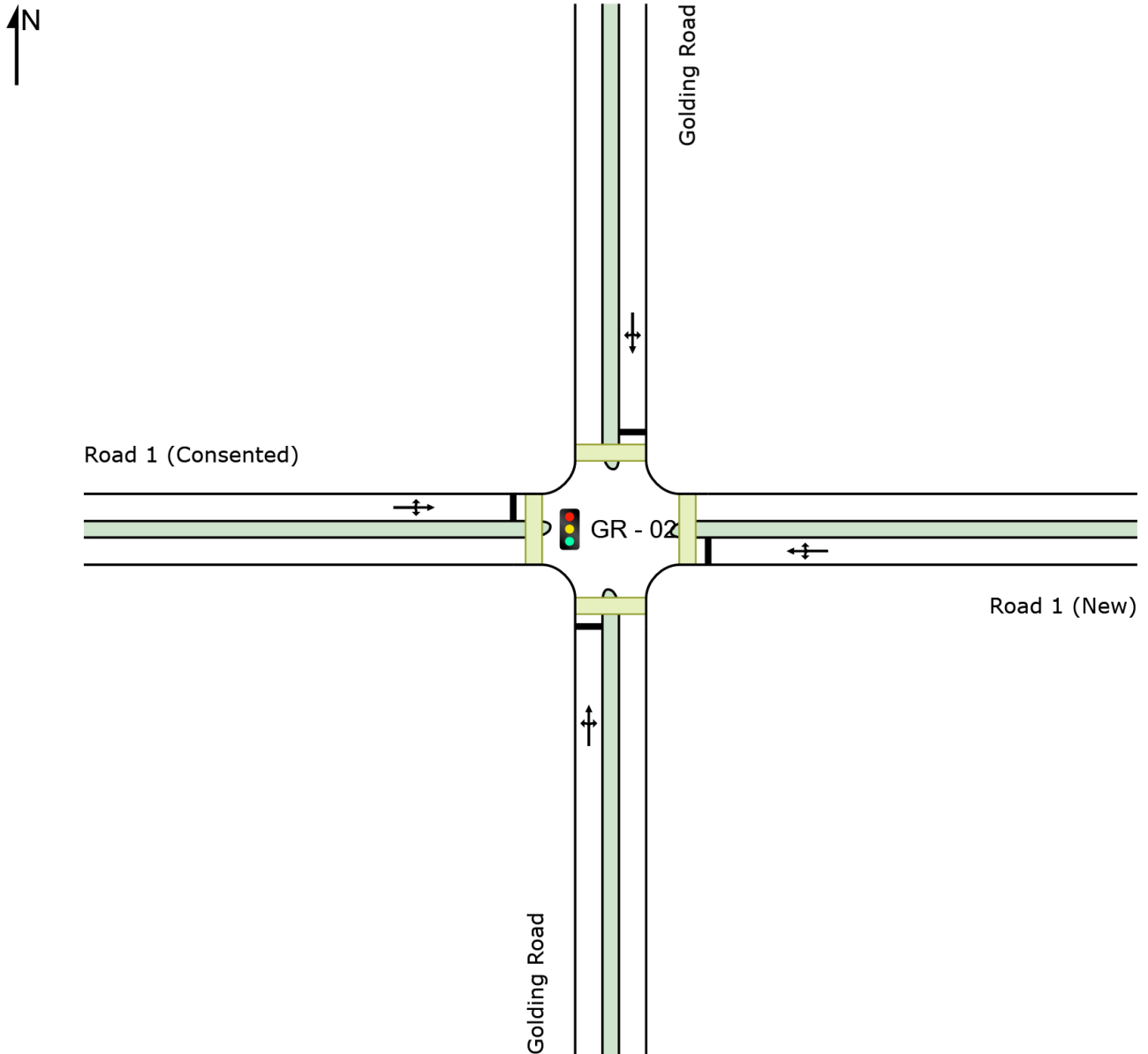


SITE LAYOUT

 Site: GR - 02 [Golding Road / Road 1 - Signalised - AM Peak - Full Ped (Site Folder: Golding Road / Road 1 - Signalised)]

Signalised Intersection of Golding Road / Road 1
AM Peak: Existing + Consented + Development
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Project: C:\Users\Elemit\Traffic Planning Dropbox\A TPC Projects\2021 Projects\21981 - 50 Pukekohe East Road and 47 Golding Road\TPC Documents\Modelling\RFI\21981 - SIDRA Modelling.sip9

MOVEMENT SUMMARY

Site: GR - 02 [Golding Road / Road 1 - Signalised - AM Peak - Full Ped (Site Folder: Golding Road / Road 1 - Signalised)]

Signalised Intersection of Golding Road / Road 1

AM Peak: Existing + Consented + Development

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|------|---------------|------|---------------|------|-----------|-------------|------------------|-------------------|----------|-----------|---------------------|------------------|-------------|
| Mov ID | Turn | INPUT VOLUMES | | DEMAND FLOWS | | Deg. Satn | Aver. Delay | Level of Service | 95% BACK OF QUEUE | | Prop. Que | Effective Stop Rate | Aver. No. Cycles | Aver. Speed |
| | | [Total veh/h | HV % | [Total veh/h | HV % | | | | [Veh. veh | Dist] m | | | | |
| South: Golding Road | | | | | | | | | | | | | | |
| 1 | L2 | 5 | 1.0 | 5 | 1.0 | 0.538 | 29.7 | LOS C | 5.3 | 37.5 | 0.95 | 0.78 | 0.95 | 38.0 |
| 2 | T1 | 172 | 1.0 | 181 | 1.0 | * 0.538 | 25.1 | LOS C | 5.3 | 37.5 | 0.95 | 0.78 | 0.95 | 37.1 |
| 3 | R2 | 4 | 1.0 | 4 | 1.0 | 0.538 | 29.7 | LOS C | 5.3 | 37.5 | 0.95 | 0.78 | 0.95 | 37.8 |
| Approach | | 181 | 1.0 | 191 | 1.0 | 0.538 | 25.3 | LOS C | 5.3 | 37.5 | 0.95 | 0.78 | 0.95 | 37.1 |
| East: Road 1 (New) | | | | | | | | | | | | | | |
| 4 | L2 | 17 | 1.0 | 18 | 1.0 | 0.402 | 34.1 | LOS C | 2.2 | 15.7 | 0.98 | 0.75 | 0.98 | 35.5 |
| 5 | T1 | 12 | 1.0 | 13 | 1.0 | * 0.402 | 29.5 | LOS C | 2.2 | 15.7 | 0.98 | 0.75 | 0.98 | 34.3 |
| 6 | R2 | 42 | 1.0 | 44 | 1.0 | 0.402 | 34.1 | LOS C | 2.2 | 15.7 | 0.98 | 0.75 | 0.98 | 32.2 |
| Approach | | 71 | 1.0 | 75 | 1.0 | 0.402 | 33.3 | LOS C | 2.2 | 15.7 | 0.98 | 0.75 | 0.98 | 33.4 |
| North: Golding Road | | | | | | | | | | | | | | |
| 7 | L2 | 11 | 1.0 | 12 | 1.0 | 0.493 | 31.3 | LOS C | 4.0 | 28.6 | 0.96 | 0.77 | 0.96 | 34.4 |
| 8 | T1 | 109 | 2.0 | 115 | 2.0 | * 0.493 | 26.7 | LOS C | 4.0 | 28.6 | 0.96 | 0.77 | 0.96 | 36.3 |
| 9 | R2 | 14 | 1.0 | 15 | 1.0 | 0.493 | 31.3 | LOS C | 4.0 | 28.6 | 0.96 | 0.77 | 0.96 | 34.2 |
| Approach | | 134 | 1.8 | 141 | 1.8 | 0.493 | 27.6 | LOS C | 4.0 | 28.6 | 0.96 | 0.77 | 0.96 | 35.9 |
| West: Road 1 (Consented) | | | | | | | | | | | | | | |
| 10 | L2 | 82 | 1.0 | 86 | 1.0 | 0.496 | 30.4 | LOS C | 4.3 | 30.7 | 0.95 | 0.78 | 0.95 | 34.0 |
| 11 | T1 | 46 | 1.0 | 48 | 1.0 | * 0.496 | 25.8 | LOS C | 4.3 | 30.7 | 0.95 | 0.78 | 0.95 | 35.8 |
| 12 | R2 | 19 | 1.0 | 20 | 1.0 | 0.496 | 30.4 | LOS C | 4.3 | 30.7 | 0.95 | 0.78 | 0.95 | 36.6 |
| Approach | | 147 | 1.0 | 155 | 1.0 | 0.496 | 29.0 | LOS C | 4.3 | 30.7 | 0.95 | 0.78 | 0.95 | 34.9 |
| All Vehicles | | 533 | 1.2 | 561 | 1.2 | 0.538 | 27.9 | LOS C | 5.3 | 37.5 | 0.96 | 0.77 | 0.96 | 35.7 |

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

| Pedestrian Movement Performance | | | | | | | | | | | | |
|---------------------------------|----------|------------|-----------|-------------|------------------|-----------------------|----------|-----------|---------------------|-------------|--------------|-------------|
| Mov ID | Crossing | Input Vol. | Dem. Flow | Aver. Delay | Level of Service | AVERAGE BACK OF QUEUE | | Prop. Que | Effective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | | | | | | [Ped ped | Dist] m | | | | | |
| South: Golding Road | | | | | | | | | | | | |
| P1 | Full | 50 | 53 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |
| East: Road 1 (New) | | | | | | | | | | | | |
| P2 | Full | 50 | 53 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |

| North: Golding Road | | | | | | | | | | | | |
|--------------------------|-------------|-----|-----|------|-------|-----|-----|------|------|-------|-------|------|
| P3 | Full | 50 | 53 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |
| West: Road 1 (Consented) | | | | | | | | | | | | |
| P4 | Full | 50 | 53 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |
| All | Pedestrians | 200 | 211 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: GR - 02 [Golding Road / Road 1 - Signalised - AM Peak - Full Ped (Site Folder: Golding Road / Road 1 - Signalised)]

Signalised Intersection of Golding Road / Road 1
 AM Peak: Existing + Consented + Development
 Site Category: (None)
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

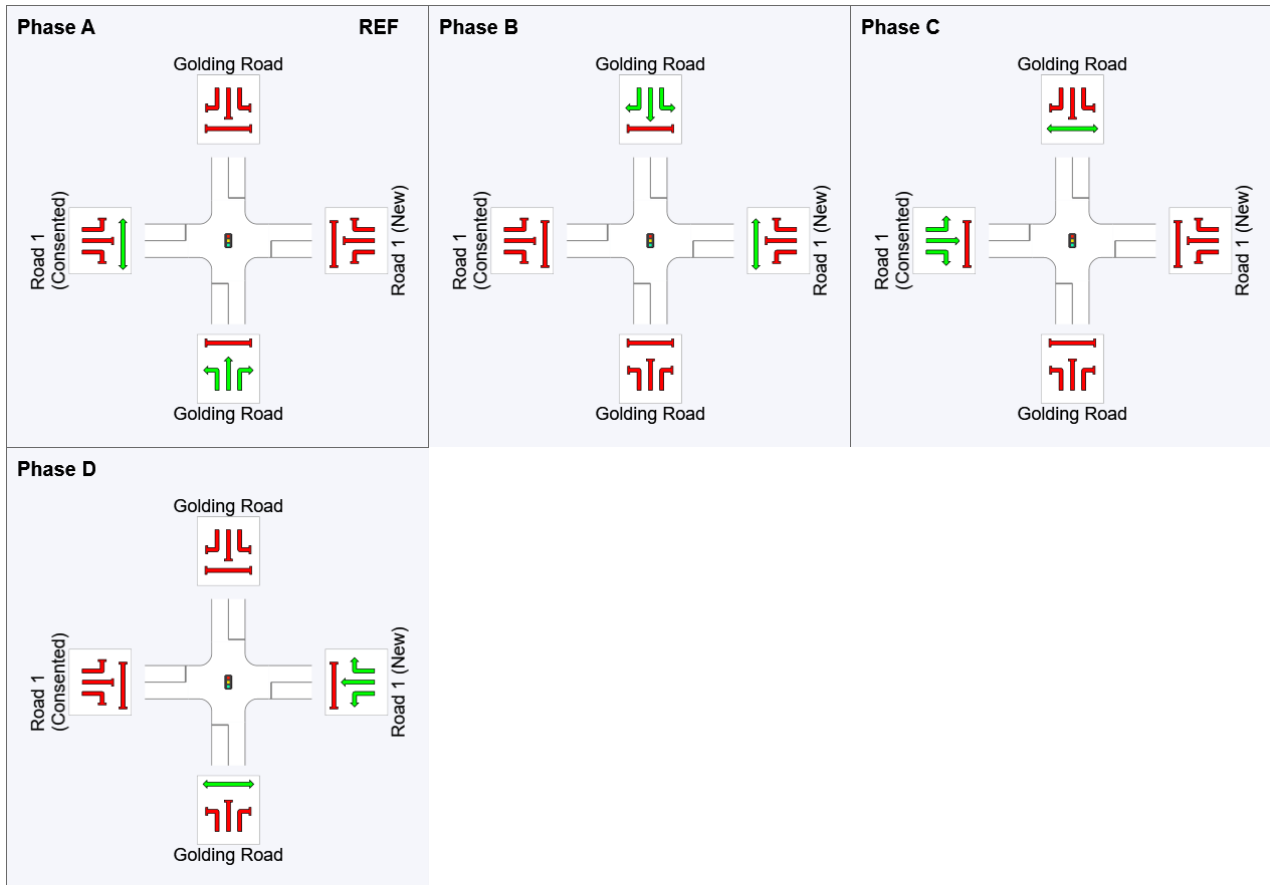
Timings based on settings in the Site Phasing & Timing dialog
 Phase Times determined by the program
 Phase Sequence: Split Phasing
 Reference Phase: Phase A
 Input Phase Sequence: A, B, C, D
 Output Phase Sequence: A, B, C, D

Phase Timing Summary

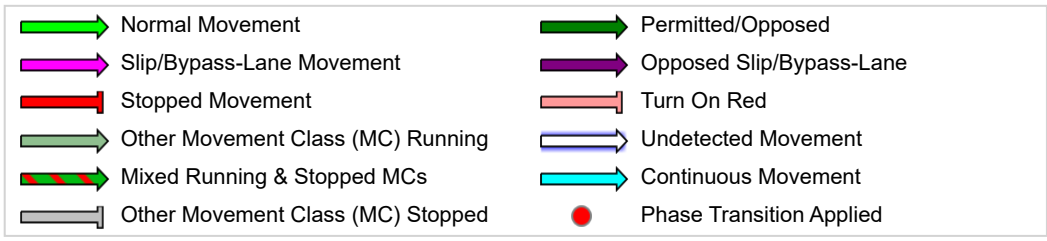
| Phase | A | B | C | D |
|-------------------------|-----|-----|-----|-----|
| Phase Change Time (sec) | 0 | 17 | 32 | 48 |
| Green Time (sec) | 11 | 9 | 10 | 6 |
| Phase Time (sec) | 17 | 15 | 16 | 12 |
| Phase Split | 28% | 25% | 27% | 20% |

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
 VAR: Variable Phase



MOVEMENT SUMMARY

Site: GR - 02 [Golding Road / Road 1 - Signalised - PM Peak - Full Ped (Site Folder: Golding Road / Road 1 - Signalised)]

Signalised Intersection of Golding Road / Road 1

PM Peak: Existing + Consented + Development

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|------|---------------|------|---------------|------|-----------|-------------|------------------|-------------------|----------|-----------|---------------------|------------------|-------------|
| Mov ID | Turn | INPUT VOLUMES | | DEMAND FLOWS | | Deg. Satn | Aver. Delay | Level of Service | 95% BACK OF QUEUE | | Prop. Que | Effective Stop Rate | Aver. No. Cycles | Aver. Speed |
| | | [Total veh/h | HV % | [Total veh/h | HV % | | | | [Veh. veh | Dist] m | | | | |
| South: Golding Road | | | | | | | | | | | | | | |
| 1 | L2 | 20 | 1.0 | 21 | 1.0 | 0.394 | 30.8 | LOS C | 3.2 | 22.2 | 0.95 | 0.75 | 0.95 | 37.2 |
| 2 | T1 | 70 | 1.0 | 74 | 1.0 | * 0.394 | 26.2 | LOS C | 3.2 | 22.2 | 0.95 | 0.75 | 0.95 | 36.2 |
| 3 | R2 | 17 | 1.0 | 18 | 1.0 | 0.394 | 30.8 | LOS C | 3.2 | 22.2 | 0.95 | 0.75 | 0.95 | 36.9 |
| Approach | | 107 | 1.0 | 113 | 1.0 | 0.394 | 27.8 | LOS C | 3.2 | 22.2 | 0.95 | 0.75 | 0.95 | 36.5 |
| East: Road 1 (New) | | | | | | | | | | | | | | |
| 4 | L2 | 4 | 1.0 | 4 | 1.0 | 0.384 | 33.9 | LOS C | 2.2 | 15.4 | 0.97 | 0.74 | 0.97 | 36.4 |
| 5 | T1 | 57 | 1.0 | 60 | 1.0 | * 0.384 | 29.3 | LOS C | 2.2 | 15.4 | 0.97 | 0.74 | 0.97 | 35.3 |
| 6 | R2 | 9 | 1.0 | 9 | 1.0 | 0.384 | 33.9 | LOS C | 2.2 | 15.4 | 0.97 | 0.74 | 0.97 | 33.2 |
| Approach | | 70 | 1.0 | 74 | 1.0 | 0.384 | 30.2 | LOS C | 2.2 | 15.4 | 0.97 | 0.74 | 0.97 | 35.2 |
| North: Golding Road | | | | | | | | | | | | | | |
| 7 | L2 | 36 | 1.0 | 38 | 1.0 | 0.392 | 25.4 | LOS C | 4.7 | 32.9 | 0.88 | 0.75 | 0.88 | 36.2 |
| 8 | T1 | 88 | 1.0 | 93 | 1.0 | * 0.392 | 20.8 | LOS C | 4.7 | 32.9 | 0.88 | 0.75 | 0.88 | 38.0 |
| 9 | R2 | 52 | 1.0 | 55 | 1.0 | 0.392 | 25.4 | LOS C | 4.7 | 32.9 | 0.88 | 0.75 | 0.88 | 35.9 |
| Approach | | 176 | 1.0 | 185 | 1.0 | 0.392 | 23.1 | LOS C | 4.7 | 32.9 | 0.88 | 0.75 | 0.88 | 37.0 |
| West: Road 1 (Consented) | | | | | | | | | | | | | | |
| 10 | L2 | 14 | 1.0 | 15 | 1.0 | 0.185 | 33.1 | LOS C | 1.0 | 7.0 | 0.95 | 0.70 | 0.95 | 33.2 |
| 11 | T1 | 14 | 1.0 | 15 | 1.0 | * 0.185 | 28.5 | LOS C | 1.0 | 7.0 | 0.95 | 0.70 | 0.95 | 35.0 |
| 12 | R2 | 5 | 1.0 | 5 | 1.0 | 0.185 | 33.1 | LOS C | 1.0 | 7.0 | 0.95 | 0.70 | 0.95 | 35.9 |
| Approach | | 33 | 1.0 | 35 | 1.0 | 0.185 | 31.1 | LOS C | 1.0 | 7.0 | 0.95 | 0.70 | 0.95 | 34.4 |
| All Vehicles | | 386 | 1.0 | 406 | 1.0 | 0.394 | 26.4 | LOS C | 4.7 | 32.9 | 0.92 | 0.74 | 0.92 | 36.3 |

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

| Pedestrian Movement Performance | | | | | | | | | | | | |
|---------------------------------|----------|------------|-----------|-------------|------------------|-----------------------|----------|-----------|---------------------|-------------|--------------|-------------|
| Mov ID | Crossing | Input Vol. | Dem. Flow | Aver. Delay | Level of Service | AVERAGE BACK OF QUEUE | | Prop. Que | Effective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | | | | | | [Ped ped | Dist] m | | | | | |
| South: Golding Road | | | | | | | | | | | | |
| P1 | Full | 50 | 53 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |
| East: Road 1 (New) | | | | | | | | | | | | |
| P2 | Full | 50 | 53 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |

| North: Golding Road | | | | | | | | | | | | |
|--------------------------|-------------|-----|-----|------|-------|-----|-----|------|------|-------|-------|------|
| P3 | Full | 50 | 53 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |
| West: Road 1 (Consented) | | | | | | | | | | | | |
| P4 | Full | 50 | 53 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |
| All | Pedestrians | 200 | 211 | 24.4 | LOS C | 0.1 | 0.1 | 0.90 | 0.90 | 186.4 | 210.6 | 1.13 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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PHASING SUMMARY

Site: GR - 02 [Golding Road / Road 1 - Signalised - PM Peak - Full Ped (Site Folder: Golding Road / Road 1 - Signalised)]

Signalised Intersection of Golding Road / Road 1
 PM Peak: Existing + Consented + Development
 Site Category: (None)
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site User-Given Cycle Time)

Timings based on settings in the Site Phasing & Timing dialog

Phase Times determined by the program

Phase Sequence: Split Phasing

Reference Phase: Phase A

Input Phase Sequence: A, B, C, D

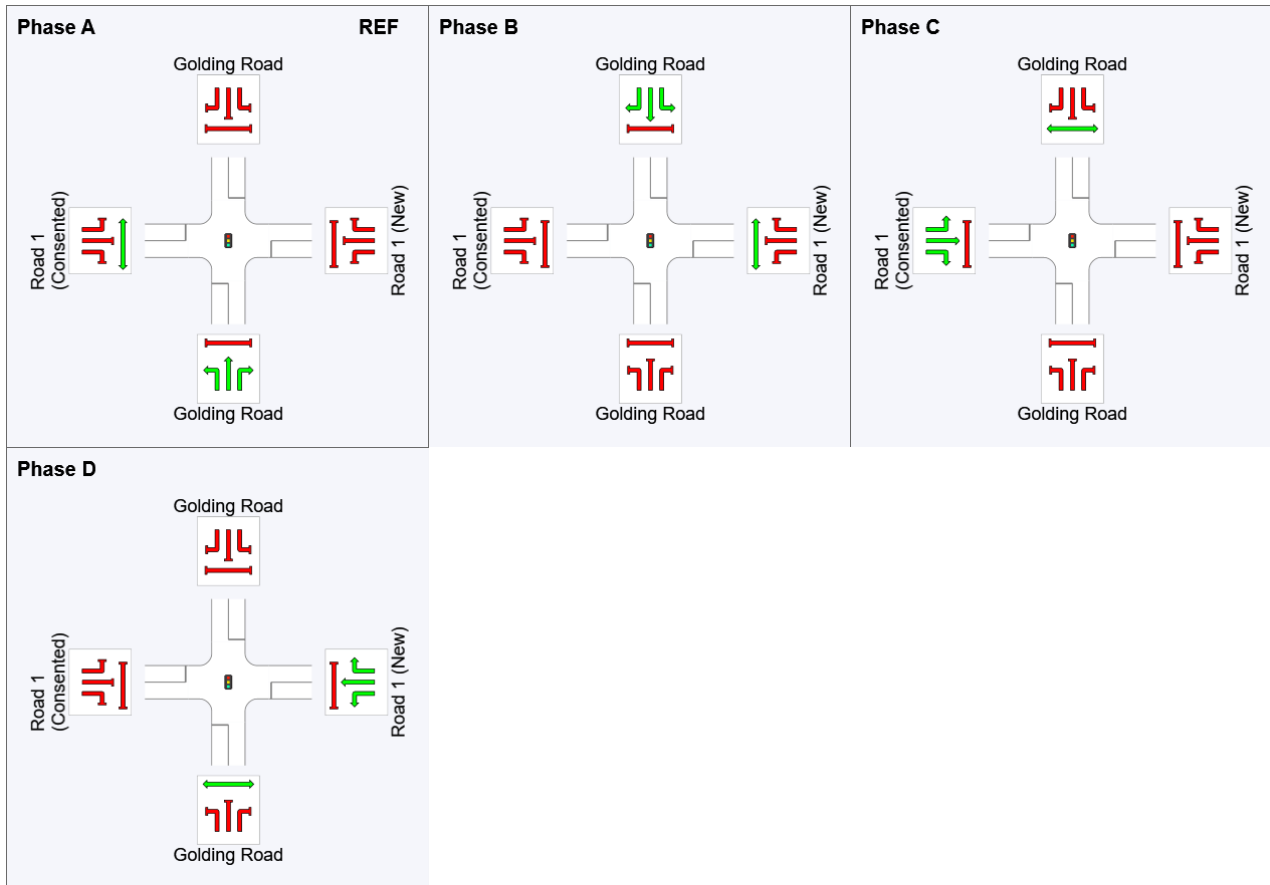
Output Phase Sequence: A, B, C, D

Phase Timing Summary

| Phase | A | B | C | D |
|-------------------------|-----|-----|-----|-----|
| Phase Change Time (sec) | 0 | 15 | 36 | 48 |
| Green Time (sec) | 9 | 15 | 6 | 6 |
| Phase Time (sec) | 15 | 21 | 12 | 12 |
| Phase Split | 25% | 35% | 20% | 20% |

See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified or implied) less than 100%.

Output Phase Sequence



REF: Reference Phase
 VAR: Variable Phase



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