 0.00 | 0.00 | 0.00 | 65  | 785.20  | 857.33  |
| 462 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 463 | A28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 464 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 465 | A28 | E28 | 432 | 230.90  | 852.36  | 0.00 | 0.00 | 0.00 | 432 | 230.90  | 852.36  |
| 466 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 467 | G28 | D28 | 40  | 2451.15 | 819.82  | 0.00 | 0.00 | 0.00 | 40  | 2451.15 | 819.82  |
| 468 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 469 | G28 | F28 | 64  | 2476.33 | 1093.97 | 0.00 | 0.00 | 0.00 | 64  | 2476.33 | 1093.97 |
| 470 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 471 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 472 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 473 | B28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 474 | C28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 475 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 476 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 477 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 478 | D28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 479 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 480 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 481 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 482 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 483 | H28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 484 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 485 | H28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 486 | F28 | D28 | 28  | 2490.31 | 780.75  | 0.00 | 0.00 | 0.00 | 28  | 2490.31 | 780.75  |
| 487 | F28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |

# Final Prediction Table

## Traffic Stream Results

|     |                |           |              | SIGNALS            |       | FLOWS                                 |                                 | PERFORMANCE                    |                                    |                           |                                  | PER PCU          |                         |                         | QUEUES                 |                                  | WEIGHTS                         |                                       | PENALTIES | P.I. |
|-----|----------------|-----------|--------------|--------------------|-------|---------------------------------------|---------------------------------|--------------------------------|------------------------------------|---------------------------|----------------------------------|------------------|-------------------------|-------------------------|------------------------|----------------------------------|---------------------------------|---------------------------------------|-----------|------|
| Arm | Traffic Stream | Name      | Traffic node | Cont roller stream | Phase | Calcu late d flow enter ing (PCU /hr) | Calcu late d sat flow (PCU/ hr) | Actu al gre en (s (per cycle)) | Waste d time total (s (per cycle)) | Degr ee of saturation (%) | Practi cal reser ve capacity (%) | Journ eyTime (s) | Me an Delay per Veh (s) | Me an stops per Veh (%) | Me an max que ue (PCU) | Delay weig hting multi plier (%) | Stop weig hting multi plier (%) | Cost of traffic penalt ies (£ per hr) | P.I.      |      |
| A   | 1              | (untiled) | 6            | 771-2              | E     | 431                                   | 2050                            | 26                             | 2.00                               | 90                        | 0                                | 65.15            | 59.57                   | 129.13                  | 12.18                  | 20                               | 0                               | 0.00                                  | 20.26     |      |
|     | 2              | (untiled) | 6            | 771-2              | E     | 249                                   | 2050                            | 26                             | 8.00                               | 52                        | 73                               | 31.52            | 25.77                   | 98.15                   | 5.04                   | 20                               | 0                               | 0.00                                  | 5.06      |      |
|     | 3              | (untiled) | 6            | 771-2              | E     | 390                                   | 2050                            | 26                             | 5.00                               | 82                        | 10                               | 44.77            | 38.89                   | 107.41                  | 9.02                   | 20                               | 0                               | 0.00                                  | 11.96     |      |
|     | 4              | (untiled) | 6            | 771-2              | E     | 364 <                                 | 2050                            | 26                             | 6.69                               | 100                       | -10                              | 208.65           | 202.64                  | 223.13                  | 22.96+                 | 20                               | 0                               | 0.00                                  | 58.19     |      |
| Ac  | 1              | (untiled) | 6            | 771-2              | D     | 795                                   | 2263                            | 74                             | 30.00                              | 55                        | 62                               | 14.37            | 7.18                    | 44.47                   | 5.92                   | 100                              | 500                             | 0.00                                  | 79.24     |      |
|     | 2              | (untiled) | 6            | 771-2              | D     | 509                                   | 2263                            | 74                             | 48.64                              | 37                        | 145                              | 10.38            | 0.89                    | 2.98                    | 1.80                   | 100                              | 50                              | 0.00                                  | 1.91      |      |
|     | 3              | (untiled) | 6            | 771-2              | D     | 128                                   | 2263                            | 74                             | 56.19                              | 9                         | 905                              | 10.83            | 4.23                    | 38.44                   | 2.33                   | 100                              | 500                             | 0.00                                  | 10.03     |      |
| Acf | 1              | (untiled) | 6            |                    |       | 1304                                  | 2263                            | 120                            | 42.00                              | 58                        | 56                               | 6.30             | 1.08                    | 0.02                    | 0.39                   | 100                              | 100                             | 0.00                                  | 5.57      |      |
|     | 2              | (untiled) | 6            |                    |       | 128                                   | 2263                            | 120                            | 84.00                              | 6                         | 1491                             | 7.29             | 0.05                    | 0.00                    | 0.00                   | 100                              | 100                             | 0.00                                  | 0.02      |      |
| Af  | 1              | (untiled) | 6            |                    |       | 680                                   | 2050                            | 120                            | 19.00                              | 33                        | 171                              | 6.86             | 0.44                    | 0.00                    | 0.08                   | 100                              | 100                             | 0.00                                  | 1.17      |      |
|     | 2              | (untiled) | 6            |                    |       | 390                                   | 2050                            | 120                            | 22.00                              | 19                        | 373                              | 6.59             | 0.21                    | 0.00                    | 0.02                   | 100                              | 100                             | 0.00                                  | 0.32      |      |
|     | 3              | (untiled) | 6            |                    |       | 402 <                                 | 2050                            | 120                            | 98.69                              | 110                       | -19                              | 252.19           | 245.83                  | 224.89                  | 31.44+                 | 100                              | 100                             | 0.00                                  | 400.06    |      |
| B   | 1              | (untiled) | 1            | 769-1              | B     | 360                                   | 2050                            | 40                             | 0.00                               | 50                        | 79                               | 25.00            | 17.90                   | 72.48                   | 4.35                   | 20                               | 0                               | 0.00                                  | 5.08      |      |
|     | 2              | (untiled) | 1            | 769-1              | B     | 491                                   | 2150                            | 40                             | 0.00                               | 65                        | 38                               | 28.16            | 20.87                   | 79.67                   | 6.53                   | 20                               | 0                               | 0.00                                  | 8.08      |      |
|     | 3              | (untiled) | 1            | 769-1              | B     | 495                                   | 2100                            | 40                             | 42.00                              | 82                        | 10                               | 40.06            | 32.58                   | 97.61                   | 8.16                   | 20                               | 0                               | 0.00                                  | 12.71     |      |
|     | 4              | (untiled) | 1            | 769-1              | B     | 555                                   | 2050                            | 40                             | 42.00                              | 77                        | 16                               | 38.02            | 25.73                   | 95.50                   | 8.93                   | 20                               | 0                               | 0.00                                  | 11.26     |      |
| Bc  | 1              | (untiled) | 1            | 769-1              | A     | 758                                   | 2050                            | 56                             | 12.00                              | 77                        | 18                               | 29.88            | 17.92                   | 102.42                  | 18.63                  | 100                              | 500                             | 0.00                                  | 140.10    |      |
|     | 2              | (untiled) | 1            | 769-1              | A     | 474                                   | 2050                            | 56                             | 17.00                              | 48                        | 88                               | 30.40            | 18.57                   | 99.87                   | 9.03                   | 100                              | 500                             | 0.00                                  | 87.48     |      |
|     | 3              | (untiled) | 1            | 769-1              | A     | 404 <                                 | 2050                            | 56                             | 58.00                              | 100                       | -10                              | 249.04           | 237.33                  | 315.36                  | 30.83+                 | 100                              | 500                             | 79495.66                              | 80013.73  |      |
| Bcf | 1              | (untiled) | 1            |                    |       | 1226                                  | 2263                            | 120                            | 48.00                              | 54                        | 66                               | 5.16             | 0.94                    | 0.00                    | 0.32                   | 100                              | 100                             | 0.00                                  | 4.54      |      |
|     | 2              | (untiled) | 1            |                    |       | 758                                   | 2263                            | 120                            | 70.00                              | 33                        | 169                              | 5.23             | 0.40                    | 0.00                    | 0.08                   | 100                              | 100                             | 0.00                                  | 1.20      |      |
|     | 3              | (untiled) | 1            |                    |       | 474                                   | 2263                            | 120                            | 79.00                              | 21                        | 330                              | 6.35             | 0.21                    | 0.00                    | 0.03                   | 100                              | 100                             | 0.00                                  | 0.39      |      |

|      |   |            |     |       |   |        |      |     |        |     |      |         |         |        |         |     |     |           |           |
|------|---|------------|-----|-------|---|--------|------|-----|--------|-----|------|---------|---------|--------|---------|-----|-----|-----------|-----------|
|      | 4 | (untitled) | 1   |       |   | 408 <  | 2263 | 120 | 98.57  | 101 | -11  | 147.48  | 141.16  | 161.83 | 20.42+  | 100 | 100 | 0.00      | 239.71    |
| Bf   | 1 | (untitled) | 1   |       |   | 851    | 1800 | 120 | 0.00   | 47  | 90   | 28.23   | 0.89    | 0.00   | 0.21    | 100 | 100 | 0.00      | 3.00      |
|      | 2 | (untitled) | 1   |       |   | 1049   | 1800 | 120 | 0.00   | 58  | 54   | 28.81   | 1.39    | 0.00   | 0.41    | 100 | 100 | 0.00      | 5.77      |
| C    | 1 | (untitled) | 2   | 769-2 | G | 44     | 2100 | 34  | 32.00  | 7   | 1186 | 27.27   | 12.74   | 99.89  | 1.45    | 20  | 0   | 0.00      | 0.44      |
|      | 2 | (untitled) | 2   | 769-2 | G | 354 <  | 2200 | 34  | 16.24  | 98  | -8   | 258.08  | 243.35  | 372.01 | 27.34+  | 20  | 0   | 0.00      | 67.92     |
|      | 3 | (untitled) | 2   | 769-2 | G | 239    | 2050 | 34  | 21.00  | 39  | 132  | 38.22   | 23.30   | 104.60 | 4.55    | 20  | 0   | 0.00      | 4.39      |
| Cf   | 1 | (untitled) | 2   |       |   | 342 <  | 1965 | 120 | 99.25  | 101 | -11  | 330.50  | 313.14  | 413.48 | 33.98+  | 100 | 100 | 0.00      | 440.07    |
|      | 2 | (untitled) | 2   |       |   | 296    | 1965 | 120 | 100.87 | 30  | 204  | 27.45   | 9.95    | 86.66  | 4.89    | 100 | 100 | 0.00      | 14.85     |
| D    | 1 | (untitled) | 3   | 770-1 | B | 148 <  | 2050 | 20  | 13.36  | 100 | -10  | 353.10  | 348.97  | 232.63 | 14.89+  | 20  | 0   | 0.00      | 40.65     |
|      | 2 | (untitled) | 3   | 770-1 | B | 148    | 1850 | 20  | 7.00   | 44  | 106  | 48.70   | 44.57   | 102.45 | 3.21    | 20  | 0   | 0.00      | 5.22      |
|      | 3 | (untitled) | 3   | 770-1 | B | 250 <  | 2250 | 20  | 8.66   | 100 | -10  | 200.68  | 196.71  | 193.31 | 14.39+  | 20  | 0   | 0.00      | 38.82     |
|      | 4 | (untitled) | 3   | 770-1 | B | 254    | 2250 | 20  | 2.00   | 62  | 46   | 47.51   | 43.36   | 90.21  | 3.86    | 20  | 0   | 0.00      | 8.70      |
| Dc   | 1 | (untitled) | 3   | 770-1 | A | 622    | 2100 | 80  | 34.00  | 43  | 108  | 8.06    | 1.95    | 22.59  | 2.47    | 100 | 500 | 0.00      | 13.59     |
|      | 2 | (untitled) | 3   | 770-1 | A | 584 <  | 2100 | 80  | 48.77  | 100 | -10  | 113.99  | 108.12  | 127.52 | 19.56+  | 100 | 500 | 111549.38 | 111844.96 |
|      | 3 | (untitled) | 3   | 770-1 | A | 134    | 2100 | 80  | 74.00  | 9   | 867  | 22.13   | 16.49   | 100.40 | 2.31    | 100 | 500 | 0.00      | 17.10     |
|      | 4 | (untitled) | 3   | 770-1 | A | 103    | 2100 | 80  | 75.09  | 15  | 494  | 39.30   | 33.89   | 102.89 | 1.81    | 100 | 500 | 0.00      | 20.46     |
| Dc f | 1 | (untitled) | 3   |       |   | 719    | 2050 | 120 | 60.00  | 35  | 157  | 5.38    | 0.47    | 0.03   | 0.09    | 100 | 100 | 0.00      | 1.35      |
|      | 2 | (untitled) | 3   |       |   | 472    | 2100 | 120 | 57.00  | 22  | 300  | 5.14    | 0.25    | 0.00   | 0.03    | 100 | 100 | 0.00      | 0.46      |
|      | 3 | (untitled) | 3   |       |   | 622    | 2100 | 120 | 50.00  | 30  | 204  | 7.54    | 0.36    | 0.02   | 0.06    | 100 | 100 | 0.00      | 0.89      |
|      | 4 | (untitled) | 3   |       |   | 579 <  | 2100 | 120 | 86.62  | 99  | -9   | 120.93  | 113.91  | 167.44 | 21.98+  | 100 | 100 | 0.00      | 279.08    |
|      | 5 | (untitled) | 3   |       |   | 134    | 2100 | 120 | 105.00 | 6   | 1315 | 5.02    | 0.06    | 0.00   | 0.00    | 100 | 100 | 0.00      | 0.03      |
|      | 6 | (untitled) | 3   |       |   | 103    | 2050 | 120 | 105.00 | 5   | 1687 | 7.99    | 0.05    | 0.00   | 0.00    | 100 | 100 | 0.00      | 0.02      |
| Df   | 1 | (untitled) | 3-2 |       |   | 1099 < | 1900 | 120 | 101.30 | 371 | -76  | 1346.68 | 1322.68 | 838.01 | 411.42+ | 100 | 100 | 0.00      | 5764.84   |
|      | 2 | (untitled) | 3-2 |       |   | 1353 < | 2250 | 120 | 93.10  | 268 | -66  | 1161.65 | 1137.65 | 630.82 | 441.27+ | 100 | 100 | 0.00      | 6111.32   |
| Dx P | 1 | (untitled) | 3-2 | 770-2 | D | 719    | 2050 | 103 | 27.00  | 40  | 122  | 4.13    | 0.70    | 0.62   | 0.15    | 100 | 100 | 0.00      | 2.11      |
|      | 2 | (untitled) | 3-2 | 770-2 | D | 472    | 2050 | 103 | 37.00  | 27  | 239  | 4.00    | 0.39    | 1.66   | 4.11    | 100 | 100 | 0.00      | 0.98      |
| Ec   | 1 | (untitled) | 4   | 770-3 | F | 323 <  | 2150 | 16  | 0.00   | 100 | -10  | 163.15  | 159.39  | 190.95 | 15.57+  | 100 | 500 | 69204.87  | 69506.51  |

|     |   |            |     |       |   |       |              |     |        |     |              |        |        |        |        |     |     |          |          |
|-----|---|------------|-----|-------|---|-------|--------------|-----|--------|-----|--------------|--------|--------|--------|--------|-----|-----|----------|----------|
|     | 2 | (untitled) | 4   | 770-3 | F | 273   | 2263         | 16  | 2.00   | 80  | 12           | 34.79  | 31.16  | 131.35 | 7.02   | 100 | 500 | 0.00     | 90.98    |
|     | 3 | (untitled) | 4   | 770-3 | F | 339 < | 2263         | 16  | 0.00   | 100 | -10          | 158.89 | 155.38 | 176.42 | 15.69+ | 100 | 500 | 73457.87 | 73762.02 |
|     | 4 | (untitled) | 4   | 770-3 | F | 252   | 2250         | 16  | 4.00   | 75  | 20           | 35.42  | 30.01  | 124.13 | 5.31   | 100 | 500 | 0.00     | 49.48    |
| Ef  | 1 | (untitled) | 4   |       |   | 671   | 2100         | 120 | 55.00  | 32  | 182          | 3.85   | 0.40   | 0.00   | 0.07   | 100 | 100 | 0.00     | 1.06     |
|     | 2 | (untitled) | 4   |       |   | 680 < | 2100         | 120 | 81.74  | 102 | -11          | 109.82 | 106.34 | 124.50 | 22.41+ | 100 | 100 | 0.00     | 311.99   |
|     | 3 | (untitled) | 4   |       |   | 273   | 2263         | 120 | 97.00  | 12  | 647          | 4.71   | 0.11   | 0.00   | 0.01   | 100 | 100 | 0.00     | 0.12     |
|     | 4 | (untitled) | 4   |       |   | 338 < | 2300         | 120 | 102.29 | 100 | -10          | 141.18 | 136.04 | 174.82 | 15.06+ | 100 | 100 | 0.00     | 191.86   |
|     | 5 | (untitled) | 4   |       |   | 269   | 2300         | 120 | 88.00  | 12  | 670          | 5.81   | 0.10   | 0.00   | 0.01   | 100 | 100 | 0.00     | 0.11     |
| Ef  | 1 | (untitled) | 4   |       |   | 935   | 1900         | 120 | 0.00   | 49  | 83           | 16.22  | 0.92   | 0.00   | 0.24   | 100 | 100 | 0.00     | 3.38     |
|     | 2 | (untitled) | 4   |       |   | 521   | 1900         | 120 | 0.00   | 27  | 228          | 15.66  | 0.36   | 0.00   | 0.05   | 100 | 100 | 0.00     | 0.74     |
| Exp | 1 | (untitled) | 4-2 | 770-4 | L | 671   | 2050         | 102 | 45.00  | 38  | 136          | 4.94   | 1.06   | 6.86   | 2.45   | 100 | 100 | 0.00     | 4.27     |
|     | 2 | (untitled) | 4-2 | 770-4 | L | 347   | 2050         | 102 | 49.00  | 20  | 357          | 4.35   | 0.32   | 0.90   | 0.08   | 100 | 100 | 0.00     | 0.54     |
| F   | 1 | (untitled) | 5   | 771-1 | B | 360   | 2100         | 28  | 0.00   | 69  | 31           | 34.11  | 27.73  | 93.30  | 5.69   | 20  | 0   | 0.00     | 7.88     |
|     | 2 | (untitled) | 5   | 771-1 | B | 512 < | 2100         | 28  | 0.00   | 98  | -8           | 85.35  | 78.92  | 161.46 | 15.53+ | 20  | 0   | 0.00     | 31.88    |
|     | 3 | (untitled) | 5   | 771-1 | B | 44    | 2100         | 28  | 28.00  | 8   | 974          | 24.11  | 17.56  | 75.52  | 0.55   | 20  | 0   | 0.00     | 0.61     |
| Fc  | 1 | (untitled) | 5   | 771-1 | A | 645   | 2263         | 72  | 22.00  | 46  | 95           | 22.12  | 2.30   | 10.60  | 1.98   | 100 | 500 | 0.00     | 10.96    |
|     | 2 | (untitled) | 5   | 771-1 | A | 672   | 2263         | 72  | 18.20  | 48  | 86           | 21.25  | 1.92   | 10.54  | 6.60   | 100 | 500 | 0.00     | 10.45    |
|     | 3 | (untitled) | 5   | 771-1 | A | 876   | 2263         | 72  | 26.00  | 63  | 43           | 27.61  | 7.83   | 33.42  | 4.89   | 100 | 500 | 0.00     | 49.13    |
| Ff  | 1 | (untitled) | 5   |       |   | 872   | 1900         | 120 | 0.00   | 46  | 96           | 33.89  | 0.80   | 0.00   | 0.19   | 100 | 100 | 0.00     | 2.76     |
|     | 2 | (untitled) | 5   |       |   | 44    | 1900         | 120 | 120.00 | 2   | 3786         | 33.07  | 0.02   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |
| G   | 1 | (untitled) | 2   | 769-2 | F | 277   | 2050         | 32  | 9.02   | 49  | 83           | 31.48  | 15.50  | 51.07  | 1.98   | 100 | 500 | 0.00     | 29.00    |
|     | 2 | (untitled) | 2   | 769-2 | F | 261   | 2050         | 32  | 2.88   | 46  | 95           | 25.52  | 14.14  | 46.51  | 2.53   | 100 | 500 | 0.00     | 34.00    |
| Gf  | 1 | (untitled) | 4   |       |   | 277   | 2050         | 120 | 58.00  | 14  | 566          | 3.17   | 0.14   | 0.00   | 0.01   | 100 | 100 | 0.00     | 0.15     |
|     | 2 | (untitled) | 4   |       |   | 244   | 2050         | 120 | 58.00  | 12  | 656          | 3.12   | 0.12   | 0.00   | 0.01   | 100 | 100 | 0.00     | 0.11     |
| xA  | 1 | (untitled) | 10  |       |   | 1002  | 2263         | 120 | 40.45  | 45  | 99           | 18.12  | 0.89   | 7.24   | 4.85   | 100 | 100 | 0.00     | 5.88     |
|     | 2 | (untitled) | 10  |       |   | 676   | 2263         | 120 | 64.00  | 30  | 201          | 17.59  | 0.34   | 0.00   | 0.06   | 100 | 100 | 0.00     | 0.90     |
| xB  | 1 | (untitled) |     |       |   | 1226  | Unrestricted | 120 | 4.00   | 0   | Unrestricted | 5.79   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |
| xC  | 1 | (untitled) |     |       |   | 528   | 1900         | 120 | 83.00  | 46  | 94           | 14.75  | 6.08   | 67.18  | 7.16   | 100 | 100 | 0.00     | 24.05    |
|     | 2 | (untitled) |     |       |   | 450   | 1900         | 120 | 77.13  | 36  | 147          | 14.02  | 5.32   | 51.48  | 4.86   | 100 | 100 | 0.00     | 16.86    |
| xD  | 1 | (untitled) |     |       |   | 719   | Unrestricted | 120 | 25.00  | 0   | Unrestricted | 9.11   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |

|      |   |            |          |          |   |       |              |     |        |     |              |        |        |        |        |     |     |          |          |
|------|---|------------|----------|----------|---|-------|--------------|-----|--------|-----|--------------|--------|--------|--------|--------|-----|-----|----------|----------|
|      | 2 | (untitled) |          |          |   | 472   | Unrestricted | 120 | 51.00  | 0   | Unrestricted | 9.16   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |
| xE   | 1 | (untitled) |          |          |   | 671   | Unrestricted | 120 | 11.00  | 0   | Unrestricted | 13.04  | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |
|      | 2 | (untitled) |          |          |   | 348   | Unrestricted | 120 | 55.00  | 0   | Unrestricted | 13.04  | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |
| xF   | 1 | (untitled) |          |          |   | 408   | Unrestricted | 120 | 27.00  | 0   | Unrestricted | 12.35  | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |
| Cc 1 | 1 | (untitled) | 2        | 769-2    | E | 440   | 2050         | 60  | 23.17  | 42  | 113          | 25.23  | 18.58  | 91.43  | 7.78   | 100 | 100 | 0.00     | 47.70    |
| E1   | 1 | (untitled) | 4        | 770-3    | G | 311   | 2050         | 56  | 0.00   | 31  | 187          | 16.28  | 10.28  | 56.17  | 2.93   | 20  | 0   | 0.00     | 2.52     |
|      | 2 | (untitled) | 4        | 770-3    | G | 624   | 2200         | 56  | 0.00   | 59  | 53           | 19.61  | 13.61  | 63.31  | 6.60   | 20  | 0   | 0.00     | 6.70     |
| Gf 1 | 1 | (untitled) | 4        |          |   | 17    | 692          | 120 | 106.00 | 2   | 3622         | 5.80   | 0.06   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |
| Cc 2 | 2 | (untitled) | 2        | 769-2    | D | 678   | 2150         | 62  | 9.02   | 60  | 50           | 20.36  | 10.63  | 62.31  | 7.60   | 100 | 500 | 0.00     | 64.27    |
|      | 3 | (untitled) | 2        | 769-2    | D | 496   | 2050         | 62  | 25.54  | 46  | 97           | 17.31  | 6.38   | 28.48  | 2.92   | 100 | 500 | 0.00     | 21.34    |
|      | 4 | (untitled) | 2        | 769-2    | D | 469   | 2150         | 62  | 3.49   | 41  | 118          | 23.48  | 17.08  | 89.68  | 7.87   | 100 | 500 | 0.00     | 110.11   |
|      | 5 | (untitled) | 2        | 769-2    | D | 354 < | 2050         | 62  | 43.49  | 101 | -11          | 220.46 | 213.57 | 27.185 | 24.38+ | 100 | 500 | 79661.56 | 80129.59 |
|      | 6 | (untitled) | 2        | 769-2    | D | 0     | 2050         | 62  | 64.00  | 0   | Unrestricted | 0.00   | 0.00   | 0.00   | 0.00   | 100 | 500 | 0.00     | 0.00     |
| E2   | 3 | (untitled) | 4        | 770-3    | H | 277   | 2150         | 60  | 0.37   | 25  | 259          | 12.66  | 8.66   | 51.26  | 2.48   | 20  | 0   | 0.00     | 1.89     |
|      | 4 | (untitled) | 4        | 770-3    | H | 244   | 2050         | 60  | 0.00   | 23  | 291          | 12.54  | 8.47   | 49.18  | 2.35   | 20  | 0   | 0.00     | 1.63     |
| TC5  | 2 | (untitled) | TC 771-6 | TC77 7-1 | A | 757   | 2263         | 96  | 28.00  | 41  | 120          | 4.40   | 1.64   | 11.77  | 2.96   | 100 | 100 | 0.00     | 6.00     |
|      | 3 | (untitled) | TC 771-6 | TC77 7-1 | A | 676   | 2263         | 96  | 51.00  | 37  | 146          | 4.02   | 1.26   | 5.41   | 1.55   | 100 | 100 | 0.00     | 3.81     |
|      | 4 | (untitled) | TC 771-6 | TC77 7-1 | C | 0     | 1800         | 8   | 9.00   | 0   | Unrestricted | 0.00   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00     | 0.00     |
| TC9  | 1 | (untitled) | TC 771-6 | TC77 7-1 | B | 583   | 1925         | 84  | 0.00   | 42  | 115          | 18.44  | 7.43   | 35.43  | 6.89   | 100 | 100 | 0.00     | 19.69    |
|      | 2 | (untitled) | TC 771-6 | TC77 7-1 | B | 368   | 1966         | 84  | 0.00   | 26  | 249          | 17.09  | 6.03   | 31.20  | 3.83   | 100 | 100 | 0.00     | 10.19    |
|      | 3 | (untitled) | TC 771-6 | TC77 7-1 | B | 355   | 1947         | 84  | 7.49   | 28  | 227          | 17.33  | 6.21   | 33.85  | 3.70   | 100 | 100 | 0.00     | 10.20    |
| TC35 | 1 | (untitled) | TC 771-6 | TC77 7-1 | A | 254   | 1900         | 96  | 33.00  | 16  | 449          | 3.95   | 1.06   | 9.88   | 1.47   | 100 | 100 | 0.00     | 1.37     |
| TC36 | 1 | (untitled) | TC 771-6 |          |   | 201   | 1800         | 120 | 0.00   | 11  | 706          | 3.15   | 0.13   | 0.00   | 0.01   | 100 | 100 | 0.00     | 0.10     |
| TC37 | 1 | (untitled) | TC 771-6 | TC77 7-2 | J | 35    | 1850         | 105 | 105.00 | 2   | 4102         | 4.09   | 0.90   | 11.69  | 0.14   | 100 | 100 | 0.00     | 0.27     |
| TC38 | 1 | (untitled) | TC 771-6 |          |   | 35    | 437          | 120 | 89.00  | 8   | 1024         | 2.57   | 1.03   | 16.19  | 2.42   | 100 | 100 | 0.00     | 0.34     |
| TC39 | 2 | (untitled) | TC 771-6 |          |   | 757   | 2263         | 120 | 50.00  | 33  | 169          | 2.94   | 0.40   | 0.00   | 0.08   | 100 | 100 | 0.00     | 1.19     |
|      | 3 | (untitled) | TC 771-6 |          |   | 676   | 2263         | 120 | 73.00  | 30  | 201          | 2.74   | 0.34   | 0.00   | 0.06   | 100 | 100 | 0.00     | 0.90     |

|              |   |            |          |         |   |        |              |     |        |     |              |         |         |        |         |     |     |          |          |
|--------------|---|------------|----------|---------|---|--------|--------------|-----|--------|-----|--------------|---------|---------|--------|---------|-----|-----|----------|----------|
| T<br>C4<br>0 | 2 | (untitled) | TC 771-6 |         |   | 792    | Unrestricted | 120 | 18.00  | 0   | Unrestricted | 4.23    | 0.00    | 0.00   | 0.00    | 100 | 100 | 0.00     | 0.00     |
|              | 3 | (untitled) | TC 771-6 |         |   | 676    | Unrestricted | 120 | 51.00  | 0   | Unrestricted | 4.02    | 0.00    | 0.00   | 0.00    | 100 | 100 | 0.00     | 0.00     |
| T<br>C4<br>1 | 1 | (untitled) | TC 771-6 | TC777-1 | D | 166    | 1850         | 13  | 0.00   | 77  | 17           | 81.14   | 77.20   | 111.97 | 6.28    | 100 | 100 | 0.00     | 57.03    |
| T<br>C4<br>2 | 1 | (untitled) | TC 771-6 | TC777-1 | E | 0      | 0            | 0   | 0.00   | 0   | -100         | 0.00    | 0.00    | 0.00   | 0.00    | 100 | 100 | 0.00     | 0.00     |
| T<br>C4<br>3 | 1 | (untitled) |          |         |   | 0      | 1800         | 120 | 120.00 | 0   | Unrestricted | 0.00    | 0.00    | 0.00   | 0.00    | 100 | 100 | 0.00     | 0.00     |
| 47           | 1 | (untitled) | 2        |         |   | 977    | 1300         | 120 | 28.00  | 75  | 20           | 20.18   | 4.15    | 0.00   | 1.13    | 100 | 100 | 0.00     | 15.99    |
| 48           | 1 | (untitled) | 2        |         |   | 1653 < | 1965         | 120 | 81.03  | 259 | -65          | 1119.86 | 1113.25 | 612.34 | 528.85+ | 100 | 100 | 0.00     | 7307.55  |
| 49           | 1 | (untitled) | TC 771-6 |         |   | 653    | 1900         | 120 | 0.00   | 34  | 162          | 3.64    | 0.50    | 0.00   | 0.09    | 100 | 100 | 0.00     | 1.28     |
|              | 2 | (untitled) | TC 771-6 |         |   | 653    | 1900         | 120 | 0.00   | 34  | 162          | 3.64    | 0.50    | 0.00   | 0.09    | 100 | 100 | 0.00     | 1.28     |
| 50           | 1 | (untitled) | 1        |         |   | 2017 < | 1900         | 120 | 0.00   | 106 | -15          | 122.91  | 117.14  | 76.05  | 65.63+  | 100 | 100 | 0.00     | 950.05   |
| 51           | 1 | (untitled) | 4-2      |         |   | 916    | 1900         | 120 | 0.00   | 48  | 87           | 5.38    | 0.88    | 0.00   | 0.22    | 100 | 100 | 0.00     | 3.18     |
| 52           | 1 |            | 1        | 770-3   | A | 240 <  | 1800         | 14  | 0.00   | 100 | -10          | 507.87  | 487.11  | 581.92 | 36.27+  | 100 | 500 | 61507.90 | 6205.665 |
|              | 2 |            | 1        | 770-3   | A | 240 <  | 1800         | 14  | 0.00   | 100 | -10          | 507.82  | 487.03  | 581.60 | 36.26+  | 100 | 500 | 61397.64 | 6194.621 |
| 53           | 1 |            | 2        |         |   | 544 <  | 1800         | 120 | 104.00 | 227 | -60          | 1024.02 | 1018.74 | 533.53 | 164.03+ | 100 | 100 | 0.00     | 2203.59  |
|              | 2 |            | 2        |         |   | 555 <  | 1800         | 120 | 104.02 | 231 | -61          | 1038.46 | 1033.39 | 562.27 | 161.79+ | 100 | 100 | 0.00     | 2278.51  |

## Pedestrian Crossing Results

|            |      |            |              | SIGNALS           |       |                                   | FLOWS                        |                              | PERFORMANCE              |                            |                  | PER PED                |                      | QUEUES              | WEIGHTS                              | PENALTIES | P.I. |
|------------|------|------------|--------------|-------------------|-------|-----------------------------------|------------------------------|------------------------------|--------------------------|----------------------------|------------------|------------------------|----------------------|---------------------|--------------------------------------|-----------|------|
| Pedestrian | Side | Name       | Traffic node | Controller stream | Phase | Calculated Flow Entering (Ped/hr) | Calculated sat flow (Ped/hr) | Actual green (s (per cycle)) | Degree of saturation (%) | Practical reserve capacity | Journey Time (s) | Mean Delay per Ped (s) | Mean max queue (Ped) | Delay weighting (%) | Cost of traffic penalties (£ per hr) | P.I.      |      |
| 1          | 1    | (untitled) | 3-2          | 770-2             | E     | 0                                 | 11000                        | 5                            | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 3-2          | 770-2             | E     | 0                                 | 11000                        | 5                            | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
| 2          | 1    | (untitled) | 3            | 770-1             | C     | 0                                 | 11000                        | 76                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 3            | 770-1             | C     | 0                                 | 11000                        | 76                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
| 3          | 1    | (untitled) | 4-2          | 770-4             | M     | 0                                 | 11000                        | 6                            | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 4-2          | 770-4             | M     | 0                                 | 11000                        | 6                            | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
| 4          | 1    | (untitled) | 4            | 770-3             | J     | 0                                 | 11000                        | 22                           | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |



|              |         |         |      |         |          |         |           |           |
|--------------|---------|---------|------|---------|----------|---------|-----------|-----------|
| <b>TOTAL</b> | 5805.79 | 2328.59 | 2.49 | 2169.36 | 29397.51 | 1541.51 | 536274.88 | 567213.90 |
|--------------|---------|---------|------|---------|----------|---------|-----------|-----------|

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- \* = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- **P.I. = PERFORMANCE INDEX**

# TRANSYT 16

Version: 16.0.1.8473  
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+44 (0)1344 379777 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:** M62 JN 28 CRF Scheme\_Mar 20\_PF\_Sept 20\_RevC\_mitigation  
DS\_optA+B\_2032+Com+CP+Dev\_04.t16  
**Path:** P:\133--\A13398-VAA Land at Chidswell\30 Technical\31 Modelling\Transyt\Option A+B  
**Report generation date:** 24/01/2021 14:37:14

## » Network Diagrams

« A16 - PM Base 2032 + Com Dev + CP + Dev : D16 - PM 2032 + Com Dev + CP + Dev, :

## » Summary

## » Network Options

## » Traffic Nodes

## » Arms and Traffic Streams

## » Pedestrian Crossings

## » Local OD Matrix - Local Matrix: 1

## » Signal Timings

## » Results - Link

## » Results - Traffic Stream

## » Data Entry - Stage Start and End

## » Data Entry - Phase

## » Data Entry - Traffic Stream

## » Data entry - Link

## » Results - Pedestrian

## » Collections

## » Point to Point Journey Time

## » Final Prediction Table

## Summary of network performance

|         | Set ID   | Cycle time (s) | PI (£ per hr) | Total delay (PCU-hr/hr) | Highest DOS    | Number oversaturated |
|---------|--|----------------|---------------|-------------------------|----------------|----------------------|
|         | PM Base 2032 + Com Dev + CP + Dev - PM 2032 + Com Dev + CP + Dev |                |               |                         |                |                      |
| Network | A16<br>D16   | 60             | 201588.95     | 1128.21                 | 142% (TS 51/1) | 27 (17%)             |

*There are warnings associated with this model run - see the 'Data Errors and Warnings' tables.*

## File summary

### File description

|             |            |
|-------------|------------|
| File title  | (untitled) |
| Location    |            |
| Site number |            |
| UTCRegion   |            |

|              |                |
|--------------|----------------|
| Driving side | Left           |
| Date         | 01/03/2017     |
| Version      |                |
| Status       | [no status]    |
| Identifier   |                |
| Client       |                |
| Jobnumber    |                |
| Enumerator   | LEEDS\00730414 |
| Description  |                |

## Model and Results

| Enable controller offsets | Enable fuel consumption | Enable quick flares | Display journey time results | Display OD matrix distances | Display level of service results | Display blocking and starvation results | Display end of red and green queue results | Display excess queue results | Display separate uniform and random results | Display unweighted results | Display TRANSYT 12 style timings | Display effective greens in results | Display Red-With-Ambler | Display End-Of-Green Ambler | Display controller phase minimums |
|---------------------------|-------------------------|---------------------|------------------------------|-----------------------------|----------------------------------|---|--|------------------------------|---|----------------------------|----------------------------------|-------------------------------------|-------------------------|-----------------------------|-----------------------------------|
|                           |                         |                     |                              |                             |                                  |   |  |                              |   |                            |                                  |                                     |                         |                             |                                   |

## Units

| Cost units | Speed units | Distance units | Fuel economy units | Fuel rate units | Mass units | Traffic units input | Traffic units results | Flow units | Average delay units | Total delay units | Rate of delay units |
|------------|-------------|----------------|--------------------|-----------------|------------|---------------------|-----------------------|------------|---------------------|-------------------|---------------------|
| £          | kph         | m              | mpg                | l/h             | kg         | PCU                 | PCU                   | perHour    | s                   | -Hour             | perHour             |

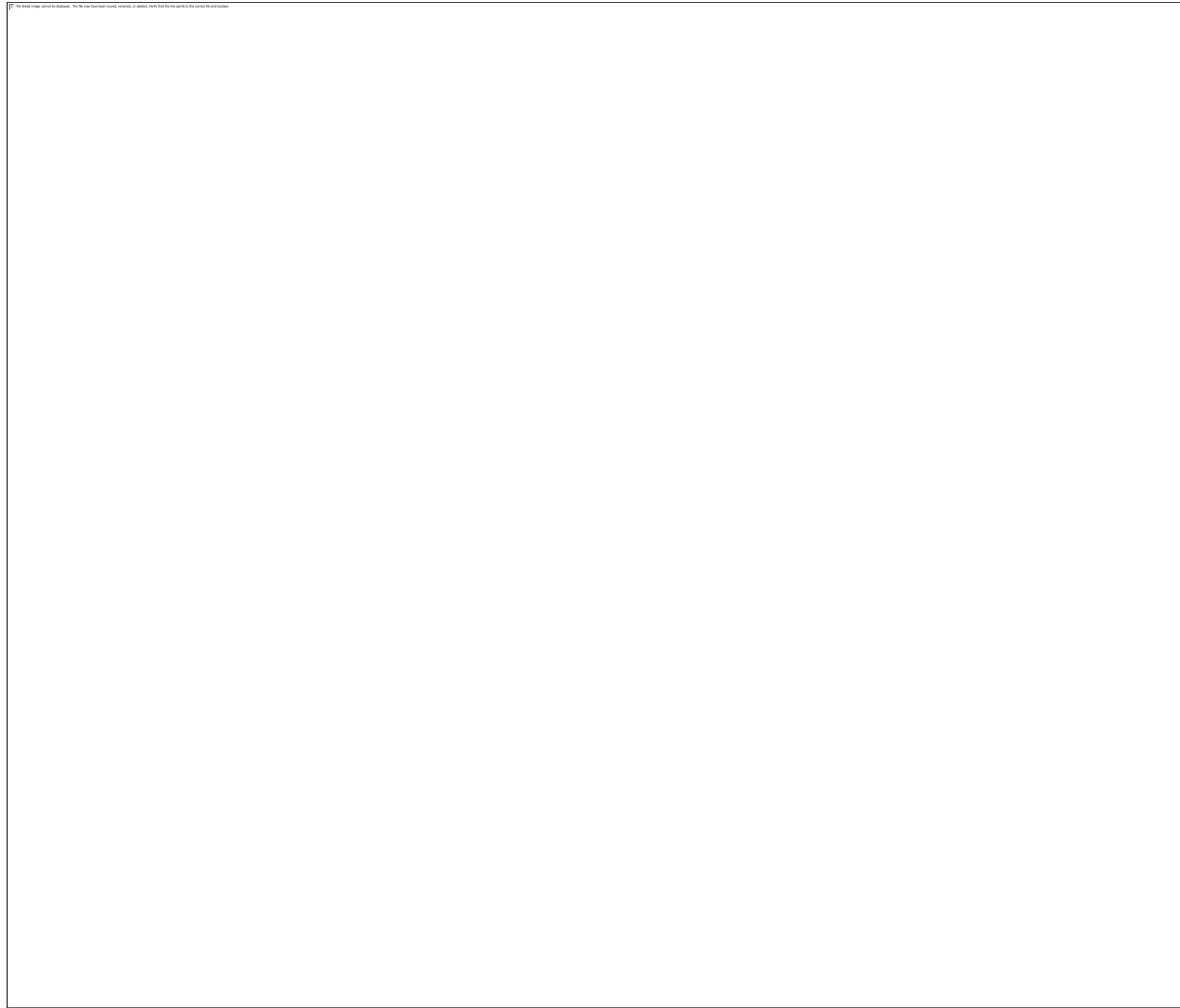
## Sorting

| Show names instead of IDs | Sorting direction | Sorting type | Ignore prefixes when sorting | Analysis/demand set sorting | Link grouping | Source grouping | Colour Analysis/Demand Sets |
|---------------------------|-------------------|--------------|------------------------------|-----------------------------|---------------|-----------------|-----------------------------|
|                           | Ascending         | Numerical    |                              | ID                          | Normal        | Normal          | ✓                           |

## Simulation options

| Criteria type | Stop criteria (%) | Stop criteria time (s) | Stop criteria number of trials | Random seed | Results refresh speed (s) | Average animation capture interval (s) | Use quick response | Do flow sampling | Uniform vehicle generation | Last run random seed | Last run number of trials | Last run time taken (s) |
|---------------|-------------------|------------------------|--------------------------------|-------------|---------------------------|--|--------------------|------------------|----------------------------|----------------------|---------------------------|-------------------------|
| Delay         | 3.00              | 999                    | 200                            | -1          | 3                         | 60                                     | ✓                  |                  |                            | 0                    | 0                         | 0.00                    |

## Network Diagrams



# A16 - PM Base 2032 + Com Dev + CP + Dev D16 - PM 2032 + Com Dev + CP + Dev,

## Summary

### Data Errors and Warnings

| Severity | Area                | Item                        | Description   |
|----------|---------------------|-----------------------------|---|
| Warning  | Traffic Stream Data | Arm Bf - Traffic Stream 1   | Arm Bf - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Bf - Traffic Stream 2   | Arm Bf - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Ff - Traffic Stream 1   | Arm Ff - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm Ff - Traffic Stream 2   | Arm Ff - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm xA - Traffic Stream 1   | Arm xA - Traffic Stream 1 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm xA - Traffic Stream 2   | Arm xA - Traffic Stream 2 is over 200m. Recommend the use of PDM to model platooning effects. |
| Warning  | Traffic Stream Data | Arm TC38 - Traffic Stream 1 | Traffic Stream 1: CTM uses a whole number of cells. CTM is using the length adjusted by 30%.  |

|         |                        |  |  |
|---------|------------------------|--|--|
| Warning | Local Matrix           | Local Matrix 1                                     | Local Matrix 1: Auto Calculate option is switched off - OD flows will not be allocated automatically to the network. |
| Warning | Traffic Stream Signals | Arm TC5 - Traffic Stream 4 - Signals (TC777-1, C)  | Traffic Stream 4 controlling phase C never runs in the current stage sequence.                                       |
| Warning | Traffic Stream Signals | Arm TC42 - Traffic Stream 1 - Signals (TC777-1, E) | Traffic Stream 1 controlling phase E never runs in the current stage sequence.                                       |
| Info    | Arm Data               | Arm xC   | No traffic node specified for arm(s): xC   |
| Info    | Traffic Stream Signals | Arm TC5 - Traffic Stream 4 - Signals (TC777-1, C)  | Traffic Stream 4 controlling phase C never runs in stage sequence 1.   |
| Info    | Traffic Stream Signals | Arm TC42 - Traffic Stream 1 - Signals (TC777-1, E) | Traffic Stream 1 controlling phase E never runs in stage sequence 1.   |

## Run Summary

| Analysis set used | Run start time      | Run finish time     | Run duration (s) | Modeling start time (HH:mm) | Network Cycle Time (s) | Performance Index (£ per hr) | Total network delay (PCU - hr/hr) | Highest DOS (%) | Item with highest DOS | Number of oversaturated items | Percentage of oversaturated items (%) | Item with worst signalised PRC | Item with worst unsignalised PRC | Item with worst overall PRC | Network within capacity |
|-------------------|---------------------|---------------------|------------------|-----------------------------|------------------------|------------------------------|-----------------------------------|-----------------|-----------------------|-------------------------------|---------------------------------------|--------------------------------|----------------------------------|-----------------------------|-------------------------|
| 16                | 24/01/2021 14:36:13 | 24/01/2021 14:36:27 | 14.67            | 16:30                       | 60                     | 201588.95                    | 1128.21                           | 142.14          | 51/1                  | 27                            | 17                                    | TC5/4                          | 51/1                             | TC5/4                       |                         |

## Analysis Set Details

| Name                              | Use Simulation | Description | Use specific Demand Set(s) | Specific Demand Set(s) | Optimise specific Demand Set(s) | Include in report | Locked |
|-----------------------------------|----------------|-------------|----------------------------|------------------------|---------------------------------|-------------------|--------|
| PM Base 2032 + Com Dev + CP + Dev |                |             | ✓                          | D16                    |                                 | ✓                 |        |

## Demand Set Details

| Scenario name                | Time Period name | Description | Composite | Demand sets | Start time (HH:mm) | Locked | Run automatically |
|------------------------------|------------------|-------------|-----------|-------------|--------------------|--------|-------------------|
| PM 2032 + Com Dev + CP + Dev |                  |             |           |             | 16:30              |        | ✓                 |

## Network Options

### Network timings

| Network cycle time (s) | Minimum possible cycle time (s) | Absolute minimum possible cycle time (s) | Restrict to SCOOT cycle times | Time segment length (min) | Number of time segments | Modelled time period (min) |
|------------------------|---------------------------------|--|-------------------------------|---------------------------|-------------------------|----------------------------|
| 60                     | 37                              | 37                                       |                               | 60                        | 1                       | 60                         |

### Signals options

| Start displacement (s) | End displacement (s) |
|------------------------|----------------------|
| 2                      | 3                    |

### Advanced

| Phase minimum broken penalty (£) | Phase maximum broken penalty (£) | Intergreen broken penalty (£) | Starting Red-with-Amber (s) | Missing stage transition options |
|----------------------------------|----------------------------------|-------------------------------|-----------------------------|----------------------------------|
| 10000.00                         | 10000.00                         | 10000.00                      | 2                           | Assume banned                    |

## Traffic options

| Traffic model            | Vehicle flow scaling factor (%) | Pedestrian flow scaling factor (%) | Cruise times or speeds |
|--------------------------|---------------------------------|------------------------------------|------------------------|
| Platoon Dispersion (PDM) | 100                             | 100                                | Cruise Speeds          |

## Advanced

| Resolution | DOS Threshold (%) | Cruise scaling factor (%) | Use link stop weightings | Use link delay weightings | Exclude pedestrians from traffic model | Exclude pedestrians from results calculation | Random delay mode | Type of Vehicle-in-Service | Type of random parameter | PCU Length (m) | Calculate results for Path Segments | Generate PDM Profile Data |
|------------|-------------------|---------------------------|--------------------------|---------------------------|--|--|-------------------|----------------------------|--------------------------|----------------|-------------------------------------|---------------------------|
| 1          | 90                | 100                       | ✓                        | ✓                         |  |  | Complex           | Uniform (TRANSYT)          | Uniform (TRANSYT)        | 5.75           |                                     | ✓                         |

## Normal Traffic parameters

| Dispersion type | Dispersion coefficient | Travel time coefficient |
|-----------------|------------------------|-------------------------|
| Default         | 35                     | 80                      |

## Normal Traffic Types

| Name   | PCU Factor |
|--------|------------|
| Normal | 1.00       |

## Bus parameters

| Name | PCU Factor | Dispersion type | Acceleration (ms <sup>-2</sup> ) | Stationary time coefficient | Cruise time coefficient |
|------|------------|-----------------|----------------------------------|-----------------------------|-------------------------|
| Bus  | 1.00       | Default         | 0.94                             | 30                          | 85                      |

## Tram parameters

| Name | PCU Factor | Dispersion type | Acceleration (ms <sup>-2</sup> ) | Stationary time coefficient | Cruise time coefficient |
|------|------------|-----------------|----------------------------------|-----------------------------|-------------------------|
| Tram | 1.00       | Default         | 0.94                             | 100                         | 100                     |

## Pedestrian parameters

| Dispersion type |
|-----------------|
| Default         |

## Optimisation options

| Enable optimisation | Auto redistribute | Optimisation level       | Enable OUT Profile accuracy |
|---------------------|-------------------|--------------------------|-----------------------------|
| ✓                   |                   | Offsets And Green Splits | ✓                           |

## Advanced

| Optimisation type            | Hill climb increments        | OUTProfile accuracy (%)            | Use enhanced optimisation | Auto optimisation order | Optimisation order   | Master controller | Offsets relative to master controller | Master controller offset after each run |
|------------------------------|------------------------------|------------------------------------|---------------------------|-------------------------|--|-------------------|---------------------------------------|---|
| Standard accuracy Hill Climb | 15, 40, -1, 15, 40, 1, -1, 1 | 50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05 |                           | ✓                       | 769-1, 769-2, 770-1, 770-2, 770-3, 770-4, 771-1, 771-2, TC777-1, TC777-2 |                   |                                       | Do nothing                              |

## Economics

| Vehicle Monetary Value Of Delay (£ per PCU-hr) | Vehicle Monetary Value Of Stops (£ per 100 stops) | Pedestrian monetary value of delay (£ per Ped-hr) |
|--|---|---|
| 14.20  | 2.60  | 14.20   |

## Traffic Nodes

## Traffic Nodes

| Traffic node | Name       | Description |
|--------------|------------|-------------|
| (ALL)        | (untitled) |             |

## Arms and Traffic Streams

### Arms

| Arm  | Name                      | Description | Traffic node |
|------|---------------------------|-------------|--------------|
| A    | Dewsbury Rd SB            |             | 6            |
| Ac   | (untitled)                |             | 6            |
| Acf  | (untitled)                |             | 6            |
| Af   | Dewsbury Rd SB            |             | 6            |
| B    | M62 WB off slip           |             | 1            |
| Bc   | (untitled)                |             | 1            |
| Bcf  | (untitled)                |             | 1            |
| Bf   | M62 WB off slip           |             | 1            |
| C    | Bradford Rd WB            |             | 2            |
| Cf   | Bradford Rd WB            |             | 2            |
| D    | Dewsbury Rd NB            |             | 3            |
| Dc   | (untitled)                |             | 3            |
| Dcf  | (untitled)                |             | 3            |
| Df   | Dewsbury Rd NB            |             | 3-2          |
| Dxp  | Dewsbury Rd exit SB (ped) |             | 3-2          |
| Ec   | (untitled)                |             | 4            |
| Ecf  | (untitled)                |             | 4            |
| Ef   | Bradford Rd EB            |             | 4            |
| Exp  | Bradford Rd exit WB (ped) |             | 4-2          |
| F    | M62 EB off slip           |             | 5            |
| Fc   | (untitled)                |             | 5            |
| Ff   | M62 EB off slip           |             | 5            |
| G    | (untitled)                |             | 2            |
| Gf   | (untitled)                |             | 4            |
| xA   | Dewsbury Rd exit NB       |             | 10           |
| xB   | M62 EB on slip            |             |              |
| xC   | (untitled)                |             |              |
| xD   | Dewsbury Rd exit SB       |             |              |
| xE   | Bradford Rd exit WB       |             |              |
| xF   | M62 WB on slip            |             |              |
| Cc1  | (untitled)                |             | 2            |
| E1   | Bradford Rd EB (left)     |             | 4            |
| Gf1  | (untitled)                |             | 4            |
| Cc2  | (untitled)                |             | 2            |
| E2   | Bradford Rd EB (ahead)    |             | 4            |
| TC5  | (untitled)                |             | TC771-6      |
| TC9  | (untitled)                |             | TC771-6      |
| TC35 | (untitled)                |             | TC771-6      |
| TC36 | (untitled)                |             | TC771-6      |
| TC37 | (untitled)                |             | TC771-6      |
| TC38 | (untitled)                |             | TC771-6      |
| TC39 | (untitled)                |             | TC771-6      |
| TC40 | (untitled)                |             | TC771-6      |
| TC41 | (untitled)                |             | TC771-6      |
| TC42 | (untitled)                |             | TC771-6      |
| TC43 | (untitled)                |             |              |

|    |            |  |         |
|----|------------|--|---------|
| 47 | (untitled) |  | 2       |
| 48 | (untitled) |  | 2       |
| 49 | (untitled) |  | TC771-6 |
| 50 | (untitled) |  | 1       |
| 51 | (untitled) |  | 4-2     |
| 52 |            |  | 1       |
| 53 |            |  | 2       |

## Traffic Streams

| Arm | Traffic Stream | Name       | Description | Auto length | Length (m) | Has Saturation Flow | Saturation flow source | Saturation flow (PCU/hr) | Auto-calculated cell saturation flow | Cell saturation flow (PCU/hr) | Is signal controlled | Is give way | Traffic type | Allow Nearside Turn On Red |
|-----|----------------|------------|-------------|-------------|------------|---------------------|------------------------|--------------------------|--------------------------------------|-------------------------------|----------------------|-------------|--------------|----------------------------|
| A   | 1              | (untitled) | M62E        | ✓           | 74.35      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Wake        | ✓           | 76.69      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Dews        | ✓           | 78.40      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 4              | (untitled) | Brad/M62W   | ✓           | 80.11      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Ac  | 1              | (untitled) | M62E        | ✓           | 95.80      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Wake        | ✓           | 92.34      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Dews/Brad   | ✓           | 87.95      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
| Acf | 1              | (untitled) |             | ✓           | 69.59      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |             | ✓           | 70.42      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
| Af  | 1              | (untitled) | M62E/Wake   | ✓           | 53.54      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 2              | (untitled) | Dews        | ✓           | 53.19      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 3              | (untitled) | Brad/M62W   | ✓           | 53.01      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          |                      |             | Normal       |                            |
| B   | 1              | (untitled) | Wake/Dews   | ✓           | 94.67      | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Brad        | ✓           | 97.18      | ✓                   | Directly entered       | 2150                     |                                      | 2150                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Leeds       | ✓           | 99.69      | ✓                   | Directly entered       | 2100                     |                                      | 2100                          | ✓                    |             | Normal       |                            |
|     | 4              | (untitled) |             | ✓           | 102.42     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Bc  | 1              | (untitled) | Wake        | ✓           | 132.85     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
|     | 2              | (untitled) | Dews        | ✓           | 131.47     | ✓                   | Directly entered       | 2050                     |                                      | 2263                          | ✓                    |             | Normal       |                            |
|     | 3              | (untitled) | Brad/M62W   | ✓           | 130.10     | ✓                   | Directly entered       | 2050                     |                                      | 2050                          | ✓                    |             | Normal       |                            |
| Bcf | 1              | (untitled) |             | ✓           | 62.77      | ✓                   | Directly entered       | 2263                     |                                      | 2263                          |                      |             | Normal       |                            |
|     | 2              | (untitled) |             | ✓           | 62.62      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 3              | (untitled) |             | ✓           | 62.46      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
|     | 4              | (untitled) |             | ✓           | 62.38      | ✓                   | Directly entered       | 2263                     |                                      | 2050                          |                      |             | Normal       |                            |
| Bf  | 1              | (untitled) |             | ✓           | 227.81     | ✓                   | Sum of lanes           | 1800                     |                                      | 1600                          |                      |             | Normal       |                            |

|     |   |            |                 |   |        |   |                  |      |  |      |   |  |        |
|-----|---|------------|-----------------|---|--------|---|------------------|------|--|------|---|--|--------|
|     | 2 | (untitled) |                 | ✓ | 228.44 | ✓ | Sum of lanes     | 1800 |  | 1700 |   |  | Normal |
| C   | 1 | (untitled) | Dews/Brad       | ✓ | 121.13 | ✓ | Directly entered | 2100 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) | M62W/Brad/Leeds | ✓ | 122.73 | ✓ | Directly entered | 2200 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds/M62E      | ✓ | 124.35 | ✓ | Directly entered | 2050 |  | 1900 | ✓ |  | Normal |
| Cf  | 1 | (untitled) |                 | ✓ | 144.60 | ✓ | Sum of lanes     | 1965 |  | 1965 |   |  | Normal |
|     | 2 | (untitled) |                 | ✓ | 145.86 | ✓ | Sum of lanes     | 1965 |  | 1965 |   |  | Normal |
| D   | 1 | (untitled) | Brad/M62        |   | 55.00  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds           |   | 55.00  | ✓ | Directly entered | 1850 |  | 2075 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds/M62/Wake  | ✓ | 52.87  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
|     | 4 | (untitled) | Leeds/M62/Wake  | ✓ | 55.42  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
| Dc  | 1 | (untitled) | Brad            | ✓ | 50.91  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 2 | (untitled) | Brad/M62W       | ✓ | 48.96  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds           | ✓ | 47.02  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
|     | 4 | (untitled) | Leeds/M62E      | ✓ | 45.07  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |  | Normal |
| Dcf | 1 | (untitled) |                 | ✓ | 65.43  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
|     | 2 | (untitled) |                 | ✓ | 65.28  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 3 | (untitled) |                 | ✓ | 65.54  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 4 | (untitled) |                 | ✓ | 67.69  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 5 | (untitled) |                 | ✓ | 66.13  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 6 | (untitled) |                 | ✓ | 66.17  | ✓ | Directly entered | 2050 |  | 2050 |   |  | Normal |
| Df  | 1 | (untitled) |                 |   | 200.00 | ✓ | Sum of lanes     | 1900 |  |      |   |  | Normal |
|     | 2 | (untitled) |                 |   | 200.00 | ✓ | Directly entered | 2250 |  |      |   |  | Normal |
| Dxp | 1 | (untitled) |                 | ✓ | 45.75  | ✓ | Directly entered | 2050 |  |      | ✓ |  | Normal |
|     | 2 | (untitled) |                 | ✓ | 48.11  | ✓ | Directly entered | 2050 |  |      | ✓ |  | Normal |
| Ec  | 1 | (untitled) | M62W            | ✓ | 50.09  | ✓ | Directly entered | 2150 |  | 2150 | ✓ |  | Normal |
|     | 2 | (untitled) | Leeds           | ✓ | 48.43  | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 3 | (untitled) | Leeds           | ✓ | 46.77  | ✓ | Directly entered | 2263 |  | 2263 | ✓ |  | Normal |
|     | 4 | (untitled) | M62E            | ✓ | 45.11  | ✓ | Directly entered | 2250 |  | 2250 | ✓ |  | Normal |
| Ecf | 1 | (untitled) |                 | ✓ | 45.94  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 2 | (untitled) |                 | ✓ | 46.37  | ✓ | Directly entered | 2100 |  | 2100 |   |  | Normal |
|     | 3 | (untitled) |                 | ✓ | 46.95  | ✓ | Directly entered | 2263 |  | 2263 |   |  | Normal |
|     | 4 | (untitled) |                 | ✓ | 47.51  | ✓ | Directly entered | 2300 |  | 2300 |   |  | Normal |

|     |   |            |            |   |        |   |                  |      |  |      |   |   |        |  |
|-----|---|------------|------------|---|--------|---|------------------|------|--|------|---|---|--------|--|
|     | 5 | (untitled) |            | ✓ | 48.55  | ✓ | Directly entered | 2300 |  | 2300 |   |   | Normal |  |
| Ef  | 1 | (untitled) |            | ✓ | 127.54 | ✓ | Directly entered | 1900 |  |      |   |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 127.54 | ✓ | Sum of lanes     | 1900 |  |      |   |   | Normal |  |
| Exp | 1 | (untitled) |            | ✓ | 51.83  | ✓ | Directly entered | 2050 |  | 2100 | ✓ |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 53.71  | ✓ | Directly entered | 2050 |  | 2100 | ✓ |   | Normal |  |
| F   | 1 | (untitled) | Leeds      | ✓ | 85.13  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |   | Normal |  |
|     | 2 | (untitled) | Wake       | ✓ | 85.72  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |   | Normal |  |
|     | 3 | (untitled) | Dews/Brad  | ✓ | 87.25  | ✓ | Directly entered | 2100 |  | 2100 | ✓ |   | Normal |  |
| Fc  | 1 | (untitled) | Leeds      | ✓ | 178.68 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |   | Normal |  |
|     | 2 | (untitled) | Leeds      | ✓ | 175.19 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |   | Normal |  |
|     | 3 | (untitled) | M62E/Dews  | ✓ | 180.28 | ✓ | Directly entered | 2263 |  | 2263 | ✓ |   | Normal |  |
| Ff  | 1 | (untitled) |            | ✓ | 275.73 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 275.39 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |   | Normal |  |
| G   | 1 | (untitled) |            | ✓ | 155.36 | ✓ | Directly entered | 2050 |  | 2050 | ✓ |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 151.80 | ✓ | Directly entered | 2050 |  | 2050 | ✓ |   | Normal |  |
| Gf  | 1 | (untitled) |            | ✓ | 40.48  | ✓ | Directly entered | 2050 |  | 2050 |   |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 40.06  | ✓ | Directly entered | 2050 |  | 2050 |   |   | Normal |  |
| xA  | 1 | (untitled) |            | ✓ | 229.66 | ✓ | Directly entered | 2263 |  | 2263 |   |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 229.97 | ✓ | Directly entered | 2263 |  | 2263 |   |   | Normal |  |
| xB  | 1 | (untitled) |            | ✓ | 77.15  |   |                  |      |  |      |   |   | Normal |  |
| xC  | 1 | (untitled) |            | ✓ | 115.60 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 115.98 | ✓ | Sum of lanes     | 1900 |  | 1900 |   |   | Normal |  |
| xD  | 1 | (untitled) |            | ✓ | 121.44 |   |                  |      |  |      |   |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 122.12 |   |                  |      |  |      |   |   | Normal |  |
| xE  | 1 | (untitled) |            | ✓ | 173.89 |   |                  |      |  |      |   |   | Normal |  |
|     | 2 | (untitled) |            | ✓ | 173.83 |   |                  |      |  |      |   |   | Normal |  |
| xF  | 1 | (untitled) |            | ✓ | 158.35 |   |                  |      |  |      |   |   | Normal |  |
| Cc1 | 1 | (untitled) | Wake       | ✓ | 95.84  | ✓ | Directly entered | 2050 |  | 2050 | ✓ |   | Normal |  |
| E1  | 1 | (untitled) | M62W/Leeds |   | 80.00  | ✓ | Directly entered | 2050 |  | 1900 | ✓ |   | Normal |  |
|     | 2 | (untitled) | Leeds/M62E |   | 80.00  | ✓ | Directly entered | 2200 |  | 2100 | ✓ |   | Normal |  |
| Gf1 | 1 | (untitled) |            | ✓ | 47.81  |   |                  |      |  |      |   | ✓ | Normal |  |
| Cc2 | 2 | (untitled) | Dews       | ✓ | 91.52  | ✓ | Directly entered | 2150 |  | 2100 | ✓ |   | Normal |  |

|      |   |            |           |   |        |   |                  |      |   |      |   |   |        |
|------|---|------------|-----------|---|--------|---|------------------|------|---|------|---|---|--------|
|      | 3 | (untitled) | Brad/M62W | ✓ | 91.11  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |
|      | 4 | (untitled) | Dews/Brad | ✓ | 90.39  | ✓ | Directly entered | 2150 |   | 2100 | ✓ |   | Normal |
|      | 5 | (untitled) | Leeds     | ✓ | 90.48  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |
|      | 6 | (untitled) | Leeds     | ✓ | 88.08  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |
| E2   | 3 | (untitled) | Wake      | ✓ | 53.28  | ✓ | Directly entered | 2150 |   | 2050 | ✓ |   | Normal |
|      | 4 | (untitled) | Wake      | ✓ | 54.33  | ✓ | Directly entered | 2050 |   | 2050 | ✓ |   | Normal |
| TC5  | 2 | (untitled) |           | ✓ | 23.03  | ✓ | Sum of lanes     | 2263 |   | 2263 | ✓ |   | Normal |
|      | 3 | (untitled) |           | ✓ | 23.02  | ✓ | Directly entered | 2263 |   | 2263 | ✓ |   | Normal |
|      | 4 | (untitled) |           | ✓ | 24.43  | ✓ | Sum of lanes     | 1800 |   | 2263 | ✓ |   | Normal |
| TC9  | 1 | (untitled) |           | ✓ | 91.71  | ✓ | Directly entered | 1925 |   | 1925 | ✓ |   | Normal |
|      | 2 | (untitled) |           | ✓ | 92.21  | ✓ | Sum of lanes     | 1966 |   | 1966 | ✓ |   | Normal |
|      | 3 | (untitled) |           | ✓ | 92.69  | ✓ | Sum of lanes     | 1947 |   | 1947 | ✓ |   | Normal |
| TC35 | 1 | (untitled) |           | ✓ | 24.16  | ✓ | Directly entered | 1900 |   | 2263 | ✓ |   | Normal |
| TC36 | 1 | (untitled) |           | ✓ | 25.22  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |
| TC37 | 1 | (untitled) |           | ✓ | 44.32  | ✓ | Directly entered | 1850 |   | 1850 | ✓ |   | Normal |
| TC38 | 1 | (untitled) |           | ✓ | 21.32  | ✓ | Directly entered | 1850 |   | 1850 |   | ✓ | Normal |
| TC39 | 2 | (untitled) |           | ✓ | 35.24  | ✓ | Directly entered | 2263 |   | 2263 |   |   | Normal |
|      | 3 | (untitled) |           | ✓ | 33.28  | ✓ | Directly entered | 2263 |   | 2263 |   |   | Normal |
| TC40 | 2 | (untitled) |           | ✓ | 58.74  |   |                  |      |   |      |   |   | Normal |
|      | 3 | (untitled) |           | ✓ | 55.82  |   |                  |      |   |      |   |   | Normal |
| TC41 | 1 | (untitled) |           | ✓ | 54.63  | ✓ | Directly entered | 1850 |   | 1850 | ✓ |   | Normal |
| TC42 | 1 | (untitled) |           | ✓ | 23.35  | ✓ | Sum of lanes     | 1771 |   |      | ✓ |   | Normal |
| TC43 | 1 | (untitled) |           | ✓ | 51.77  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |
| 47   | 1 | (untitled) |           | ✓ | 133.63 | ✓ | Directly entered | 1300 |   | 1300 |   |   | Normal |
| 48   | 1 | (untitled) |           | ✓ | 55.12  | ✓ | Sum of lanes     | 1965 |   |      |   |   | Normal |
| 49   | 1 | (untitled) |           | ✓ | 26.24  | ✓ | Directly entered | 1900 |   |      |   |   | Normal |
|      | 2 | (untitled) |           | ✓ | 26.24  | ✓ | Directly entered | 1900 |   |      |   |   | Normal |
| 50   | 1 | (untitled) |           | ✓ | 48.15  | ✓ | Sum of lanes     | 1900 |   |      |   |   | Normal |
| 51   | 1 | (untitled) |           | ✓ | 37.47  | ✓ | Sum of lanes     | 1900 |   |      |   |   | Normal |
| 52   | 1 |            |           | ✓ | 173.00 | ✓ | Sum of lanes     | 1800 | ✓ | 1800 | ✓ |   | Normal |
|      | 2 |            |           | ✓ | 173.18 | ✓ | Sum of lanes     | 1800 | ✓ | 1800 | ✓ |   | Normal |
| 53   | 1 |            |           | ✓ | 43.95  | ✓ | Sum of lanes     | 1800 |   |      |   |   | Normal |







|      |   |   |            |  |   |     |              |   |      |   |   |          |   |  |      |
|------|---|---|------------|--|---|-----|--------------|---|------|---|---|----------|---|--|------|
| E2   | 3 | 3 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 4 | 4 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC5  | 2 | 1 | (untitled) |  | ✓ | N/A | Clearly Good | 0 | 3.50 | ✓ | 0 | 99999.00 |   |  | 2263 |
|      | 3 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 4 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
| TC9  | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 2 | 1 | (untitled) |  | ✓ | N/A | Average      | 0 | 3.70 | ✓ | 0 | 99999.00 |   |  | 1966 |
|      | 3 | 1 | (untitled) |  | ✓ | N/A | Average      | 0 | 3.50 | ✓ | 0 | 99999.00 |   |  | 1947 |
| TC35 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC36 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
| TC37 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC38 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC39 | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 3 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC40 | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 3 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC41 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| TC42 | 1 | 1 | (untitled) |  | ✓ | N/A | Average      | 0 | 3.00 | ✓ | 0 | 9.44     | ✓ |  | 1771 |
| TC43 | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
| 47   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| 48   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1965 |
| 49   | 1 | 2 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
|      | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  |      |
| 50   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1900 |
| 51   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1900 |
| 52   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
|      | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
| 53   | 1 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |
|      | 2 | 1 | (untitled) |  |   |     |              |   |      |   |   |          |   |  | 1800 |

## Modelling

| Arm | Traffic Stream | Traffic model | Stop weighting multiplier (%) | Delay weighting multiplier (%) | Assignment Cost Weighting (%) | Exclude from results calculation | Max queue storage | Has queue limit | Queue limit (PCU) | Excess queue | Has degree of saturation limit | Degree of saturation limit (%) | Excess degree of saturation | Low degree of saturation |
|-----|----------------|---------------|-------------------------------|--------------------------------|-------------------------------|----------------------------------|-------------------|-----------------|-------------------|--------------|--------------------------------|--------------------------------|-----------------------------|--------------------------|
|-----|----------------|---------------|-------------------------------|--------------------------------|-------------------------------|----------------------------------|-------------------|-----------------|-------------------|--------------|--------------------------------|--------------------------------|-----------------------------|--------------------------|

|     |   |                 |     |     |     | (PCU ) |      |   | penal ty (£) |         |  | penalty (£) | penalty (£) |
|-----|---|-----------------|-----|-----|-----|--------|------|---|--------------|---------|--|-------------|-------------|
| A   | 1 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
| Ac  | 1 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 16.50        | 9999.00 |  |             |             |
|     | 2 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 16.50        | 9999.00 |  |             |             |
|     | 3 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 16.50        | 9999.00 |  |             |             |
| Acf | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| Af  | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| B   | 1 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
| Bc  | 1 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 22.50        | 9999.00 |  |             |             |
|     | 2 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 22.50        | 9999.00 |  |             |             |
|     | 3 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 22.50        | 9999.00 |  |             |             |
| Bcf | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| Bf  | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| C   | 1 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
| Cf  | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| D   | 1 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 0   | 20  | 100 |        | 0.00 |   |              |         |  |             |             |
| Dc  | 1 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 8.00         | 9999.00 |  |             |             |
|     | 2 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 8.00         | 9999.00 |  |             |             |
|     | 3 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 8.00         | 9999.00 |  |             |             |
|     | 4 | CTM             | 500 | 100 | 100 |        | 0.00 | ✓ | 8.00         | 9999.00 |  |             |             |
| Dcf | 1 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 2 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 3 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 4 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 5 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
|     | 6 | CTM             | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |
| Df  | 1 | NetworkDe fault | 100 | 100 | 100 |        | 0.00 |   |              |         |  |             |             |



|          |   |                    |     |     |     |  |      |   |           |             |  |  |  |  |  |  |  |  |  |
|----------|---|--------------------|-----|-----|-----|--|------|---|-----------|-------------|--|--|--|--|--|--|--|--|--|
| Gf1      | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| Cc2      | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 3 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 4 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 5 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 6 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 15.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
| E2       | 3 | CTM                | 0   | 20  | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 4 | CTM                | 0   | 20  | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>5  | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 4 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>9  | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>35 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>36 | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>37 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>38 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>39 | 2 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 3 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>40 | 2 | PDM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 3 | PDM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>41 | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>42 | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| TC<br>43 | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 47       | 1 | CTM                | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 48       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 49       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 50       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 51       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
| 52       | 1 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 30.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
|          | 2 | CTM                | 500 | 100 | 100 |  | 0.00 | ✓ | 30.0<br>0 | 9999.<br>00 |  |  |  |  |  |  |  |  |  |
| 53       | 1 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |
|          | 2 | NetworkDe<br>fault | 100 | 100 | 100 |  | 0.00 |   |           |             |  |  |  |  |  |  |  |  |  |

### Modelling - Advanced

| Arm   | Traffic Stream | Initial queue (PCU) | Type of Vehicle-in-Service | Vehicle-in-Service | Type of random parameter | Random parameter | Auto cycle time | Cycle time |
|-------|----------------|---------------------|----------------------------|--------------------|--------------------------|------------------|-----------------|------------|
| (ALL) | (ALL)          | 0.00                | NetworkDefault             | Not-Included       | NetworkDefault           | 0.50             | ✓               | 60         |

### Normal traffic - Modelling

| Arm   | Traffic Stream | Stop weighting (%) | Delay weighting (%) |
|-------|----------------|--------------------|---------------------|
| (ALL) | (ALL)          | 100                | 100                 |

### Normal traffic - Advanced

| Arm   | Traffic Stream | Dispersion type for Normal Traffic |
|-------|----------------|------------------------------------|
| (ALL) | (ALL)          | NetworkDefault                     |

### Flows

| Arm | Traffic Stream | Total Flow (PCU/hr) | Normal Flow (PCU/hr) |
|-----|----------------|---------------------|----------------------|
| A   | 1              | 962                 | 962                  |
|     | 2              | 542                 | 542                  |
|     | 3              | 764                 | 764                  |
|     | 4              | 770                 | 770                  |
| Ac  | 1              | 925                 | 925                  |
|     | 2              | 486                 | 486                  |
|     | 3              | 482                 | 482                  |
| Acf | 1              | 1411                | 1411                 |
|     | 2              | 482                 | 482                  |
| Af  | 1              | 1504                | 1504                 |
|     | 2              | 764                 | 764                  |
|     | 3              | 770                 | 770                  |
| B   | 1              | 382                 | 382                  |
|     | 2              | 377                 | 377                  |
|     | 3              | 367                 | 367                  |
|     | 4              | 359                 | 359                  |
| Bc  | 1              | 1028                | 1028                 |
|     | 2              | 1114                | 1114                 |
|     | 3              | 902                 | 902                  |
| Bcf | 1              | 1887                | 1887                 |
|     | 2              | 1028                | 1028                 |
|     | 3              | 1114                | 1114                 |
|     | 4              | 902                 | 902                  |
| Bf  | 1              | 759                 | 759                  |
|     | 2              | 726                 | 726                  |
| C   | 1              | 101                 | 101                  |
|     | 2              | 602                 | 602                  |
|     | 3              | 399                 | 399                  |
| Cf  | 1              | 637                 | 637                  |
|     | 2              | 465                 | 465                  |
| D   | 1              | 423                 | 423                  |
|     | 2              | 251                 | 251                  |
|     | 3              | 370                 | 370                  |
|     | 4              | 390                 | 390                  |
| Dc  | 1              | 682                 | 682                  |
|     | 2              | 721                 | 721                  |
|     | 3              | 312                 | 312                  |
|     | 4              | 499                 | 499                  |
| Dcf | 1              | 900                 | 900                  |
|     | 2              | 1229                | 1229                 |
|     | 3              | 682                 | 682                  |
|     | 4              | 721                 | 721                  |
|     | 5              | 312                 | 312                  |
|     | 6              | 499                 | 499                  |
| Df  | 1              | 674                 | 674                  |

|     |   |      |      |
|-----|---|------|------|
|     | 2 | 760  | 760  |
| Dxp | 1 | 900  | 900  |
|     | 2 | 1229 | 1229 |
| Ec  | 1 | 426  | 426  |
|     | 2 | 563  | 563  |
|     | 3 | 530  | 530  |
|     | 4 | 465  | 465  |
| Ecf | 1 | 787  | 787  |
|     | 2 | 1039 | 1039 |
|     | 3 | 563  | 563  |
|     | 4 | 530  | 530  |
|     | 5 | 729  | 729  |
| Ef  | 1 | 882  | 882  |
|     | 2 | 630  | 630  |
| Exp | 1 | 787  | 787  |
|     | 2 | 613  | 613  |
| F   | 1 | 235  | 235  |
|     | 2 | 398  | 398  |
|     | 3 | 381  | 381  |
| Fc  | 1 | 742  | 742  |
|     | 2 | 1001 | 1001 |
|     | 3 | 923  | 923  |
| Ff  | 1 | 633  | 633  |
|     | 2 | 381  | 381  |
| G   | 1 | 446  | 446  |
|     | 2 | 447  | 447  |
| Gf  | 1 | 329  | 329  |
|     | 2 | 301  | 301  |
| xA  | 1 | 954  | 954  |
|     | 2 | 833  | 833  |
| xB  | 1 | 1887 | 1887 |
| xC  | 1 | 767  | 767  |
|     | 2 | 734  | 734  |
| xD  | 1 | 900  | 900  |
|     | 2 | 1229 | 1229 |
| xE  | 1 | 787  | 787  |
|     | 2 | 613  | 613  |
| xF  | 1 | 881  | 881  |
| Cc1 | 1 | 607  | 607  |
| E1  | 1 | 424  | 424  |
|     | 2 | 458  | 458  |
| Gf1 | 1 | 264  | 264  |
| Cc2 | 2 | 803  | 803  |
|     | 3 | 476  | 476  |
|     | 4 | 1225 | 1225 |
|     | 5 | 499  | 499  |
|     | 6 | 239  | 239  |
| E2  | 3 | 329  | 329  |
|     | 4 | 301  | 301  |
| TC5 | 2 | 776  | 776  |
|     | 3 | 833  | 833  |
|     | 4 | 0    | 0    |
| TC9 | 1 | 1282 | 1282 |
|     | 2 | 764  | 764  |
|     | 3 | 639  | 639  |

|      |   |      |      |
|------|---|------|------|
| TC35 | 1 | 178  | 178  |
| TC36 | 1 | 431  | 431  |
| TC37 | 1 | 78   | 78   |
| TC38 | 1 | 78   | 78   |
| TC39 | 2 | 776  | 776  |
|      | 3 | 833  | 833  |
| TC40 | 2 | 854  | 854  |
|      | 3 | 833  | 833  |
| TC41 | 1 | 353  | 353  |
| TC42 | 1 | 0    | 0    |
| TC43 | 1 | 0    | 0    |
| 47   | 1 | 1501 | 1501 |
| 48   | 1 | 1102 | 1102 |
| 49   | 1 | 1342 | 1342 |
|      | 2 | 1343 | 1343 |
| 50   | 1 | 1485 | 1485 |
| 51   | 1 | 1014 | 1014 |
| 52   | 1 | 343  | 343  |
|      | 2 | 337  | 337  |
| 53   | 1 | 343  | 343  |
|      | 2 | 337  | 337  |

## Signals

| Arm | Traffic Stream | Controller stream | Phase | Second phase enabled |
|-----|----------------|-------------------|-------|----------------------|
| A   | 1              | 771-2             | E     |                      |
|     | 2              | 771-2             | E     |                      |
|     | 3              | 771-2             | E     |                      |
|     | 4              | 771-2             | E     |                      |
| Ac  | 1              | 771-2             | D     |                      |
|     | 2              | 771-2             | D     |                      |
|     | 3              | 771-2             | D     |                      |
| B   | 1              | 769-1             | B     |                      |
|     | 2              | 769-1             | B     |                      |
|     | 3              | 769-1             | B     |                      |
|     | 4              | 769-1             | B     |                      |
| Bc  | 1              | 769-1             | A     |                      |
|     | 2              | 769-1             | A     |                      |
|     | 3              | 769-1             | A     |                      |
| C   | 1              | 769-2             | G     |                      |
|     | 2              | 769-2             | G     |                      |
|     | 3              | 769-2             | G     |                      |
| D   | 1              | 770-1             | B     |                      |
|     | 2              | 770-1             | B     |                      |
|     | 3              | 770-1             | B     |                      |
|     | 4              | 770-1             | B     |                      |
| Dc  | 1              | 770-1             | A     |                      |
|     | 2              | 770-1             | A     |                      |
|     | 3              | 770-1             | A     |                      |
|     | 4              | 770-1             | A     |                      |
| Dxp | 1              | 770-2             | D     |                      |
|     | 2              | 770-2             | D     |                      |
| Ec  | 1              | 770-3             | F     |                      |
|     | 2              | 770-3             | F     |                      |
|     | 3              | 770-3             | F     |                      |
|     | 4              | 770-3             | F     |                      |

|      |   |         |   |  |
|------|---|---------|---|--|
| Exp  | 1 | 770-4   | L |  |
|      | 2 | 770-4   | L |  |
| F    | 1 | 771-1   | B |  |
|      | 2 | 771-1   | B |  |
|      | 3 | 771-1   | B |  |
| Fc   | 1 | 771-1   | A |  |
|      | 2 | 771-1   | A |  |
|      | 3 | 771-1   | A |  |
| G    | 1 | 769-2   | F |  |
|      | 2 | 769-2   | F |  |
| Cc1  | 1 | 769-2   | E |  |
| E1   | 1 | 770-3   | G |  |
|      | 2 | 770-3   | G |  |
| Cc2  | 2 | 769-2   | D |  |
|      | 3 | 769-2   | D |  |
|      | 4 | 769-2   | D |  |
|      | 5 | 769-2   | D |  |
|      | 6 | 769-2   | D |  |
| E2   | 3 | 770-3   | H |  |
|      | 4 | 770-3   | H |  |
| TC5  | 2 | TC777-1 | A |  |
|      | 3 | TC777-1 | A |  |
|      | 4 | TC777-1 | C |  |
| TC9  | 1 | TC777-1 | B |  |
|      | 2 | TC777-1 | B |  |
|      | 3 | TC777-1 | B |  |
| TC35 | 1 | TC777-1 | A |  |
| TC37 | 1 | TC777-2 | J |  |
| TC41 | 1 | TC777-1 | D |  |
| TC42 | 1 | TC777-1 | E |  |
| 52   | 1 | 770-3   | A |  |
|      | 2 | 770-3   | A |  |

### Entry Sources

| Arm  | Traffic Stream | Cruise time for Normal Traffic (s) | Cruise speed for Normal Traffic (kph) |
|------|----------------|------------------------------------|---------------------------------------|
| Df   | 1              | 24.00                              | 30.00                                 |
|      | 2              | 24.00                              | 30.00                                 |
| Ef   | 1              | 15.31                              | 30.00                                 |
|      | 2              | 15.31                              | 30.00                                 |
| TC36 | 1              | 3.03                               | 30.00                                 |
| TC42 | 1              | 2.80                               | 30.00                                 |
| 48   | 1              | 6.61                               | 30.00                                 |
| 49   | 1              | 3.15                               | 30.00                                 |
|      | 2              | 3.15                               | 30.00                                 |
| 50   | 1              | 5.78                               | 30.00                                 |
| 51   | 1              | 4.50                               | 30.00                                 |

### Sources

| Arm | Traffic Stream | Source | Source traffic stream | Destination traffic stream | Cruise time for Normal Traffic (s) | Cruise speed for Normal Traffic (kph) | Auto turning radius | Traffic turn style | Turning radius (m) |
|-----|----------------|--------|-----------------------|----------------------------|------------------------------------|---------------------------------------|---------------------|--------------------|--------------------|
| A   | 1              | 1      | Af/1                  | A/1                        | 5.58                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |
|     | 2              | 1      | Af/1                  | A/2                        | 5.75                               | 48.00                                 | ✓                   | Straight           | Straight Movement  |

|     |   |   |        |       |       |       |   |          |                   |
|-----|---|---|--------|-------|-------|-------|---|----------|-------------------|
|     | 3 | 1 | Af/2   | A/3   | 5.88  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Af/3   | A/4   | 6.01  | 48.00 | ✓ | Straight | Straight Movement |
| Ac  | 1 | 1 | Acf/1  | Ac/1  | 7.19  | 48.00 | ✓ | Offside  | 48.59             |
|     | 2 | 1 | Acf/1  | Ac/2  | 9.50  | 35.00 | ✓ | Offside  | 46.08             |
|     | 3 | 1 | Acf/2  | Ac/3  | 6.60  | 48.00 | ✓ | Offside  | 42.76             |
| Acf | 1 | 1 | F/2    | Acf/1 | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | F/3    | Acf/2 | 7.24  | 35.00 | ✓ | Straight | Straight Movement |
| Af  | 1 | 1 | TC42/1 | Af/1  | 6.42  | 30.00 | ✓ | Nearside | 10.60             |
|     | 2 | 1 | TC42/1 | Af/2  | 6.38  | 30.00 | ✓ | Nearside | 10.60             |
|     | 3 | 1 | TC42/1 | Af/3  | 6.36  | 30.00 | ✓ | Nearside | 10.60             |
| B   | 1 | 1 | Bf/1   | B/1   | 7.10  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Bf/1   | B/2   | 7.29  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Bf/2   | B/3   | 7.48  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Bf/2   | B/4   | 12.29 | 30.00 | ✓ | Straight | Straight Movement |
| Bc  | 1 | 1 | Bcf/2  | Bc/1  | 11.96 | 40.00 | ✓ | Offside  | 51.76             |
|     | 2 | 1 | Bcf/3  | Bc/2  | 11.83 | 40.00 | ✓ | Offside  | 48.45             |
|     | 3 | 1 | Bcf/4  | Bc/3  | 11.71 | 40.00 | ✓ | Offside  | 45.13             |
| Bcf | 1 | 1 | A/1    | Bcf/1 | 4.71  | 48.00 | ✓ | Nearside | 68.09             |
|     | 2 | 1 | A/2    | Bcf/2 | 6.63  | 34.00 | ✓ | Nearside | 71.40             |
|     | 3 | 1 | A/3    | Bcf/3 | 6.61  | 34.00 | ✓ | Nearside | 74.72             |
|     | 4 | 1 | A/4    | Bcf/4 | 6.60  | 34.00 | ✓ | Nearside | 78.03             |
| Bf  | 1 | 1 | 50/1   | Bf/1  | 27.34 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 50/1   | Bf/2  | 27.41 | 30.00 | ✓ | Straight | Straight Movement |
| C   | 1 | 1 | Cf/1   | C/1   | 14.54 | 30.00 | ✓ | Offside  | 59.30             |
|     | 2 | 1 | Cf/2   | C/2   | 14.73 | 30.00 | ✓ | Offside  | 55.98             |
|     | 3 | 1 | Cf/2   | C/3   | 14.92 | 30.00 | ✓ | Offside  | 53.27             |
| Cf  | 1 | 1 | 48/1   | Cf/1  | 17.35 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 48/1   | Cf/2  | 17.50 | 30.00 | ✓ | Straight | Straight Movement |
| D   | 1 | 1 | Df/1   | D/1   | 4.13  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Df/1   | D/2   | 4.13  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Df/2   | D/3   | 3.97  | 48.00 | ✓ | Straight | Straight Movement |
|     | 4 | 1 | Df/2   | D/4   | 4.16  | 48.00 | ✓ | Straight | Straight Movement |
| Dc  | 1 | 1 | Dcf/3  | Dc/1  | 6.11  | 30.00 | ✓ | Offside  | 56.19             |
|     | 2 | 1 | Dcf/4  | Dc/2  | 5.88  | 30.00 | ✓ | Offside  | 52.87             |
|     | 3 | 1 | Dcf/5  | Dc/3  | 5.64  | 30.00 | ✓ | Offside  | 49.56             |
|     | 4 | 1 | Dcf/6  | Dc/4  | 5.41  | 30.00 | ✓ | Offside  | 46.25             |
| Dcf | 1 | 1 | Cc2/2  | Dcf/1 | 4.91  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Cc2/4  | Dcf/2 | 4.90  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | C/2    | Dcf/3 | 4.92  | 48.00 | ✓ | Nearside | 58.12             |
|     | 4 | 1 | C/2    | Dcf/4 | 5.08  | 48.00 | ✓ | Nearside | 58.12             |

|     |   |   |       |       |       |       |   |          |                   |
|-----|---|---|-------|-------|-------|-------|---|----------|-------------------|
|     | 5 | 1 | C/3   | Dcf/5 | 4.96  | 48.00 | ✓ | Nearside | 61.43             |
|     | 6 | 1 | C/3   | Dcf/6 | 7.94  | 30.00 | ✓ | Nearside | 61.43             |
| Dxp | 1 | 1 | Dcf/1 | Dxp/1 | 3.43  | 48.00 | ✓ | Nearside | 60.22             |
|     | 2 | 1 | Dcf/2 | Dxp/2 | 3.61  | 48.00 | ✓ | Nearside | 63.54             |
| Ec  | 1 | 1 | Ecf/2 | Ec/1  | 3.76  | 48.00 | ✓ | Offside  | 76.42             |
|     | 2 | 1 | Ecf/3 | Ec/2  | 3.63  | 48.00 | ✓ | Offside  | 73.10             |
|     | 3 | 1 | Ecf/4 | Ec/3  | 3.51  | 48.00 | ✓ | Offside  | 69.79             |
|     | 4 | 1 | Ecf/5 | Ec/4  | 5.41  | 30.00 | ✓ | Offside  | 66.48             |
| Ecf | 1 | 1 | Dc/1  | Ecf/1 | 3.45  | 48.00 | ✓ | Offside  | 76.11             |
|     | 2 | 1 | Dc/2  | Ecf/2 | 3.48  | 48.00 | ✓ | Offside  | 72.80             |
|     | 3 | 1 | Dc/3  | Ecf/3 | 3.52  | 48.00 | ✓ | Offside  | 69.49             |
|     | 4 | 1 | Dc/4  | Ecf/4 | 3.56  | 48.00 | ✓ | Offside  | 66.17             |
|     | 5 | 1 | Dc/4  | Ecf/5 | 3.64  | 48.00 | ✓ | Offside  | 62.86             |
| Exp | 1 | 1 | Ecf/1 | Exp/1 | 3.89  | 48.00 | ✓ | Nearside | 52.96             |
|     | 2 | 1 | Ecf/2 | Exp/2 | 4.03  | 48.00 | ✓ | Nearside | 56.27             |
| F   | 1 | 1 | Ff/1  | F/1   | 6.38  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Ff/1  | F/2   | 6.43  | 48.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Ff/2  | F/3   | 6.54  | 48.00 | ✓ | Straight | Straight Movement |
| Fc  | 1 | 1 | Ec/2  | Fc/1  | 18.38 | 35.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Ec/3  | Fc/2  | 18.02 | 35.00 | ✓ | Straight | Straight Movement |
|     | 3 | 1 | Ec/4  | Fc/3  | 18.54 | 35.00 | ✓ | Straight | Straight Movement |
| Ff  | 1 | 1 | 51/1  | Ff/1  | 33.09 | 30.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | 51/1  | Ff/2  | 33.05 | 30.00 | ✓ | Straight | Straight Movement |
| G   | 1 | 1 | Gf/1  | G/1   | 15.98 | 35.00 | ✓ | Offside  | 88.54             |
|     | 2 | 1 | Gf/2  | G/2   | 11.38 | 48.00 | ✓ | Offside  | 85.22             |
| Gf  | 1 | 1 | E2/3  | Gf/1  | 3.04  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | E2/4  | Gf/2  | 3.00  | 48.00 | ✓ | Straight | Straight Movement |
| xA  | 1 | 1 | F/1   | xA/1  | 17.22 | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | F/1   | xA/2  | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xB  | 1 | 1 | Bcf/1 | xB/1  | 5.79  | 48.00 | ✓ | Nearside | 59.55             |
| xC  | 1 | 1 | G/1   | xC/1  | 8.67  | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | G/2   | xC/2  | 8.70  | 48.00 | ✓ | Straight | Straight Movement |
| xD  | 1 | 1 | Dxp/1 | xD/1  | 9.11  | 48.00 | ✓ | Nearside | 44.59             |
|     | 2 | 1 | Dxp/2 | xD/2  | 9.16  | 48.00 | ✓ | Nearside | 47.90             |
| xE  | 1 | 1 | Exp/1 | xE/1  | 13.04 | 48.00 | ✓ | Straight | Straight Movement |
|     | 2 | 1 | Exp/2 | xE/2  | 13.04 | 48.00 | ✓ | Straight | Straight Movement |
| xF  | 1 | 1 | Ec/1  | xF/1  | 11.88 | 48.00 | ✓ | Straight | Straight Movement |
| Cc1 | 1 | 1 | B/1   | Cc1/1 | 8.63  | 40.00 | ✓ | Straight | Straight Movement |
| E1  | 1 | 1 | Ef/1  | E1/1  | 6.00  | 48.00 | ✓ | Nearside | 26.33             |
|     | 2 | 1 | Ef/1  | E1/2  | 6.00  | 48.00 | ✓ | Nearside | 28.96             |

|             |   |   |        |        |       |       |   |          |                   |
|-------------|---|---|--------|--------|-------|-------|---|----------|-------------------|
| <b>Gf1</b>  | 1 | 1 | Ecf/5  | Gf1/1  | 5.74  | 30.00 | ✓ | Offside  | 21.77             |
| <b>Cc2</b>  | 2 | 1 | B/1    | Cc2/2  | 8.24  | 40.00 | ✓ | Straight | Straight Movement |
|             | 3 | 1 | B/3    | Cc2/3  | 8.20  | 40.00 | ✓ | Straight | Straight Movement |
|             | 4 | 1 | B/2    | Cc2/4  | 8.14  | 40.00 | ✓ | Straight | Straight Movement |
|             | 5 | 1 | Bc/3   | Cc2/5  | 6.03  | 54.00 | ✓ | Offside  | 96.53             |
|             | 6 | 1 | Bc/3   | Cc2/6  | 5.87  | 54.00 | ✓ | Offside  | 93.22             |
| <b>E2</b>   | 3 | 1 | Ef/2   | E2/3   | 4.00  | 48.00 | ✓ | Nearside | 43.25             |
|             | 4 | 1 | Ef/2   | E2/4   | 4.07  | 48.00 | ✓ | Nearside | 43.25             |
| <b>TC5</b>  | 2 | 1 | xA/1   | TC5/2  | 2.76  | 30.00 | ✓ | Straight | Straight Movement |
|             | 3 | 1 | xA/2   | TC5/3  | 2.76  | 30.00 | ✓ | Straight | Straight Movement |
|             | 4 | 1 | xA/2   | TC5/4  | 2.93  | 30.00 | ✓ | Straight | Straight Movement |
| <b>TC9</b>  | 1 | 1 | 49/1   | TC9/1  | 11.00 | 30.00 | ✓ | Straight | Straight Movement |
|             | 2 | 1 | 49/2   | TC9/2  | 11.07 | 30.00 | ✓ | Straight | Straight Movement |
|             | 3 | 1 | 49/2   | TC9/3  | 11.12 | 30.00 | ✓ | Straight | Straight Movement |
| <b>TC35</b> | 1 | 1 | xA/1   | TC35/1 | 2.90  | 30.00 | ✓ | Straight | Straight Movement |
| <b>TC37</b> | 1 | 1 | TC36/1 | TC37/1 | 3.19  | 50.00 | ✓ | Nearside | 46.04             |
| <b>TC38</b> | 1 | 1 | TC37/1 | TC38/1 | 1.53  | 50.00 | ✓ | Straight | Straight Movement |
| <b>TC39</b> | 2 | 1 | TC5/2  | TC39/2 | 2.54  | 50.00 | ✓ | Straight | Straight Movement |
|             | 3 | 1 | TC5/3  | TC39/3 | 2.40  | 50.00 | ✓ | Straight | Straight Movement |
| <b>TC40</b> | 2 | 1 | TC38/1 | TC40/2 | 4.23  | 50.00 | ✓ | Nearside | 11.92             |
|             | 3 | 1 | TC39/3 | TC40/3 | 4.02  | 50.00 | ✓ | Offside  | 77.43             |
| <b>TC41</b> | 1 | 1 | TC36/1 | TC41/1 | 3.93  | 50.00 | ✓ | Straight | Straight Movement |
| <b>TC43</b> | 1 | 1 | TC9/1  | TC43/1 | 3.73  | 50.00 | ✓ | Nearside | 6.11              |
| <b>47</b>   | 1 | 1 | xC/1   | 47/1   | 16.04 | 30.00 | ✓ | Straight | Straight Movement |
| <b>52</b>   | 1 | 1 | 53/1   | 52/1   | 20.76 | 30.00 | ✓ | Straight | Straight Movement |
|             | 2 | 1 | 53/2   | 52/2   | 20.78 | 30.00 | ✓ | Straight | Straight Movement |
| <b>53</b>   | 1 | 1 | Bc/3   | 53/1   | 5.27  | 30.00 | ✓ | Offside  | 5.00              |
|             | 2 | 1 | Bc/3   | 53/2   | 5.07  | 30.00 | ✓ | Offside  | 5.00              |
| <b>Acf</b>  | 1 | 2 | Fc/3   | Acf/1  | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
|             | 2 | 2 | Fc/3   | Acf/2  | 7.24  | 35.00 | ✓ | Straight | Straight Movement |
| <b>Af</b>   | 1 | 2 | TC9/1  | Af/1   | 6.42  | 30.00 | ✓ | Straight | Straight Movement |
|             | 2 | 2 | TC9/2  | Af/2   | 6.38  | 30.00 | ✓ | Straight | Straight Movement |
|             | 3 | 2 | TC9/3  | Af/3   | 6.36  | 30.00 | ✓ | Straight | Straight Movement |
| <b>Bcf</b>  | 1 | 2 | Ac/1   | Bcf/1  | 3.96  | 57.00 | ✓ | Offside  | 93.05             |
|             | 2 | 2 | Ac/2   | Bcf/2  | 3.95  | 57.00 | ✓ | Offside  | 89.74             |
|             | 3 | 2 | Ac/3   | Bcf/3  | 3.95  | 57.00 | ✓ | Offside  | 86.42             |
|             | 4 | 2 | Ac/3   | Bcf/4  | 3.94  | 57.00 | ✓ | Offside  | 86.42             |
| <b>C</b>    | 2 | 2 | Cf/1   | C/2    | 14.73 | 30.00 | ✓ | Offside  | 56.58             |

|      |   |   |        |        |       |       |   |          |                   |
|------|---|---|--------|--------|-------|-------|---|----------|-------------------|
| Dcf  | 1 | 2 | C/1    | Dcf/1  | 4.91  | 48.00 | ✓ | Nearside | 54.80             |
|      | 2 | 2 | C/1    | Dcf/2  | 4.90  | 48.00 | ✓ | Nearside | 54.80             |
|      | 3 | 2 | Cc2/3  | Dcf/3  | 7.87  | 30.00 | ✓ | Straight | Straight Movement |
|      | 4 | 2 | Cc2/3  | Dcf/4  | 8.12  | 30.00 | ✓ | Straight | Straight Movement |
|      | 5 | 2 | Cc2/5  | Dcf/5  | 7.94  | 30.00 | ✓ | Offside  | 99.16             |
|      | 6 | 2 | Cc2/6  | Dcf/6  | 7.94  | 30.00 | ✓ | Offside  | 95.85             |
| Ecf  | 1 | 2 | D/1    | Ecf/1  | 3.45  | 48.00 | ✓ | Nearside | 43.36             |
|      | 2 | 2 | D/1    | Ecf/2  | 3.48  | 48.00 | ✓ | Nearside | 43.36             |
|      | 3 | 2 | D/2    | Ecf/3  | 5.63  | 30.00 | ✓ | Nearside | 46.68             |
|      | 4 | 2 | D/3    | Ecf/4  | 5.70  | 30.00 | ✓ | Nearside | 49.99             |
|      | 5 | 2 | D/4    | Ecf/5  | 5.83  | 30.00 | ✓ | Nearside | 53.30             |
| Fc   | 1 | 2 | E1/1   | Fc/1   | 20.10 | 32.00 | ✓ | Nearside | 58.94             |
|      | 2 | 2 | E1/1   | Fc/2   | 19.71 | 32.00 | ✓ | Nearside | 60.85             |
|      | 3 | 2 | E1/2   | Fc/3   | 20.28 | 32.00 | ✓ | Nearside | 64.16             |
| G    | 1 | 2 | Gf1/1  | G/1    | 15.98 | 35.00 | ✓ | Offside  | 17.91             |
|      | 2 | 2 | Gf1/1  | G/2    | 11.38 | 48.00 | ✓ | Offside  | 15.13             |
| xA   | 1 | 2 | Fc/1   | xA/1   | 17.22 | 48.00 | ✓ | Straight | Straight Movement |
|      | 2 | 2 | Fc/2   | xA/2   | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xC   | 1 | 2 | Cc1/1  | xC/1   | 8.67  | 48.00 | ✓ | Nearside | 56.51             |
|      | 2 | 2 | Cc1/1  | xC/2   | 8.70  | 48.00 | ✓ | Nearside | 57.28             |
| xF   | 1 | 2 | E1/1   | xF/1   | 11.88 | 48.00 | ✓ | Nearside | 40.67             |
| Cc1  | 1 | 2 | Bc/1   | Cc1/1  | 6.39  | 54.00 | ✓ | Straight | Straight Movement |
| Cc2  | 2 | 2 | Bc/1   | Cc2/2  | 10.98 | 30.00 | ✓ | Straight | Straight Movement |
|      | 3 | 2 | Bc/2   | Cc2/3  | 10.93 | 30.00 | ✓ | Offside  | 99.84             |
|      | 4 | 2 | Bc/2   | Cc2/4  | 6.03  | 54.00 | ✓ | Straight | Straight Movement |
|      | 5 | 2 | B/4    | Cc2/5  | 8.14  | 40.00 | ✓ | Straight | Straight Movement |
|      | 6 | 2 | B/4    | Cc2/6  | 7.93  | 40.00 | ✓ | Straight | Straight Movement |
| TC9  | 2 | 2 | 49/1   | TC9/2  | 11.07 | 30.00 | ✓ | Straight | Straight Movement |
| TC39 | 2 | 2 | TC42/1 | TC39/2 | 2.54  | 50.00 | ✓ | Offside  | 9.44              |
|      | 3 | 2 | TC42/1 | TC39/3 | 2.40  | 50.00 | ✓ | Offside  | 9.44              |
| TC40 | 2 | 2 | TC39/2 | TC40/2 | 4.23  | 50.00 | ✓ | Offside  | 80.74             |
| TC43 | 1 | 2 | TC5/4  | TC43/1 | 3.73  | 50.00 | ✓ | Offside  | 21.45             |
| 47   | 1 | 2 | xC/2   | 47/1   | 16.04 | 30.00 | ✓ | Straight | Straight Movement |
| 53   | 1 | 2 | B/3    | 53/1   | 5.27  | 30.00 | ✓ | Offside  | 40.30             |
|      | 2 | 2 | B/4    | 53/2   | 5.07  | 30.00 | ✓ | Offside  | 36.99             |
| Acf  | 1 | 3 | Fc/2   | Acf/1  | 5.22  | 48.00 | ✓ | Straight | Straight Movement |
| Af   | 1 | 3 | TC41/1 | Af/1   | 6.42  | 30.00 | ✓ | Offside  | 6.19              |
|      | 2 | 3 | TC41/1 | Af/2   | 6.38  | 30.00 | ✓ | Offside  | 6.19              |
|      | 3 | 3 | TC41/1 | Af/3   | 6.36  | 30.00 | ✓ | Offside  | 6.19              |
| Dcf  | 4 | 3 | Cc2/5  | Dcf/4  | 8.12  | 30.00 | ✓ | Straight | Straight Movement |
| Fc   | 1 | 3 | 52/1   | Fc/1   | 21.44 | 30.00 | ✓ | Offside  | 13.89             |
|      | 2 | 3 | 52/2   | Fc/2   | 21.02 | 30.00 | ✓ | Offside  | 10.58             |

|     |   |   |      |       |       |       |   |          |                   |
|-----|---|---|------|-------|-------|-------|---|----------|-------------------|
| xA  | 2 | 3 | Fc/1 | xA/2  | 17.25 | 48.00 | ✓ | Straight | Straight Movement |
| xF  | 1 | 3 | 52/1 | xF/1  | 19.00 | 30.00 | ✓ | Offside  | 19.56             |
| Cc2 | 3 | 3 | B/2  | Cc2/3 | 10.93 | 30.00 | ✓ | Straight | Straight Movement |
|     | 5 | 3 | B/3  | Cc2/5 | 10.86 | 30.00 | ✓ | Straight | Straight Movement |

### Give Way Data

| Arm   | Traffic Stream | Opposed traffic | Use Step-wise Opposed Turn Model | Visibility restricted |
|-------|----------------|-----------------|----------------------------------|-----------------------|
| (ALL) | 1              | AllTraffic      |                                  |                       |

### Give Way Data - All Movements - Conflicts

| Traffic Stream | Description | Controlling type | Controlling traffic stream | Percentage opposing (%) | Slope coefficient | Upstream signals visible |
|----------------|-------------|------------------|----------------------------|-------------------------|-------------------|--------------------------|
| 1              |             | TrafficStream    | Gf/1                       | 100                     | 0.22              |                          |
|                |             | TrafficStream    | Gf/2                       | 100                     | 0.22              |                          |
|                |             | TrafficStream    | TC39/2                     | 100                     | 0.22              |                          |
|                |             | TrafficStream    | TC39/3                     | 100                     | 0.22              |                          |

## Pedestrian Crossings

### Pedestrian Crossings

| Crossing | Name       | Description | Traffic node | Allow walk on red | Crossing type | Length (m) | Cruise time (seconds) | Cruise speed (kph) |
|----------|------------|-------------|--------------|-------------------|---------------|------------|-----------------------|--------------------|
| 1        | (untitled) |             | 3-2          |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 2        | (untitled) |             | 3            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 3        | (untitled) |             | 4-2          |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 4        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 5        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 6        | (untitled) |             | 4            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 7        | (untitled) |             | 5            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 8        | (untitled) |             | 1            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 9        | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 10       | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 11       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 12       | (untitled) |             | 2            |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 13       | (untitled) |             |              |                   | Farside       | 3.00       | 2.00                  | 5.40               |
| 14       | (untitled) |             |              |                   | Farside       | 3.00       | 2.00                  | 5.40               |
| 15       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 16       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |
| 17       | (untitled) |             |              |                   | Nearside      | 3.00       | 2.00                  | 5.40               |

### Pedestrian Crossings - Signals

| Crossing | Controller stream | Phase | Second phase enabled |
|----------|-------------------|-------|----------------------|
| 1        | 770-2             | E     |                      |
| 2        | 770-1             | C     |                      |
| 3        | 770-4             | M     |                      |
| 4        | 770-3             | J     |                      |
| 5        | 770-3             | I     |                      |
| 6        | 770-3             | K     |                      |
| 7        | 771-1             | C     |                      |
| 8        | 769-1             | C     |                      |
| 9        | 769-2             | J     |                      |
| 10       | 769-2             | K     |                      |

|    |         |   |  |
|----|---------|---|--|
| 11 | 769-2   | H |  |
| 12 | 769-2   | I |  |
| 13 | TC777-1 | I |  |
| 14 | TC777-1 | F |  |
| 15 | TC777-1 | G |  |
| 16 | TC777-1 | H |  |
| 17 | TC777-2 | K |  |

### Pedestrian Crossings - Sides

| Crossing | Side  | Saturation flow (Ped/hr) |
|----------|-------|--------------------------|
| (ALL)    | (ALL) | 11000                    |

### Pedestrian Crossings - Modelling

| Crossing | Side  | Delay weighting (%) | Assignment Cost Weighting (%) | Exclude from results calculation | Max queue storage (Ped) | Has queue limit | Has degree of saturation limit |
|----------|-------|---------------------|-------------------------------|----------------------------------|-------------------------|-----------------|--------------------------------|
| (ALL)    | (ALL) | 100                 | 100                           |                                  | 0.00                    |                 |                                |

## Local OD Matrix - Local Matrix: 1

### Local Matrix Options

| OD Matrix | Name       | Use for point to point table | Allocation mode  | Allow paths past exit locations | Allow looped paths on arms | Allow looped paths on traffic nodes | Copy flows | Matrix to copy flows from | Limit paths by length | Path length limit multiplier | Limit paths by number | Path number limit | Limit paths by flow | Low path flow threshold |
|-----------|------------|------------------------------|------------------|---------------------------------|----------------------------|-------------------------------------|------------|---------------------------|-----------------------|------------------------------|-----------------------|-------------------|---------------------|-------------------------|
| 1         | (untitled) | ✓                            | User Equilibrium |                                 |                            | ✓                                   |            |                           |                       |                              |                       |                   |                     |                         |

Note: Auto Calculate disabled on this Local Matrix - Paths and Flow Allocation might not be up to date.

### Normal Input Flows (PCU/hr)

|      | To  |     |     |      |     |     |     |     |   |
|------|-----|-----|-----|------|-----|-----|-----|-----|---|
|      | A28 | B28 | C28 | D28  | E28 | F28 | G28 | H28 |   |
| From | A28 | 3   | 58  | 436  | 13  | 470 | 55  | 450 | 0 |
|      | B28 | 19  | 0   | 101  | 182 | 520 | 13  | 267 | 0 |
|      | C28 | 400 | 46  | 0    | 318 | 105 | 20  | 545 | 0 |
|      | D28 | 6   | 393 | 363  | 0   | 17  | 55  | 180 | 0 |
|      | E28 | 497 | 630 | 94   | 114 | 1   | 9   | 167 | 0 |
|      | F28 | 126 | 29  | 67   | 106 | 25  | 0   | 78  | 0 |
|      | G28 | 836 | 345 | 1068 | 148 | 262 | 26  | 0   | 0 |
|      | H28 | 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0 |

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

### Locations

| OD Matrix | Location | Name       | Entries    | Exits      | Colour  |
|-----------|----------|------------|------------|------------|---------|
| 1         | A28      | (untitled) | 50/1       | xB/1       | #FF0000 |
|           | B28      | (untitled) | 48/1       | 47/1       | #00FF40 |
|           | C28      | (untitled) | Df/2, Df/1 | xD/1, xD/2 | #804000 |

|  |            |            |            |                |         |
|--|------------|------------|------------|----------------|---------|
|  | <b>D28</b> | (untitled) | 51/1       | xF/1           | #FF00FF |
|  | <b>E28</b> | (untitled) | Ef/2, Ef/1 | xE/1, xE/2     | #FF8000 |
|  | <b>F28</b> | (untitled) | TC36/1     | TC35/1         | #FFA500 |
|  | <b>G28</b> | (untitled) | 49/2, 49/1 | TC40/2, TC40/3 | #0000FF |
|  | <b>H28</b> | (untitled) | TC42/1     | TC43/1         | #008000 |

### Normal Paths and Flows

| OD Matrix | Path | Description | From location | To location | Path items   | Allocation type | Normal Calculated Flow (PCU/hr) |
|-----------|------|-------------|---------------|-------------|--|-----------------|---------------------------------|
| 1         | 32   | I1          | C28           | E28         | Df/1, D/1, Ecf/1, Exp/1, xE/1  | Normal          | 105                             |
|           | 36   |             | C28           | E28         | Df/1, D/1, Ecf/2, Exp/2, xE/2  | Disabled        | 0                               |
|           | 41   |             | E28           | A28         | Ef/1, E1/2, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1   | Normal          | 392                             |
|           | 49   | I1          | C28           | D28         | Df/1, D/1, Ecf/2, Ec/1, xF/1   | Normal          | 318                             |
|           | 50   |             | E28           | D28         | Ef/1, E1/1, xF/1   | Normal          | 114                             |
|           | 68   |             | E28           | G28         | Ef/1, E1/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2  | Normal          | 167                             |
|           | 92   |             | E28           | F28         | Ef/1, E1/1, Fc/1, xA/1, TC35/1   | Normal          | 9                               |
|           | 100  |             | E28           | B28         | Ef/2, E2/4, Gf/2, G/2, xC/2, 47/1  | Normal          | 301                             |
|           | 102  |             | A28           | C28         | 50/1, Bf/1, B/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal          | 324                             |
|           | 103  |             | F28           | B28         | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                                    | Fixed           | 0                               |
|           | 105  |             | D28           | H28         | 51/1, Ff/1, F/1, xA/2, TC5/4, TC43/1   | Normal          | 0                               |
|           | 107  |             | A28           | B28         | 50/1, Bf/1, B/1, Cc1/1, xC/2, 47/1   | Normal          | 56                              |
|           | 110  |             | E28           | G28         | Ef/1, E1/1, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal          | 0                               |
|           | 112  |             | F28           | G28         | TC36/1, TC37/1, TC38/1, TC40/2   | Normal          | 78                              |
|           | 113  |             | F28           | A28         | TC36/1, TC41/1, Af/1, A/1, Bcf/1, xB/1   | Normal          | 126                             |
|           | 115  |             | B28           | C28         | 48/1, Cf/1, C/1, Dcf/2, Dxp/2, xD/2  | Fixed           | 4                               |
|           | 125  |             | H28           | A28         | TC42/1, Af/1, A/1, Bcf/1, xB/1   | Normal          | 0                               |
|           | 130  |             | G28           | C28         | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                               | Normal          | 704                             |
|           | 137  |             | H28           | G28         | TC42/1, TC39/2, TC40/2   | Normal          | 0                               |
|           | 138  |             | H28           | G28         | TC42/1, TC39/3, TC40/3   | Normal          | 0                               |
|           | 140  |             | B28           | G28         | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                 | Normal          | 126                             |
|           | 141  |             | B28           | F28         | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                                | Normal          | 13                              |
|           | 142  |             | B28           | G28         | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                 | Normal          | 0                               |
|           | 143  |             | E28           | H28         | Ef/1, E1/1, Fc/2, xA/2, TC5/4, TC43/1  | Normal          | 0                               |
|           | 144  |             | B28           | G28         | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                 | Normal          | 141                             |
|           | 145  |             | B28           | H28         | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                         | Normal          | 0                               |
|           | 146  |             | B28           | A28         | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                    | Normal          | 0                               |
|           | 147  |             | B28           | B28         | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1 | Normal          | 0                               |

|     |  |     |     |   |        |     |
|-----|--|-----|-----|---|--------|-----|
| 148 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1        | Normal | 0   |
| 149 |  | B28 | A28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                           | Normal | 19  |
| 150 |  | E28 | B28 | Ef/2, E2/3, Gf/1, G/1, xC/1, 47/1   | Normal | 329 |
| 151 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1        | Normal | 0   |
| 152 |  | H28 | B28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1   | Normal | 0   |
| 153 |  | F28 | B28 | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1   | Normal | 29  |
| 154 |  | E28 | A28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1  | Normal | 105 |
| 155 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1     | Normal | 0   |
| 156 |  | G28 | B28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1              | Normal | 75  |
| 157 |  | H28 | B28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1   | Normal | 0   |
| 158 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                 | Normal | 19  |
| 159 |  | A28 | H28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                         | Normal | 0   |
| 160 |  | B28 | D28 | 48/1, Cf/1, C/2, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 62  |
| 161 |  | B28 | E28 | 48/1, Cf/1, C/2, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 138 |
| 162 |  | B28 | D28 | 48/1, Cf/2, C/2, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 20  |
| 163 |  | B28 | E28 | 48/1, Cf/2, C/2, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 164 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1 | Normal | 0   |
| 165 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1 | Normal | 0   |
| 166 |  | B28 | C28 | 48/1, Cf/1, C/1, Dcf/1, Dxp/1, xD/1   | Normal | 97  |
| 167 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                                  | Normal | 0   |
| 168 |  | G28 | A28 | 49/1, TC9/1, Af/1, A/1, Bcf/1, xB/1   | Normal | 836 |
| 169 |  | G28 | B28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1  | Normal | 23  |
| 170 |  | G28 | B28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1  | Normal | 119 |
| 171 |  | G28 | H28 | 49/1, TC9/1, TC43/1   | Normal | 0   |
| 172 |  | H28 | E28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                              | Normal | 0   |
| 173 |  | F28 | D28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                       | Normal | 0   |
| 174 |  | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 0   |
| 175 |  | A28 | D28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1  | Normal | 0   |
| 176 |  | H28 | C28 | TC42/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 0   |
| 177 |  | H28 | B28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                   | Normal | 0   |
| 178 |  | B28 | E28 | 48/1, Cf/1, C/2, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 335 |
| 179 |  | B28 | E28 | 48/1, Cf/2, C/2, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 47  |
| 180 |  | A28 | H28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                         | Normal | 0   |

|         |     |     |   |        |     |
|---------|-----|-----|---|--------|-----|
| 18<br>1 | F28 | C28 | TC36/1, TC41/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 67  |
| 18<br>2 | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2       | Normal | 0   |
| 18<br>3 | A28 | E28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 4   |
| 18<br>4 | C28 | A28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1  | Normal | 56  |
| 18<br>5 | A28 | B28 | 50/1, Bf/1, B/1, Cc1/1, xC/1, 47/1  | Normal | 2   |
| 18<br>6 | A28 | C28 | 50/1, Bf/1, B/2, Cc2/4, Dcf/2, Dxp/2, xD/2  | Normal | 112 |
| 18<br>7 | G28 | D28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 18<br>8 | A28 | G28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                           | Normal | 0   |
| 18<br>9 | G28 | E28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                   | Normal | 0   |
| 19<br>0 | G28 | D28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 0   |
| 19<br>1 | D28 | F28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                | Normal | 0   |
| 19<br>2 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0   |
| 19<br>3 | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 19<br>4 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2            | Normal | 0   |
| 19<br>5 | D28 | G28 | 51/1, Ff/1, F/1, xA/1, TC5/2, TC39/2, TC40/2  | Normal | 157 |
| 19<br>6 | D28 | F28 | 51/1, Ff/1, F/1, xA/1, TC35/1   | Normal | 55  |
| 19<br>7 | D28 | G28 | 51/1, Ff/1, F/1, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 23  |
| 19<br>8 | D28 | A28 | 51/1, Ff/1, F/2, Acf/1, Ac/1, Bcf/1, xB/1   | Normal | 6   |
| 19<br>9 | D28 | B28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1  | Normal | 268 |
| 20<br>0 | D28 | B28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1  | Normal | 111 |
| 20<br>1 | F28 | E28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                | Normal | 0   |
| 20<br>2 | F28 | D28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                 | Normal | 0   |
| 20<br>3 | F28 | E28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                | Normal | 0   |
| 20<br>4 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                         | Normal | 0   |
| 20<br>5 | A28 | E28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 166 |
| 20<br>6 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 0   |
| 20<br>7 | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 20<br>8 | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                            | Normal | 0   |
| 20<br>9 | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                                    | Normal | 0   |
| 21<br>0 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                      | Normal | 0   |
| 21<br>1 | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                              | Normal | 0   |
| 21<br>2 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                                 | Normal | 0   |
| 21<br>3 | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1   | Normal | 0   |

|     |  |     |     |  |        |     |
|-----|--|-----|-----|--|--------|-----|
| 214 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3  | Normal | 0   |
| 215 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1          | Normal | 0   |
| 216 |  | A28 | G28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 337 |
| 217 |  | A28 | H28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 218 |  | A28 | A28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                            | Normal | 0   |
| 219 |  | A28 | C28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1 | Normal | 0   |
| 220 |  | A28 | B28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1         | Normal | 0   |
| 221 |  | A28 | B28 | 50/1, Bf/2, B/4, 53/2, 52/2, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1         | Normal | 0   |
| 222 |  | A28 | D28 | 50/1, Bf/2, B/3, 53/1, 52/1, xF/1  | Normal | 7   |
| 223 |  | A28 | G28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                         | Normal | 0   |
| 224 |  | A28 | F28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/1, TC35/1  | Normal | 2   |
| 225 |  | A28 | G28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                         | Normal | 0   |
| 226 |  | A28 | H28 | 50/1, Bf/2, B/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                                 | Normal | 0   |
| 235 |  | E28 | G28 | Ef/1, E1/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3  | Fixed  | 0   |
| 236 |  | E28 | H28 | Ef/1, E1/1, Fc/1, xA/2, TC5/4, TC43/1  | Normal | 0   |
| 246 |  | E28 | C28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                  | Normal | 0   |
| 248 |  | D28 | C28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                   | Normal | 350 |
| 249 |  | H28 | C28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                              | Normal | 0   |
| 252 |  | F28 | C28 | TC36/1, TC41/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                      | Normal | 0   |
| 283 |  | E28 | B28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                          | Normal | 0   |
| 284 |  | E28 | B28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                          | Normal | 0   |
| 285 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                          | Normal | 0   |
| 286 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                          | Normal | 0   |
| 307 |  | G28 | C28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                         | Normal | 60  |
| 317 |  | C28 | G28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3                              | Normal | 314 |
| 318 |  | C28 | H28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                                      | Normal | 0   |
| 319 |  | C28 | B28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1              | Normal | 0   |
| 320 |  | C28 | B28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1              | Normal | 0   |
| 322 |  | C28 | G28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                              | Normal | 231 |
| 323 |  | C28 | F28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1   | Normal | 20  |
| 324 |  | C28 | G28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                              | Normal | 0   |
| 325 |  | C28 | H28 | Df/1, D/2, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                                      | Normal | 0   |
| 330 |  | C28 | A28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                                 | Normal | 344 |

|     |  |     |     |   |        |     |
|-----|--|-----|-----|---|--------|-----|
| 331 |  | C28 | B28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                                     | Normal | 0   |
| 332 |  | C28 | B28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1                                     | Normal | 0   |
| 334 |  | C28 | C28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/4, Dcf/2, Dxp/2, xD/2                             | Normal | 0   |
| 342 |  | C28 | B28 | Df/2, D/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1  | Normal | 28  |
| 343 |  | C28 | B28 | Df/2, D/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1  | Normal | 18  |
| 364 |  | B28 | H28 | 48/1, Cf/2, C/3, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1  | Normal | 0   |
| 379 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1                  | Normal | 0   |
| 380 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1   | Normal | 0   |
| 381 |  | B28 | B28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1   | Normal | 0   |
| 382 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3       | Normal | 0   |
| 383 |  | G28 | B28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                        | Normal | 128 |
| 384 |  | A28 | A28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/1, Bcf/1, xB/1                              | Normal | 0   |
| 385 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/1, 47/1           | Normal | 0   |
| 386 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc1/1, xC/2, 47/1           | Normal | 0   |
| 387 |  | A28 | A28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/1, Bcf/1, xB/1                              | Normal | 3   |
| 388 |  | A28 | B28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1  | Normal | 0   |
| 389 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                 | Normal | 0   |
| 390 |  | E28 | B28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                 | Normal | 0   |
| 391 |  | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3 | Normal | 0   |
| 392 |  | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1         | Normal | 0   |
| 393 |  | D28 | B28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                  | Normal | 15  |
| 394 |  | D28 | B28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                  | Normal | 0   |
| 395 |  | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1                    | Normal | 0   |
| 396 |  | H28 | B28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                             | Normal | 0   |
| 397 |  | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/3, TC39/3, TC40/3    | Normal | 0   |
| 398 |  | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/4, Ec/3, Fc/2, xA/2, TC5/4, TC43/1            | Normal | 0   |
| 399 |  | F28 | B28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/1, xC/1, 47/1                     | Normal | 0   |
| 400 |  | F28 | B28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/6, Dcf/6, Dc/4, Ecf/5, Gf1/1, G/2, xC/2, 47/1                     | Normal | 0   |
| 401 |  | G28 | F28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                      | Normal | 26  |
| 402 |  | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3       | Normal | 0   |
| 403 |  | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1               | Normal | 0   |
| 404 |  | A28 | G28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                           | Normal | 0   |
| 405 |  | A28 | F28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1  | Normal | 0   |

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|-----|-----|-----|---|--------|-----|
| 406 | A28 | H28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                                   | Normal | 0   |
| 407 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2 | Normal | 0   |
| 408 | H28 | F28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                           | Normal | 0   |
| 409 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3            | Normal | 0   |
| 410 | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1                    | Normal | 0   |
| 411 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2    | Normal | 0   |
| 412 | F28 | F28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                   | Normal | 0   |
| 413 | F28 | G28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3    | Normal | 0   |
| 414 | F28 | H28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/4, TC43/1            | Normal | 0   |
| 415 | A28 | D28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1  | Normal | 0   |
| 417 | A28 | E28 | 50/1, Bf/2, B/3, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1   | Normal | 45  |
| 418 | G28 | C28 | 49/1, TC9/1, Af/1, A/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1  | Normal | 304 |
| 423 | C28 | C28 | Df/2, D/3, Ecf/4, Ec/3, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                             | Normal | 0   |
| 424 | C28 | C28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1                             | Normal | 0   |
| 425 | E28 | C28 | Ef/1, E1/1, Fc/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 29  |
| 428 | E28 | C28 | Ef/1, E1/2, Fc/3, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1   | Normal | 65  |
| 431 | D28 | C28 | 51/1, Ff/1, F/2, Acf/1, Ac/2, Bcf/2, Bc/1, Cc2/2, Dcf/1, Dxp/1, xD/1  | Normal | 13  |
| 439 | G28 | E28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                                   | Normal | 0   |
| 440 | G28 | E28 | 49/2, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                   | Normal | 0   |
| 441 | G28 | E28 | 49/1, TC9/2, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                   | Normal | 0   |
| 442 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                            | Normal | 0   |
| 443 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                             | Normal | 0   |
| 444 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                            | Normal | 0   |
| 445 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1                             | Normal | 0   |
| 446 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                              | Normal | 0   |
| 447 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                             | Normal | 0   |
| 448 | H28 | E28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 0   |
| 449 | H28 | D28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 0   |
| 450 | H28 | E28 | TC42/1, Af/2, A/3, Bcf/3, Bc/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 451 | G28 | D28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                                    | Normal | 21  |
| 452 | G28 | E28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                                   | Normal | 262 |
| 453 | A28 | D28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1  | Normal | 0   |
| 454 | A28 | E28 | 50/1, Bf/2, B/4, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2   | Normal | 0   |

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|-----|-----|-----|--|--------|-----|
| 455 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                  | Normal | 0   |
| 456 | E28 | E28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                 | Normal | 1   |
| 457 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                   | Normal | 0   |
| 458 | D28 | E28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                  | Normal | 17  |
| 459 | H28 | D28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1                              | Normal | 0   |
| 460 | F28 | E28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2                     | Normal | 25  |
| 461 | A28 | E28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/4, Dc/2, Ecf/2, Exp/2, xE/2  | Normal | 0   |
| 462 | A28 | G28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                | Normal | 94  |
| 463 | A28 | F28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/1, TC35/1                               | Normal | 53  |
| 464 | A28 | G28 | 50/1, Bf/2, B/3, Cc2/5, Dcf/5, Dc/3, Ecf/3, Ec/2, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                | Normal | 0   |
| 465 | A28 | E28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/3, Dc/1, Ecf/1, Exp/1, xE/1  | Normal | 255 |
| 466 | A28 | D28 | 50/1, Bf/1, B/2, Cc2/3, Dcf/4, Dc/2, Ecf/2, Ec/1, xF/1   | Normal | 6   |
| 467 | G28 | D28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1  | Normal | 127 |
| 468 | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                 | Normal | 0   |
| 469 | G28 | F28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                                | Normal | 0   |
| 470 | G28 | G28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                 | Normal | 0   |
| 471 | G28 | H28 | 49/2, TC9/3, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                         | Normal | 0   |
| 472 | A28 | D28 | 50/1, Bf/2, B/4, Cc2/6, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1 | Normal | 0   |
| 473 | B28 | D28 | 48/1, Cf/2, C/3, Dcf/6, Dc/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1        | Normal | 100 |
| 474 | C28 | D28 | Df/2, D/4, Ecf/5, Ec/4, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1                           | Normal | 0   |
| 475 | E28 | D28 | Ef/1, E1/2, Fc/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1                                       | Normal | 0   |
| 476 | D28 | D28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, xF/1  | Normal | 0   |
| 477 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2           | Normal | 0   |
| 478 | D28 | F28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                          | Normal | 0   |
| 479 | D28 | G28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3           | Normal | 0   |
| 480 | D28 | H28 | 51/1, Ff/2, F/3, Acf/2, Ac/3, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                   | Normal | 0   |
| 481 | H28 | D28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1   | Normal | 0   |
| 482 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC5/2, TC39/2, TC40/2                      | Normal | 0   |
| 483 | H28 | F28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                                     | Normal | 0   |
| 484 | H28 | G28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/3, TC39/3, TC40/3                      | Normal | 0   |
| 485 | H28 | H28 | TC42/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/2, TC5/4, TC43/1                              | Normal | 0   |
| 486 | F28 | D28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, xF/1   | Normal | 106 |
| 487 | F28 | F28 | TC36/1, TC41/1, Af/3, A/4, Bcf/4, Bc/3, 53/1, 52/1, Fc/1, xA/1, TC35/1                             | Normal | 0   |

# Signal Timings

Network Default: 60s cycle time; 60 steps

## Resultant penalties

| Time Segment | Controller stream | Phase min max penalty (£ per hr) | Intergreen broken penalty (£ per hr) | Stage constraint broken penalty (£ per hr) | Cost of controller stream penalties (£ per hr) |
|--------------|-------------------|----------------------------------|--------------------------------------|--|--|
| 16:30-17:30  | (ALL)             | 0.00                             | 0.00                                 | 0.00                                       | 0.00   |

## Results - Link

## Results - Traffic Stream

### Results - Traffic Stream: Vehicle summary

| Time Segment | Arm | Traffic Stream | Name       | Phase | Calculated flow entering (PCU/hr) | Calculated sat flow (PCU/hr) | Actual green (s (per cycle)) | Calculated capacity (PCU/hr) | Degree of saturation (%) | Practical reserve capacity (%) | Mean Delay per Veh (s) | Mean max queue (PCU) | Utilised storage (%) | JourneyTime (s) |        |
|--------------|-----|----------------|------------|-------|-----------------------------------|------------------------------|------------------------------|------------------------------|--------------------------|--------------------------------|------------------------|----------------------|----------------------|-----------------|--------|
| 16:30-17:30  | A   | 1              | (untitled) | E     | 854                               | 2050                         | 24                           | 854                          | 100                      | -10                            | 81.44                  | 25.68                | 198.58               | 87.02           |        |
|              |     | 2              | (untitled) | E     | 479                               | 2050                         | 24                           | 854                          | 56                       | 60                             | 20.22                  | 6.65                 | 49.88                | 25.97           |        |
|              |     | 3              | (untitled) | E     | 758                               | 2050                         | 24                           | 854                          | 89                       | 1                              | 29.82                  | 14.05                | 103.04               | 35.70           |        |
|              |     | 4              | (untitled) | E     | 746                               | 2050                         | 24                           | 854                          | 87                       | 3                              | 30.18                  | 13.38                | 96.01                | 36.19           |        |
|              | Ac  | 1              | (untitled) | D     |                                   | 920                          | 2263                         | 26                           | 1018                     | 90                             | 0                      | 30.09                | 13.28                | 79.68           | 37.27  |
|              |     | 2              | (untitled) | D     |                                   | 370                          | 2263                         | 26                           | 983                      | 38                             | 139                    | 7.16                 | 1.80                 | 11.23           | 16.66  |
|              |     | 3              | (untitled) | D     |                                   | 369                          | 2263                         | 26                           | 1015                     | 36                             | 148                    | 1.53                 | 2.42                 | 15.84           | 8.12   |
|              | Acf | 1              | (untitled) |       |                                   | 1290                         | 2263                         | 60                           | 2263                     | 57                             | 58                     | 1.05                 | 0.38                 | 3.11            | 6.27   |
|              |     | 2              | (untitled) |       |                                   | 369                          | 2263                         | 60                           | 2263                     | 16                             | 452                    | 0.15                 | 0.02                 | 0.13            | 7.40   |
|              | Af  | 1              | (untitled) |       |                                   | 1333                         | 2050                         | 60                           | 1541                     | 87                             | 4                      | 12.83                | 11.27                | 121.04          | 19.25  |
|              |     | 2              | (untitled) |       |                                   | 758                          | 2050                         | 60                           | 1922                     | 39                             | 128                    | 0.63                 | 1.58                 | 17.05           | 7.01   |
|              |     | 3              | (untitled) |       |                                   | 746                          | 2050                         | 60                           | 2050                     | 36                             | 147                    | 0.50                 | 0.10                 | 1.13            | 6.86   |
|              | B   | 1              | (untitled) | B     |                                   | 270                          | 2050                         | 9                            | 342                      | 79                             | 14                     | 49.64                | 5.88                 | 35.74           | 56.74  |
|              |     | 2              | (untitled) | B     |                                   | 266                          | 2150                         | 9                            | 266                      | 100                            | -10                    | 296.01               | 23.92                | 141.51          | 303.30 |
|              |     | 3              | (untitled) | B     |                                   | 259                          | 2100                         | 9                            | 308                      | 84                             | 7                      | 44.66                | 5.29                 | 30.48           | 52.14  |
|              |     | 4              | (untitled) | B     |                                   | 253                          | 2050                         | 9                            | 342                      | 74                             | 21                     | 34.84                | 4.48                 | 25.16           | 47.13  |
|              | Bc  | 1              | (untitled) | A     |                                   | 849                          | 2050                         | 39                           | 1367                     | 62                             | 45                     | 9.30                 | 14.04                | 60.77           | 21.26  |
|              |     | 2              | (untitled) | A     |                                   | 1014                         | 2050                         | 39                           | 1367                     | 74                             | 21                     | 17.17                | 14.99                | 65.56           | 29.00  |
|              |     | 3              | (untitled) | A     |                                   | 858                          | 2050                         | 39                           | 1367                     | 63                             | 43                     | 16.30                | 14.06                | 62.15           | 28.01  |
|              | Bcf | 1              | (untitled) |       |                                   | 1774                         | 2263                         | 60                           | 2263                     | 78                             | 15                     | 2.86                 | 1.41                 | 12.92           | 7.18   |

|            |   |            |   |      |      |    |      |     |     |        |       |        |        |
|------------|---|------------|---|------|------|----|------|-----|-----|--------|-------|--------|--------|
|            | 2 | (untitled) |   | 849  | 2263 | 60 | 2263 | 38  | 140 | 0.48   | 0.11  | 1.03   | 5.94   |
|            | 3 | (untitled) |   | 1014 | 2263 | 60 | 2263 | 45  | 101 | 0.65   | 0.18  | 1.67   | 6.58   |
|            | 4 | (untitled) |   | 858  | 2263 | 60 | 2263 | 38  | 137 | 0.49   | 0.12  | 1.07   | 6.74   |
| <b>Bf</b>  | 1 | (untitled) |   | 536  | 1800 | 60 | 566  | 95  | -5  | 214.03 | 44.90 | 113.33 | 241.37 |
|            | 2 | (untitled) |   | 512  | 1800 | 60 | 1800 | 28  | 216 | 0.40   | 0.06  | 0.14   | 27.81  |
| <b>C</b>   | 1 | (untitled) | G | 89   | 2100 | 14 | 525  | 17  | 432 | 18.90  | 1.50  | 7.11   | 33.44  |
|            | 2 | (untitled) | G | 529  | 2200 | 14 | 550  | 96  | -7  | 150.45 | 27.28 | 127.80 | 165.18 |
|            | 3 | (untitled) | G | 351  | 2050 | 14 | 513  | 68  | 31  | 35.33  | 6.59  | 30.49  | 50.26  |
| <b>Cf</b>  | 1 | (untitled) |   | 559  | 1965 | 60 | 559  | 100 | -10 | 183.76 | 35.98 | 143.08 | 201.12 |
|            | 2 | (untitled) |   | 410  | 1965 | 60 | 1143 | 36  | 151 | 7.43   | 4.95  | 19.52  | 24.93  |
| <b>D</b>   | 1 | (untitled) | B | 423  | 2050 | 13 | 478  | 88  | 2   | 47.48  | 8.90  | 93.06  | 51.60  |
|            | 2 | (untitled) | B | 251  | 1850 | 13 | 432  | 58  | 55  | 26.14  | 3.75  | 39.17  | 30.27  |
|            | 3 | (untitled) | B | 370  | 2250 | 13 | 525  | 70  | 28  | 29.13  | 5.99  | 65.11  | 33.10  |
|            | 4 | (untitled) | B | 390  | 2250 | 13 | 525  | 74  | 21  | 30.99  | 6.49  | 67.30  | 35.15  |
| <b>Dc</b>  | 1 | (untitled) | A | 548  | 2100 | 37 | 1330 | 41  | 119 | 11.18  | 7.54  | 85.11  | 17.29  |
|            | 2 | (untitled) | A | 635  | 2100 | 37 | 1330 | 48  | 89  | 6.74   | 5.13  | 60.27  | 12.61  |
|            | 3 | (untitled) | A | 252  | 2100 | 37 | 1330 | 19  | 375 | 6.76   | 2.34  | 28.58  | 12.40  |
|            | 4 | (untitled) | A | 458  | 2100 | 37 | 1330 | 34  | 161 | 7.89   | 3.25  | 41.52  | 13.30  |
| <b>Dcf</b> | 1 | (untitled) |   | 745  | 2050 | 60 | 2050 | 36  | 148 | 0.50   | 0.10  | 0.91   | 5.41   |
|            | 2 | (untitled) |   | 1097 | 2100 | 60 | 2100 | 52  | 72  | 0.94   | 0.29  | 2.51   | 5.83   |
|            | 3 | (untitled) |   | 548  | 2100 | 60 | 2100 | 26  | 245 | 0.30   | 0.05  | 0.40   | 6.36   |
|            | 4 | (untitled) |   | 635  | 2100 | 60 | 2100 | 30  | 198 | 0.37   | 0.07  | 0.56   | 7.57   |
|            | 5 | (untitled) |   | 252  | 2100 | 60 | 2100 | 12  | 650 | 0.12   | 0.01  | 0.07   | 6.61   |
|            | 6 | (untitled) |   | 458  | 2050 | 60 | 2050 | 22  | 303 | 0.25   | 0.03  | 0.28   | 8.19   |
| <b>Df</b>  | 1 | (untitled) |   | 674  | 1900 | 60 | 1900 | 35  | 154 | 0.52   | 0.10  | 0.28   | 24.52  |
|            | 2 | (untitled) |   | 760  | 2250 | 60 | 2250 | 34  | 166 | 0.41   | 0.09  | 0.25   | 24.41  |
| <b>Dxp</b> | 1 | (untitled) | D | 724  | 2050 | 41 | 1435 | 50  | 78  | 2.81   | 1.67  | 20.97  | 6.24   |
|            | 2 | (untitled) | D | 1090 | 2050 | 41 | 1435 | 76  | 18  | 4.12   | 6.42  | 76.71  | 7.73   |
| <b>Ec</b>  | 1 | (untitled) | F | 415  | 2150 | 19 | 717  | 58  | 55  | 17.11  | 6.72  | 77.09  | 20.87  |
|            | 2 | (untitled) | F | 503  | 2263 | 19 | 754  | 67  | 35  | 16.64  | 6.71  | 79.71  | 20.27  |
|            | 3 | (untitled) | F | 507  | 2263 | 19 | 754  | 67  | 34  | 17.72  | 7.59  | 93.29  | 21.23  |
|            | 4 | (untitled) | F | 451  | 2250 | 19 | 750  | 60  | 50  | 15.04  | 7.41  | 94.50  | 20.45  |

|     |   |            |   |      |              |    |              |     |              |        |       |        |        |
|-----|---|------------|---|------|--------------|----|--------------|-----|--------------|--------|-------|--------|--------|
| Ecf | 1 | (untitled) |   | 653  | 2100         | 60 | 2099         | 31  | 189          | 0.39   | 4.71  | 58.93  | 3.84   |
|     | 2 | (untitled) |   | 953  | 2100         | 60 | 2099         | 45  | 98           | 0.72   | 4.83  | 59.89  | 4.19   |
|     | 3 | (untitled) |   | 503  | 2263         | 60 | 2129         | 24  | 281          | 0.76   | 2.07  | 25.33  | 5.33   |
|     | 4 | (untitled) |   | 507  | 2300         | 60 | 1752         | 29  | 211          | 1.48   | 1.84  | 22.26  | 6.61   |
|     | 5 | (untitled) |   | 711  | 2300         | 60 | 2213         | 32  | 180          | 0.46   | 1.93  | 22.86  | 5.30   |
| Ef  | 1 | (untitled) |   | 882  | 1900         | 60 | 1900         | 46  | 94           | 0.82   | 0.20  | 0.91   | 16.13  |
|     | 2 | (untitled) |   | 630  | 1900         | 60 | 1900         | 33  | 171          | 0.47   | 0.08  | 0.37   | 15.78  |
| Exp | 1 | (untitled) | L | 653  | 2050         | 42 | 1469         | 44  | 103          | 2.83   | 4.85  | 53.83  | 6.72   |
|     | 2 | (untitled) | L | 537  | 2050         | 42 | 1469         | 37  | 146          | 2.04   | 2.42  | 25.95  | 6.07   |
| F   | 1 | (untitled) | B | 165  | 2100         | 7  | 280          | 59  | 52           | 43.64  | 3.17  | 21.44  | 50.03  |
|     | 2 | (untitled) | B | 280  | 2100         | 7  | 280          | 100 | -10          | 256.54 | 21.81 | 146.28 | 262.96 |
|     | 3 | (untitled) | B | 280  | 2100         | 7  | 280          | 100 | -10          | 256.54 | 21.81 | 143.72 | 263.08 |
| Fc  | 1 | (untitled) | A | 681  | 2263         | 43 | 1660         | 41  | 119          | 8.29   | 5.71  | 18.38  | 27.12  |
|     | 2 | (untitled) | A | 962  | 2263         | 43 | 1601         | 60  | 50           | 7.74   | 6.93  | 22.73  | 26.99  |
|     | 3 | (untitled) | A | 909  | 2263         | 43 | 1486         | 61  | 47           | 10.61  | 13.54 | 43.19  | 30.03  |
| Ff  | 1 | (untitled) |   | 445  | 1900         | 60 | 445          | 100 | -10          | 377.96 | 57.89 | 120.73 | 411.05 |
|     | 2 | (untitled) |   | 269  | 1900         | 60 | 280          | 96  | -6           | 211.70 | 18.14 | 37.88  | 244.75 |
| G   | 1 | (untitled) | F | 416  | 2050         | 14 | 416          | 100 | -10          | 259.26 | 35.08 | 129.84 | 275.24 |
|     | 2 | (untitled) | F | 441  | 2050         | 14 | 425          | 104 | -13          | 255.12 | 38.97 | 147.62 | 266.50 |
| Gf  | 1 | (untitled) |   | 329  | 2050         | 60 | 310          | 106 | -15          | 182.30 | 20.12 | 285.73 | 185.34 |
|     | 2 | (untitled) |   | 301  | 2050         | 60 | 2034         | 15  | 508          | 0.22   | 2.33  | 33.51  | 3.22   |
| xA  | 1 | (untitled) |   | 830  | 2263         | 60 | 2260         | 37  | 145          | 0.47   | 2.43  | 6.07   | 17.69  |
|     | 2 | (untitled) |   | 788  | 2263         | 60 | 1585         | 50  | 81           | 6.20   | 5.35  | 13.37  | 23.45  |
| xB  | 1 | (untitled) |   | 1774 | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 5.79   |
| xC  | 1 | (untitled) |   | 650  | 1900         | 60 | 650          | 100 | -10          | 118.05 | 29.63 | 147.38 | 126.72 |
|     | 2 | (untitled) |   | 650  | 1900         | 60 | 650          | 100 | -10          | 119.04 | 29.53 | 146.42 | 127.74 |
| xD  | 1 | (untitled) |   | 724  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 9.11   |
|     | 2 | (untitled) |   | 1090 | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 9.16   |
| xE  | 1 | (untitled) |   | 653  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.04  |
|     | 2 | (untitled) |   | 537  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 13.04  |
| xF  | 1 | (untitled) |   | 849  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00  | 0.00   | 14.56  |
| Cc1 | 1 | (untitled) | E | 459  | 2050         | 31 | 1093         | 42  | 114          | 3.58   | 2.70  | 16.17  | 10.17  |

|      |   |            |   |      |              |    |              |     |              |        |        |         |        |
|------|---|------------|---|------|--------------|----|--------------|-----|--------------|--------|--------|---------|--------|
| E1   | 1 | (untitled) | G | 424  | 2050         | 12 | 444          | 95  | -6           | 73.88  | 12.03  | 86.50   | 79.88  |
|      | 2 | (untitled) | G | 458  | 2200         | 12 | 477          | 96  | -6           | 74.71  | 13.54  | 97.35   | 80.71  |
| Gf1  | 1 | (untitled) |   | 260  | 664          | 60 | 246          | 106 | -15          | 189.86 | 15.97  | 192.02  | 195.60 |
| Cc2  | 2 | (untitled) | D | 660  | 2150         | 32 | 1176         | 56  | 60           | 3.81   | 3.04   | 19.10   | 13.84  |
|      | 3 | (untitled) | D | 336  | 2050         | 32 | 1128         | 30  | 202          | 0.68   | 0.06   | 0.40    | 10.40  |
|      | 4 | (untitled) | D | 1094 | 2150         | 32 | 1171         | 93  | -4           | 27.74  | 15.86  | 100.89  | 33.92  |
|      | 5 | (untitled) | D | 447  | 2050         | 32 | 1128         | 40  | 127          | 2.76   | 2.40   | 15.23   | 9.92   |
|      | 6 | (untitled) | D | 230  | 2050         | 32 | 1128         | 20  | 342          | 2.30   | 2.57   | 16.79   | 8.31   |
| E2   | 3 | (untitled) | H | 329  | 2150         | 14 | 508          | 65  | 39           | 26.56  | 5.23   | 56.49   | 30.56  |
|      | 4 | (untitled) | H | 301  | 2050         | 14 | 512          | 59  | 53           | 24.74  | 4.34   | 45.97   | 28.81  |
| TC5  | 2 | (untitled) | A | 686  | 2263         | 34 | 1358         | 50  | 78           | 1.92   | 2.87   | 71.78   | 4.68   |
|      | 3 | (untitled) | A | 788  | 2263         | 34 | 1358         | 58  | 55           | 5.89   | 3.30   | 82.40   | 8.66   |
|      | 4 | (untitled) | C | 0    | 0            | 0  | 0            | 0   | -100         | 0.00   | 0.00   | 0.00    | 0.00   |
| TC9  | 1 | (untitled) | B | 1152 | 1925         | 35 | 1152         | 100 | -10          | 71.16  | 32.43  | 203.32  | 82.17  |
|      | 2 | (untitled) | B | 758  | 1966         | 35 | 1245         | 61  | 48           | 9.20   | 7.15   | 44.58   | 20.26  |
|      | 3 | (untitled) | B | 639  | 1947         | 35 | 1233         | 52  | 74           | 7.57   | 5.31   | 32.96   | 18.70  |
| TC35 | 1 | (untitled) | A | 144  | 1900         | 34 | 1140         | 13  | 612          | 0.87   | 0.42   | 10.09   | 3.77   |
| TC36 | 1 | (untitled) |   | 431  | 1800         | 60 | 352          | 122 | -27          | 360.34 | 47.25  | 1077.19 | 363.36 |
| TC37 | 1 | (untitled) | J | 64   | 1850         | 44 | 1388         | 5   | 1860         | 0.23   | 0.06   | 0.77    | 3.42   |
| TC38 | 1 | (untitled) |   | 64   | 434          | 60 | 434          | 15  | 514          | 4.87   | 2.43   | 65.49   | 6.40   |
| TC39 | 2 | (untitled) |   | 686  | 2263         | 60 | 2263         | 30  | 197          | 0.35   | 0.07   | 1.07    | 2.88   |
|      | 3 | (untitled) |   | 788  | 2263         | 60 | 2263         | 35  | 158          | 0.42   | 0.09   | 1.61    | 2.82   |
| TC40 | 2 | (untitled) |   | 749  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00   | 0.00    | 4.23   |
|      | 3 | (untitled) |   | 788  | Unrestricted | 60 | Unrestricted | 0   | Unrestricted | 0.00   | 0.00   | 0.00    | 4.02   |
| TC41 | 1 | (untitled) | D | 288  | 1850         | 15 | 288          | 100 | -10          | 177.19 | 15.26  | 160.66  | 181.12 |
| TC42 | 1 | (untitled) | E | 0    | 0            | 0  | 0            | 0   | -100         | 0.00   | 0.00   | 0.00    | 0.00   |
| TC43 | 1 | (untitled) |   | 0    | 1800         | 60 | 1800         | 0   | Unrestricted | 0.00   | 0.00   | 0.00    | 0.00   |
| 47   | 1 | (untitled) |   | 1300 | 1300         | 60 | 1300         | 100 | -10          | 48.58  | 17.54  | 75.48   | 64.61  |
| 48   | 1 | (untitled) |   | 1102 | 1965         | 60 | 969          | 114 | -21          | 240.71 | 85.74  | 894.33  | 247.33 |
| 49   | 1 | (untitled) |   | 1342 | 1900         | 60 | 1206         | 111 | -19          | 202.11 | 91.56  | 2006.08 | 205.26 |
|      | 2 | (untitled) |   | 1343 | 1900         | 60 | 1900         | 71  | 27           | 2.27   | 0.85   | 18.57   | 5.42   |
| 50   | 1 | (untitled) |   | 1485 | 1900         | 60 | 1048         | 142 | -36          | 539.48 | 236.79 | 2827.98 | 545.25 |

|  |    |   |            |   |      |      |      |     |      |     |        |        |         |        |      |
|--|----|---|------------|---|------|------|------|-----|------|-----|--------|--------|---------|--------|------|
|  | 51 | 1 | (untitled) |   | 1015 | 1900 | 60   | 714 | 142  | -37 | 546.32 | 163.14 | 2503.60 | 550.82 |      |
|  | 52 | 1 |            | A | 321  | 1800 | 12   | 390 | 82   | 9   | 32.67  | 5.61   | 18.65   | 53.43  |      |
|  |    | 2 |            | A | 321  | 1800 | 12   | 390 | 82   | 9   | 61.76  | 7.64   | 25.37   | 82.54  |      |
|  | 53 | 1 |            |   |      | 321  | 1800 | 60  | 1800 | 18  | 405    | 0.22   | 0.02    | 0.25   | 5.49 |
|  |    | 2 |            |   |      | 321  | 1800 | 60  | 1800 | 18  | 405    | 0.28   | 2.64    | 35.98  | 5.35 |

## Data Entry - Stage Start and End

### Resultant Stage

| Controller Stream | Resultant Stage | Is base stage | Library Stage ID | Phases in this stage | Stage start (s) | Stage end (s) | Stage duration (s) | User stage minimum (s) | Stage minimum (s) |
|-------------------|-----------------|---------------|------------------|----------------------|-----------------|---------------|--------------------|------------------------|-------------------|
| 769-1             | 1               | ✓             | 1                | A,C                  | 36              | 11            | 35                 | 1                      | 7                 |
|                   | 2               | ✓             | 2                | B                    | 22              | 31            | 9                  | 1                      | 7                 |
| 769-2             | 1               | ✓             | 4                | D,E,H,I              | 28              | 51            | 23                 | 1                      | 1                 |
|                   | 2               | ✓             | 5                | F,G,J,K              | 5               | 13            | 8                  | 1                      | 7                 |
| 770-1             | 1               | ✓             | 1                | A,C                  | 43              | 18            | 35                 | 1                      | 5                 |
|                   | 2               | ✓             | 2                | B                    | 25              | 38            | 13                 | 1                      | 7                 |
| 770-2             | 1               | ✓             | 4                | D                    | 26              | 7             | 41                 | 1                      | 7                 |
|                   | 2               | ✓             | 5                | E                    | 12              | 19            | 7                  | 1                      | 5                 |
| 770-3             | 1               | ✓             | 4                | A                    | 29              | 41            | 12                 | 1                      | 7                 |
|                   | 2               | ✓             | 7                | F,I,J                | 46              | 1             | 15                 | 1                      | 3                 |
|                   | 3               | ✓             | 9                | G,H                  | 12              | 24            | 12                 | 1                      | 4                 |
| 770-4             | 1               | ✓             | 11               | L                    | 32              | 14            | 42                 | 1                      | 7                 |
|                   | 2               | ✓             | 12               | M                    | 19              | 25            | 6                  | 1                      | 6                 |
| 771-1             | 1               | ✓             | 1                | A,C                  | 25              | 2             | 37                 | 1                      | 9                 |
|                   | 2               | ✓             | 3                | B                    | 13              | 20            | 7                  | 1                      | 7                 |
| 771-2             | 1               | ✓             | 5                | D                    | 23              | 49            | 26                 | 1                      | 7                 |
|                   | 2               | ✓             | 6                | E                    | 54              | 18            | 24                 | 1                      | 7                 |
| TC777-1           | 1               | ✓             | 1                | A,B,F                | 26              | 0             | 34                 | 1                      | 7                 |
|                   | 2               | ✓             | 5                | D,H,I                | 7               | 20            | 13                 | 1                      | 6                 |
| TC777-2           | 1               | ✓             | 1                | J                    | 18              | 2             | 44                 | 1                      | 7                 |
|                   | 2               | ✓             | 2                | K                    | 7               | 13            | 6                  | 1                      | 5                 |

## Data Entry - Phase

### Phase

| Controller Stream | Phase | Phase | Street minimum green (s) | Maximum green (s) | Relative start displacement (s) | Relative end displacement (s) | Type       |
|-------------------|-------|-------|--------------------------|-------------------|---------------------------------|-------------------------------|------------|
| 769-1             | A     | A     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | B     | B     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | C     | C     | 7                        | 300               | 0                               | 0                             | Pedestrian |
| 769-2             | D     | D     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | E     | E     | 7                        | 300               | 0                               | 0                             | Traffic    |
|                   | F     | F     | 4                        | 300               | 0                               | 0                             | Traffic    |
|                   | G     | G     | 4                        | 300               | 0                               | 0                             | Traffic    |
|                   | H     | H     | 5                        | 300               | 0                               | 0                             | Pedestrian |
|                   | I     | I     | 7                        | 300               | 0                               | 0                             | Pedestrian |
|                   | J     | J     | 10                       | 300               | 0                               | 0                             | Pedestrian |
|                   | K     | K     | 5                        | 300               | 0                               | 0                             | Pedestrian |

|         |   |   |    |     |   |   |            |
|---------|---|---|----|-----|---|---|------------|
| 770-1   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | B | B | 7  | 300 | 0 | 0 | Traffic    |
|         | C | C | 5  | 300 | 0 | 0 | Pedestrian |
| 770-2   | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 5  | 300 | 0 | 0 | Pedestrian |
| 770-3   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | F | F | 7  | 300 | 0 | 0 | Traffic    |
|         | G | G | 4  | 300 | 0 | 0 | Traffic    |
|         | H | H | 4  | 300 | 0 | 0 | Traffic    |
|         | I | I | 5  | 300 | 0 | 0 | Pedestrian |
|         | J | J | 5  | 300 | 0 | 0 | Pedestrian |
|         | K | K | 10 | 300 | 0 | 0 | Pedestrian |
| 770-4   | L | L | 7  | 300 | 0 | 0 | Traffic    |
|         | M | M | 6  | 300 | 0 | 0 | Pedestrian |
| 771-1   | A | A | 7  | 300 | 0 | 0 | Traffic    |
|         | B | B | 7  | 300 | 0 | 0 | Traffic    |
|         | C | C | 9  | 300 | 0 | 0 | Pedestrian |
| 771-2   | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 7  | 300 | 0 | 0 | Traffic    |
| TC777-1 | A | A | 7  | 300 | 0 | 1 | Traffic    |
|         | B | B | 7  | 300 | 0 | 2 | Traffic    |
|         | C | C | 7  | 300 | 0 | 0 | Traffic    |
|         | D | D | 7  | 300 | 0 | 0 | Traffic    |
|         | E | E | 7  | 300 | 0 | 0 | Traffic    |
|         | F | F | 5  | 300 | 0 | 0 | Pedestrian |
|         | G | G | 7  | 300 | 0 | 0 | Pedestrian |
|         | H | H | 6  | 300 | 0 | 0 | Pedestrian |
|         | I | I | 5  | 300 | 0 | 0 | Pedestrian |
| TC777-2 | J | J | 7  | 300 | 0 | 0 | Traffic    |
|         | K | K | 5  | 300 | 0 | 0 | Pedestrian |

## Data Entry - Traffic Stream

### Traffic Stream

| Arm | Traffic Stream | Auto length | Length (m) | Traffic model | Max queue storage (PCU) | Traffic type | Has Saturation Flow | Is signal controlled | Is give way | Saturation flow source | Saturation flow (PCU/hr) | Delay weighting multiplier (%) | Stop weighting multiplier (%) |
|-----|----------------|-------------|------------|---------------|-------------------------|--------------|---------------------|----------------------|-------------|------------------------|--------------------------|--------------------------------|-------------------------------|
| A   | 1              | ✓           | 74.35      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 2              | ✓           | 76.69      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 3              | ✓           | 78.40      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
|     | 4              | ✓           | 80.11      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2050                     | 20                             | 0                             |
| Ac  | 1              | ✓           | 95.80      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2263                     | 100                            | 500                           |
|     | 2              | ✓           | 92.34      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2263                     | 100                            | 500                           |
|     | 3              | ✓           | 87.95      | CTM           | 0.00                    | Normal       | ✓                   | ✓                    |             | Directly entered       | 2263                     | 100                            | 500                           |
| Acf | 1              | ✓           | 69.59      | CTM           | 0.00                    | Normal       | ✓                   |                      |             | Directly entered       | 2263                     | 100                            | 100                           |
|     | 2              | ✓           | 70.42      | CTM           | 0.00                    | Normal       | ✓                   |                      |             | Directly entered       | 2263                     | 100                            | 100                           |

|     |   |   |        |     |      |        |   |   |  |                  |      |     |     |
|-----|---|---|--------|-----|------|--------|---|---|--|------------------|------|-----|-----|
| Af  | 1 | ✓ | 53.54  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 53.19  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 3 | ✓ | 53.01  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
| B   | 1 | ✓ | 94.67  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 2 | ✓ | 97.18  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2150 | 20  | 0   |
|     | 3 | ✓ | 99.69  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 4 | ✓ | 102.42 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Bc  | 1 | ✓ | 132.85 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 2 | ✓ | 131.47 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 3 | ✓ | 130.10 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
| Bcf | 1 | ✓ | 62.77  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 2 | ✓ | 62.62  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 3 | ✓ | 62.46  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 62.38  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
| Bf  | 1 | ✓ | 227.81 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
|     | 2 | ✓ | 228.44 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
| C   | 1 | ✓ | 121.13 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 2 | ✓ | 122.73 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2200 | 20  | 0   |
|     | 3 | ✓ | 124.35 | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
| Cf  | 1 | ✓ | 144.60 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
|     | 2 | ✓ | 145.86 | CTM | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
| D   | 1 |   | 55.00  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 20  | 0   |
|     | 2 |   | 55.00  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 1850 | 20  | 0   |
|     | 3 | ✓ | 52.87  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 20  | 0   |
|     | 4 | ✓ | 55.42  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 20  | 0   |
| Dc  | 1 | ✓ | 50.91  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 2 | ✓ | 48.96  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 3 | ✓ | 47.02  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
|     | 4 | ✓ | 45.07  | CTM | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 100 | 500 |
| Dcf | 1 | ✓ | 65.43  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 65.28  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 3 | ✓ | 65.54  | CTM | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |

|     |   |   |        |                |      |        |   |   |  |                  |      |     |     |
|-----|---|---|--------|----------------|------|--------|---|---|--|------------------|------|-----|-----|
|     | 4 | ✓ | 67.69  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 5 | ✓ | 66.13  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 6 | ✓ | 66.17  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
| Df  | 1 |   | 200.00 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 |   | 200.00 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 2250 | 100 | 100 |
| Dxp | 1 | ✓ | 45.75  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 48.11  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
| Ec  | 1 | ✓ | 50.09  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2150 | 100 | 500 |
|     | 2 | ✓ | 48.43  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 3 | ✓ | 46.77  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 4 | ✓ | 45.11  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2250 | 100 | 500 |
| Ecf | 1 | ✓ | 45.94  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 2 | ✓ | 46.37  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2100 | 100 | 100 |
|     | 3 | ✓ | 46.95  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
|     | 4 | ✓ | 47.51  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2300 | 100 | 100 |
|     | 5 | ✓ | 48.55  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2300 | 100 | 100 |
| Ef  | 1 | ✓ | 127.54 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 1900 | 100 | 100 |
|     | 2 | ✓ | 127.54 | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| Exp | 1 | ✓ | 51.83  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 53.71  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 100 |
| F   | 1 | ✓ | 85.13  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 2 | ✓ | 85.72  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
|     | 3 | ✓ | 87.25  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2100 | 20  | 0   |
| Fc  | 1 | ✓ | 178.68 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 2 | ✓ | 175.19 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
|     | 3 | ✓ | 180.28 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2263 | 100 | 500 |
| Ff  | 1 | ✓ | 275.73 | CTM            | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
|     | 2 | ✓ | 275.39 | CTM            | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| G   | 1 | ✓ | 155.36 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
|     | 2 | ✓ | 151.80 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 2050 | 100 | 500 |
| Gf  | 1 | ✓ | 40.48  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |
|     | 2 | ✓ | 40.06  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2050 | 100 | 100 |

|      |   |   |        |                |      |        |   |   |   |                  |      |     |     |
|------|---|---|--------|----------------|------|--------|---|---|---|------------------|------|-----|-----|
| xA   | 1 | ✓ | 229.66 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
|      | 2 | ✓ | 229.97 | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |
| xB   | 1 | ✓ | 77.15  | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xC   | 1 | ✓ | 115.60 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
|      | 2 | ✓ | 115.98 | CTM            | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1900 | 100 | 100 |
| xD   | 1 | ✓ | 121.44 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|      | 2 | ✓ | 122.12 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xE   | 1 | ✓ | 173.89 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
|      | 2 | ✓ | 173.83 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| xF   | 1 | ✓ | 158.35 | NetworkDefault | 0.00 | Normal |   |   |   |                  |      | 100 | 100 |
| Cc1  | 1 | ✓ | 95.84  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 100 |
| E1   | 1 |   | 80.00  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 20  | 0   |
|      | 2 |   | 80.00  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2200 | 20  | 0   |
| Gf1  | 1 | ✓ | 47.81  | NetworkDefault | 0.00 | Normal |   |   | ✓ |                  |      | 100 | 100 |
| Cc2  | 2 | ✓ | 91.52  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 100 | 500 |
|      | 3 | ✓ | 91.11  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|      | 4 | ✓ | 90.39  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 100 | 500 |
|      | 5 | ✓ | 90.48  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
|      | 6 | ✓ | 88.08  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 100 | 500 |
| E2   | 3 | ✓ | 53.28  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2150 | 20  | 0   |
|      | 4 | ✓ | 54.33  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2050 | 20  | 0   |
| TC5  | 2 | ✓ | 23.03  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 2263 | 100 | 100 |
|      | 3 | ✓ | 23.02  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 2263 | 100 | 100 |
|      | 4 | ✓ | 24.43  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1800 | 100 | 100 |
| TC9  | 1 | ✓ | 91.71  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1925 | 100 | 100 |
|      | 2 | ✓ | 92.21  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1966 | 100 | 100 |
|      | 3 | ✓ | 92.69  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Sum of lanes     | 1947 | 100 | 100 |
| TC35 | 1 | ✓ | 24.16  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1900 | 100 | 100 |
| TC36 | 1 | ✓ | 25.22  | NetworkDefault | 0.00 | Normal | ✓ |   |   | Sum of lanes     | 1800 | 100 | 100 |
| TC37 | 1 | ✓ | 44.32  | CTM            | 0.00 | Normal | ✓ | ✓ |   | Directly entered | 1850 | 100 | 100 |
| TC38 | 1 | ✓ | 21.32  | CTM            | 0.00 | Normal | ✓ |   | ✓ | Directly entered | 1850 | 100 | 100 |
| TC39 | 2 | ✓ | 35.24  | CTM            | 0.00 | Normal | ✓ |   |   | Directly entered | 2263 | 100 | 100 |

|       |   |   |        |                |      |        |   |   |  |                  |      |     |     |
|-------|---|---|--------|----------------|------|--------|---|---|--|------------------|------|-----|-----|
|       | 3 | ✓ | 33.28  | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 2263 | 100 | 100 |
| TC4 0 | 2 | ✓ | 58.74  | PDM            | 0.00 | Normal |   |   |  |                  |      | 100 | 100 |
|       | 3 | ✓ | 55.82  | PDM            | 0.00 | Normal |   |   |  |                  |      | 100 | 100 |
| TC4 1 | 1 | ✓ | 54.63  | CTM            | 0.00 | Normal | ✓ | ✓ |  | Directly entered | 1850 | 100 | 100 |
| TC4 2 | 1 | ✓ | 23.35  | NetworkDefault | 0.00 | Normal | ✓ | ✓ |  | Sum of lanes     | 1771 | 100 | 100 |
| TC4 3 | 1 | ✓ | 51.77  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
| 47    | 1 | ✓ | 133.63 | CTM            | 0.00 | Normal | ✓ |   |  | Directly entered | 1300 | 100 | 100 |
| 48    | 1 | ✓ | 55.12  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1965 | 100 | 100 |
| 49    | 1 | ✓ | 26.24  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 1900 | 100 | 100 |
|       | 2 | ✓ | 26.24  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Directly entered | 1900 | 100 | 100 |
| 50    | 1 | ✓ | 48.15  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| 51    | 1 | ✓ | 37.47  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1900 | 100 | 100 |
| 52    | 1 | ✓ | 173.00 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Sum of lanes     | 1800 | 100 | 500 |
|       | 2 | ✓ | 173.18 | CTM            | 0.00 | Normal | ✓ | ✓ |  | Sum of lanes     | 1800 | 100 | 500 |
| 53    | 1 | ✓ | 43.95  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |
|       | 2 | ✓ | 42.23  | NetworkDefault | 0.00 | Normal | ✓ |   |  | Sum of lanes     | 1800 | 100 | 100 |

## Data entry - Link

## Results - Pedestrian

### Pedestrian Crossings: Pedestrian summary

| Time Segment | Pedestrian crossing | Side | Calculated Flow Entering (Ped/hr) | Degree of saturation (%) | Actual green (s (per cycle)) | Mean Delay Per Ped (s) | Mean max queue (Ped) |
|--------------|---------------------|------|-----------------------------------|--------------------------|------------------------------|------------------------|----------------------|
| 16:30-17:30  | 1                   | 1    | 0                                 | 0                        | 7                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 7                            | 0.00                   | 0.00                 |
|              | 2                   | 1    | 0                                 | 0                        | 35                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 35                           | 0.00                   | 0.00                 |
|              | 3                   | 1    | 0                                 | 0                        | 6                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 6                            | 0.00                   | 0.00                 |
|              | 4                   | 1    | 0                                 | 0                        | 22                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 22                           | 0.00                   | 0.00                 |
|              | 5                   | 1    | 0                                 | 0                        | 24                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 24                           | 0.00                   | 0.00                 |
|              | 6                   | 1    | 0                                 | 0                        | 0                            | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 0                            | 0.00                   | 0.00                 |
|              | 7                   | 1    | 0                                 | 0                        | 37                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 37                           | 0.00                   | 0.00                 |
|              | 8                   | 1    | 0                                 | 0                        | 35                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 35                           | 0.00                   | 0.00                 |
|              | 9                   | 1    | 0                                 | 0                        | 11                           | 0.00                   | 0.00                 |
|              |                     | 2    | 0                                 | 0                        | 11                           | 0.00                   | 0.00                 |

|  |    |   |   |   |    |      |      |
|--|----|---|---|---|----|------|------|
|  | 10 | 1 | 0 | 0 | 16 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 16 | 0.00 | 0.00 |
|  | 11 | 1 | 0 | 0 | 29 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 29 | 0.00 | 0.00 |
|  | 12 | 1 | 0 | 0 | 29 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 29 | 0.00 | 0.00 |
|  | 13 | 1 | 0 | 0 | 15 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 15 | 0.00 | 0.00 |
|  | 14 | 1 | 0 | 0 | 35 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 35 | 0.00 | 0.00 |
|  | 15 | 1 | 0 | 0 | 0  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 0  | 0.00 | 0.00 |
|  | 16 | 1 | 0 | 0 | 13 | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 13 | 0.00 | 0.00 |
|  | 17 | 1 | 0 | 0 | 6  | 0.00 | 0.00 |
|  |    | 2 | 0 | 0 | 6  | 0.00 | 0.00 |

## Collections

### Point to Point Journey Time

Note: Auto Calculate disabled on this Local Matrix (Paths and Flow Allocation might not be up to date).

#### Average Journey Time (s) for Local Matrix: 1

|      | To  |        |        |        |       |        |        |        |     |
|------|-----|--------|--------|--------|-------|--------|--------|--------|-----|
|      | A28 | B28    | C28    | D28    | E28   | F28    | G28    | H28    |     |
| From | A28 | 739.6  | 1050.4 | 942.5  | 905.4 | 934.1  | 728.4  | 767.2  | 0.0 |
|      | B28 | 449.7  | 0.0    | 514.2  | 568.0 | 648.4  | 418.4  | 432.0  | 0.0 |
|      | C28 | 164.9  | 780.0  | 0.0    | 113.5 | 98.8   | 132.6  | 147.0  | 0.0 |
|      | D28 | 1272.9 | 1469.8 | 1179.7 | 0.0   | 1179.8 | 1032.7 | 1041.4 | 0.0 |
|      | E28 | 188.6  | 613.9  | 220.1  | 107.9 | 266.6  | 138.4  | 146.5  | 0.0 |
|      | F28 | 670.7  | 834.4  | 657.6  | 687.3 | 681.2  | 0.0    | 377.4  | 0.0 |
|      | G28 | 406.2  | 684.6  | 237.5  | 187.1 | 152.4  | 207.1  | 0.0    | 0.0 |
|      | H28 | 0.0    | 0.0    | 0.0    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0 |

#### Path Journey Time

| Path | From Location | To Location | Normal Calculated Flow (PCU/hr) | Normal journey time (s) | Normal journey dist (m) | Bus journeydist (m) | Tram journey dist (m) | Pedestrian journey dist (m) | Calculated Total Flow (PCU/hr) | Avg journey time (s) | Avg journey dist (m) |
|------|---------------|-------------|---------------------------------|-------------------------|-------------------------|---------------------|-----------------------|-----------------------------|--------------------------------|----------------------|----------------------|
| 32   | C28           | E28         | 105                             | 98.85                   | 526.66                  | 0.00                | 0.00                  | 0.00                        | 105                            | 98.85                | 526.66               |
| 36   | C28           | E28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 41   | E28           | A28         | 392                             | 192.55                  | 693.15                  | 0.00                | 0.00                  | 0.00                        | 392                            | 192.55               | 693.15               |
| 49   | C28           | D28         | 318                             | 113.55                  | 509.82                  | 0.00                | 0.00                  | 0.00                        | 318                            | 113.55               | 509.82               |
| 50   | E28           | D28         | 114                             | 107.88                  | 365.90                  | 0.00                | 0.00                  | 0.00                        | 114                            | 107.88               | 365.90               |
| 68   | E28           | G28         | 167                             | 146.48                  | 732.90                  | 0.00                | 0.00                  | 0.00                        | 167                            | 146.48               | 732.90               |
| 92   | E28           | F28         | 9                               | 138.38                  | 640.05                  | 0.00                | 0.00                  | 0.00                        | 9                              | 138.38               | 640.05               |
| 100  | E28           | B28         | 301                             | 513.09                  | 623.35                  | 0.00                | 0.00                  | 0.00                        | 301                            | 513.09               | 623.35               |
| 102  | A28           | C28         | 324                             | 872.77                  | 694.76                  | 0.00                | 0.00                  | 0.00                        | 324                            | 872.77               | 694.76               |
| 103  | F28           | B28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 105  | D28           | H28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 107  | A28           | B28         | 56                              | 1050.39                 | 716.08                  | 0.00                | 0.00                  | 0.00                        | 56                             | 1050.39              | 716.08               |
| 110  | E28           | G28         | 0                               | 0.00                    | 0.00                    | 0.00                | 0.00                  | 0.00                        | 0                              | 0.00                 | 0.00                 |
| 112  | F28           | G28         | 78                              | 377.41                  | 149.60                  | 0.00                | 0.00                  | 0.00                        | 78                             | 377.41               | 149.60               |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 113 | F28 | A28 | 126 | 670.66  | 347.66  | 0.00 | 0.00 | 0.00 | 126 | 670.66  | 347.66  |
| 115 | B28 | C28 | 4   | 516.59  | 556.36  | 0.00 | 0.00 | 0.00 | 4   | 516.59  | 556.36  |
| 125 | H28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 130 | G28 | C28 | 704 | 157.48  | 769.88  | 0.00 | 0.00 | 0.00 | 704 | 157.48  | 769.88  |
| 137 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 138 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 140 | B28 | G28 | 126 | 426.61  | 1059.21 | 0.00 | 0.00 | 0.00 | 126 | 426.61  | 1059.21 |
| 141 | B28 | F28 | 13  | 418.37  | 966.36  | 0.00 | 0.00 | 0.00 | 13  | 418.37  | 966.36  |
| 142 | B28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 143 | E28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 144 | B28 | G28 | 141 | 436.93  | 1048.14 | 0.00 | 0.00 | 0.00 | 141 | 436.93  | 1048.14 |
| 145 | B28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 146 | B28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 147 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 148 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 149 | B28 | A28 | 19  | 449.73  | 1015.84 | 0.00 | 0.00 | 0.00 | 19  | 449.73  | 1015.84 |
| 150 | E28 | B28 | 329 | 706.36  | 625.89  | 0.00 | 0.00 | 0.00 | 329 | 706.36  | 625.89  |
| 151 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 152 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 153 | F28 | B28 | 29  | 834.36  | 750.62  | 0.00 | 0.00 | 0.00 | 29  | 834.36  | 750.62  |
| 154 | E28 | A28 | 105 | 173.64  | 688.05  | 0.00 | 0.00 | 0.00 | 105 | 173.64  | 688.05  |
| 155 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 156 | G28 | B28 | 75  | 765.24  | 1144.80 | 0.00 | 0.00 | 0.00 | 75  | 765.24  | 1144.80 |
| 157 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 158 | A28 | G28 | 19  | 728.95  | 1189.89 | 0.00 | 0.00 | 0.00 | 19  | 728.95  | 1189.89 |
| 159 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 160 | B28 | D28 | 62  | 674.44  | 693.92  | 0.00 | 0.00 | 0.00 | 62  | 674.44  | 693.92  |
| 161 | B28 | E28 | 138 | 664.41  | 713.02  | 0.00 | 0.00 | 0.00 | 138 | 664.41  | 713.02  |
| 162 | B28 | D28 | 20  | 486.47  | 695.18  | 0.00 | 0.00 | 0.00 | 20  | 486.47  | 695.18  |
| 163 | B28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 164 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 165 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 166 | B28 | C28 | 97  | 514.14  | 553.47  | 0.00 | 0.00 | 0.00 | 97  | 514.14  | 553.47  |
| 167 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 168 | G28 | A28 | 836 | 406.23  | 385.76  | 0.00 | 0.00 | 0.00 | 836 | 406.23  | 385.76  |
| 169 | G28 | B28 | 23  | 562.70  | 788.72  | 0.00 | 0.00 | 0.00 | 23  | 562.70  | 788.72  |
| 170 | G28 | B28 | 119 | 566.06  | 789.10  | 0.00 | 0.00 | 0.00 | 119 | 566.06  | 789.10  |
| 171 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 172 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 173 | F28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 174 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 175 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 176 | H28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 177 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 178 | B28 | E28 | 335 | 665.37  | 710.57  | 0.00 | 0.00 | 0.00 | 335 | 665.37  | 710.57  |
| 179 | B28 | E28 | 47  | 478.44  | 711.82  | 0.00 | 0.00 | 0.00 | 47  | 478.44  | 711.82  |
| 180 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 181 | F28 | C28 | 67  | 657.57  | 729.68  | 0.00 | 0.00 | 0.00 | 67  | 657.57  | 729.68  |
| 182 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 183 | A28 | E28 | 4   | 1142.27 | 854.82  | 0.00 | 0.00 | 0.00 | 4   | 1142.27 | 854.82  |
| 184 | C28 | A28 | 56  | 163.65  | 827.67  | 0.00 | 0.00 | 0.00 | 56  | 163.65  | 827.67  |
| 185 | A28 | B28 | 2   | 1049.57 | 715.70  | 0.00 | 0.00 | 0.00 | 2   | 1049.57 | 715.70  |
| 186 | A28 | C28 | 112 | 1145.37 | 699.04  | 0.00 | 0.00 | 0.00 | 112 | 1145.37 | 699.04  |
| 187 | G28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 188 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 189 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 190 | G28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 191 | D28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 192 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 193 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 194 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 195 | D28 | G28 | 157 | 1040.80 | 744.99  | 0.00 | 0.00 | 0.00 | 157 | 1040.80 | 744.99  |
| 196 | D28 | F28 | 55  | 1032.71 | 652.14  | 0.00 | 0.00 | 0.00 | 55  | 1032.71 | 652.14  |
| 197 | D28 | G28 | 23  | 1045.64 | 740.41  | 0.00 | 0.00 | 0.00 | 23  | 1045.64 | 740.41  |
| 198 | D28 | A28 | 6   | 1272.89 | 704.24  | 0.00 | 0.00 | 0.00 | 6   | 1272.89 | 704.24  |
| 199 | D28 | B28 | 268 | 1455.81 | 1101.39 | 0.00 | 0.00 | 0.00 | 268 | 1455.81 | 1101.39 |
| 200 | D28 | B28 | 111 | 1458.59 | 1101.77 | 0.00 | 0.00 | 0.00 | 111 | 1458.59 | 1101.77 |
| 201 | F28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 202 | F28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 203 | F28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 204 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 205 | A28 | E28 | 166 | 675.49  | 857.96  | 0.00 | 0.00 | 0.00 | 166 | 675.49  | 857.96  |
| 206 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 207 | F28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 208 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 209 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 210 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 211 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 212 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 213 | H28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 214 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 215 | F28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 216 | A28 | G28 | 337 | 778.50  | 1111.71 | 0.00 | 0.00 | 0.00 | 337 | 778.50  | 1111.71 |
| 217 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 218 | A28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 219 | A28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 220 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 221 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 222 | A28 | D28 | 7   | 727.40  | 751.58  | 0.00 | 0.00 | 0.00 | 7   | 727.40  | 751.58  |
| 223 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 224 | A28 | F28 | 2   | 771.40  | 1025.73 | 0.00 | 0.00 | 0.00 | 2   | 771.40  | 1025.73 |
| 225 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 226 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 235 | E28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 236 | E28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 246 | E28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 248 | D28 | C28 | 350 | 1174.71 | 1078.32 | 0.00 | 0.00 | 0.00 | 350 | 1174.71 | 1078.32 |
| 249 | H28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 252 | F28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 283 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 284 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 285 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 286 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 307 | G28 | C28 | 60  | 360.61  | 769.88  | 0.00 | 0.00 | 0.00 | 60  | 360.61  | 769.88  |
| 317 | C28 | G28 | 314 | 150.98  | 864.44  | 0.00 | 0.00 | 0.00 | 314 | 150.98  | 864.44  |
| 318 | C28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 319 | C28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 320 | C28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 322 | C28 | G28 | 231 | 141.63  | 875.73  | 0.00 | 0.00 | 0.00 | 231 | 141.63  | 875.73  |
| 323 | C28 | F28 | 20  | 132.64  | 782.88  | 0.00 | 0.00 | 0.00 | 20  | 132.64  | 782.88  |
| 324 | C28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 325 | C28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 330 | C28 | A28 | 344 | 165.11  | 834.69  | 0.00 | 0.00 | 0.00 | 344 | 165.11  | 834.69  |
| 331 | C28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 332 | C28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 334 | C28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 342 | C28 | B28 | 28  | 789.30  | 756.38  | 0.00 | 0.00 | 0.00 | 28  | 789.30  | 756.38  |
| 343 | C28 | B28 | 18  | 765.90  | 753.20  | 0.00 | 0.00 | 0.00 | 18  | 765.90  | 753.20  |
| 364 | B28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 379 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 380 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 381 | B28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 382 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 383 | G28 | B28 | 128 | 769.70  | 1141.62 | 0.00 | 0.00 | 0.00 | 128 | 769.70  | 1141.62 |
| 384 | A28 | A28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 385 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 386 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 387 | A28 | A28 | 3   | 739.56  | 1157.59 | 0.00 | 0.00 | 0.00 | 3   | 739.56  | 1157.59 |
| 388 | A28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 389 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 390 | E28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 391 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 392 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 393 | D28 | B28 | 15  | 1806.63 | 1451.24 | 0.00 | 0.00 | 0.00 | 15  | 1806.63 | 1451.24 |
| 394 | D28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 395 | H28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 396 | H28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 397 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 398 | F28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 399 | F28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 400 | F28 | B28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 401 | G28 | F28 | 26  | 207.11  | 1176.03 | 0.00 | 0.00 | 0.00 | 26  | 207.11  | 1176.03 |
| 402 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 403 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 404 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 405 | A28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 406 | A28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 407 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 408 | H28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 409 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 410 | H28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 411 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 412 | F28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 413 | F28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 414 | F28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 415 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 417 | A28 | E28 | 45  | 676.77  | 855.50  | 0.00 | 0.00 | 0.00 | 45  | 676.77  | 855.50  |
| 418 | G28 | C28 | 304 | 398.26  | 767.78  | 0.00 | 0.00 | 0.00 | 304 | 398.26  | 767.78  |
| 423 | C28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 424 | C28 | C28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 425 | E28 | C28 | 29  | 214.88  | 1064.27 | 0.00 | 0.00 | 0.00 | 29  | 214.88  | 1064.27 |
| 428 | E28 | C28 | 65  | 222.46  | 1069.36 | 0.00 | 0.00 | 0.00 | 65  | 222.46  | 1069.36 |
| 431 | D28 | C28 | 13  | 1310.18 | 1080.45 | 0.00 | 0.00 | 0.00 | 13  | 1310.18 | 1080.45 |
| 439 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 440 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 441 | G28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 442 | E28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 443 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |

|     |     |     |     |         |         |      |      |      |     |         |         |
|-----|-----|-----|-----|---------|---------|------|------|------|-----|---------|---------|
| 444 | E28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 445 | D28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 446 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 447 | D28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 448 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 449 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 450 | H28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 451 | G28 | D28 | 21  | 170.91  | 906.47  | 0.00 | 0.00 | 0.00 | 21  | 170.91  | 906.47  |
| 452 | G28 | E28 | 262 | 152.44  | 925.57  | 0.00 | 0.00 | 0.00 | 262 | 152.44  | 925.57  |
| 453 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 454 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 455 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 456 | E28 | E28 | 1   | 266.61  | 1219.72 | 0.00 | 0.00 | 0.00 | 1   | 266.61  | 1219.72 |
| 457 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 458 | D28 | E28 | 17  | 1179.76 | 1232.00 | 0.00 | 0.00 | 0.00 | 17  | 1179.76 | 1232.00 |
| 459 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 460 | F28 | E28 | 25  | 681.20  | 886.49  | 0.00 | 0.00 | 0.00 | 25  | 681.20  | 886.49  |
| 461 | A28 | E28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 462 | A28 | G28 | 94  | 734.55  | 1200.64 | 0.00 | 0.00 | 0.00 | 94  | 734.55  | 1200.64 |
| 463 | A28 | F28 | 53  | 726.45  | 1107.79 | 0.00 | 0.00 | 0.00 | 53  | 726.45  | 1107.79 |
| 464 | A28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 465 | A28 | E28 | 255 | 1143.83 | 852.36  | 0.00 | 0.00 | 0.00 | 255 | 1143.83 | 852.36  |
| 466 | A28 | D28 | 6   | 1144.25 | 835.72  | 0.00 | 0.00 | 0.00 | 6   | 1144.25 | 835.72  |
| 467 | G28 | D28 | 127 | 189.69  | 819.82  | 0.00 | 0.00 | 0.00 | 127 | 189.69  | 819.82  |
| 468 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 469 | G28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 470 | G28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 471 | G28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 472 | A28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 473 | B28 | D28 | 100 | 517.49  | 1436.67 | 0.00 | 0.00 | 0.00 | 100 | 517.49  | 1436.67 |
| 474 | C28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 475 | E28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 476 | D28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 477 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 478 | D28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 479 | D28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 480 | D28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 481 | H28 | D28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 482 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 483 | H28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 484 | H28 | G28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 485 | H28 | H28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |
| 486 | F28 | D28 | 106 | 687.31  | 780.75  | 0.00 | 0.00 | 0.00 | 106 | 687.31  | 780.75  |
| 487 | F28 | F28 | 0   | 0.00    | 0.00    | 0.00 | 0.00 | 0.00 | 0   | 0.00    | 0.00    |

## Final Prediction Table

### Traffic Stream Results

|     |                     |              | SIGNALS           |       | FLOWS                    |                              | PERFORMANCE       |                   |                          |                         | PER PCU         |                   |                   | QUEUES         | WEIGHTS               |                               | PENALTIES                    | P.I. |
|-----|---------------------|--------------|-------------------|-------|--------------------------|------------------------------|-------------------|-------------------|--------------------------|-------------------------|-----------------|-------------------|-------------------|----------------|-----------------------|-------------------------------|------------------------------|------|
| Arm | Traffic Stream Name | Traffic node | Controller stream | Phase | Calculated flow entering | Calculated sat flow (PCU/hr) | Actual greens (pe | Wasted time total | Degree of saturation (%) | Practical reserve capac | JourneyTime (s) | Mean Delay per Ve | Mean stops per Ve | Mean max queue | Delay weighting multi | Stop weighting multiplier (%) | Cost of traffic penalties (£ | P.I. |

|      |   |            |   |       |   | (PCU/hr) |      | r cycle) | l (s (per cycle)) |     | ity (%) |        | h (s)  | h (%)  | (PCU)  | plier (%) |     | per hr) |        |
|------|---|------------|---|-------|---|----------|------|----------|-------------------|-----|---------|--------|--------|--------|--------|-----------|-----|---------|--------|
| A    | 1 | (untitled) | 6 | 771-2 | E | 854 <    | 2050 | 24       | 0.00              | 100 | -10     | 87.02  | 81.44  | 160.23 | 25.68+ | 20        | 0   | 0.00    | 54.88  |
|      | 2 | (untitled) | 6 | 771-2 | E | 479      | 2050 | 24       | 1.00              | 56  | 60      | 25.97  | 20.22  | 84.11  | 6.65   | 20        | 0   | 0.00    | 7.64   |
|      | 3 | (untitled) | 6 | 771-2 | E | 758 <    | 2050 | 24       | 2.00              | 89  | 1       | 35.70  | 29.82  | 109.95 | 14.05+ | 20        | 0   | 0.00    | 17.83  |
|      | 4 | (untitled) | 6 | 771-2 | E | 746      | 2050 | 24       | 1.00              | 87  | 3       | 36.19  | 30.18  | 106.17 | 13.38  | 20        | 0   | 0.00    | 17.76  |
| Ac   | 1 | (untitled) | 6 | 771-2 | D | 920      | 2263 | 26       | 0.00              | 90  | 0       | 37.27  | 30.09  | 80.53  | 13.28  | 100       | 500 | 0.00    | 228.10 |
|      | 2 | (untitled) | 6 | 771-2 | D | 370      | 2263 | 26       | 13.94             | 38  | 139     | 16.66  | 7.16   | 26.08  | 1.80   | 100       | 500 | 0.00    | 18.67  |
|      | 3 | (untitled) | 6 | 771-2 | D | 369      | 2263 | 26       | 13.09             | 36  | 148     | 8.12   | 1.53   | 11.05  | 2.42   | 100       | 500 | 0.00    | 8.76   |
| Ac f | 1 | (untitled) | 6 |       |   | 1290     | 2263 | 60       | 23.00             | 57  | 58      | 6.27   | 1.05   | 0.00   | 0.38   | 100       | 100 | 0.00    | 5.35   |
|      | 2 | (untitled) | 6 |       |   | 369      | 2263 | 60       | 45.00             | 16  | 452     | 7.40   | 0.15   | 0.00   | 0.02   | 100       | 100 | 0.00    | 0.23   |
| Af   | 1 | (untitled) | 6 |       |   | 1333 <   | 2050 | 60       | 18.90             | 87  | 4       | 19.25  | 12.83  | 49.21  | 11.27+ | 100       | 100 | 0.00    | 75.70  |
|      | 2 | (untitled) | 6 |       |   | 758      | 2050 | 60       | 25.74             | 39  | 128     | 7.01   | 0.63   | 1.65   | 1.58   | 100       | 100 | 0.00    | 2.04   |
|      | 3 | (untitled) | 6 |       |   | 746      | 2050 | 60       | 6.00              | 36  | 147     | 6.86   | 0.50   | 0.00   | 0.10   | 100       | 100 | 0.00    | 1.48   |
| B    | 1 | (untitled) | 1 | 769-1 | B | 270      | 2050 | 9        | 2.00              | 79  | 14      | 56.74  | 49.64  | 128.66 | 5.88   | 20        | 0   | 0.00    | 10.56  |
|      | 2 | (untitled) | 1 | 769-1 | B | 266 <    | 2150 | 9        | 2.57              | 100 | -10     | 303.30 | 296.01 | 336.19 | 23.92+ | 20        | 0   | 0.00    | 62.14  |
|      | 3 | (untitled) | 1 | 769-1 | B | 259      | 2100 | 9        | 1.21              | 84  | 7       | 52.14  | 44.66  | 117.12 | 5.29   | 20        | 0   | 0.00    | 9.13   |
|      | 4 | (untitled) | 1 | 769-1 | B | 253      | 2050 | 9        | 0.00              | 74  | 21      | 47.13  | 34.84  | 104.63 | 4.48   | 20        | 0   | 0.00    | 6.96   |
| Bc   | 1 | (untitled) | 1 | 769-1 | A | 849      | 2050 | 39       | 13.00             | 62  | 45      | 21.26  | 9.30   | 60.05  | 14.04  | 100       | 500 | 0.00    | 87.97  |
|      | 2 | (untitled) | 1 | 769-1 | A | 1014     | 2050 | 39       | 10.00             | 74  | 21      | 29.00  | 17.17  | 86.88  | 14.99  | 100       | 500 | 0.00    | 166.94 |
|      | 3 | (untitled) | 1 | 769-1 | A | 858      | 2050 | 39       | 11.00             | 63  | 43      | 28.01  | 16.30  | 81.54  | 14.06  | 100       | 500 | 0.00    | 133.22 |
| Bc f | 1 | (untitled) | 1 |       |   | 1774     | 2263 | 60       | 8.00              | 78  | 15      | 7.18   | 2.86   | 0.00   | 1.41   | 100       | 100 | 0.00    | 20.03  |
|      | 2 | (untitled) | 1 |       |   | 849      | 2263 | 60       | 22.00             | 38  | 140     | 5.94   | 0.48   | 0.00   | 0.11   | 100       | 100 | 0.00    | 1.60   |
|      | 3 | (untitled) | 1 |       |   | 1014     | 2263 | 60       | 29.00             | 45  | 101     | 6.58   | 0.65   | 0.00   | 0.18   | 100       | 100 | 0.00    | 2.58   |
|      | 4 | (untitled) | 1 |       |   | 858      | 2263 | 60       | 22.00             | 38  | 137     | 6.74   | 0.49   | 0.00   | 0.12   | 100       | 100 | 0.00    | 1.64   |
| Bf   | 1 | (untitled) | 1 |       |   | 536 <    | 1800 | 60       | 41.14             | 95  | -5      | 241.37 | 214.03 | 427.39 | 44.90+ | 100       | 100 | 0.00    | 480.97 |
|      | 2 | (untitled) | 1 |       |   | 512      | 1800 | 60       | 5.00              | 28  | 216     | 27.81  | 0.40   | 0.00   | 0.06   | 100       | 100 | 0.00    | 0.80   |
| C    | 1 | (untitled) | 2 | 769-2 | G | 89       | 2100 | 14       | 12.00             | 17  | 432     | 33.44  | 18.90  | 101.15 | 1.50   | 20        | 0   | 0.00    | 1.32   |

|      |   |            |     |       |   |       |      |    |       |     |     |        |        |        |        |     |     |      |        |
|------|---|------------|-----|-------|---|-------|------|----|-------|-----|-----|--------|--------|--------|--------|-----|-----|------|--------|
|      | 2 | (untitled) | 2   | 769-2 | G | 529 < | 2200 | 14 | 0.00  | 96  | -7  | 165.18 | 150.45 | 294.87 | 27.28+ | 20  | 0   | 0.00 | 62.84  |
|      | 3 | (untitled) | 2   | 769-2 | G | 351   | 2050 | 14 | 4.00  | 68  | 31  | 50.26  | 35.33  | 112.58 | 6.59   | 20  | 0   | 0.00 | 9.78   |
| Cf   | 1 | (untitled) | 2   |       |   | 559 < | 1965 | 60 | 42.92 | 100 | -10 | 201.12 | 183.76 | 352.60 | 35.98+ | 100 | 100 | 0.00 | 430.15 |
|      | 2 | (untitled) | 2   |       |   | 410   | 1965 | 60 | 43.11 | 36  | 151 | 24.93  | 7.43   | 69.47  | 4.95   | 100 | 100 | 0.00 | 15.57  |
| D    | 1 | (untitled) | 3   | 770-1 | B | 423   | 2050 | 13 | 0.00  | 88  | 2   | 51.60  | 47.48  | 122.07 | 8.90   | 20  | 0   | 0.00 | 15.84  |
|      | 2 | (untitled) | 3   | 770-1 | B | 251   | 1850 | 13 | 0.00  | 58  | 55  | 30.27  | 26.14  | 89.32  | 3.75   | 20  | 0   | 0.00 | 5.18   |
|      | 3 | (untitled) | 3   | 770-1 | B | 370   | 2250 | 13 | 0.00  | 70  | 28  | 33.10  | 29.13  | 96.29  | 5.99   | 20  | 0   | 0.00 | 8.50   |
|      | 4 | (untitled) | 3   | 770-1 | B | 390   | 2250 | 13 | 0.00  | 74  | 21  | 35.15  | 30.99  | 99.05  | 6.49   | 20  | 0   | 0.00 | 9.53   |
| Dc   | 1 | (untitled) | 3   | 770-1 | A | 548   | 2100 | 37 | 20.00 | 41  | 119 | 17.29  | 11.18  | 79.19  | 7.54   | 100 | 500 | 0.00 | 51.33  |
|      | 2 | (untitled) | 3   | 770-1 | A | 635   | 2100 | 37 | 6.00  | 48  | 89  | 12.61  | 6.74   | 48.65  | 5.13   | 100 | 500 | 0.00 | 36.22  |
|      | 3 | (untitled) | 3   | 770-1 | A | 252   | 2100 | 37 | 11.00 | 19  | 375 | 12.40  | 6.76   | 55.54  | 2.34   | 100 | 500 | 0.00 | 15.50  |
|      | 4 | (untitled) | 3   | 770-1 | A | 458   | 2100 | 37 | 11.00 | 34  | 161 | 13.30  | 7.89   | 44.20  | 3.25   | 100 | 500 | 0.00 | 26.95  |
| Dc f | 1 | (untitled) | 3   |       |   | 745   | 2050 | 60 | 30.00 | 36  | 148 | 5.41   | 0.50   | 0.00   | 0.10   | 100 | 100 | 0.00 | 1.47   |
|      | 2 | (untitled) | 3   |       |   | 1097  | 2100 | 60 | 26.00 | 52  | 72  | 5.83   | 0.94   | 0.00   | 0.29   | 100 | 100 | 0.00 | 4.05   |
|      | 3 | (untitled) | 3   |       |   | 548   | 2100 | 60 | 35.00 | 26  | 245 | 6.36   | 0.30   | 0.00   | 0.05   | 100 | 100 | 0.00 | 0.65   |
|      | 4 | (untitled) | 3   |       |   | 635   | 2100 | 60 | 16.00 | 30  | 198 | 7.57   | 0.37   | 0.00   | 0.07   | 100 | 100 | 0.00 | 0.93   |
|      | 5 | (untitled) | 3   |       |   | 252   | 2100 | 60 | 22.00 | 12  | 650 | 6.61   | 0.12   | 0.00   | 0.01   | 100 | 100 | 0.00 | 0.12   |
|      | 6 | (untitled) | 3   |       |   | 458   | 2050 | 60 | 24.00 | 22  | 303 | 8.19   | 0.25   | 0.00   | 0.03   | 100 | 100 | 0.00 | 0.46   |
| Df   | 1 | (untitled) | 3-2 |       |   | 674   | 1900 | 60 | 0.00  | 35  | 154 | 24.52  | 0.52   | 0.00   | 0.10   | 100 | 100 | 0.00 | 1.38   |
|      | 2 | (untitled) | 3-2 |       |   | 760   | 2250 | 60 | 0.00  | 34  | 166 | 24.41  | 0.41   | 0.00   | 0.09   | 100 | 100 | 0.00 | 1.22   |
| Dx P | 1 | (untitled) | 3-2 | 770-2 | D | 724   | 2050 | 41 | 8.00  | 50  | 78  | 6.24   | 2.81   | 13.77  | 1.67   | 100 | 100 | 0.00 | 11.21  |
|      | 2 | (untitled) | 3-2 | 770-2 | D | 1090  | 2050 | 41 | 6.00  | 76  | 18  | 7.73   | 4.12   | 14.96  | 6.42   | 100 | 100 | 0.00 | 22.96  |
| Ec   | 1 | (untitled) | 4   | 770-3 | F | 415   | 2150 | 19 | 1.00  | 58  | 55  | 20.87  | 17.11  | 97.47  | 6.72   | 100 | 500 | 0.00 | 93.01  |
|      | 2 | (untitled) | 4   | 770-3 | F | 503   | 2263 | 19 | 0.00  | 67  | 35  | 20.27  | 16.64  | 80.43  | 6.71   | 100 | 500 | 0.00 | 97.94  |
|      | 3 | (untitled) | 4   | 770-3 | F | 507   | 2263 | 19 | 6.00  | 67  | 34  | 21.23  | 17.72  | 89.37  | 7.59   | 100 | 500 | 0.00 | 108.25 |
|      | 4 | (untitled) | 4   | 770-3 | F | 451   | 2250 | 19 | 7.00  | 60  | 50  | 20.45  | 15.04  | 98.61  | 7.41   | 100 | 500 | 0.00 | 54.60  |
| Ec f | 1 | (untitled) | 4   |       |   | 653   | 2100 | 60 | 28.04 | 31  | 189 | 3.84   | 0.39   | 0.86   | 4.71   | 100 | 100 | 0.00 | 1.19   |
|      | 2 | (untitled) | 4   |       |   | 953   | 2100 | 60 | 14.02 | 45  | 98  | 4.19   | 0.72   | 1.32   | 4.83   | 100 | 100 | 0.00 | 3.10   |
|      | 3 | (untitled) | 4   |       |   | 503   | 2263 | 60 | 19.56 | 24  | 281 | 5.33   | 0.76   | 13.51  | 2.07   | 100 | 100 | 0.00 | 3.02   |
|      | 4 | (untitled) | 4   |       |   | 507   | 2300 | 60 | 43.29 | 29  | 211 | 6.61   | 1.48   | 20.76  | 1.84   | 100 | 100 | 0.00 | 4.85   |
|      | 5 | (untitled) | 4   |       |   | 711   | 2300 | 60 | 60.00 | 32  | 180 | 5.30   | 0.46   | 5.83   | 1.93   | 100 | 100 | 0.00 | 2.19   |

|     |   |            |     |       |   |       |              |    |       |     |              |        |         |         |        |     |     |          |           |
|-----|---|------------|-----|-------|---|-------|--------------|----|-------|-----|--------------|--------|---------|---------|--------|-----|-----|----------|-----------|
| Ef  | 1 | (untitled) | 4   |       |   | 882   | 1900         | 60 | 0.00  | 46  | 94           | 16.13  | 0.82    | 0.00    | 0.20   | 100 | 100 | 0.00     | 2.85      |
|     | 2 | (untitled) | 4   |       |   | 630   | 1900         | 60 | 0.00  | 33  | 171          | 15.78  | 0.47    | 0.00    | 0.08   | 100 | 100 | 0.00     | 1.17      |
| Exp | 1 | (untitled) | 4-2 | 770-4 | L | 653   | 2050         | 42 | 17.00 | 44  | 103          | 6.72   | 2.83    | 25.24   | 4.85   | 100 | 100 | 0.00     | 12.57     |
|     | 2 | (untitled) | 4-2 | 770-4 | L | 537   | 2050         | 42 | 16.00 | 37  | 146          | 6.07   | 2.04    | 13.48   | 2.42   | 100 | 100 | 0.00     | 6.65      |
| F   | 1 | (untitled) | 5   | 771-1 | B | 165   | 2100         | 7  | 3.00  | 59  | 52           | 50.03  | 43.64   | 11.4.61 | 3.17   | 20  | 0   | 0.00     | 5.69      |
|     | 2 | (untitled) | 5   | 771-1 | B | 280 < | 2100         | 7  | 0.00  | 100 | -10          | 262.96 | 25.6.54 | 32.6.91 | 21.81+ | 20  | 0   | 0.00     | 56.67     |
|     | 3 | (untitled) | 5   | 771-1 | B | 280 < | 2100         | 7  | 0.00  | 100 | -10          | 263.08 | 25.6.54 | 32.6.91 | 21.81+ | 20  | 0   | 0.00     | 56.67     |
| Fc  | 1 | (untitled) | 5   | 771-1 | A | 681   | 2263         | 43 | 20.00 | 41  | 119          | 27.12  | 8.29    | 52.37   | 5.71   | 100 | 500 | 0.00     | 51.35     |
|     | 2 | (untitled) | 5   | 771-1 | A | 962   | 2263         | 43 | 11.55 | 60  | 50           | 26.99  | 7.74    | 42.72   | 6.93   | 100 | 500 | 0.00     | 60.54     |
|     | 3 | (untitled) | 5   | 771-1 | A | 909   | 2263         | 43 | 19.59 | 61  | 47           | 30.03  | 10.61   | 80.38   | 13.54  | 100 | 500 | 0.00     | 95.22     |
| Ff  | 1 | (untitled) | 5   |       |   | 445 < | 1900         | 60 | 45.94 | 100 | -10          | 411.05 | 37.7.96 | 57.2.58 | 57.89+ | 100 | 100 | 0.00     | 695.88    |
|     | 2 | (untitled) | 5   |       |   | 269   | 1900         | 60 | 51.16 | 96  | -6           | 244.75 | 21.1.70 | 25.5.25 | 18.14  | 100 | 100 | 0.00     | 233.37    |
| G   | 1 | (untitled) | 2   | 769-2 | F | 416 < | 2050         | 14 | 2.83  | 100 | -10          | 275.24 | 25.9.26 | 39.5.67 | 35.08+ | 100 | 500 | 87362.54 | 879.27.18 |
|     | 2 | (untitled) | 2   | 769-2 | F | 441 < | 2050         | 14 | 2.55  | 104 | -13          | 266.50 | 25.5.12 | 38.7.45 | 38.97+ | 100 | 500 | 98096.59 | 988.03.76 |
| Gf  | 1 | (untitled) | 4   |       |   | 329 < | 2050         | 60 | 50.92 | 106 | -15          | 185.34 | 18.2.30 | 26.2.11 | 20.12+ | 100 | 100 | 0.00     | 262.68    |
|     | 2 | (untitled) | 4   |       |   | 301   | 2050         | 60 | 45.47 | 15  | 508          | 3.22   | 0.22    | 3.15    | 2.33   | 100 | 100 | 0.00     | 0.56      |
| xA  | 1 | (untitled) | 10  |       |   | 830   | 2263         | 60 | 30.08 | 37  | 145          | 17.69  | 0.47    | 1.11    | 2.43   | 100 | 100 | 0.00     | 1.82      |
|     | 2 | (untitled) | 10  |       |   | 788   | 2263         | 60 | 34.98 | 50  | 81           | 23.45  | 6.20    | 42.98   | 5.35   | 100 | 100 | 0.00     | 30.16     |
| xB  | 1 | (untitled) |     |       |   | 1774  | Unrestricted | 60 | 0.00  | 0   | Unrestricted | 5.79   | 0.00    | 0.00    | 0.00   | 100 | 100 | 0.00     | 0.00      |
| xC  | 1 | (untitled) |     |       |   | 650 < | 1900         | 60 | 39.47 | 100 | -10          | 126.72 | 11.8.05 | 14.3.57 | 29.63+ | 100 | 100 | 0.00     | 332.63    |
|     | 2 | (untitled) |     |       |   | 650 < | 1900         | 60 | 39.47 | 100 | -10          | 127.74 | 11.9.04 | 13.2.13 | 29.53+ | 100 | 100 | 0.00     | 332.67    |
| xD  | 1 | (untitled) |     |       |   | 724   | Unrestricted | 60 | 12.00 | 0   | Unrestricted | 9.11   | 0.00    | 0.00    | 0.00   | 100 | 100 | 0.00     | 0.00      |
|     | 2 | (untitled) |     |       |   | 1090  | Unrestricted | 60 | 12.00 | 0   | Unrestricted | 9.16   | 0.00    | 0.00    | 0.00   | 100 | 100 | 0.00     | 0.00      |
| xE  | 1 | (untitled) |     |       |   | 653   | Unrestricted | 60 | 16.00 | 0   | Unrestricted | 13.04  | 0.00    | 0.00    | 0.00   | 100 | 100 | 0.00     | 0.00      |
|     | 2 | (untitled) |     |       |   | 537   | Unrestricted | 60 | 13.00 | 0   | Unrestricted | 13.04  | 0.00    | 0.00    | 0.00   | 100 | 100 | 0.00     | 0.00      |
| xF  | 1 | (untitled) |     |       |   | 849   | Unrestricted | 60 | 2.00  | 0   | Unrestricted | 14.56  | 0.00    | 0.00    | 0.00   | 100 | 100 | 0.00     | 0.00      |
| Cc1 | 1 | (untitled) | 2   | 769-2 | E | 459   | 2050         | 31 | 7.00  | 42  | 114          | 10.17  | 3.58    | 19.18   | 2.70   | 100 | 100 | 0.00     | 9.92      |
| E1  | 1 | (untitled) | 4   | 770-3 | G | 424   | 2050         | 12 | 0.00  | 95  | -6           | 79.88  | 73.88   | 15.4.72 | 12.03  | 20  | 0   | 0.00     | 24.71     |

|        |   |            |          |          |   |        |              |    |       |     |              |        |        |        |        |     |     |        |        |
|--------|---|------------|----------|----------|---|--------|--------------|----|-------|-----|--------------|--------|--------|--------|--------|-----|-----|--------|--------|
|        | 2 | (untitled) | 4        | 770-3    | G | 458    | 2200         | 12 | 0.00  | 96  | -6           | 80.71  | 74.71  | 156.08 | 13.54  | 20  | 0   | 0.00   | 26.99  |
| Gf 1   | 1 | (untitled) | 4        |          |   | 260 <  | 664          | 60 | 36.76 | 106 | -15          | 195.60 | 189.86 | 259.89 | 15.97+ | 100 | 100 | 0.00   | 202.65 |
| Cc 2   | 2 | (untitled) | 2        | 769-2    | D | 660    | 2150         | 32 | 6.19  | 56  | 60           | 13.84  | 3.81   | 27.52  | 3.04   | 100 | 500 | 0.00   | 24.37  |
|        | 3 | (untitled) | 2        | 769-2    | D | 336    | 2050         | 32 | 23.00 | 30  | 202          | 10.40  | 0.68   | 0.00   | 0.06   | 100 | 500 | 0.00   | 0.90   |
|        | 4 | (untitled) | 2        | 769-2    | D | 1094 < | 2150         | 32 | 1.33  | 93  | -4           | 33.92  | 27.74  | 76.25  | 15.86+ | 100 | 500 | 143.43 | 426.94 |
|        | 5 | (untitled) | 2        | 769-2    | D | 447    | 2050         | 32 | 4.00  | 40  | 127          | 9.92   | 2.76   | 17.09  | 2.40   | 100 | 500 | 0.00   | 17.88  |
|        | 6 | (untitled) | 2        | 769-2    | D | 230    | 2050         | 32 | 8.00  | 20  | 342          | 8.31   | 2.30   | 15.80  | 2.57   | 100 | 500 | 0.00   | 9.22   |
| E2     | 3 | (untitled) | 4        | 770-3    | H | 329    | 2150         | 14 | 0.82  | 65  | 39           | 30.56  | 26.56  | 89.26  | 5.23   | 20  | 0   | 0.00   | 6.89   |
|        | 4 | (untitled) | 4        | 770-3    | H | 301    | 2050         | 14 | 0.00  | 59  | 53           | 28.81  | 24.74  | 86.42  | 4.34   | 20  | 0   | 0.00   | 5.87   |
| T C5   | 2 | (untitled) | TC 771-6 | TC77 7-1 | A | 686    | 2263         | 34 | 8.00  | 50  | 78           | 4.68   | 1.92   | 24.06  | 2.87   | 100 | 100 | 0.00   | 7.25   |
|        | 3 | (untitled) | TC 771-6 | TC77 7-1 | A | 788    | 2263         | 34 | 12.00 | 58  | 55           | 8.66   | 5.89   | 25.09  | 3.30   | 100 | 100 | 0.00   | 20.81  |
|        | 4 | (untitled) | TC 771-6 | TC77 7-1 | C | 0      | 0            | 0  | 0.00  | 0   | -100         | 0.00   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00   | 0.00   |
| T C9   | 1 | (untitled) | TC 771-6 | TC77 7-1 | B | 1152 < | 1925         | 35 | 2.09  | 100 | -10          | 82.17  | 71.16  | 152.82 | 32.43+ | 100 | 100 | 0.00   | 345.46 |
|        | 2 | (untitled) | TC 771-6 | TC77 7-1 | B | 758    | 1966         | 35 | 0.00  | 61  | 48           | 20.26  | 9.20   | 56.40  | 7.15   | 100 | 100 | 0.00   | 32.86  |
|        | 3 | (untitled) | TC 771-6 | TC77 7-1 | B | 639    | 1947         | 35 | 0.00  | 52  | 74           | 18.70  | 7.57   | 49.70  | 5.31   | 100 | 100 | 0.00   | 23.07  |
| T C3 5 | 1 | (untitled) | TC 771-6 | TC77 7-1 | A | 144    | 1900         | 34 | 18.00 | 13  | 612          | 3.77   | 0.87   | 17.65  | 0.42   | 100 | 100 | 0.00   | 0.81   |
| T C3 6 | 1 | (untitled) | TC 771-6 |          |   | 431 <  | 1800         | 60 | 48.27 | 122 | -27          | 363.36 | 360.34 | 328.39 | 47.25+ | 100 | 100 | 0.00   | 627.08 |
| T C3 7 | 1 | (untitled) | TC 771-6 | TC77 7-2 | J | 64     | 1850         | 44 | 24.00 | 5   | 1860         | 3.42   | 0.23   | 5.62   | 0.06   | 100 | 100 | 0.00   | 0.18   |
| T C3 8 | 1 | (untitled) | TC 771-6 |          |   | 64     | 434          | 60 | 27.00 | 15  | 514          | 6.40   | 4.87   | 48.96  | 2.43   | 100 | 100 | 0.00   | 2.31   |
| T C3 9 | 2 | (untitled) | TC 771-6 |          |   | 686    | 2263         | 60 | 32.00 | 30  | 197          | 2.88   | 0.35   | 0.00   | 0.07   | 100 | 100 | 0.00   | 0.93   |
|        | 3 | (untitled) | TC 771-6 |          |   | 788    | 2263         | 60 | 36.00 | 35  | 158          | 2.82   | 0.42   | 0.00   | 0.09   | 100 | 100 | 0.00   | 1.32   |
| T C4 0 | 2 | (untitled) | TC 771-6 |          |   | 749    | Unrestricted | 60 | 12.00 | 0   | Unrestricted | 4.23   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00   | 0.00   |
|        | 3 | (untitled) | TC 771-6 |          |   | 788    | Unrestricted | 60 | 27.00 | 0   | Unrestricted | 4.02   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00   | 0.00   |
| T C4 1 | 1 | (untitled) | TC 771-6 | TC77 7-1 | D | 288 <  | 1850         | 15 | 6.65  | 100 | -10          | 181.12 | 177.19 | 224.53 | 15.26+ | 100 | 100 | 0.00   | 224.02 |
| T C4 2 | 1 | (untitled) | TC 771-6 | TC77 7-1 | E | 0      | 0            | 0  | 0.00  | 0   | -100         | 0.00   | 0.00   | 0.00   | 0.00   | 100 | 100 | 0.00   | 0.00   |

|              |   |            |             |       |   |       |      |    |       |     |              |        |        |        |         |     |     |      |         |
|--------------|---|------------|-------------|-------|---|-------|------|----|-------|-----|--------------|--------|--------|--------|---------|-----|-----|------|---------|
| T<br>C4<br>3 | 1 | (untitled) |             |       |   | 0     | 1800 | 60 | 60.00 | 0   | Unrestricted | 0.00   | 0.00   | 0.00   | 0.00    | 100 | 100 | 0.00 | 0.00    |
| 47           | 1 | (untitled) | 2           |       |   | 1300  | 1300 | 60 | 0.00  | 100 | -10          | 64.61  | 48.58  | 0.00   | 17.54   | 100 | 100 | 0.00 | 249.09  |
| 48           | 1 | (untitled) | 2           |       |   | 1102< | 1965 | 60 | 30.41 | 114 | -21          | 247.33 | 24.071 | 29.111 | 85.74+  | 100 | 100 | 0.00 | 1081.70 |
| 49           | 1 | (untitled) | TC<br>771-6 |       |   | 1342< | 1900 | 60 | 21.92 | 111 | -19          | 205.26 | 20.211 | 27.540 | 91.56+  | 100 | 100 | 0.00 | 1111.51 |
|              | 2 | (untitled) | TC<br>771-6 |       |   | 1343  | 1900 | 60 | 0.00  | 71  | 27           | 5.42   | 2.27   | 0.00   | 0.85    | 100 | 100 | 0.00 | 12.03   |
| 50           | 1 | (untitled) | 1           |       |   | 1485< | 1900 | 60 | 26.90 | 142 | -36          | 545.25 | 53.948 | 37.592 | 236.79+ | 100 | 100 | 0.00 | 3209.39 |
| 51           | 1 | (untitled) | 4-2         |       |   | 1015< | 1900 | 60 | 37.45 | 142 | -37          | 550.82 | 54.632 | 37.727 | 163.14+ | 100 | 100 | 0.00 | 2221.05 |
| 52           | 1 |            | 1           | 770-3 | A | 321   | 1800 | 12 | 0.00  | 82  | 9            | 53.43  | 32.67  | 10.227 | 5.61    | 100 | 500 | 0.00 | 61.92   |
|              | 2 |            | 1           | 770-3 | A | 321   | 1800 | 12 | 2.00  | 82  | 9            | 82.54  | 61.76  | 13.193 | 7.64    | 100 | 500 | 0.00 | 104.66  |
| 53           | 1 |            | 2           |       |   | 321   | 1800 | 60 | 19.00 | 18  | 405          | 5.49   | 0.22   | 0.00   | 0.02    | 100 | 100 | 0.00 | 0.27    |
|              | 2 |            | 2           |       |   | 321   | 1800 | 60 | 44.00 | 18  | 405          | 5.35   | 0.28   | 3.68   | 2.64    | 100 | 100 | 0.00 | 0.50    |

### Pedestrian Crossing Results

|            |      |            |              | SIGNALS           |       |                                   | FLOWS                        |                            | PERFORMANCE              |                            |                  | PER PED                |                      | QUES                | WEIGHTS                              | PENALTIES | P.I. |
|------------|------|------------|--------------|-------------------|-------|-----------------------------------|------------------------------|----------------------------|--------------------------|----------------------------|------------------|------------------------|----------------------|---------------------|--------------------------------------|-----------|------|
| Pedestrian | Side | Name       | Traffic node | Controller stream | Phase | Calculated Flow Entering (Ped/hr) | Calculated sat flow (Ped/hr) | Actual green (s per cycle) | Degree of saturation (%) | Practical reserve capacity | Journey Time (s) | Mean Delay per Ped (s) | Mean max queue (Ped) | Delay weighting (%) | Cost of traffic penalties (£ per hr) | P.I.      |      |
| 1          | 1    | (untitled) | 3-2          | 770-2             | E     | 0                                 | 11000                        | 7                          | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 3-2          | 770-2             | E     | 0                                 | 11000                        | 7                          | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
| 2          | 1    | (untitled) | 3            | 770-1             | C     | 0                                 | 11000                        | 35                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 3            | 770-1             | C     | 0                                 | 11000                        | 35                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
| 3          | 1    | (untitled) | 4-2          | 770-4             | M     | 0                                 | 11000                        | 6                          | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 4-2          | 770-4             | M     | 0                                 | 11000                        | 6                          | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
| 4          | 1    | (untitled) | 4            | 770-3             | J     | 0                                 | 11000                        | 22                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 4            | 770-3             | J     | 0                                 | 11000                        | 22                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
| 5          | 1    | (untitled) | 4            | 770-3             | I     | 0                                 | 11000                        | 24                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 4            | 770-3             | I     | 0                                 | 11000                        | 24                         | 0                        | Unrestricted               | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
| 6          | 1    | (untitled) | 4            | 770-3             | K     | 0                                 | 0                            | 0                          | 0                        | -100                       | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |
|            | 2    | (untitled) | 4            | 770-3             | K     | 0                                 | 0                            | 0                          | 0                        | -100                       | 0.00             | 0.00                   | 0.00                 | 100                 | 0.00                                 | 0.00      |      |

|    |   |            |   |         |   |   |       |    |   |              |      |      |      |     |      |      |
|----|---|------------|---|---------|---|---|-------|----|---|--------------|------|------|------|-----|------|------|
| 7  | 1 | (untitled) | 5 | 771-1   | C | 0 | 11000 | 37 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 5 | 771-1   | C | 0 | 11000 | 37 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 8  | 1 | (untitled) | 1 | 769-1   | C | 0 | 11000 | 35 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 1 | 769-1   | C | 0 | 11000 | 35 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 9  | 1 | (untitled) | 2 | 769-2   | J | 0 | 11000 | 11 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 2 | 769-2   | J | 0 | 11000 | 11 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 10 | 1 | (untitled) | 2 | 769-2   | K | 0 | 11000 | 16 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 2 | 769-2   | K | 0 | 11000 | 16 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 11 | 1 | (untitled) |   | 769-2   | H | 0 | 11000 | 29 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | 769-2   | H | 0 | 11000 | 29 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 12 | 1 | (untitled) | 2 | 769-2   | I | 0 | 11000 | 29 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) | 2 | 769-2   | I | 0 | 11000 | 29 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 13 | 1 | (untitled) |   | TC777-1 | I | 0 | 11000 | 15 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | I | 0 | 11000 | 15 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 14 | 1 | (untitled) |   | TC777-1 | F | 0 | 11000 | 35 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | F | 0 | 11000 | 35 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 15 | 1 | (untitled) |   | TC777-1 | G | 0 | 0     | 0  | 0 | -100         | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | G | 0 | 0     | 0  | 0 | -100         | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 16 | 1 | (untitled) |   | TC777-1 | H | 0 | 11000 | 13 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-1 | H | 0 | 11000 | 13 | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
| 17 | 1 | (untitled) |   | TC777-2 | K | 0 | 11000 | 6  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |
|    | 2 | (untitled) |   | TC777-2 | K | 0 | 11000 | 6  | 0 | Unrestricted | 0.00 | 0.00 | 0.00 | 100 | 0.00 | 0.00 |

## Network Results

|                | Distance travelled (PCU-km/hr) | Time spent (PCU-hr/hr) | Mean journey speed (kph) | Total delay (PCU-hr/hr) | Weighted cost of delay (£ per hr) | Weighted cost of stops (£ per hr) | Excess queue penalty (£ per hr) | Performance Index (£ per hr) |
|----------------|--------------------------------|------------------------|--------------------------|-------------------------|-----------------------------------|-----------------------------------|---------------------------------|------------------------------|
| Normal traffic | 6669.81                        | 1306.14                | 5.11                     | 1128.21                 | 14087.05                          | 1899.34                           | 185602.56                       | 201588.95                    |
| Bus            |                                |                        |                          |                         |                                   |                                   |                                 |                              |
| Tram           |                                |                        |                          |                         |                                   |                                   |                                 |                              |
| Pedestrians    | 0.00                           | 0.00                   | 0.00                     | 0.00                    | 0.00                              | 0.00                              | 0.00                            | 0.00                         |
| <b>TOTAL</b>   | 6669.81                        | 1306.14                | 5.11                     | 1128.21                 | 14087.05                          | 1899.34                           | 185602.56                       | 201588.95                    |

- < = adjusted flow warning (upstream links/traffic streams are over-saturated)
- \* = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link/traffic stream excess queue is greater than 0
- **P.I. = PERFORMANCE INDEX**