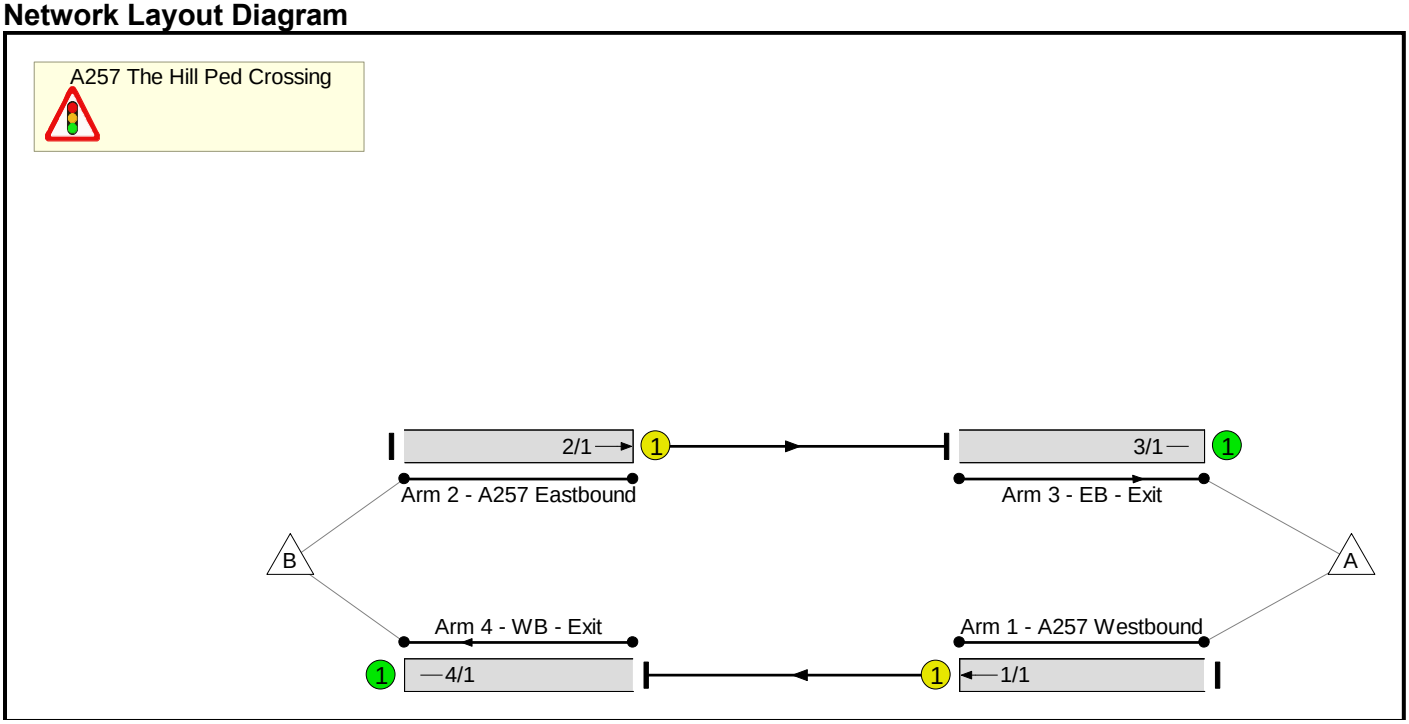
# Full Input Data And Results

## User and Project Details

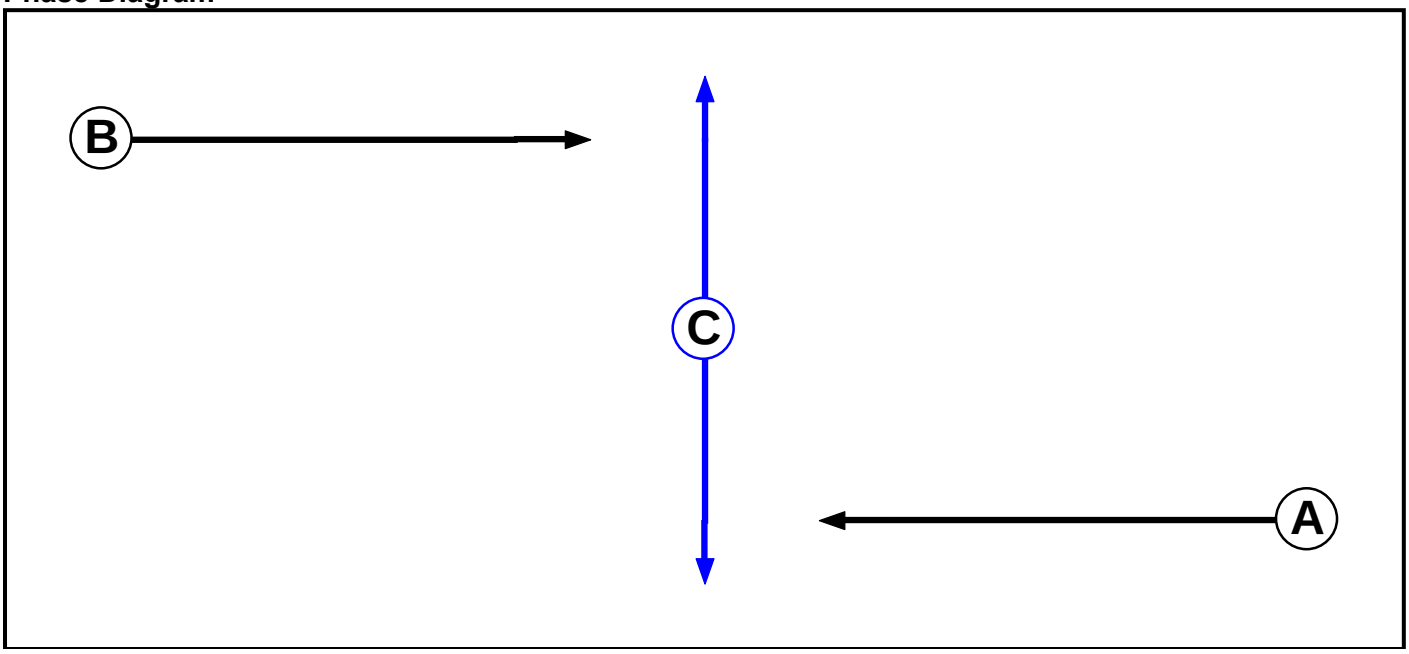
| | |
|---|---|
| **Project:** | **Littlebourne** |
| **Title:** | **A257 The Hill Pedestrian Crossing** |
| **Location:** | |
| **Client:** | Gladman |
| **Date Started:** | 02.11.2023 |
| **Additional detail:** | |
| **File name:** | A257 The Hill Pedestrian Crossing.lsg3x |
| **Author:** | Jon Wilkinson |
| **Company:** | i-Transport |
| **Address:** | Manchester |

## Network Layout Diagram



Full Input Data And Results

## Phase Diagram




## Phase Input Data

| Phase Name | Phase Type | Assoc. Phase | Street Min | Cont Min |
|---|---|---|---|---|
| A | Traffic | | 7 | 7 |
| B | Traffic | | 7 | 7 |
| C | Pedestrian | | 7 | 7 |

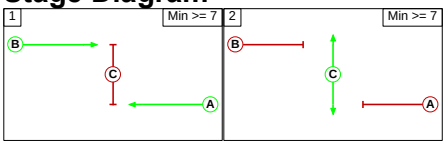
## Phase Intergreens Matrix

| | | Starting Phase | | |
|---|---|---|---|---|
| | | A | B | C |
| Terminating Phase | A | | - | 5 |
| | B | - | | 5 |
| | C | 7 | 7 | |

## Phases in Stage

| Stage No. | Phases in Stage |
|---|---|
| 1 | A B |
| 2 | C |

## Stage Diagram




## Phase Delays

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

Full Input Data And Results

## Prohibited Stage Change

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

Full Input Data And Results

## Give-Way Lane Input Data

| Junction: A257 The Hill Ped Crossing |
| --- |
| There are no Opposed Lanes in this Junction |

Full Input Data And Results

## Lane Input Data

| Junction: A257 The Hill Ped Crossing | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lane** | **Lane Type** | **Phases** | **Start Disp.** | **End Disp.** | **Physical Length (PCU)** | **Sat Flow Type** | **Def User Saturation Flow (PCU/Hr)** | **Lane Width (m)** | **Gradient** | **Nearside Lane** | **Turns** | **Turning Radius (m)** |
| 1/1 (A257 Westbound) | U | A | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | Y | Arm 4 Ahead | Inf |
| 2/1 (A257 Eastbound) | U | B | 2 | 3 | 60.0 | Geom | - | 3.00 | 0.00 | Y | Arm 3 Ahead | Inf |
| 3/1 (EB - Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |
| 4/1 (WB - Exit) | U | | 2 | 3 | 60.0 | Inf | - | - | - | - | - | - |

## Traffic Flow Groups

| Flow Group | Start Time | End Time | Duration | Formula |
|---|---|---|---|---|
| 1: '2045 B+C+D AM' | 08:00 | 09:00 | 01:00 | |
| 2: '2045 B+C+D PM' | 17:00 | 18:00 | 01:00 | |

**Scenario 1: '2045 B+C+D AM'** (FG1: '2045 B+C+D AM', Plan 1: 'Network Control Plan 1')

## Traffic Flows, Desired

**Desired Flow :**

| | | Destination | | |
|---|---|---|---|---|
| | | A | B | Tot. |
| Origin | A | 0 | 662 | 662 |
| | B | 480 | 0 | 480 |
| | Tot. | 480 | 662 | 1142 |

## Traffic Lane Flows

| Lane | Scenario 1: 2045 B+C+D AM |
|---|---|
| **Junction: A257 The Hill Ped Crossing** | |
| 1/1 | 662 |
| 2/1 | 480 |
| 3/1 | 480 |
| 4/1 | 662 |

Full Input Data And Results

## Lane Saturation Flows

| Junction: A257 The Hill Ped Crossing | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Lane** | **Lane Width (m)** | **Gradient** | **Nearside Lane** | **Allowed Turns** | **Turning Radius (m)** | **Turning Prop.** | **Sat Flow (PCU/Hr)** | **Flared Sat Flow (PCU/Hr)** |
| 1/1 (A257 Westbound) | 3.00 | 0.00 | Y | Arm 4 Ahead | Inf | 100.0 % | 1915 | 1915 |
| 2/1 (A257 Eastbound) | 3.00 | 0.00 | Y | Arm 3 Ahead | Inf | 100.0 % | 1915 | 1915 |
| 3/1 (EB - Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 4/1 (WB - Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |

**Scenario 2: '2045 B+C+D PM'** (FG2: '2045 B+C+D PM', Plan 1: 'Network Control Plan 1')

## Traffic Flows, Desired

**Desired Flow :**

| | | Destination | | |
|---|---|---|---|---|
| | | A | B | Tot. |
| Origin | A | 0 | 451 | 451 |
| | B | 435 | 0 | 435 |
| | Tot. | 435 | 451 | 886 |

## Traffic Lane Flows

| Lane | Scenario 2: 2045 B+C+D PM |
|---|---|
| **Junction: A257 The Hill Ped Crossing** | |
| 1/1 | 451 |
| 2/1 | 435 |
| 3/1 | 435 |
| 4/1 | 451 |

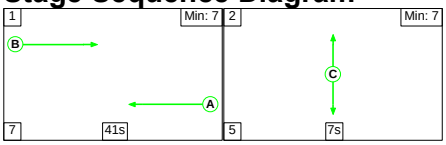
## Lane Saturation Flows

| Junction: A257 The Hill Ped Crossing | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Lane** | **Lane Width (m)** | **Gradient** | **Nearside Lane** | **Allowed Turns** | **Turning Radius (m)** | **Turning Prop.** | **Sat Flow (PCU/Hr)** | **Flared Sat Flow (PCU/Hr)** |
| 1/1 (A257 Westbound) | 3.00 | 0.00 | Y | Arm 4 Ahead | Inf | 100.0 % | 1915 | 1915 |
| 2/1 (A257 Eastbound) | 3.00 | 0.00 | Y | Arm 3 Ahead | Inf | 100.0 % | 1915 | 1915 |
| 3/1 (EB - Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |
| 4/1 (WB - Exit Lane 1) | Infinite Saturation Flow | | | | | | Inf | Inf |

Full Input Data And Results

**Scenario 1: '2045 B+C+D AM'** (FG1: '2045 B+C+D AM', Plan 1: 'Network Control Plan 1')

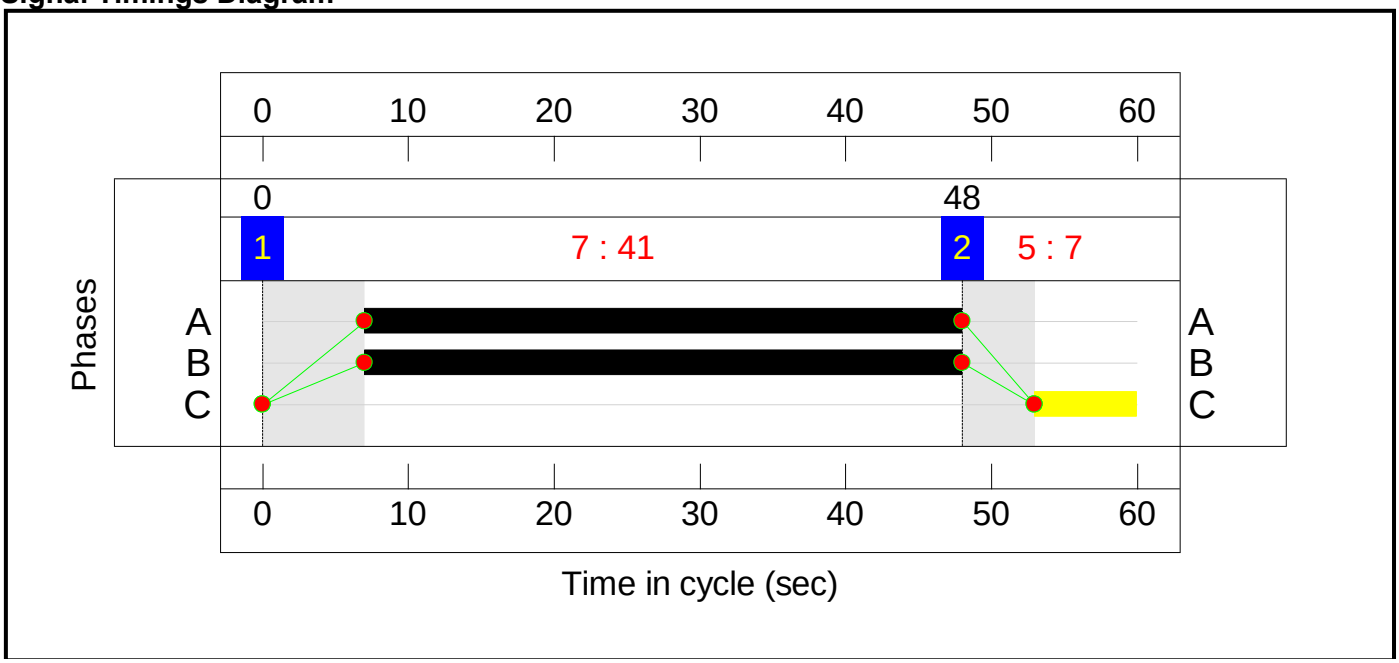
## Stage Sequence Diagram



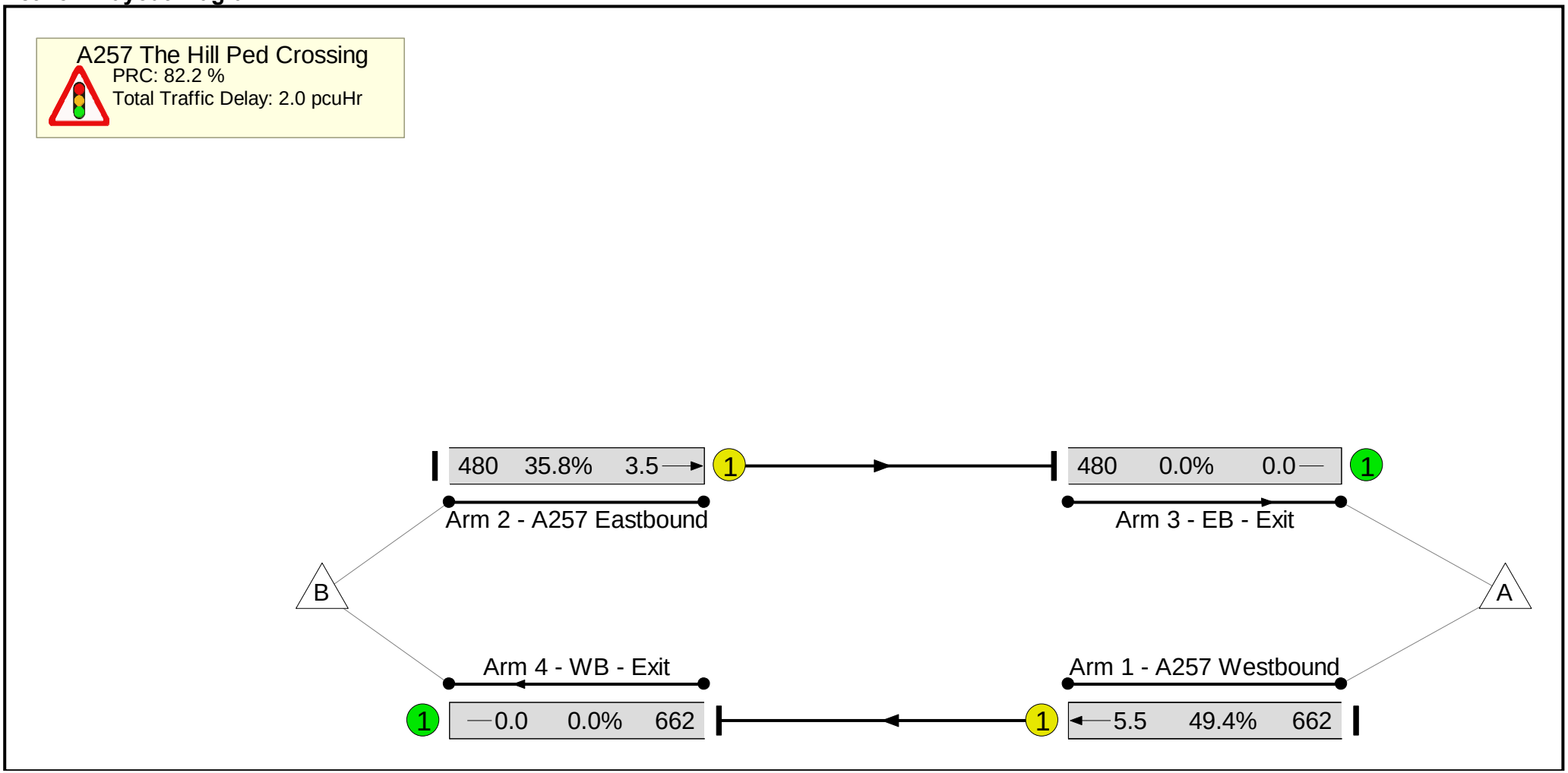

## Stage Timings

| Stage | 1 | 2 |
|---|---|---|
| Duration | 41 | 7 |
| Change Point | 0 | 48 |

## Signal Timings Diagram



**Network Layout Diagram**



Full Input Data And Results

## Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Network: A257 The Hill Pedestrian Crossing** | **-** | **-** | **N/A** | **-** | **-** | | **-** | **-** | **-** | **-** | **-** | **-** | **49.4%** |
| **A257 The Hill Ped Crossing** | **-** | **-** | **N/A** | **-** | **-** | | **-** | **-** | **-** | **-** | **-** | **-** | **49.4%** |
| 1/1 | A257 Westbound Ahead | U | N/A | N/A | A | | 1 | 41 | - | 662 | 1915 | 1340 | 49.4% |
| 2/1 | A257 Eastbound Ahead | U | N/A | N/A | B | | 1 | 41 | - | 480 | 1915 | 1340 | 35.8% |
| 3/1 | EB - Exit | U | N/A | N/A | - | | - | - | - | 480 | Inf | Inf | 0.0% |
| 4/1 | WB - Exit | U | N/A | N/A | - | | - | - | - | 662 | Inf | Inf | 0.0% |

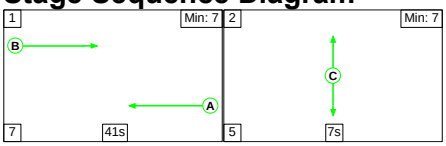
| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Network: A257 The Hill Pedestrian Crossing** | **-** | **-** | **0** | **0** | **0** | **1.2** | **0.8** | **0.0** | **2.0** | **-** | **-** | **-** | **-** |
| **A257 The Hill Ped Crossing** | **-** | **-** | **0** | **0** | **0** | **1.2** | **0.8** | **0.0** | **2.0** | **-** | **-** | **-** | **-** |
| 1/1 | 662 | 662 | - | - | - | 0.8 | 0.5 | - | 1.2 | 6.8 | 5.0 | 0.5 | 5.5 |
| 2/1 | 480 | 480 | - | - | - | 0.5 | 0.3 | - | 0.8 | 5.7 | 3.2 | 0.3 | 3.5 |
| 3/1 | 480 | 480 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4/1 | 662 | 662 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

C1 PRC for Signalled Lanes (%): 82.2 Total Delay for Signalled Lanes (pcuHr): 2.01 Cycle Time (s): 60
PRC Over All Lanes (%): 82.2 Total Delay Over All Lanes(pcuHr): 2.01

Full Input Data And Results

**Scenario 2: '2045 B+C+D PM'** (FG2: '2045 B+C+D PM', Plan 1: 'Network Control Plan 1')

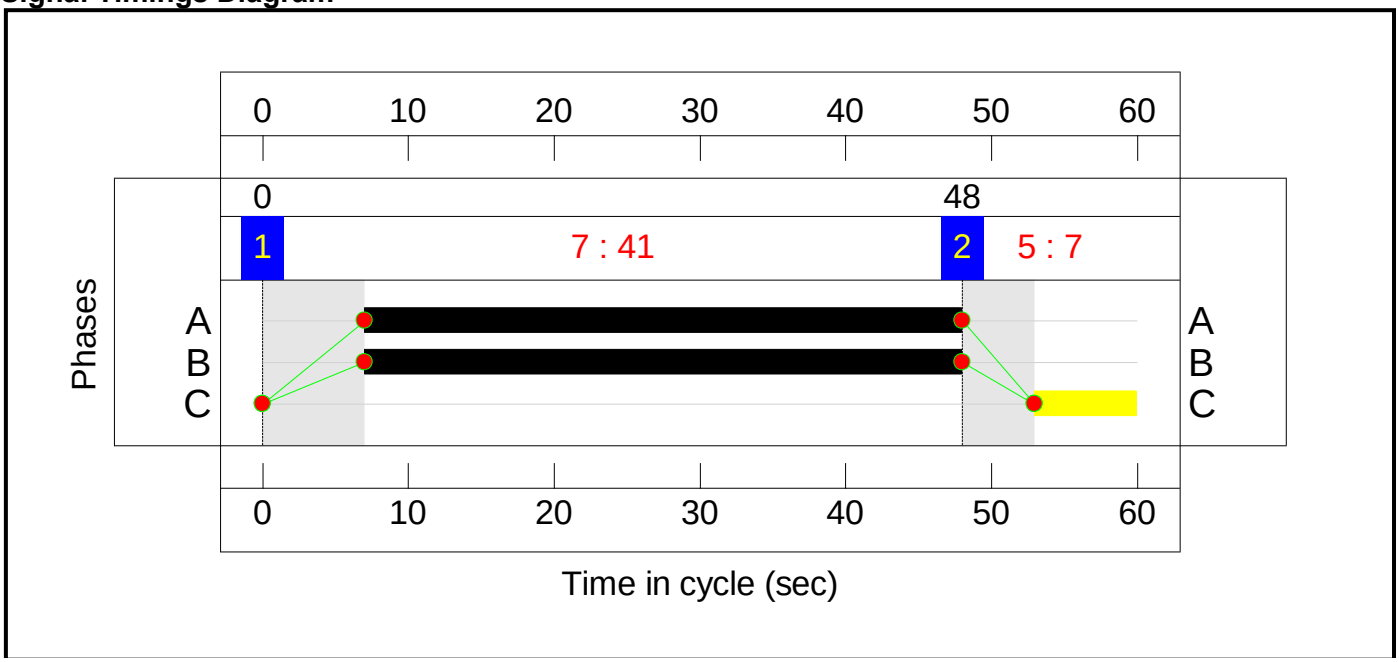
## Stage Sequence Diagram



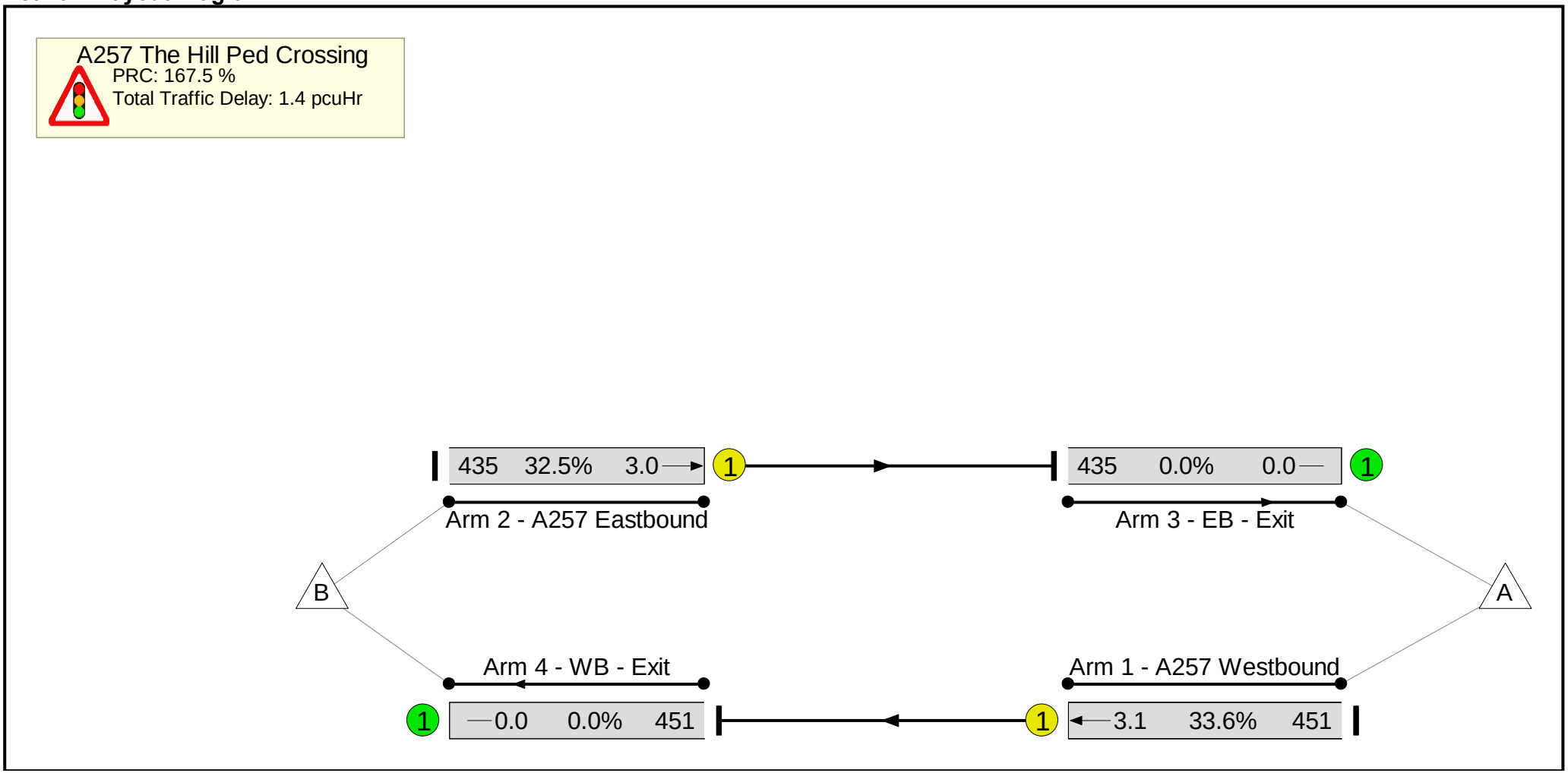

## Stage Timings

| Stage | 1 | 2 |
|---|---|---|
| Duration | 41 | 7 |
| Change Point | 0 | 48 |

## Signal Timings Diagram



**Network Layout Diagram**



Full Input Data And Results

## Network Results

| Item | Lane Description | Lane Type | Controller Stream | Position In Filtered Route | Full Phase | Arrow Phase | Num Greens | Total Green (s) | Arrow Green (s) | Demand Flow (pcu) | Sat Flow (pcu/Hr) | Capacity (pcu) | Deg Sat (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Network: A257 The Hill Pedestrian Crossing** | **-** | **-** | **N/A** | **-** | **-** | | **-** | **-** | **-** | **-** | **-** | **-** | **33.6%** |
| **A257 The Hill Ped Crossing** | **-** | **-** | **N/A** | **-** | **-** | | **-** | **-** | **-** | **-** | **-** | **-** | **33.6%** |
| 1/1 | A257 Westbound Ahead | U | N/A | N/A | A | | 1 | 41 | - | 451 | 1915 | 1340 | 33.6% |
| 2/1 | A257 Eastbound Ahead | U | N/A | N/A | B | | 1 | 41 | - | 435 | 1915 | 1340 | 32.5% |
| 3/1 | EB - Exit | U | N/A | N/A | - | | - | - | - | 435 | Inf | Inf | 0.0% |
| 4/1 | WB - Exit | U | N/A | N/A | - | | - | - | - | 451 | Inf | Inf | 0.0% |

| Item | Arriving (pcu) | Leaving (pcu) | Turners In Gaps (pcu) | Turners When Unopposed (pcu) | Turners In Intergreen (pcu) | Uniform Delay (pcuHr) | Rand + Oversat Delay (pcuHr) | Storage Area Uniform Delay (pcuHr) | Total Delay (pcuHr) | Av. Delay Per PCU (s/pcu) | Max. Back of Uniform Queue (pcu) | Rand + Oversat Queue (pcu) | Mean Max Queue (pcu) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Network: A257 The Hill Pedestrian Crossing** | **-** | **-** | **0** | **0** | **0** | **0.9** | **0.5** | **0.0** | **1.4** | **-** | **-** | **-** | **-** |
| **A257 The Hill Ped Crossing** | **-** | **-** | **0** | **0** | **0** | **0.9** | **0.5** | **0.0** | **1.4** | **-** | **-** | **-** | **-** |
| 1/1 | 451 | 451 | - | - | - | 0.4 | 0.3 | - | 0.7 | 5.6 | 2.9 | 0.3 | 3.1 |
| 2/1 | 435 | 435 | - | - | - | 0.4 | 0.2 | - | 0.7 | 5.5 | 2.8 | 0.2 | 3.0 |
| 3/1 | 435 | 435 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4/1 | 451 | 451 | - | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

C1 PRC for Signalled Lanes (%): 167.5 Total Delay for Signalled Lanes (pcuHr): 1.36 Cycle Time (s): 60
PRC Over All Lanes (%): 167.5 Total Delay Over All Lanes(pcuHr): 1.36