Providence West ROL 2, 817 Ripley Road

Traffic Impact Assessment

Stockland

Level 4, 99 Melbourne Street, South Brisbane,
QLD 4101

Prepared by:

SLR Consulting Australia

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Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Stockland (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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1.0 Introduction

1.1 Overview

The proposed development (Providence West ROL 2) is located within the Ripley Valley Priority Development Area (PDA) and is within the Providence development area being developed and delivered by Stockland. The subject site is located:

- On the southern side of the Centenary Highway.
- Immediately south of and adjoining the Providence West ROL 1 (Lacebark) development, recently approved.
- On the western side of Ripley Road.
- On the northern side of the proposed future South West Trunk Road.

SLR Consulting Australia Pty Ltd (SLR) has been commissioned by Stockland to prepare a Traffic Impact Assessment (TIA) to accompany a development application (DA) in relation to the residential development, known as ROL 2, within the overall Providence West development area, hereafter referred to as the "proposed development".

The plans for the proposed development, prepared by Therefor Group (Therefor), and relevant extracts are included at **Appendix A**. Functional plans of the key road network within the development have been prepared by KN Group and relevant plans are also included at **Appendix A**.

This report is a revision of the previous report version 2.0 dated 20 May 2025 and supersedes that previous report. In particular, this report responds to items raised by Ipswich City Council (as MEDQ Delegate) in their Information Request letter of 3 July 2025.

1.2 Scope of Assessment

This document has been prepared to inform Ipswich City Council (ICC) in their assessment of the DA by identifying and addressing the traffic and transport matters relevant to the proposed development as follows:

- The assessment has considered the proposed ROL 2 development site in the context of the Providence West development and the greater Ripley Valley area.
- The assessment has included consideration of the future year traffic demands and operational performance at the key road infrastructure that provides access to the subject site.
- The assessment has included a development layout review that considers the following:
  - Internal road network.
  - Internal connectivity and permeability for vehicles and active transport.
  - Connection to active transport infrastructure.
  - Connection to public transport infrastructure.
  - Configuration of key internal intersections.

Of particular importance, and change since the previous report version 2.0 dated 20 May 2025, this report includes further analysis of the South West Trunk Road (along the southern boundary of the subject site), noting the following:

- The South West Trunk Road is not part of the subject development application.
- Relevant applications for the South West Trunk Road will occur separately from this subject application, but around a similar timeframe.
- The South West Trunk Road (when constructed) will provide the main vehicular access route for the subject development.
- The South West Trunk Road is one of number of Trunk Roads identified within the Development Charges and Offset Plan (DCOP) for Ripley Valley and provides vehicular routes serving the entire Ripley Valley PDA.

Given the importance of the South West Trunk Road, the analysis herein considers staging options associated with the timing of the proposed development before / after connection to the South West Trunk Road and considers the South West Trunk Road before / after further connections to / from the west (including a connection with Wensley Road over the Centenary Highway).

Also of particular importance is the assessment of the Ripley Road / Providence Parade intersection. This intersection is part of the Trunk Road network identified within the DCOP for Ripley Valley and serves the majority of the Ripley Valley PDA catchment adjoining Ripley Road south of the Centenary Highway. Whilst some consideration has been given to the subject intersection, the intersection form has been approved and constructed as part of other applications and the need for further upgrading is beyond the responsibility of the subject ROL 2 development.

1.3 Previous Approvals

The subject application represents a new application over the site. Nonetheless, it is important to recognise that a previous (generally similar) approval does exist over the site. The development has previously been approved with the following conditions imposed:

- **Reconfiguration of Lot:**

  The approval conditions for the reconfiguration of lot are specified in the letter from ICC dated 26 July 2021 (9820/2019/MAPDA/A) which is attached at **Appendix B**.

- **Context Plan**

  The approval conditions for the context plan are specified in the letter from ICC dated 14 November 2023 (10397/2023/MAPDA) which is attached at **Appendix B**.

To assist ICC, comments have been provided in Italics throughout the report to identify consistency with, or areas that have substantially changed from, the above approvals and to explain the reason for the changes.

2.0 Subject Site

2.1 Site Context

The subject site is located at 817 Ripley Road, Ipswich, more formally described as Lot 196 on SP157517. The proposed development is referred to as Providence West ROL 2. The site location is shown in the context of the local area on **Figure 1**.

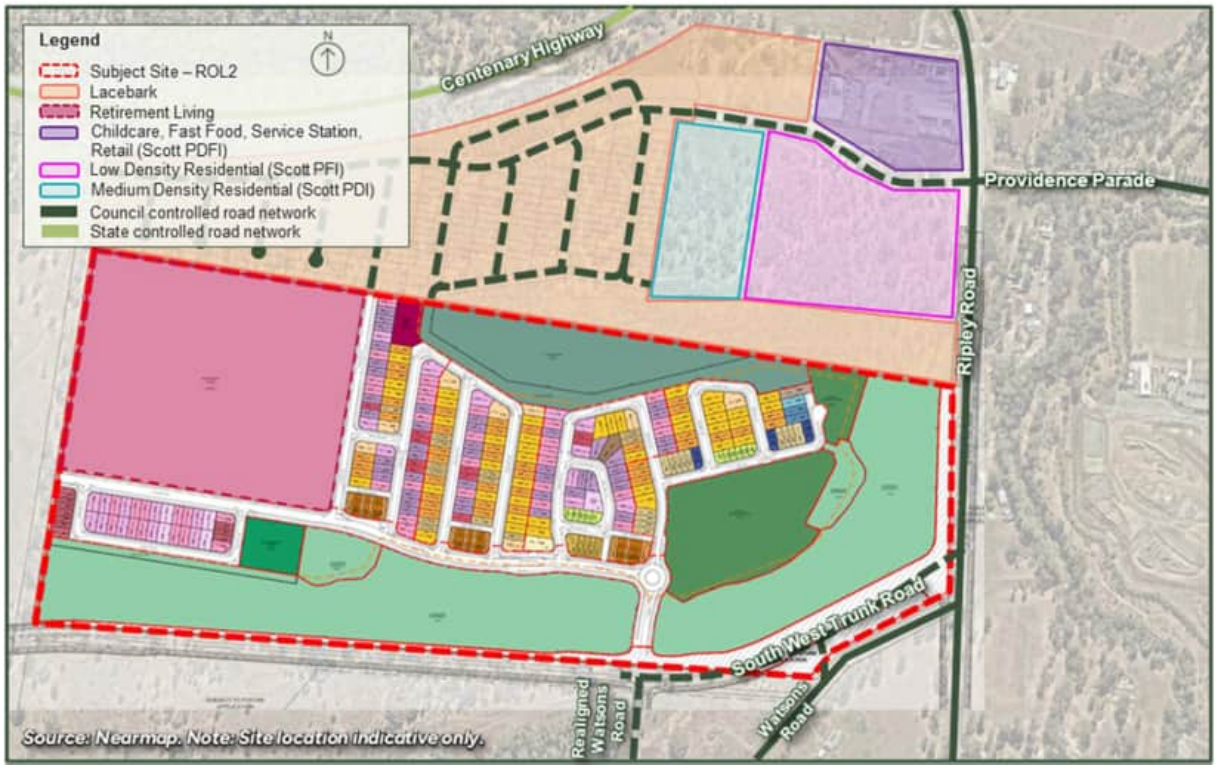
The site is bound by Ripley Road to the east, the future South West Trunk Road to the south, future residential development to the west (land owned by Stockland, referred to as ROL 3) and the Lacebark development to the north (recently approved residential development owned by Stockland, referred to as ROL 1). A portion of the ROL 2 site, located in the northwestern portion of the site, will consist of retirement living (RL) and will be subjected to a separate application.

It is relevant to note that the land to the immediate east of ROL 1 (Lacebark) has been approved and is being developed by Scott PDI. The Scott PDI development includes the ROL 1 (Lacebark) site (now owned and being developed by Stockland) plus the following:

- Medium Density site immediately east of Lacebark.
- Child Care Centre.
- Retail development (7,500sqm).
- Fast Food outlets (x 2).
- Service Station (fronting Ripley Road).

These sites are identified on **Figure 1**. The latter development and approval is relevant to consideration of the Ripley Road / Providence Parade intersection.

Figure 1 Site Location



2.2 Surrounding Road Network

Details of the key roads surrounding the subject site are provided in **Table 1** and can be seen in **Figure 1**. The Road Hierarchy designation in **Table 1** reflects the intended future role of the roads as part of the overall Ripley PDA. The Form and Posted Speed in **Table 1** reflects the existing situation.

Table 1 Key Surrounding Roads

Road Name	Road Hierarchy (Intended Future Role)	Existing Form	Existing Posted Speed
Centenary Highway	Highway	13m wide pavement, single lane each direction, 2.3m paved shoulder	100km/h
Ripley Road	Arterial Road (Urban Arterial)	Undivided, single lane each direction with unsealed shoulders on the section south of Providence Parade and sealed shoulders to the north of Providence Parade.	60km/h
Providence Parade	Sub Arterial / Major Collector (Trunk Connector)	Undivided, single lane each direction, with separate cycle lanes on at least one side of the road up to Greenview Avenue	60km/h
Watsons Road	Sub Arterial / Major Collector (Trunk Connector)	Unsealed, single lane each direction.	50km/h (unposted)

2.3 Future Road Network Planning

Given the largely undeveloped surrounding land uses, there is a considerable amount of future road infrastructure yet to be constructed to support the development of the Ripley Valley PDA. Some key elements are currently being planned, designed and / or constructed.

Importantly, the South West Trunk Road is part of the major road network, identified in the EDQ Development Charges and Offset Plan (DCOP), necessary to service the overall Ripley PDA. It is intended that construction of the South West Trunk Road be funded through the DCOP. At present, functional designs for the South West Trunk Road adjacent to Providence West have been prepared and it is expected that these will be submitted for formal approval within the second half of 2025 (to allow funding and construction). The latter is expected to include upgrading of Ripley Road along the eastern edge of the subject site, and upgrading of the Ripley Road / South West Trunk Road and Watsons Road / South West Trunk Road intersections.

The Ripley Road / Providence Parade intersection has recently been upgraded by Stockland (from an unsignalised T-junction) to a 4-way signalised intersection, to provide access (via the western leg) for the Scott PDI development and ROL 1 (Lacebark). The western leg extension to ROL 1 (Lacebark) will be completed by the end of 2025. This intersection will also facilitate access (via Scott PDI and ROL 1) for the proposed Providence West ROL 2. The recently constructed intersection form is consistent with the previous approvals (ref: 5638/2024/PDAEPC/A) for the Scott PDI development.

The timing for construction of these parts of the South West Trunk Road, Ripley Road and the associated intersections is uncertain at this stage. Nonetheless, Stockland (on behalf of other property developers in the Ripley PDA) are currently pursuing detailed design, approvals and funding to allow construction to commence as soon as possible. At present, the best estimate is that construction may commence in 2027 and may be complete and open to traffic by 2029.

It is acknowledged that EDQ's planning for the overall PDA has been based on the assumption that the Trunk Road network within Ripley PDA will include interchanges on the Centenary Highway at Grampian Drive (existing roundabout), Wensley Road (new connection), Ripley Road (existing roundabout) and Cumner Road (existing roundabout). The latter has not been confirmed by Department of Transport and Main Roads (DTMR). Notwithstanding the latter, EDQ's planning and transport modelling of the Trunk Road network has assumed that a Centenary Highway / Wensley Road interchange will be in place at the 2031, 2041 and 2046 model year horizons.

Notwithstanding the above, for the purpose of a conservative traffic assessment herein, it is assumed that:

- The first residential lots in Providence West ROL 1 (Lacebark) will be sealed in early 2026.
- Upgrading of the Ripley Road / Providence Parade intersection (to a 4-way signalised intersection) will be complete by late 2025.
- Providence West ROL 2 (subject site) will commence construction in mid 2028.
- The first residential lots in Providence West ROL 2 (subject site) will be sealed in early 2029.
- The South West Trunk Road (including Ripley Road and the associated intersections) adjacent to ROL 2 will commence construction in 2027.
- The South West Trunk Road (including Ripley Road and the associated intersections) adjacent to ROL 2 will be complete and open to traffic by 2029.
- The South West Trunk Road west of ROL 2 and through to Grampian Drive will be complete before 2036.
- The South West Trunk Road (west of ROL 2) will be extended over Centenary Highway (with or without an interchange) to Wensley Road by 2037.

The above timing is discussed further throughout the analysis herein.

The South West Trunk Road is a separate application to the ROL 2 application and will be delivered as a separate package of works. Notwithstanding the latter, it is recognised as part of the major road network supporting the entire Ripley Valley PDA.

2.4 Existing and Approved Developments

To consider the impact of the proposed development on the external road network, the approved developments within the surrounding area and existing developments that have recently been constructed have also been considered. The following have been allowed for and are indicated in **Figure 1**:

- ROL 1 (Lacebark) – residential development located to the north of the subject site. The development has been approved by ICC and is currently being constructed. ROL 1 consists of 287 dwellings (266 lots). Traffic generated by this development will be added to the traffic counts, to form part of the background traffic.

- Childcare (within Scott PDI land) – this is an existing development located to the north-west of the Ripley Road /Providence Parade intersection, however, the childcare facility was not yet completed at the time when the traffic surveys were conducted. Traffic generated by this development will be added to the traffic counts, to form part of the background traffic.
- Retail development (within Scott PDI land) – this is an approved development, however it is not yet constructed. Traffic generated by this development will be added to the traffic counts, to form part of the background traffic.
- Medium density site (within Scott PDI land) – this is an approved development, however it is not yet constructed. Traffic generated by this development will be added to the traffic counts, to form part of the background traffic.
- Service Station (within Scott PDI land) – this is an existing development located to the north-west of the Ripley Road /Providence Parade intersection that was operational at the time when the traffic surveys were conducted. Traffic generated by this development is included in the traffic counts, and therefore in the background traffic.
- Fast Food (within Scott PDI land) – this is an existing development located to the north-west of the Ripley Road /Providence Parade intersection that was operational at the time when the traffic surveys were conducted. Traffic generated by this development is included in the traffic counts, and therefore in the background traffic.

3.0 Proposed Development

3.1 Overview

Based on the development plans prepared by Therefor, (included at **Appendix A**) it is proposed to develop the Providence West ROL 2 site for the purposes of low density residential. The proposed land uses and yields of the development are as follows:

- 311 standard lots (1 dwelling per lot).
- Plus 8 fonzie lots (additional 1 dwelling per lot).
- Plus 6 duplex lots (2 dwellings per lot).
- Medium density, 12 dwellings.
- Retirement living site (assumed to comprise 250 dwellings).
- District recreation park.

3.2 Retirement Living Site

The retirement living (RL) site will be subjected to a separate development approval. The location can be seen in **Figure 1** and is assumed to consist of 250 dwellings. The traffic generation potential of the retirement living site has been included as part of the development traffic. The access points are still to be determined and will be addressed as part of the future application. The access points will be anywhere on the eastern, southern or western edge of the retirement living site, except:

- Opposite any other side streets.
- Where safe intersection sight distance does not comply with Austroads.

3.3 Road Network Considerations

3.3.1 Site Accesses

The subject development (ROL 2) will obtain access via the following locations:

- **To the north**: via ROL 1 (Lacebark) and the intersection of Providence Parade / Ripley Road. This connection will be established before the first stages of the ROL 2 development commence.
- **To the south**: via a new intersection of the ROL 2 development onto the South West Trunk Road (west of Watsons Road). As discussed in **Section 2.3**, for the purpose of the traffic assessment it is assumed that the South West Trunk Road (east of the ROL 2 access) will be constructed by 2029 and the South West Trunk Road (west of the ROL 2 access) will be constructed by 2036.
- **To the west**: via the future residential development. This connection will only be established with the development of the neighbouring lot (referred to as Providence West ROL 3). For the purpose of the traffic assessment herein, this connection has been ignored.

The approved context plan and approved development plans indicated an access to the subject site located on Ripley Road between Providence Parade and the South West Trunk Road. However, owing to topographical constraints, this access has been removed. The proposed accesses are appropriate to provide connectivity between the development and the surrounding road network. Notwithstanding the differences, the proposed road network connections are considered to be generally consistent with what has been previously approved.

3.3.2 Functional Road Hierarchy

The functional road hierarchy for the overall Providence West development is shown in **Appendix A**. It is important to recognise that this functional road hierarchy represents the function of each road / street, so that the appropriate formations and cross sections can be determined. This functional road hierarchy is not determined by the traffic volumes (although this is recognised as one of the important attributes), nor does this functional road hierarchy designation define the cross section of that street. The cross section is developed following consideration of the street's function, traffic volume, adjacent land use / frontage and other urban design planning.

The key road hierarchy elements for the road network within and adjacent to the ROL 2 development are as follows:

- Ripley Road – Arterial.
- South West Trunk Road – Arterial.
- Road 01 (east-west through ROL 1, east of Road 07) – Major Collector (Neighbourhood Connector in EDQ terminology). The approved cross section has a 6.6m wide pavement, plus indented parking lanes, within a 22.0m wide road reserve.
- Road 07 (north-south through ROL 1) – Collector (Neighbourhood Access in EDQ terminology). The approved cross section has an 8.5m wide pavement within a 19.3m wide road reserve (equivalent to an ICC Collector Street).
- Road 07 (north-south through ROL 2, aligning with Road 07 in ROL 1) – Collector (Neighbourhood Access in EDQ terminology). The proposed cross section has an 8.5m wide pavement within a 19.3m wide road reserve (equivalent to, but with a wider road reserve than, an ICC Collector Street).
- Road 02 (east-west through ROL 2, east of Road 07, connecting to the South West Trunk Road) – Major Collector (Neighbourhood Connector in EDQ terminology). The proposed cross section has an 8.5m wide pavement, plus 2.3m wide indented parking lane (one side only), within a 21.3m wide road reserve (equivalent to, but slightly narrower parking lane than, an ICC Access Major Collector Street).
- Road 02 (east-west through ROL 2, west of Road 07, connecting (in the future) to ROL 3) – Major Collector (Neighbourhood Connector in EDQ terminology). The proposed cross section has a 7.0m wide pavement, plus 2.3m wide indented parking lanes (both sides, where frontage access is proposed), within a 22.1m wide road reserve (equivalent to, but slightly narrower parking lanes than, an ICC Access Major Collector Street).
- Road 01 (north-south, south of Road 02, connecting to/from ROL 2) – Major Collector (Neighbourhood Connector in EDQ terminology). The proposed cross section has two 5.45m wide carriageways (separated by a 3.5m wide centre median), within a 26.4m wide road reserve (equivalent to, but slightly wider pavements than, an ICC No Access Major Collector Street).

Street cross sections and traffic volumes are discussed later in this report.

The proposed functional Road Hierarchy is considered to be generally consistent with what has been previously approved.

3.3.3 Cross Sections

The cross-sections have been developed to be generally consistent with and guided by the ICC's standard road-cross sections and EDQ PDA Guideline No. 6, however in some instances the elements of each cross section may differ slightly. The road cross-sections for the proposed ROL 2 development internal road network are annotated on the overall development plans and functional layout plans.

The proposed cross sections are generally summarised as follows (with recognition of the equivalent road hierarchy terminology used in EDQ Guideline No. 6):

- **Major Collector Streets (EDQ Neighbourhood Connector)** – 21.3m to 26.4m Road Reserve.
    - Traffic lane widths are 3.5m, consistent with ICC standards for a Major Collector.
    - Parking lanes widths are 2.3m, consistent with EDQ Guideline No. 6 for a Neighbourhood Connector (noting that the latter includes narrower adjacent traffic lanes of 3.3m).
- **Collector Streets (EDQ Neighbourhood Access)** – 19.3m Road Reserve.
    - Road pavement width is 8.5m, which is consistent with ICC standards for a Collector.
- **Access Streets (EDQ Neighbourhood Access)** – 14.0m to 16.0m Road Reserve.
    - Road pavement width is 7.5m or 8.0m, which is generally in accordance with (or greater than the minimum width of) the EDQ Guideline No. 6.
- **Laneways (EDQ Neighbourhood Lane)** – 8.0m to 12m Road Reserve.
    - Road pavement width is 5.5m (or 7.8m where parking is provided on one side) which is generally in accordance with the EDQ Guideline No. 6.

Notwithstanding a variety of differences, and recognising the introduction of EDQ Guidelines, the proposed cross sections are considered to achieve similar outcomes to those that have been previously approved.

3.3.4 Intersection Forms and Spacing

All the intersections within the ROL 2 development, are three-way priority intersections, with the exception of a single lane roundabout on Road 01. There are no concerns with the form of these intersections, and the traffic volumes do not warrant auxiliary turn lanes. Sight distances will be addressed by the civil designer (KN Group).

The spacing (separation) between intersections is consistent with good transport planning principles, as guided by Queensland Streets.

The ultimate form of the intersection of the ROL 2 development to the external road network (at South West Trunk Road) is proposed to be a signalised 4-way intersection. The ultimate (and interim) intersection form and location will represent:

- An ultimate 4 lane (2 through lanes in each direction) median divided South West Trunk Road. An interim form will have 1 through lane in each direction on South West Trunk Road.
- A new alignment of Watsons Road (moved west from the existing alignment). The timing of the latter is uncertain, therefore an interim form will retain the existing alignment of Watsons Road (at an unsignalised T-junction with South West Trunk Road).
- Alignment of Road 01 within ROL 2 to be opposite the new alignment of Watsons Road.
- Auxiliary turn lanes where necessary for traffic capacity and safety.

This intersection is undergoing detailed design to ensure that it aligns with the detailed design / alignment of the South West Trunk Road. For that reason, this intersection sits outside the formal boundaries of the subject application. Notwithstanding the latter, the intersection (and the South West Trunk Road) forms a key part of the road network serving the proposed ROL 2 development (as well as other development in this catchment).

3.3.5 Emergency Access

Consideration has been given to the emergency access route required for the development. It is recognised that this emergency access route is not required to be a public road but is required to be of sufficient form to accommodate conventional vehicle movements exiting the development site in the case of emergency. The latter route would typically be made available after 100 dwellings have been constructed / occupied within the development.

It is understood that the South West Trunk Road will be constructed concurrently with ROL 2 and available for use upon occupation of the initial development stages. It is acknowledged, however, that the South West Trunk Road may not be completed at the time of plan sealing for the early stages of construction. In such circumstances, reliance would be placed on existing road reserves (Watsons Road, and west of Watsons Road) and access tracks to provide emergency access for vehicles (between Ripley Road and the developed lots), noting that portions of these reserves may also be subject to construction activities. The latter is shown on the 'Road Hierarchy Layout Plan' prepared by KN Group and included at **Appendix A**.

3.4 Public Transport

The planned future bus network for the proposed development, including indicative bus routes as well as indicative bus stops, is shown in **Appendix C**.

It is important to note the following in relation to the planned future bus network:

- The bus routes are indicative, and whilst they have been planned and designed to accommodate buses, it is the responsibility of Translink to deliver services on those routes. It is recognised that bus services may ultimately not be implemented by Translink on the proposed routes (if Translink do not consider this feasible / economical).

- The bus stop locations are indicative, with the exact locations to be agreed upon with Translink. It is intended that when detailed design (and construction) occurs, the bus stop details would be in compliance with Translink's *Public Transport Infrastructure Manual* (PTIM).

The ROL 2 development proposes one bus stop pair (labelled as #7) to be located on the east-west Major Collector (Road 01) to the west of the internal roundabout. Bus Stop #7 will include bus bays on both sides of the road. This bus stop would service the majority (approximately 85 %) of the ROL 2 development within a 400m walking radius. It is noted that the Retirement Living site is only partly within that catchment. Bus Stop #7 will be a public transport stop to be operated by Translink.

The overall bus network and catchment is further reliant on bus stops located in the adjacent developments (ROL 1 and ROL 3) to provide bus services that are within a 400m walking catchment for over 90% of residents (close to 100% of residents). The two bus stops located in the adjacent developments are:

- Lacebark, to the north (labelled as Bus Stop #1). Bus Stop #1 has been approved and conditioned as part of the residential development to the north. It will be located on the northern side of ROL1 on the Major Collector Road 01 running east-west with bus bays on both sides of the road. Bus Stop #1 will be a public transport stop to be operated by Translink.
- Future development to the west (indicative and labelled as Bus Stop #6). The location of Bus Stop #6 will be determined and developed as part of the future ROL 3 development (immediately west of ROL 2). The bus stop is to be located on the Major Collector Road 01 running east-west and is subject to the ROL 3 development plan (being developed by Stockland). Bus Stop #6 will include bus bays on both sides of the road. Bus Stop #6 will be a public transport stop to be operated by Translink.

As such, the proposed ROL 2 development would provide a high standard of bus network coverage when considering the wider area.

The above public transport network and bus stop locations have been presented to Translink for review and consideration. Translink is supportive of this proposed arrangement, noting the indicative nature of this.

The approved Context Plan indicated two bus stop locations within ROL 2. Considering the bus stop in the adjacent site (ROL 3), the proposed bus stops will be sufficient to provide public transport services to the proposed development which are generally consistent with what has been previously approved.

3.5 Active Transport

The planned major pathway network for the proposed ROL 2 development is shown on the development plans at **Appendix A**.

On all Collector Streets and Major Collector Streets a 2.5m or 3.0m wide shared pedestrian and cycle path will be provided on one side and a 1.5m wide (minimum) pedestrian path will be provided on the other side.

On all Access Streets a 1.5m wide pedestrian path will be provided on at least one side.

Key elements of the active transport network include:

- A 3.0m wide shared pathway along the Major Collector (Road 02) running east-west through the development, connecting to future development (ROL 3) in the west and the future cycle network along the South West Trunk Road.
- A 2.5m wide shared pathway along the Collector (Road 07) running north-south through the development and connecting to ROL 1 (Lacebark) in the north.

The proposed active transport network will achieve the same outcomes as the network that has been previously approved.

3.6 District Recreation Park Car Parking

The quantum of public car parking for the district recreation park is proposed as per the ICC Planning Scheme. Provision is made for at least 50 car spaces using a combination of the following:

- 23 parking spaces (90 degree) on the northern boundary of the park and the western boundary of the park (Road 11).
- 27 parking spaces (90 degree) within a separate off-street car park within the bounds of the park and accessed via a driveway to the local street (Road 11).

The proposed car parking supply is adequate to meet the planning scheme requirements. The location and position of car parking is appropriate for the park use. It is noted that the majority on parking fronts the adjoining local streets (on-street) and this is appropriate as it is visible to intended users and is 'over-looked' by adjacent residents and / or local traffic. The latter is of benefit in reducing anti-social behaviour that may occur in an isolated car park (off-street).

It is noted that the proposed on-street parking along the park frontage will be 90-degree parking. Given that these streets will be local streets (low volume, low speed), straight (good sight distances) and use by the park will be low turnover, there are no anticipated operational issues associated with such use.

The park design (by RPS) includes an area designated for refuse trucks and / or food caravans ('concession hardstand') at the eastern end of the on-site car park.

The ICC Planning Scheme requires parking provision for one coach (bus). However, given that the park does not have large playing fields, it is not foreseen that busses will be required to transport players to/from the park. Similarly, the proposed park facilities are unlikely to generate users arriving in significant mass volume to warrant coach (bus) parking. Therefore, no dedicated coach parking space is proposed on site.

Notwithstanding the latter, to accommodate the infrequent occasion when a coach may arrive at the site, an on-street indented coach parking bay is proposed on the eastern side of the main entry road (Road 01), immediately south of the internal roundabout. This location is approximately 100m to/from the main entry to the District Recreation Park.

4.0 Traffic Impacts

4.1 Objective

An assessment of the anticipated performance of the external road network for the subject development (ROL 2) has been undertaken as described within the following sections. The assessment is an important part of understanding what key traffic infrastructure is needed to support the ROL 2 development. In addition, the majority of the intersections assessed herein are an essential part of the Trunk Road network supporting the overall Ripley Valley PDA. Therefore, the assessment herein allows for such traffic consistent with previous approvals and previous transport modelling by EDQ.

It is important to note that the traffic volumes used for this assessment have taken into account existing and approved development within the surrounding area that was not operational at the time of traffic surveys (i.e. ROL 1 (Lacebark) and the Scott PDI development (child care centre, retail service station, fast food, medium density), as described in **Section 2.4**).

4.2 Study Intersections

For the proposed Providence West ROL2 development it is considered appropriate for the traffic assessment to consider the following intersections (as shown on **Figure 2**):

- I1 Interim (SW18) – Interim South West Trunk Road / ROL 2 Access Road. This arrangement would be in place when ROL 2 is connected to South West Trunk Road, without the future realignment of Watsons Road (ie. no southern leg). For this intersection, it is relevant to ensure that the proposed ROL 2 development traffic (northern leg) is accommodated in a T-junction form (no southern leg) for an interim period (say 5 – 10 years).
- I1 Ultimate (SW18 / SW19) – South West Trunk Road / ROL 2 Access Road / Future Watsons Road (DCOP ref: RI023). For this intersection, it is relevant to ensure that the proposed ROL 2 development traffic (northern leg) is accommodated in a 4-way intersection form at the ultimate development year horizon (10 years post-development) and/or at the 2046 model year horizon.
- I2 (SW20) – South West Trunk Road / Ripley Road (DCOP ref: RI018). For this intersection, it is relevant to ensure that the traffic volume forecast by the EDQ transport modelling (including traffic generated by the proposed ROL 2 development) is accommodated at the ultimate year horizon (10 years post-development) and/or at the 2046 model year horizon.

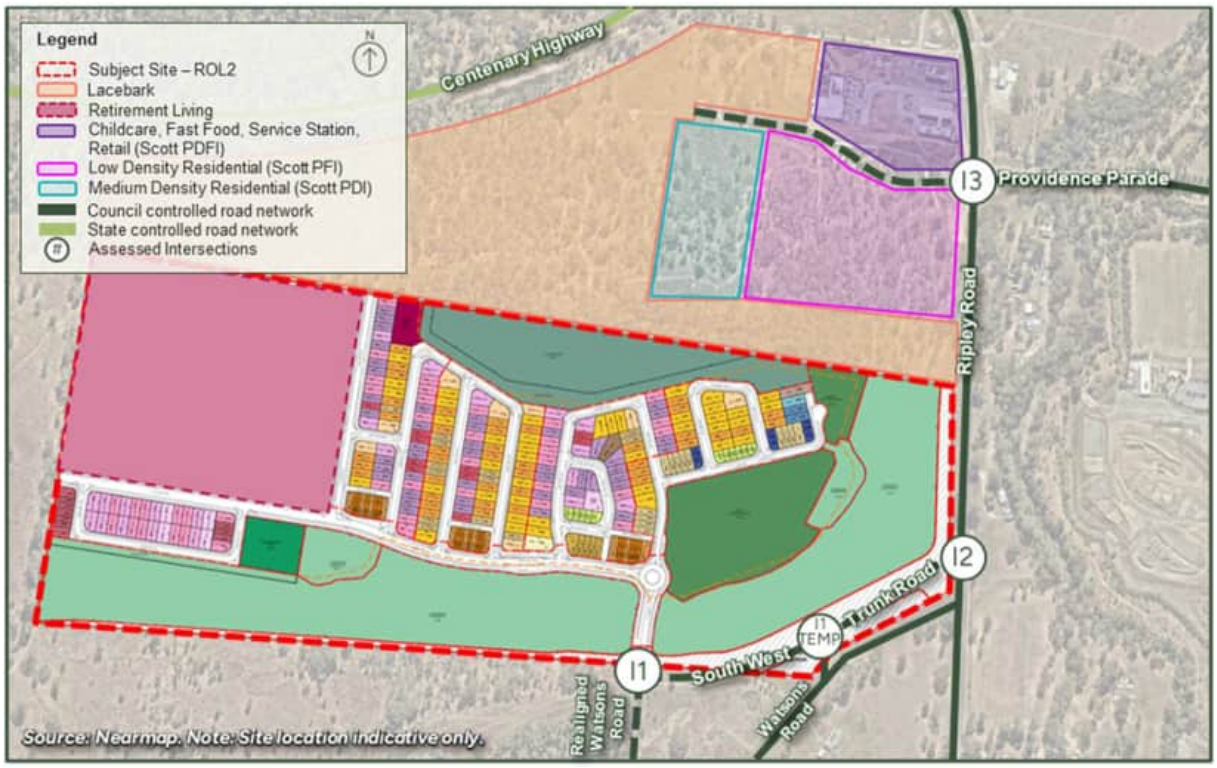
Whilst capacity analysis has not been documented herein the following temporary intersection is acknowledged:

- I1 Temporary (SW19 TEMP) – Interim South West Trunk Road / Watsons Road. This arrangement would be in place prior to the future realignment of Watsons Road. This temporary intersection arrangement would be an unsignalised T-junction to retain access for the Watsons Road catchment prior to the future realignment of Watsons Road.

The following intersection has been acknowledged herein, however no detailed analysis is undertaken as its form (interim and ultimate) has previously been identified as part of the Scott PDI development application and subsequent approval:

- I3 – Ripley Road / Providence Parade (DCOP ref: RI012). The intersection has recently been upgraded (from a priority controlled three-way intersection with no western leg) to a 4-way signalised intersection as identified in the 'Interim Ripley Road' plans accompanying the Scott PDI application / approval. Given the previous / current approval associated with the Scott PDI development this intersection is not the responsibility of the subject ROL 2 development application.

Figure 2 Study Intersections



To assess the above intersections, traffic volumes have been derived using a number of sources as follows:

- Existing Traffic Counts – to inform the existing background traffic demand, and to assist in deriving background traffic growth rates.
- Traffic Growth – to inform the future background traffic demand. Traffic growth has been derived from traffic counts (historic growth) and / or traffic model volumes (forecast growth).
- Traffic Model – to inform the future background traffic demand, including development traffic, as derived from EDQ's transport modelling.
- Development Traffic Demands – to inform the traffic generated by specific developments at development access intersections. The latter includes the subject development (Providence West ROL 2), ROL 1 (Lacebark) and the Scott PDI development.

These assessment traffic volumes are described further herein (illustrated graphically in **Appendix D**).

4.3 Background Traffic Demand

4.3.1 Existing Background Traffic Demand

In order to ascertain the existing traffic demands, traffic surveys conducted previously at the Ripley Road / Providence Parade Intersection have been utilised. The surveys were conducted on Tuesday 26 March 2024 from 6:30am to 9:30am and 2:30pm to 5:30pm.

A review of the survey data indicated that the weekday peak hours were as follows:

- AM Peak: 7:45am to 8:45am.
- PM Peak: 2:30pm to 3:30pm.

The existing peak traffic demands are illustrated graphically in **Appendix D**.

4.3.2 Traffic Growth

Where necessary, and to assist with identifying and /or confirming the future traffic volumes, the historic traffic growth has been identified by comparing the following traffic counts on Ripley Road (south of Centenary Highway) and at the Ripley Road / Providence Parade intersection:

- Ripley Road (south of Centenary Highway) – 29 November 2017.
- Ripley Road / Providence Parade intersection – 20 May 2021
- Ripley Road (south of Centenary Highway) – 19 October 2021.
- Ripley Road (south of Centenary Highway) – 28 February 2023.
- Ripley Road / Providence Parade intersection – 26 March 2024.
- Ripley Road (south of Centenary Highway) – 13 August 2024.

Traffic volumes over the above period have changed considerably due to the very low initial volumes (minimal development in 2017) and rapid development over the subsequent years. For that reason, the best comparison of traffic growth trends is between 2021 and 2024. A comparison of traffic volumes over the latter period indicates a traffic growth rate of approximately 4.5% per annum.

Whilst the above growth rate has been identified, the methodology for forecasting future traffic volumes is based on traffic model forecasts and manually derived development traffic generation, therefore this annual traffic growth rate is not used directly, but has been identified for the sake of comparison.

4.3.3 Traffic Model

The South West Trunk Road (along the southern edge of Providence West ROL 2) will provide a key part of the traffic network in the future. As identified in **Section 2.3**, it is assumed that this will not be complete and open to traffic until 2029.

Traffic volume forecasts for the South West Trunk Road, Ripley Road and Providence Parade (reflecting other future development in the Ripley PDA) have been derived using the "*Ripley Valley Priority Development Area Strategic Transport Model Update and Mesoscopic Model Development Report*", dated 1 July 2020 (ref. no. IH124300-200-CT-TNE-0002 / Rev 5, prepared by Jacobs (for EDQ)). These traffic volumes are referenced herein as the "ICC Model Volumes".

ICC has provided traffic volumes from an updated version of the above traffic model for the following model year horizons:

- 2026 – with NO connection (nor overpass) at Wensley Road / Centenary Highway.
- 2031 – with an interchange at Wensley Road / Centenary Highway.
- 2041 – with an interchange at Wensley Road / Centenary Highway.
- 2046 – with an interchange at Wensley Road / Centenary Highway.

It is recognised that whilst the above year horizons are adopted in the traffic model, the extent of development yield at each year is somewhat ambitious. Therefore, the volumes at each year are considered to be conservative (ie. high).

4.4 Development Traffic Demands

4.4.1 Trip Generation

The peak hour traffic demands for the subject development (and identified developments within the surrounding area) have been forecast using the following:

- Guide to Transport Generating Developments, Version 2.2, October 2022, RTA (RTA)
- Information Request Response: Proposed Ripley Valley Development Area 3 – 695 and 787-815 Ripley Road, Ripley – 21/2013/PDA, 26 March 2021, Bitzios (Bitzios 2021 TIA)
- SLR's conservative assumption of trip generation (SLR Assumption).

The adopted traffic generation rates and demand forecasts are presented in **Table 2**. The development yields adopted for the analysis (see **Table 2**) are based on previous development plans. The latest development plans have a marginally higher yield, but not significant enough to warrant changes to the analysis herein.

Table 2 Development Traffic Demands

Component	Yield	Peak Hour Trip Rate	Source
Development			
ROL 2	309 dwellings [1]	0.85 vph / dwelling	RTA
	12 medium density dwellings	0.65 vph / dwelling	RTA
District Recreation Park	recreation park	None [2]	SLR Assumption
Retirement Living Site	250 dwellings	0.40 vph / dwelling	SLR Assumption
Other Developments			
Lacebark (ROL 1)	287 dwellings	0.85 vph / dwelling	RTA
Low Density Residential (Scott PDI)	163 dwellings	0.85 vph / dwelling	Bitzios 2021 TIA
Medium Density Residential (Scott PDI)	209 dwellings	0.65 vph / dwelling	Bitzios 2021 TIA
Retail (Scott PDI)	7,500 sqm GFA	AM: 6.15 vph / 100sqm PM: 12.3 vph / 100sqm	Bitzios 2021 TIA
Service Station (Scott PDI)	1 site	AM: 80 vph / site PM: 120 vph / site	Bitzios 2021 TIA
Fast Food Outlets (Scott PDI)	2 sites	AM: 115 vph / site PM: 144 vph / site	Bitzios 2021 TIA
Child Care Centre (Scott PDI)	130 children	AM: 0.66 vph / child PM: 0.48 vph / child	Bitzios 2021 TIA

1. The assessment was based on a previous development plan. The updated plan would have a negligible impact on the assessment and has therefore not been updated.
2. For the assessments herein which consider Weekday AM and Weekday PM peak hours, the recreation park is assumed to generate no traffic.

The traffic volumes derived in the Bitzios 2021 TIA for the western leg of the Ripley Road / Providence Parade intersection have been used for the intersection analysis herein. These traffic volume estimates include the ROL 1 (Lacebark) site at a lesser yield than what has been subsequently approved. Reconsideration of these Bitzios 2021 TIA traffic volumes (ie. to / from the western leg of Ripley Road / Providence Parade) indicates the following:

- The adopted yield for low density residential in the Bitzios 2021 TIA (163 dwellings) is less than the ROL 1 (Lacebark) approval (287 dwellings).
- The Bitzios 2021 TIA makes no allowance for internal trip distribution (eg. trips between ROL 1 and the non-residential uses) and cross use (eg. combined trips to multiple non-residential uses).
- The Bitzios 2021 TIA allows for a separate left-in / left-out driveway on Ripley Road serving the non-residential uses in the Scott PDI site.

When the above elements have been considered and applied, the Bitzios 2021 TIA traffic volume are considered to be overestimated by approximately 20 – 40%.

Notwithstanding the latter, the Bitzios 2021 TIA traffic volumes to / from the western leg of the Ripley Road / Providence Parade intersection have been considered noting that:

- The subject intersection has not bee assessed herein, because its form (interim and ultimate) has previously been identified as part of the Scott PDI development application and subsequent approval.
- Additional traffic to/from the increased yield in ROL 1 (Lacebark) does not need to be (and therefore has not been) added.
- Additional traffic to/from Providence West ROL2 does not need to be (and therefore has not been) added, because this is assigned via the proposed intersection on South West Trunk Road.
- The timing for delivery of the assumed development served by the western leg will be progressive (see assumptions in Section 4.5.1).

4.4.2 Directional Splits

The traffic generation forecast for the development has been separated into inbound and outbound trips using typically adopted directional distributions for the different land uses as summarised in **Table 3**.

Table 3 Adopted Directional Split

Land Use	AM Peak Hour		PM Peak Hour	
	In	Out	In	Out
Residential Uses (including Retirement Living)	20%	80%	70%	30%
Non-Residential uses	50%	50%	50%	50%

4.4.3 External Traffic Distribution

Development generated traffic has been assigned to the external road network according to the following distribution provided in **Table 4**. It is anticipated that the distribution will change once the South West Trunk Road has been constructed.

Table 4 External Traffic Distribution

Direction	Before South West Trunk Road construction	After South West Trunk Road construction
North – via the Centenary Highway / Ripley Road intersection	80%	56%
East – via Providence Parade	20%	14%
West – via South West Trunk Road	-	30%

4.5 Assessment Scenarios

For the purposes of the traffic assessment, the following assessment scenarios and horizons have been considered (key assumptions are explained in the following sections):

- **Interim (2029 – 2036):** This assumes that the South West Trunk Road is not extended as a through route west of Providence West ROL 2 intersection, other than to service other developments in that western catchment (eg. Providence West ROL 3, Emerald Ridge, South Place). Importantly, the Interim volumes assume that the there is no overpass or interchange at Wensley Road / Centenary Highway.

  The Interim traffic volumes are derived using development traffic generation based on the assumed number of dwellings in the catchment at each year (2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036). Where relevant, background traffic has been interpolated using the traffic model forecasts at 2026, 2031 and 2041.

- **Ultimate 2031:** This assumes that the South West Trunk Road is extended as a through route between Ripley Road and Grampian Drive (ie. through Providence West ROL 3, Emerald Ridge, South Place and Botanica). Importantly, the Ultimate volumes assume that the trunk road network includes an interchange (or at least an overpass) at Wensley Road / Centenary Highway.

- **Ultimate 2041:** This assumes that the South West Trunk Road is extended as a through route between Ripley Road and Grampian Drive (ie. through Providence West ROL 3, Emerald Ridge, South Place and Botanica). Importantly, the Ultimate volumes assume that the trunk road network includes an interchange (or at least an overpass) at Wensley Road / Centenary Highway.

- **Ultimate 2046:** This assumes that the South West Trunk Road is extended as a through route between Ripley Road and Grampian Drive (ie. through Providence West ROL 3, Emerald Ridge, South Place and Botanica). Importantly, the Ultimate volumes assume that the trunk road network includes an interchange (or at least an overpass) at Wensley Road / Centenary Highway.

4.5.1 Interim Year (2029 – 2036) Volumes

The key assumptions adopted for the estimation of Interim Year traffic volumes are set out below, noting that all Interim year horizons assume that the South West Trunk Road (west of ROL 2 / ROL 3) does not connect to or over the Centenary Highway:

- Interim (2029):
  - 287 dwellings in ROL 1 (Lacebark), of which 10% use South West Trunk Road.
  - 120 dwellings in ROL 2, of which 80% use South West Trunk Road.
  - Approx. 1,200 dwellings in Ripley PDA south of Intersection I2.
  - Approx 5% of Scott PDI land developed.
- Interim (2030):
  - 287 dwellings in ROL 1 (Lacebark), of which 10% use South West Trunk Road.
  - 421 dwellings in ROL 2, of which 80% use South West Trunk Road.
  - Approx. 1,600 dwellings in Ripley PDA south of Intersection I2.
  - Approx 10% of Scott PDI land developed.

- Interim (2031):
  - 287 dwellings in ROL 1 (Lacebark), of which 10% use South West Trunk Road.
  - 571 dwellings in ROL 2, of which 80% use South West Trunk Road.
  - 100 dwellings in ROL 3, of which 80% use South West Trunk Road.
  - Approx. 100 dwellings west of ROL 2 / ROL 3.
  - Approx. 1,900 dwellings in Ripley PDA south of Intersection I2.
  - Approx 20% of Scott PDI land developed.
- Interim (2032):
  - 287 dwellings in ROL 1 (Lacebark), of which 10% use South West Trunk Road.
  - 571 dwellings in ROL 2, of which 80% use South West Trunk Road.
  - 200 dwellings in ROL 3, of which 80% use South West Trunk Road.
  - Approx. 200 dwellings west of ROL 2 / ROL 3.
  - Approx. 100 dwellings south of ROL 2, using Watsons Road.
  - Approx. 2,200 dwellings in Ripley PDA south of Intersection I2.
  - Approx 40% of Scott PDI land developed.
- Interim (2033):
  - 287 dwellings in ROL 1 (Lacebark), of which 10% use South West Trunk Road.
  - 571 dwellings in ROL 2, of which 80% use South West Trunk Road.
  - 300 dwellings in ROL 3, of which 80% use South West Trunk Road.
  - Approx. 650 dwellings west of ROL 2 / ROL 3, using South West Trunk Road.
  - Approx. 200 dwellings south of ROL 2, using Watsons Road.
  - Approx. 2,300 dwellings in Ripley PDA south of Intersection I2.
  - Approx 60% of Scott PDI land developed.
- Interim (2034):
  - 287 dwellings in ROL 1 (Lacebark), of which 10% use South West Trunk Road.
  - 571 dwellings in ROL 2, of which 80% use South West Trunk Road.
  - 300 dwellings in ROL 3, of which 80% use South West Trunk Road.
  - Approx. 900 dwellings west of ROL 2 / ROL 3, using South West Trunk Road.
  - School (2,000 students) west of ROL 2 / ROL 3 is 20% occupied.
  - Approx. 300 dwellings south of ROL 2, using Watsons Road.
  - Approx. 2,400 dwellings in Ripley PDA south of Intersection I2.
  - Approx 80% of Scott PDI land developed.

- Interim (2035):
  - 287 dwellings in ROL 1 (Lacebark), of which 10% use South West Trunk Road.
  - 571 dwellings in ROL 2, of which 80% use South West Trunk Road.
  - 300 dwellings in ROL 3, of which 80% use South West Trunk Road.
  - Approx. 1,150 dwellings west of ROL 2 / ROL 3, using South West Trunk Road.
  - School (2,000 students) west of ROL 2 / ROL 3 is 40% occupied.
  - Approx. 400 dwellings south of ROL 2, using Watsons Road.
  - Approx. 2,500 dwellings in Ripley PDA south of Intersection I2.
  - Approx 100% of Scott PDI land developed.
- Interim (2036):
  - 287 dwellings in ROL 1 (Lacebark), of which 10% use South West Trunk Road.
  - 571 dwellings in ROL 2, of which 80% use South West Trunk Road.
  - 300 dwellings in ROL 3, of which 80% use South West Trunk Road.
  - Approx. 1,400 dwellings west of ROL 2 / ROL 3, using South West Trunk Road.
  - School (2,000 students) west of ROL 2 / ROL 3 is 60% occupied.
  - Approx. 500 dwellings south of ROL 2, using Watsons Road.
  - Approx. 2,600 dwellings in Ripley PDA south of Intersection I2.
  - Approx 100% of Scott PDI land developed.

The resultant traffic volumes used for the traffic analysis are provided at **Appendix D**.

4.5.2 Ultimate Year (2031, 2041, 2046) Volumes

The traffic volumes adopted for the Ultimate Year model horizons have been extracted from data provided by ICC using the "*Ripley Valley Priority Development Area Strategic Transport Model Update and Mesoscopic Model Development Report*", dated 1 July 2020 (ref. no. IH124300-200-CT-TNE-0002 / Rev 5, prepared by Jacobs (for EDQ)).

Note that all Ultimate year horizons assume that:

- South West Trunk Road is extended as a through route between Ripley Road and Grampian Drive (ie. through Providence West ROL 3, Emerald Ridge, South Place and Botanica).
- South West Trunk Road (west of ROL 2 / ROL 3) has an interchange with Centenary Highway at Wensley Road.

The resultant traffic volumes used for the traffic analysis are provided at **Appendix D**.

5.0 Intersection Analysis

The operational performance of the study intersections has been analysed for the relevant assessment scenarios during both the weekday AM and weekday PM peak hour periods. Peak traffic demands are illustrated graphically in the desktop model outputs which are provided in **Appendix D**.

For the purpose of analysis, at some intersection movements where traffic volumes are negligible a minimum volume of 10vph has been adopted.

5.1 Assessment Software

The study intersections have been analysed using SIDRA Intersection 9 (SIDRA) software. SIDRA is an industry recognised analysis tool used to estimate the capacity and performance of intersections based on input parameters, including geometry and traffic volumes. SIDRA provides an estimate of an intersection's Degree of Saturation (DOS), queues and delays.

5.2 Performance Criteria

5.2.1 Degree of Saturation

The DOS thresholds, as defined in Section 4.2.4 of AGTM03-20, have been used to understand the operational performance of the intersections, as presented in **Table 5** below.

Table 5 Intersection Performance Thresholds

Intersection Type	DOS Threshold
Signalised intersections	Less than or equal to 0.90
Roundabouts	Less than or equal to 0.85
Priority controlled intersections	Less than or equal to 0.80

DOS values exceeding those presented in **Table 5** indicate that an intersection is nearing its practical capacity and upgrade works may be required. Above these DOS threshold values, users of the intersection are likely to experience rapidly increasing delays and queuing.

5.2.2 Delay

Importantly, it is noted that DOS is not the only performance indicator and that other measures such as critical delay should also be considered when assessing the performance of an intersection, such as the use of the critical movement delay for assessing the performance of priority-controlled intersections.

Section 7.4.5 of AGTM03-20 provides a summary of level of service (LOS) criteria based on the average delay per vehicle at intersections and makes further reference to guidance contained in the *Guide to Traffic Generating Developments* (TfNSW, 2002) which has recently been superseded by the Guide to Transport Impact Assessment (TfNSW, November 2024). This guide recommends that the average delay statistic for the critical movement at an intersection provides a better indication of the overall performance and safety at priority-controlled intersections. A summary of the recommended delay thresholds is provided in **Table 6**.

Table 6 LOS Criteria

LOS	Average Delay (seconds / vehicle)	Description
A	< 14	Good operation
B	15 to 28	Good with acceptable delays & spare capacity
C	29 to 42	Satisfactory
D	43 to 56	Operating near capacity
E	57 to 70	At capacity; at signals, incidents will cause excessive delays. Roundabouts/priority controlled require other control modes.

5.3 SIDRA Assessment Results

5.3.1 I1 Interim – ROL 2 Access Road / South West Trunk Road

The ROL 2 Access Road / South West Trunk Road intersection is anticipated to be constructed as part of the South West Trunk Road project by 2029 allowing the ROL 2 development to be connected. The intersection has been assessed for two interim layouts. The proposed intersection form as extracted from SIDRA is shown on **Figure 3**. The results of the SIDRA assessment are summarised in **Table 7**. Detailed SIDRA outputs are provided at **Appendix E**.

Figure 3 I1 Interim – ROL 2 Access Road / South West Trunk Road – Proposed Intersection Form (Interim and Intermediate)

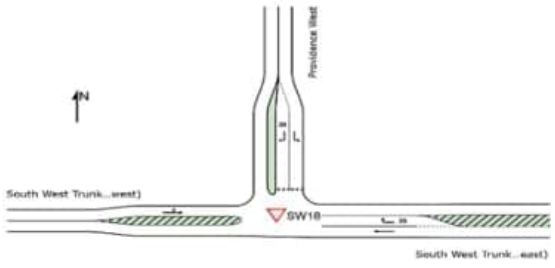
Interim Layout	Intermediate Layout
	

Table 7 I1 Interim – ROL 2 Access Road / South West Trunk Road – SIDRA Output

Scenario	AM Peak Hour			PM Peak Hour		
	DOS	Average Delay (s)	95th %ile Queue (m)	DOS	Average Delay (s)	95th %ile Queue (m)
Interim Layout						
2029 No Wensley Road	0.05	6	1	0.04	6	1
2030 No Wensley Road	0.15	6	5	0.12	7	4
2031 No Wensley Road	0.22	7	7	0.16	8	6
2032 No Wensley Road	0.25	8	8	0.17	9	6
2033 No Wensley Road	0.37	13	13	0.26	16	7

Scenario	AM Peak Hour			PM Peak Hour		
	DOS	Average Delay (s)	95th %ile Queue (m)	DOS	Average Delay (s)	95th %ile Queue (m)
2034 No Wensley Road	0.54	24	21	0.36	28	8
2035 No Wensley Road	0.89	56	52	0.46	58	9
2036 No Wensley Road	1.80	749	656	0.57	187	13
2031 With Wensley Road	0.23	11	3	0.27	13	9
2041 With Wensley Road	0.28	14	8	0.25	20	8
2046 With Wensley Road	0.40	25	9	0.35	39	11
Intermediate Layout						
2029 No Wensley Road	0.09	15	7	0.20	19	11
2030 No Wensley Road	0.25	15	24	0.57	21	35
2031 No Wensley Road	0.34	16	33	0.76	20	53
2032 No Wensley Road	0.43	16	39	0.76	18	53
2033 No Wensley Road	0.76	19	120	0.76	16	57
2034 No Wensley Road	0.82	25	212	0.90	20	94
2035 No Wensley Road	0.88	34	381	0.90	22	153
2036 No Wensley Road	0.97	56	779	0.87	27	263
2031 With Wensley Road	0.45	12	50	0.82	19	68
2041 With Wensley Road	0.53	13	63	0.76	18	90
2046 With Wensley Road	0.77	15	125	0.89	26	193

A summary of the performance results above is as follows:

- **Interim (unsignalised):**
  - Operates acceptably from 2029 to 2035, without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Fails at 2035, without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Operates acceptably at 2031, 2041 and 2046, with the South West Trunk Road extended to connect with (or over) the Centenary Highway.
- **Intermediate (signalised):**
  - Operates acceptably from 2029 to 2034, without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Fails at 2035 (excessive queues) and 2036 (inadequate capacity), without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Operates acceptably at 2031, 2041 and 2046, with the South West Trunk Road extended to connect with (or over) the Centenary Highway.

5.3.2 I1 Ultimate – ROL 2 Access Road / South West Trunk Road / New Watsons Road

In the ultimate form of the road network, it is proposed that Watsons Road will be realigned to form the southern approach of Intersection 1. The proposed intersection form as extracted from SIDRA is shown on **Figure 4**. The results of the SIDRA assessment are summarised in **Table 8**. Detailed SIDRA outputs are provided at **Appendix E**.

Figure 4 I1 Ultimate – ROL 2 Access Road / South West Trunk Road / New Watsons Road – Proposed Intersection Form (Ultimate)

Ultimate Layout

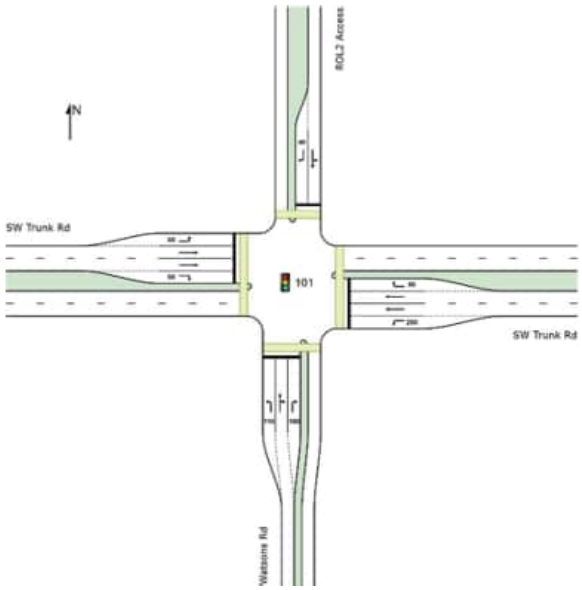


Table 8 I2 – I1 Ultimate – ROL 2 Access Road / South West Trunk Road / New Watsons Road – SIDRA Output

Scenario	AM Peak Hour			PM Peak Hour		
	DOS	Average Delay (s)	95th %ile Queue (m)	DOS	Average Delay (s)	95th %ile Queue (m)
Ultimate Layout						
2029 No Wensley Road	0.18	26.0	12.0	0.27	32.3	20.8
2030 No Wensley Road	0.45	25.5	34.5	0.80	37.4	71.0
2031 No Wensley Road	0.53	29.1	49.1	0.76	38.0	98.8
2032 No Wensley Road	0.53	31.9	49.1	0.76	37.3	98.8
2033 No Wensley Road	0.79	37.4	110.1	0.76	39.5	98.8
2034 No Wensley Road	0.85	47.2	175.5	0.79	41.0	137.4
2035 No Wensley Road	0.87	56.4	260.2	0.87	46.4	212.2
2036 No Wensley Road	0.89	64.1	364.1	0.86	51.9	293.0
2031 With Wensley Road	0.51	30.6	63.7	0.80	38.3	111.2
2041 With Wensley Road	0.80	37.1	101.0	0.76	38.1	98.8
2046 With Wensley Road	0.89	41.2	193.1	0.88	60.2	201.9

A summary of the performance results above is as follows:

- **Ultimate (signalised):**
  - Operates acceptably from 2029 to 2035, without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Fails at 2036 (excessive queues), without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Operates acceptably at 2031, 2041 and 2046, with the South West Trunk Road extended to connect with (or over) the Centenary Highway.

5.3.3 I2 – Ripley Road / South West Trunk Road

The Ripley Road / South West Trunk Road intersection is proposed to be located generally in the position of the exiting Ripley Road / Watsons Road intersection. The subject intersection has not yet been upgraded / constructed and is anticipated to be constructed as part of the South West Trunk Road project by 2029. The intersection will replace the existing intersection of Ripley Road / Watsons Road.

The intersection form as extracted from SIDRA is shown on **Figure 5**. The results of the SIDRA assessment are summarised in **Table 9**. Detailed SIDRA outputs are provided at **Appendix E**.

Figure 5 I2 – Ripley Road / South West Trunk Road – Proposed Intersection Form

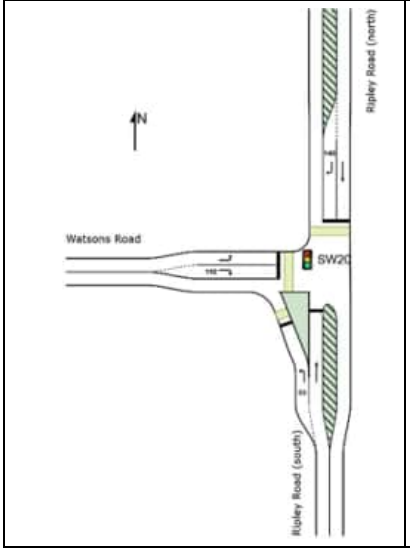
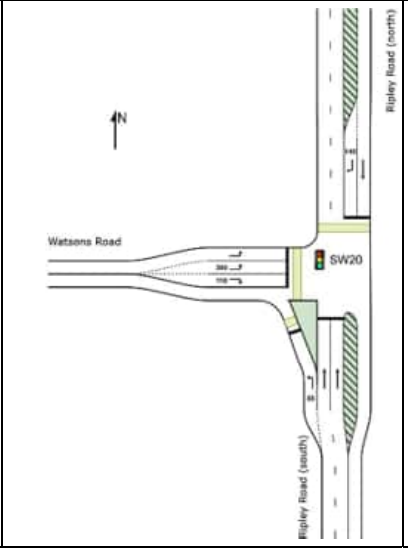
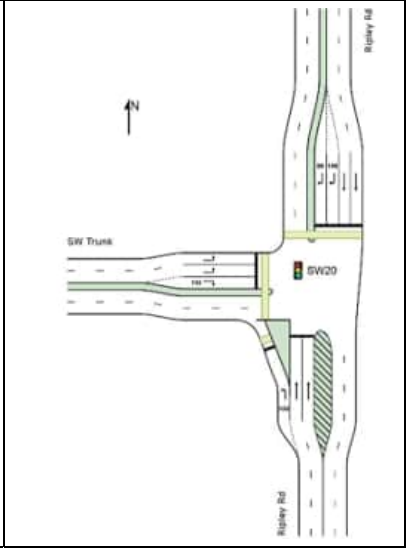
Interim Layout	Intermediate Layout	Ultimate Layout
		

Table 9 I2 – Ripley Road / South West Trunk Road – SIDRA Output

Scenario	AM Peak Hour			PM Peak Hour		
	DOS	Average Delay (s)	95th %ile Queue (m)	DOS	Average Delay (s)	95th %ile Queue (m)
Interim Layout						
2029 No Wensley Road	0.70	18.1	103.9	0.40	14.1	34.9
2030 No Wensley Road	0.88	43.5	318.0	0.75	18.3	68.5
2031 No Wensley Road	1.05	120.4	801.4	0.87	23.9	106.2
2032 No Wensley Road	1.30	304.0	1409.6	0.87	32.7	188.4
2033 No Wensley Road	1.65	566.9	1954.8	1.15	144.9	850.5
2034 No Wensley Road	1.90	744.2	2343.5	1.37	256.9	1398.1
2035 No Wensley Road	2.17	918.4	3105.5	1.58	367.5	2029.9
2036 No Wensley Road	2.53	1153.8	3963.8	1.79	481.0	2654.4
2031 With Wensley Road	0.75	18.5	69.0	0.83	20.3	72.5
2041 With Wensley Road	0.88	29.0	149.5	0.85	26.8	199.7
2046 With Wensley Road	1.21	180.8	666.5	1.47	380.8	1422.3
Intermediate Layout						
2029 No Wensley Road	0.54	17.6	45.3	0.27	14.6	24.7
2030 No Wensley Road	0.83	23.5	88.5	0.61	17.2	38.6
2031 No Wensley Road	0.84	27.9	125.2	0.72	20.0	80.9
2032 No Wensley Road	0.85	35.1	186.1	0.82	23.9	141.9
2033 No Wensley Road	0.90	54.1	295.5	1.00	69.2	655.7
2034 No Wensley Road	0.97	81.4	452.9	1.21	157.8	1178.5

Scenario	AM Peak Hour			PM Peak Hour		
	DOS	Average Delay (s)	95th %ile Queue (m)	DOS	Average Delay (s)	95th %ile Queue (m)
2035 No Wensley Road	1.10	151.2	716.3	1.41	260.9	1787.1
2036 No Wensley Road	1.24	248.3	1052.0	1.61	366.8	2420.0
2031 With Wensley Road	0.53	17.7	32.7	0.66	18.7	69.8
2041 With Wensley Road	0.66	20.6	67.1	0.89	27.9	200.0
2046 With Wensley Road	0.86	27.6	143.5	1.36	303.7	1438.2
Ultimate Layout						
2029 No Wensley Road	0.43	15.9	48.1	0.18	13.7	18.3
2030 No Wensley Road	0.66	17.8	82.1	0.34	16.2	31.5
2031 No Wensley Road	0.80	21.1	116.3	0.47	17.7	42.1
2032 No Wensley Road	0.74	20.9	133.3	0.61	18.6	54.1
2033 No Wensley Road	0.81	26.7	158.2	0.73	20.9	101.0
2034 No Wensley Road	0.89	39.5	265.6	0.84	25.5	170.7
2035 No Wensley Road	0.95	68.4	514.3	1.02	72.6	540.7
2036 No Wensley Road	1.07	121.8	791.9	1.18	140.3	818.4
2031 With Wensley Road	0.34	17.0	33.4	0.40	16.0	32.8
2041 With Wensley Road	0.53	18.2	50.6	0.81	19.8	84.3
2046 With Wensley Road	0.71	19.8	101.9	0.99	67.2	462.2

A summary of the performance results above is as follows:

- **Interim (signalised 2 lane Ripley Road):**
  - Operates acceptably at 2029, without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Fails at 2030 (excessive queues) and 2031 (inadequate capacity), without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Operates acceptably at 2031 and 2041, with the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Fails at 2046 (excessive queues and inadequate capacity), with the South West Trunk Road extended to connect with (or over) the Centenary Highway.
- **Intermediate (signalised 3 lane Ripley Road):**
  - Operates acceptably from 2029 to 2032, without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Fails at 2033 (excessive queues and inadequate capacity), without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Operates acceptably at 2031 and 2041, with the South West Trunk Road extended to connect with (or over) the Centenary Highway.

- Fails at 2046 (excessive queues and inadequate capacity), with the South West Trunk Road extended to connect with (or over) the Centenary Highway.

- **Ultimate (signalised 4 lane Ripley Road):**
  - Operates acceptably from 2029 to 2034, without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Fails at 2035 (excessive queues and inadequate capacity), without the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Operates acceptably at 2031 and 2041, with the South West Trunk Road extended to connect with (or over) the Centenary Highway.
  - Fails at 2046 PM peak only (excessive queues and just over capacity), with the South West Trunk Road extended to connect with (or over) the Centenary Highway.

5.3.4 I3 – Ripley Road / Providence Parade

Up until recently, the Ripley Road / Providence Parade intersection has been a priority controlled three-way intersection (no western leg existed). The intersection has recently been upgraded by Stockland to a 4-way signalised intersection as identified in the 'Interim Ripley Road' plans accompanying the Scott PDI application / approval (ref: 5638/2024/PDAEPC/A). The latter also includes land allocation to accommodate the 'Ultimate Ripley Road'.

The above plans reflect the following intersection arrangements:

- Interim Ripley Road (4-way signalised intersection):
  - Ripley Road with 2 through lanes northbound and 1 through lane southbound (plus auxiliary turn lanes).
  - Providence Parade with 2 right turn lanes (east to north) plus a shared through / left turn lane.
  - Western Leg with 1 through lane (plus auxiliary turn lanes).
- Ultimate Ripley Road (4-way signalised intersection):
  - Ripley Road with 3 through lanes northbound and 2 through lanes southbound (plus auxiliary turn lanes).
  - Providence Parade with 2 right turn lanes (east to north) plus a shared through / left turn lane.
  - Western Leg with 1 through lane (plus auxiliary turn lanes).

The above intersection arrangements are understood to have been determined and approved to accommodate the entire PDA (including Providence West and the Scott PDI development) in accordance with the ICC / EDQ traffic modelling. Therefore, no further assessment is considered necessary for the subject ROL 2 development application.

6.0 Temporary Interim External Road Connection – Lot Threshold

This part of the assessment considers the external road connection for the ROL 2 development in a 'temporary interim' scenario, prior to the South West Trunk Road (between ROL 2 and Ripley Road) being constructed. The objective is to identify how many lots / dwellings can be developed in ROL 2 prior to the South West Trunk Road (between ROL 2 and Ripley Road) being constructed and connected to ROL 2.

6.1 Background Traffic Report

To inform the current Development Approvals the following traffic reports have been prepared by SLR Consulting, for Stockland:

- *"Lacebark, Ripley Providence West –Traffic Engineering Advice"* dated 3 October 2024.

6.2 Technical Basis for 300 Lot Trigger

For the purpose of the lot threshold assessment, it is important to understand the basis for a 300 lot (sealed / signed) limit as typically used by the approval authorities.

A 300 lot limit is typically used as the maximum volume threshold on a Collector Street (ie. with more than 300 lots, that Collector Street might then be considered to form a function higher than a Collector Street).

The background or basis of the 300 lot limit is derived from Queensland Streets, on the basis that 300 lots equated to 3,000vpd (total daily two way traffic volume) on that Collector Street.

The 300 lot limit is also typically used, guided by the same basis as the above, as the threshold for a catchment to be served by a single Collector Street (ie. with more than 300 lots, a secondary public road access is needed for that catchment).

The technical basis of the 300 lot limit is therefore relevant and appropriate for when the second public road connection to/from Providence West ROL 2 is provided (ie. the connection of Providence West ROL 2 to the South West Trunk Road).

Importantly, the threshold for when the subject development (ROL 2) needs to be connected to the South West Trunk Road (between ROL 2 and Ripley Road) should be based on traffic volumes (noting that such traffic volumes are generated by occupied dwellings, not sealed lots) using the following two references / sources:

- The EDQ PDA Guideline No. 6 "*Street and movement network*", February 2019 indicates that a Major Collector (similar to a Neighbourhood Connector in EDQ terminology) has a traffic volume limit of 7,500vpd.
- The EDQ PDA Guideline No. 6 "*Street and movement network*", February 2019 indicates that a Collector (similar to a Neighbourhood Access in EDQ terminology) has a traffic volume limit of 3,000vpd.
- The ICC Planning Scheme indicates that a Collector has a traffic volume limit of 3,000vpd.

The above will guide the consideration of when the eastern section of the South West Trunk Road (between ROL 2 and Ripley Road) ought to be constructed and operational.

6.3 Alternative Consideration of Timing

To assist in establishing the threshold (ie. instead of 300 lots) for when the South West Trunk Road (between ROL 2 and Ripley Road) ought to be constructed and operational, the anticipated timing for delivery of the following has been considered:

- Timing by which the South West Trunk Road (between ROL 2 and Ripley Road) will be designed. It is noted that initial functional plans of this have previously (mid-2024) been presented to and discussed with ICC (the MEDQ Delegate). Detailed designs are currently underway.
- Timing by which the South West Trunk Road (between ROL 2 and Ripley Road) will be constructed and operational. It is assumed that construction might be complete by 2029, but 2030 as a worst case.
- Timing by which the South West Trunk Road (west of ROL 2 through to Grampian Drive) will be designed. It is noted that initial functional plans of this have previously (mid-2024) been presented to and discussed with ICC (the MEDQ Delegate).
- Timing by which the South West Trunk Road (west of ROL 2 through to Grampian Drive) will be constructed and operational. It is assumed that construction might be complete by 2036.
- Timing by which the new residential lots within Lacebark (Providence West ROL 1) are to be constructed / sealed. Based on information provided by Stockland it is assumed that the 1st lots will be sealed by 1 January 2026.
- Timing by which the new residential lots within Lacebark (Providence West ROL 1) are to be sold (settlement) to landowners or builders. Based on information provided by Stockland it is assumed that settlement of the 1st lots will occur by 1 July 2026, following which dwelling construction can commence.
- Timing by which residential dwellings will be constructed and occupied on the new residential lots within Lacebark (Providence West ROL 1). Based on information provided by Stockland it is assumed that the 1st dwellings will be constructed / occupied by 1 January 2027 (based on construction within 6 months after settlement). It is assumed that dwellings will be developed at a rate of 20 dwellings per month.
- Timing by which the new residential lots within Providence West ROL 2 are to be constructed / sealed. Based on information provided by Stockland it is assumed that the 1st lots will be sealed by 1 July 2028.
- Timing by which the new residential lots within Providence West ROL 2 are to be sold (settlement) to landowners or builders. Based on information provided by Stockland it is assumed that settlement of the 1st lots will occur by 1 January 2029, following which dwelling construction can commence.
- Timing by which residential dwellings will be constructed and occupied on the new residential lots within Providence West ROL 2. Based on information provided by Stockland it is assumed that the 1st dwellings will be constructed / occupied by 1 July 2029 (based on construction within 6 months after settlement). It is assumed that dwellings will be developed at a rate of 20 dwellings per month.
- Timing by which Retirement Living dwellings will be constructed and occupied within Providence West ROL 2 is unknown. For the purpose of the assessment it is assumed that this will commence in 1 November 2030 at a rate of 50 dwellings per month.

The timing by which residential dwellings will be constructed and occupied is particularly relevant, because a sealed / signed residential lot does not generate traffic (with the exception of construction traffic) but a constructed / occupied residential dwelling does generate traffic.

Stockland's advice on the timing for construction of dwellings is assumed to be 6 months after lots are sealed, based on the following sources:

- ABS data – September 2014 to June 2019. Average construction time of a new house in Queensland is 5.12 months.
- Master Builders Australia data – 2023 to 2024. Average construction time of a new house in Queensland is 10 months.

The timings associated with the above have been identified based on advice from Stockland. The findings from this are explained in the following sections.

6.4 Traffic Volume Consideration

To assist in the consideration herein, SLR has estimated the daily traffic volumes likely to be generated by the residential dwellings in Providence West ROL 1 (Lacebark) and Providence West ROL 2, once they are constructed and occupied. The estimates herein are based on the following assumptions:

- Traffic generation rate of 8vpd per dwelling (total two way). For conservatism, the latter is applied to all standard (and fonzie) dwellings, duplex dwellings (2 x 8vpd) and medium density dwellings.
- Traffic generation rate of 4vpd per Retirement Living dwelling (total two way).
- Traffic distribution as follows:
    - in the interim stage (before the South West Trunk Road is constructed, and connected to ROL 2), 100% of traffic to/from ROL 1 and ROL 2 will use Road 01 through Lacebark, connecting to the Ripley Road / Providence Parade intersection.
- Dwellings are constructed / occupied at a rate of 20 per month, as discussed in **Section 5.3**.

Using the above assumptions, the daily two way traffic volumes have been estimated on a monthly basis from December 2025 (commencement of lot sealing in Lacebark) through to December 2030 (last dwellings occupied in Providence West ROL 2). Such volumes are estimated for the following internal Collector / Major Collector streets:

- Road 01 (east-west through Lacebark, east of ROL 1) (eastern end) – Major Collector (Neighbourhood Connector in EDQ terminology). The approved cross section has a 6.6m wide pavement, plus indented parking lanes, within a 22.0m wide road reserve, having a traffic volume limit of 7,500vpd (as specified in EDQ guidelines).
- Road 07 (north-south through Lacebark) (northern end) – Collector (Neighbourhood Access in EDQ terminology, having a traffic volume limit of 3,000vpd). The approved cross section has an 8.5m wide pavement within a 19.3m wide road reserve (equivalent to an ICC Collector Street, having a traffic volume limit of 3,000vpd, as specified in the ICC Planning Scheme).

- Road 07 (north-south through ROL 2, aligning with Road 07 in Lacebark) (northern end) – Collector (Neighbourhood Access in EDQ terminology). The proposed cross section has an 8.5m wide pavement within a 19.3m wide road reserve (equivalent to an ICC Collector Street, having a traffic volume limit of 3,000vpd, as specified in the ICC Planning Scheme).

The results from this assessment are tabulated as follows in **Appendix F**:

- **Table A** outlines the timing of lot sealing, dwelling construction and then traffic generation by Lacebark (ROL 1).
- **Table B** outlines the timing of lot sealing, dwelling construction and then traffic generation by Providence West ROL 2.
- **Table C** reports the daily traffic volume (each month) on the three road sections listed above.

From the information at **Appendix F** the daily traffic volumes, compared to the relevant thresholds are summarised as follows on the three internal Collector / Major Collector streets:

- Road 01 (east-west through Lacebark, east of ROL 1) (eastern end) – Major Collector - Maximum daily volume is forecast as 6,664vpd at September 2031 with full development and dwelling occupation of Lacebark and ROL 2. This is less than the EDQ specified traffic volume limit of 7,500vpd.
- Road 07 (north-south through Lacebark) (northern end) – Collector - Maximum daily volume is forecast as 4,584vpd at September 2031 with full development and dwelling occupation of Lacebark and ROL 2. It is noted that the **3,000vpd limit specified by EDQ (and ICC) guidelines is reached:**
  - **by May 2031;**
  - **with full development and dwelling occupation of Lacebark (287 dwellings);**
  - **plus 371 dwellings (including 50 Retirement Living dwellings) in ROL 2**.
- Road 07 (north-south through ROL 2, aligning with Road 07 in Lacebark) (northern end) – Collector - Maximum daily volume is forecast as 4,368vpd at September 2031 with full development and dwelling occupation of Lacebark and ROL 2. It is noted that the 3,000vpd limit specified by EDQ (and ICC) guidelines is reached:
  - by June 2031;
  - with full development and dwelling occupation of Lacebark (287 dwellings);
  - plus 421 dwellings (including 100 Retirement Living dwellings) in ROL 2.

It is important to recognise that the assessment and results above are based on volume thresholds that are specified in the *Ipswich Planning Scheme Part 12, Div 5 – Reconfiguring a Lot Code*, Appendix D. In particular, the *ICC Planning Scheme* adopts a 3,000vpd volume threshold for a road carriageway width of 8.5m. Road 07 (through both ROL 1 and ROL 2) has an approved / proposed carriageway width of 8.5m. The results are therefore consistent with the ICC Planning Scheme.

In addition, the *EDQ PDA Guideline No. 6 "Street and movement network"* adopts a 3,000vpd volume threshold for a road carriageway width of 7.5m (with kerbside parking) or 6.0m (with indented parking). Road 07 (through both ROL 1 and ROL 2) has an approved / proposed carriageway width of 8.5m (ie. wider than the latter). The results are therefore consistent with EDQ Guidelines.

6.5 Alternative Timing Trigger

From the information provided herein, the threshold / trigger for when the eastern section of the South West Trunk Road (between ROL 2 and Ripley Road) ought to be constructed, operational and connected to Providence West ROL 2 is:

- Prior to May 2031.
- or
- Prior to 371 dwellings (including 50 Retirement Living dwellings) in ROL 2.

Given the results of the assessment provided herein, it is clear that the vast majority (371 dwellings out of a potential 571 dwellings, ie. 65%) of the development can progress prior to construction of the South West Trunk Road.

6.5.1 Sensitivity Test – Construction Traffic

It is recognised that the assessment above does not account for construction traffic (ie. traffic generated by the construction of individual dwellings). In recognition of the above, a sensitivity test has been undertaken whereby it is assumed that construction traffic commences at the time that each lot is constructed / sealed / sold and that construction traffic generation is equivalent to occupied dwellings traffic generation.

On the basis of these assumptions, the traffic volumes derived through the methodology above would be brought forward by six months, which would conclude that the threshold / trigger for when the eastern section of the South West Trunk Road (between ROL 2 and Ripley Road) ought to be constructed, operational and connected to Providence West ROL 2 is:

- Prior to November 2030.
- or
- Prior to 371 sealed lots (including 50 Retirement Living sealed lots) in ROL 2.

7.0 Summary

SLR has been commissioned by Stockland to prepare a TIA to accompany a DA in relation to the second stage of residential development in Providence West, known as ROL 2. The plans for the proposed development, prepared by Therefor and KN Group, are included at **Appendix A**.

The traffic capacity analysis herein has considered the entire ROL 2 development (308 dwellings plus 250 dwelling Retirement Living) on the assumption that this full development will represent the ultimate worst case traffic impacts for the development. It is noted that the Retirement Living site will be subject to a separate application, and the 250 dwelling yield is indicative only.

Based on the analysis and discussion summarised herein, the following is concluded:

- The proposed internal road network, including the road hierarchy and road cross sections, is:
  - Appropriate for the function served by each road segment.
  - Consistent with and / or guided by ICC's standard road-cross sections and EDQ PDA Guideline No. 6.
- The planned future bus network, including indicative bus routes and bus stop locations, is expected to provide bus services that are within a 400m walking catchment for at least 90% of residents of the proposed development.
- The planned active transport network would provide pedestrian and cycling connectivity to attractions / destinations (future and existing) within the subject site and surrounding the subject site.
- The traffic assessment of adjacent intersections indicates the following:
  - **(I1 Interim) ROL 2 Access Road / South West Trunk Road intersection:** The interim form (unsignalised T-junction) will result in excessive delays by 2035. As a result, the intersection will require signalisation (intermediate form). However, the intermediate form (signalised T-junction) will exceed acceptable thresholds by 2035.

    As a T-junction (ie. in the absence of a southern leg (new Watsons Road alignment) either the interim (unsignalised) or intermediate (signalised) layout would operate within acceptable thresholds at the 2031, 2041 and 2046 model year horizons with the Wensley Road / Centenary Highway connection in place.

    (I1 Ultimate) ROL 2 Access Road / South West Trunk Road / New Watsons Road intersection: With the addition of the southern leg (new Watsons Road alignment) the ultimate form (signalised 4-way intersection) is expected to operate within the adopted performance thresholds, but will have excessive queues from 2036 under the Interim Volume Scenarios, prior to the South West Trunk Road connection to or over the Centenary Highway. Following the latter this ultimate layout will operate within acceptable thresholds at the 2031, 2041 and 2046 model year horizons with the Wensley Road / Centenary Highway connection in place.

- **(I2) South West Trunk Road / Ripley Road intersection:** The interim form (signalised T-junction with 2 through lanes on Ripley Road) would need to be upgraded by 2030. The intermediate form (signalised T-junction with 3 through lanes on Ripley Road) will exceed acceptable thresholds by 2033. The ultimate form (signalised T-junction with 4 through lanes on Ripley Road) is expected to operate within the adopted performance thresholds until 2035under the Interim Volume Scenarios, prior to the South West Trunk Road connection to or over the Centenary Highway. Following the latter this ultimate layout will operate within acceptable thresholds at the 2031 and 2041 model year horizons with the Wensley Road / Centenary Highway connection in place, but will just exceed capacity thresholds before 2046 in the PM peak.
- **(I3) Ripley Road / Providence Parade intersection:** The interim and ultimate intersection arrangements are understood to have been determined and approved to accommodate the entire PDA in accordance with the ICC / EDQ traffic modelling. The intersection has recently been upgraded by Stockland to a 4-way signalised intersection as identified in the Scott PDI application / approval (ref: 5638/2024/PDAEPC/A). Therefore, no further assessment is considered necessary for the subject ROL 2 development application.

- An appropriate threshold for when the eastern section of the South West Trunk Road (between ROL 2 and Ripley Road) ought to be constructed and operational (and connected to ROL 2 as its second access) is either of the following:
  - Prior to May 2031.
  - or
  - Prior to 371 dwellings (including 50 Retirement Living dwellings) in ROL 2.
- Given the results of the assessment provided herein, it is clear that the vast majority (371 dwellings out of a potential 571 dwellings, ie. 65% of ROL 2 dwellings) of the development can progress prior to construction of the South West Trunk Road.

8.0 RPEQ Certification

This traffic assessment / report has been prepared under the direction of a Registered Professional Engineer of Queensland (RPEQ) who is experienced in traffic engineering and transport planning and is also a Senior Road Safety Auditor as accredited by the Queensland Department of Transport and Main Roads (TMR). This report is endorsed by that RPEQ accordingly.



Brett McClurg
Technical Director – Transport Advisory
RPEQ No. 7628

Appendix A Development Plans

Providence West ROL 2, 817 Ripley Road

Traffic Impact Assessment

Stockland

SLR Project No.: 620.30351.02004

13 March 2026



Residential Saleable Area (Standard Lots)					
ALLOTMENT TYPE		**TYPICAL LOT FRONTAGE**	**TYPICAL AREA**	**YIELD**	**%**
Urban Lofts					
	Urban Loft	min. 8.2m-8.5m	90-96m²	12	2.1%
	Garden Home	8.0m / 10.5m	128-184m²	11	1.9%
SUB-TOTAL				**23**	**4.0%**
20m deep products					
	Front Loaded Terraces	7.5m	150m²	3	0.5%
SUB-TOTAL				**3**	**0.5%**
25m deep products					
	Rear Loaded Terraces	4.6m	115m²	5	0.9%
		6.6m	165m²	7	1.2%
	Front Loaded Terraces	7.5m	188m²	18	3.1%
	Urban Home	9.0m	225m²	10	1.7%
	Villa	10.5m	263m²	54	9.3%
	Premium Villa	12.5m	313m²	26	4.5%
	Courtyard	14.0m	350m²	9	1.6%
	Traditional Allotment	16.0m	400m²	1	0.2%
SUB-TOTAL				**130**	**22.4%**
28m deep products					
	Rear Loaded Terraces	4.6m	129m²	15	2.6%
		6.6m	185m²	11	1.9%
		7.5m	210m²	5	0.9%
	Front Loaded Terraces	7.5m	210m²	13	2.2%
	Urban Home	9.0m	252m²	11	1.9%
	Villa	10.5m	294m²	44	7.6%
	Premium Villa	12.5m	350m²	39	6.7%
	Courtyard	14.0m	392m²	9	1.6%
	Traditional Allotment	16.0m	448m²	3	0.5%
SUB-TOTAL				**150**	**25.9%**
30m deep products					
	Villa	10.5m	328m²	2	0.3%
	Premium Villa	12.5m	375m²	1	0.2%
	Courtyard	14.0m	450m²	0	0.0%
	Traditional Allotment	16.0m	480m²	0	0.0%
SUB-TOTAL				**3**	**0.5%**
32m deep products					
	Villa	10.5m	336m²	1	0.2%
	Premium Villa	12.5m	400m²	1	0.2%
	Courtyard	14.0m	448m²	0	0.0%
	Traditional Allotment	16.0m	512m²	0	0.0%
SUB-TOTAL				**2**	**0.3%**
TOTAL STANDARD LOTS				**311 lots**	**53.6%**

Additional Dwellings			Indicative Yield	
F	Fonzies	varies	8	1.4%
D	Duplex lots	varies	6	1.0%
SUB-TOTAL			**14 dw**	**2.4%**

Other	Indicative Density	Indicative Yield	
Balance Lot (lot 8001)	25dw/ha	250	43.1%
Multiple Residential (lot 8002)	65dw/ha	12	2.1%
SUB-TOTAL		**262 dw**	**45.2%**
TOTAL DWELLINGS		**580 dw**	**100.0%**

therefor GROUP

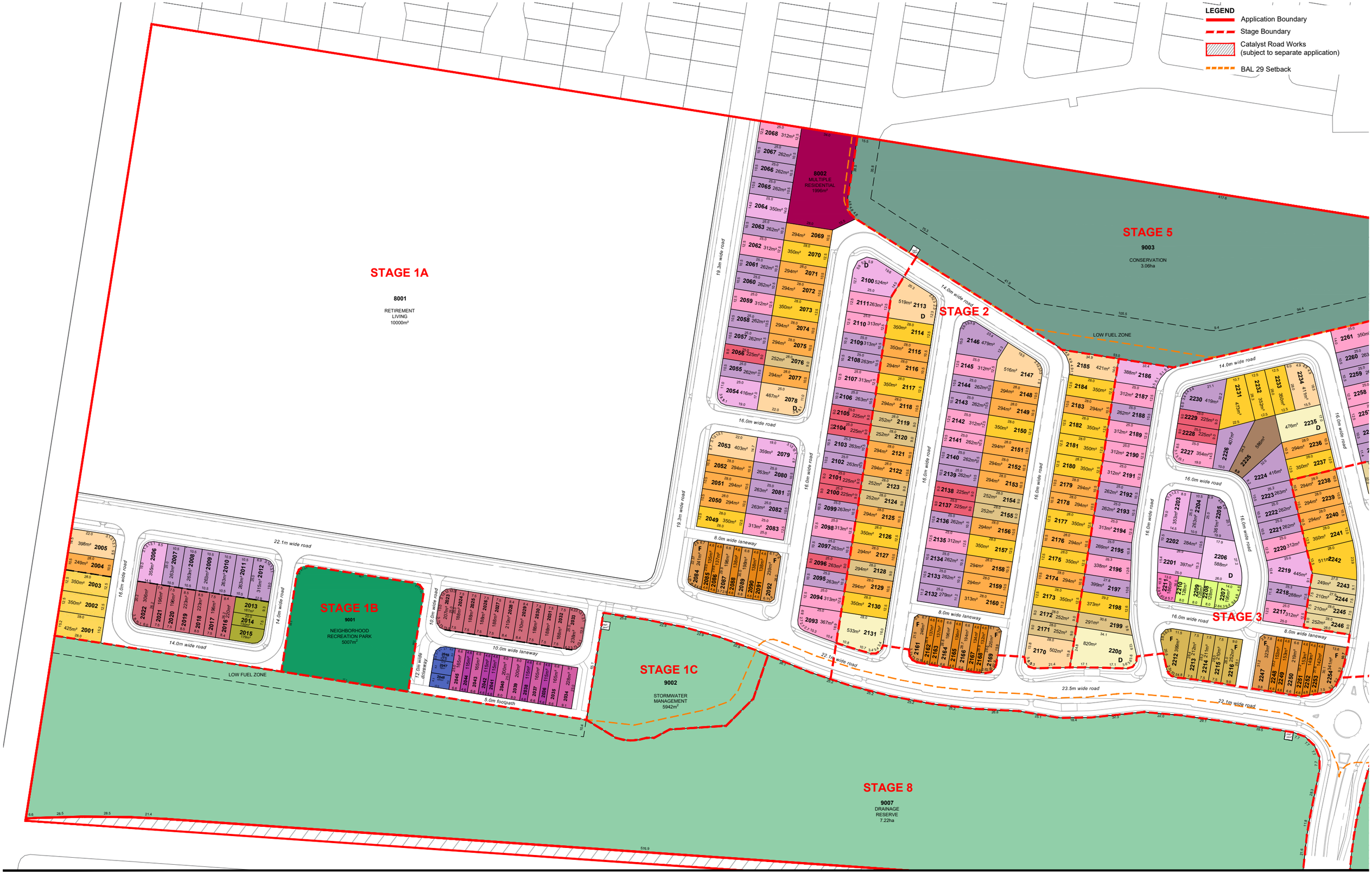
PROJECT
PROVIDENCE WEST - ROL 2

DRAWING TITLE
RECONFIGURING OF A LOT - OVERALL

20 0 40 80 120 Meters
1:2000 @ A1 - 1:4000@ A3

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PROJECT NO. 23-0573SP
DATE 11.03.2026
DRAWING NO. ROL-00
NORTH
REV M



PROJECT
PROVIDENCE WEST - ROL 2

DRAWING TITLE
RECONFIGURATION OF A LOT - 01

10 0 20 40 60 Meters
1:1000 @ A1 - 1:2000 @ A3

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PROJECT NO. 23-0573SP
DATE 11.03.2026
DRAWING NO. ROL-01
NORTH
REV M



PROJECT
PROVIDENCE WEST - ROL2

DRAWING TITLE
RECONFIGURATION OF A LOT - 02

10 0 20 40 60 Meters
1:1000 @ A1 - 1:2000 @ A3

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PROJECT NO. 23-0573SP
DATE 11.03.2026
DRAWING NO. ROL-02
NORTH
REV M

ROAD HIERARCHY	EDQ TYPOLOGY	ICC TYPOLOGY	ROAD RESERVE WIDTH (m)	CARRIAGEWAY WIDTH (m)	FOOTPATH(S)	COLOUR	CROSS SECTION
ARTERIAL	ARTERIAL	ARTERIAL	REFER TO SEPERATE CATALYST ROAD SUBMISSION - DESIGN PREPARED BY BORNHORST & WARD				-
MAJOR COLLECTOR ENTRY	NEIGHBOURHOOD CONNECTOR	MAJOR COLLECTOR	26.00	13.50	2.5m PEDESTRIAN PATH & 3.0m SHARED PATH		A
MAJOR COLLECTOR	NEIGHBOURHOOD CONNECTOR	MAJOR COLLECTOR	22.10	11.60	1.5m PEDESTRIAN PATH & 3.0m SHARED PATH		B
MAJOR COLLECTOR PARKING ONE SIDE	NEIGHBOURHOOD CONNECTOR	MAJOR COLLECTOR	21.30	10.80	1.5m PEDESTRIAN PATH & 3.0m SHARED PATH		C
COLLECTOR PARKING ONE SIDE	NEIGHBOURHOOD ACCESS PREMIUM 1	COLLECTOR	19.30	8.50	1.5m PEDESTRIAN PATH & 2.5m SHARED PATH		D
ACCESS ROAD	NEIGHBOURHOOD ACCESS	ACCESS	16.00	7.50	1.5m PEDESTRIAN PATH		E
ACCESS ROAD OPEN SPACE ADJACENT	NEIGHBOURHOOD ACCESS	ACCESS	14.00	7.50	1.5m PEDESTRIAN PATH		F
ACCESS ROAD WITH PERPENDICULAR PARKING ONE SIDE	NEIGHBOURHOOD ACCESS	ACCESS	14.00	8.00	1.5m PEDESTRIAN PATH		G
DRIVEWAY	SHARED DRIVEWAY	SHARED DRIVEWAY	12.00	7.80	-		H
LANEWAY NO PARKING	LANE	LANEWAY	8.00	5.50	-		I

FUTURE DEVELOPMENT

CONNECTION TO PROVIDENCE LACEBARK (CURRENTLY UNDER CONSTRUCTION). APPLICATION REF 2342/2024/PDA

SHARED PEDESTRIAN PATH

SHARED DRIVEWAY

RIPLEY ROAD

WATSONS ROAD

ROAD 01
ROAD 02
ROAD 03
ROAD 05
ROAD 06
ROAD 07
ROAD 08
ROAD 09
ROAD 10
ROAD 11

LANEWAY 01
LANEWAY 02
LANEWAY 03

D 31
F 32
B 31
I 33
E 32
C 31
A 31
G 32
H 33

LIMIT OF PROJECT WORKS. REFER TO CATALYST ROAD DESIGN PREPARED BY BORNHORST & WARD

4.0m EMERGENCY SECONDARY ACCESS TO CONNECT TO EXISTING ROAD RESERVE, IN THE EVENT THE PROPOSED CATALYST ARTERIAL ROAD IS NOT OPERATIONAL BY THE DELIVERY OF THE 100TH LOT

LEGEND

- RAL 2 BOUNDARY
- 1.5m CONCRETE PATH
- 2.5m CONCRETE PATH
- 3.0m CONCRETE PATH
- * DENOTES PROPOSED BUS STOP LOCATION.

NOTE
PRELIMINARY ONLY. FINAL DETAILS TO BE PROVIDED AT DETAIL DESIGN.

NOT FOR CONSTRUCTION

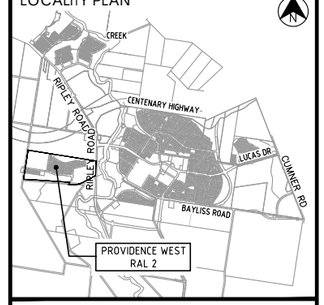
ROAD HIERARCHY - LAYOUT PLAN
SCALE 1:2000

SCALE
20 10 0 20 40 60 80 100 120 140 160 180 200m
1 : 2000 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!

NORTH

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	ISSUED FOR APPROVAL	19.10.2025	APB
B	ISSUED FOR APPROVAL	31.10.2025	TRP

Client
Stockland
PROVIDENCE

Project
PROVIDENCE WEST
RAL 2

AUTHORITY REFERENCE NUMBER
3406/2025/PDA

kn group
L1, 62 Astor Terrace, Spring Hill, QLD 4000
www.kngroup.com.au | 07 3017 1900

Approved
Digitally signed by Amy Bamford
B.E.(Civil), MIEAust, CPEng, NER, RPEQ 36180
Date: 31/10/2025

Drawing Title
ROAD HIERARCHY LAYOUT PLAN

Drawn	Designed	Checked	Date
TRP	AG	APB	OCT' 25

Scale	Sheet
AS SHOWN	02 of 53

A1	Drawing No	Revision
	24-154-11	B

\\kn-svr-02\projects\2024\24-154 Providence West - 817 - Preliminary Support\Engineering\Acad\24-154-11-RD_HIERARCHY.dwg Plotted by: TRP on 31/10/2025 4:34:59 PM

Appendix B Previous Approvals

Providence West ROL 2, 817 Ripley Road

Traffic Impact Assessment

Stockland

SLR Project No.: 620.30351.02004

13 March 2026

General Details

- Site Boundary
- Proposed Stage Boundary
- 25m Fire Buffer
- Building Exclusion Zone
- Proposed Easement
- Multiple Residential (Loft)
- Multiple Residential

Open Space

- Conservation
- Environmental Protection Zone Boundary
- Neighbourhood Recreation Park
- Local Recreation Park
- Linear Park / Stormwater Management

Scale 1:2000

DEVELOPMENT STATISTICS

Allotment Type	Typical Lot Dimensions	Stage 1 No. of Lots	Stage 2 No. of Lots	Stage 3 No. of Lots	Stage 4 No. of Lots	Stage 5 No. of Lots	Overall No. of Lots	Overall Percentage
Standard Allotment 28m Product								
Terrace Allotment	6m x 28m	—	5	—	—	—	**5**	2%
Cottage Allotment	8.5m x 28m	2	4	—	—	—	**6**	2%
Villa Allotment	10.5m x 28m	4	4	—	—	—	**8**	3%
Premium Villa Allotment	12.5m x 28m	6	8	—	—	—	**14**	5%
Courtyard Allotment	14m x 28m	6	3	—	—	—	**9**	3%
Traditional	16m x 28m	8	—	—	—	—	**8**	3%
Sub Total		**26**	**24**	—	—	—	**50**	**17%**
Standard Allotment 32m Product								
Premium Villa Allotment	12.5m x 32m	—	6	19	—	—	**25**	8%
Courtyard Allotment	14m x 32m	2	12	33	7	8	**62**	21%
Traditional	16m x 32m	4	5	16	14	10	**49**	17%
Premium Traditional Allotment	18m x 32m	24	19	12	23	31	**109**	37%
Sub Total		**30**	**42**	**80**	**44**	**49**	**245**	**83%**
Total		**56**	**66**	**80**	**44**	**49**	**295**	**100%**

Density Calculation	**dw/ha**
Net Residential Density - 298 dwellings (Including residential lots, laneway lots, multi-family dwellings (duplex) and lofts / 23.959ha (area of local roads, parks and residential lots)	**12.4**
Context Plan Targets	
Low Density Residential 9.994 ha x 15dw/ha = 150 dw	
Low Density Residential Slope Constrained 14.05 x 8dw/ha = 112 dw	
Total Low Density Residential (incl. Slope Constrained) Dwellings = 262 dw	

OVERALL LAND USE BUDGET

Land Use Budget	Area (ha)	Precentage
Area of Stages 1-5	**29.146**	**100.0%**
Saleable Area		
Area of Residential Lots	17.825	61.2%
Total Area of Allotments	**17.825**	**61.2%**
Roads		
Trunk Road	0.060	0.2%
Collector Road	2.382	8.2%
Local Road	4.665	16.0%
Existing Road	0.617	2.1%
Total Area of New Road	**7.723**	**26.5%**
Open Space		
Conservation	2.418	8.3%
Neighbourhood Recreation Park	0.512	1.8%
Local Recreation Park	0.340	1.2%
Linear Park / Stormwater Management	0.328	1.1%
Total Area of Open Space	**3.598**	**12.3%**

Road Type	Length (m)
Total Length of New Road	**4712**
Shared driveway access	269
6.5m wide lane - 5.5m pavement	228
12.25m wide road - 6.5m pavement	575
14m wide road - 6.5m pavement	1566
16.5m wide road - 8m pavement	327
19.5m wide road - 12m pavement incl. parking	1192
20.117m wide road - 6.5m pavement	286
25m wide road	269

Access points to continue as laneways in accordance with Condition 1

PLANS AND DOCUMENTS referred to in the PDA APPROVAL
26 MAR 2014
MEDQ

AMENDED IN RED
26 MAR 2014
By: B. Davey (name)
MEDQ

REVISION
A: 05/11/13 Amend further issues

Note:
All dimensions and areas are approximate only, and are subject to survey and Council approval.

Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:
Site boundaries: DCDB
Adjoining information: DCDB
Contours: Cardno
Environment constraints: Cardno

CLIENT **AMEX**

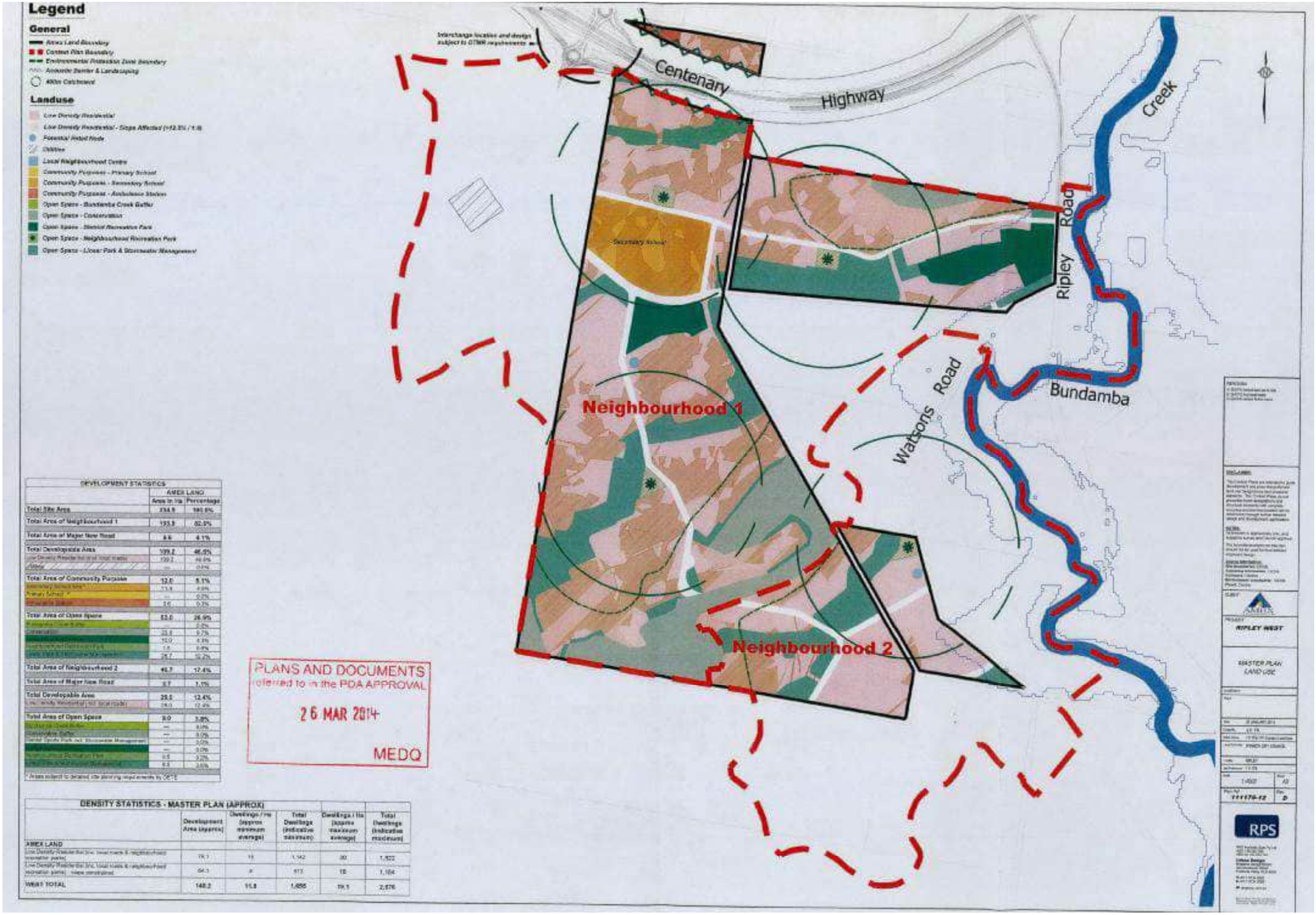
PROJECT **ARP WEST STAGES 1-5**

PLAN OF SUBDIVISION CANCELLING LOT 196 ON SP157517

Level Datum	
Origin	
Date	05 NOVEMBER 2013
Comp By.	JLS
DWG Name.	111179-23A Stage 1-5 Pro
Local Authority	IPSWICH CITY COUNCIL
Locality	RIPLEY
Job Reference	111179
Scale	1:2000
Sheet	A1
Plan Ref	111179-32
Rev	A

RPS
RPS Australia East Pty Ltd
ACN 140 292 762
ABN 44 140 292 762
Urban Design
Brisbane Design Studio
455 Brunswick Street
Fortitude Valley QLD 4006
T +61 7 3124 9300
F +61 7 3124 9399
W rpsgroup.com.au

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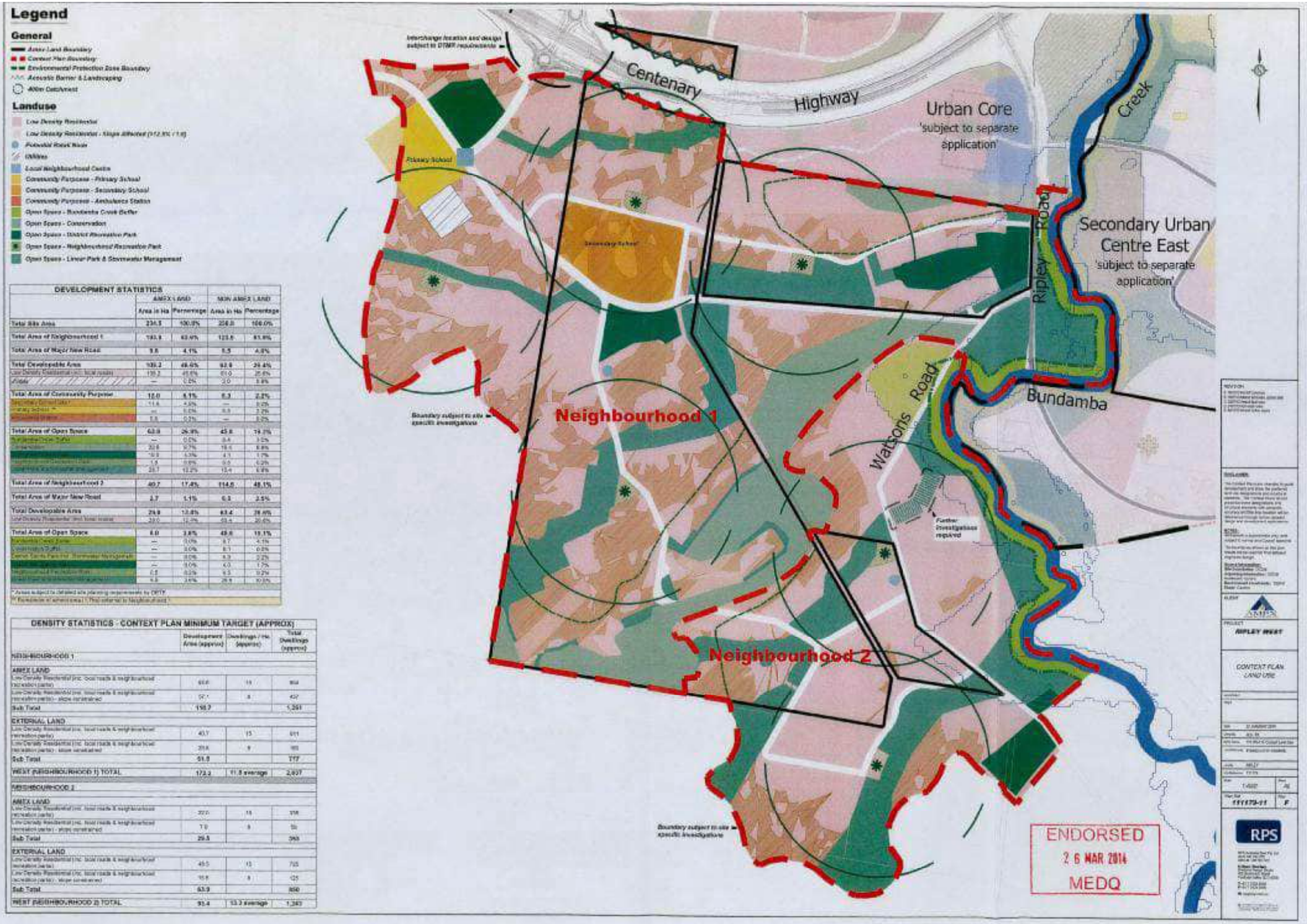
DEVELOPMENT STATISTICS

	AMEX LAND	
	Area in Ha	Percentage
Total Site Area	234.9	100.0%
Total Area of Neighbourhood 1	153.9	82.9%
Total Area of Major New Road	9.6	4.1%
Total Developable Area	199.2	46.9%
Low Density Residential (net developable area)	199.2	46.9%
Utilities	—	0.0%
Total Area of Community Purpose	12.0	5.1%
Secondary School *	11.4	4.9%
Primary School *	—	0.0%
Ambulance Station	0.6	0.3%
Total Area of Open Space	63.0	26.9%
Bundamba Creek Buffer	—	0.0%
Conservation	23.8	9.7%
District Recreation Park	10.0	4.3%
Neighbourhood Recreation Park	1.6	0.9%
Linear Park & Stormwater Management	28.7	12.2%
Total Area of Neighbourhood 2	46.7	17.4%
Total Area of Major New Road	0.7	1.1%
Total Developable Area	29.0	12.4%
Low density residential (net developable area)	29.0	12.4%
Total Area of Open Space	9.0	3.8%
Bundamba Creek Buffer	—	0.0%
Conservation Buffer	—	0.0%
Linear Parks Park and Stormwater Management	—	0.0%
Conservation	—	0.0%
Neighbourhood Recreation Park	0.5	0.2%
Linear Parks & Stormwater Management	8.5	3.6%

* Areas subject to detailed site planning requirements by DETE

DENSITY STATISTICS - MASTER PLAN (APPROX)

	Development Area (approx)	Dwellings / Ha (approx minimum average)	Total Dwellings (indicative minimum)	Dwellings / Ha (approx maximum average)	Total Dwellings (indicative maximum)
AMEX LAND					
Low Density Residential (inc. local roads & neighbourhood recreation parks)	78.1	15	1,142	20	1,523
Low Density Residential (inc. local roads & neighbourhood recreation parks) - slope constrained	64.1	8	513	15	1,104
WEST TOTAL	148.2	11.8	1,655	19.1	2,676



DEVELOPMENT STATISTICS	ANNEX LAND		NON ANNEX LAND	
	Area in Ha	Percentage	Area in Ha	Percentage
Total Site Area	234.5	100.0%	206.0	100.0%
Total Area of Neighbourhood 1	193.8	82.6%	123.6	60.0%
Total Area of Major New Road	9.5	4.1%	9.5	4.6%
Total Developable Area	109.2	46.6%	82.9	39.4%
Low Density Residential (inc. local roads)	109.2	46.6%	81.0	39.6%
Flood	—	0.0%	2.0	0.8%
Total Area of Community Purpose	12.0	5.1%	5.3	2.5%
Secondary School Site *	11.8	4.9%	—	0.0%
Primary School *	—	0.0%	5.3	2.5%
Ambulance Station	0.5	0.2%	—	0.0%
Total Area of Open Space	62.9	26.9%	45.8	19.1%
Bundamba Creek Buffer	—	0.0%	0.4	0.2%
Conservation	22.8	9.7%	19.5	8.8%
District Recreation Park	10.0	4.3%	4.1	1.7%
Neighbourhood Recreation Park	1.5	0.6%	0.5	0.2%
Linear Park & Stormwater Management	28.7	12.2%	13.4	6.8%
Total Area of Neighbourhood 2	40.7	17.4%	114.6	48.1%
Total Area of Major New Road	2.7	1.1%	6.3	2.5%
Total Developable Area	29.9	12.8%	83.4	28.6%
Low Density Residential (inc. local roads)	29.0	12.3%	83.4	28.6%
Total Area of Open Space	8.0	3.8%	48.8	19.1%
Residential Land Sale	—	0.0%	9.7	4.1%
Conservation	—	0.0%	0.1	0.0%
Central Linear Park incl. Stormwater Management	—	0.0%	5.3	2.2%
District Recreation Park	—	0.0%	4.0	1.7%
Neighbourhood Recreation Park	0.8	0.3%	0.5	0.2%
Linear Open Space incl. Stormwater Management	6.8	2.9%	29.1	10.0%

* Areas subject to detailed site planning requirements by DPTF
** Boundaries of school sites (1:1) not referred to Neighbourhood 1

DENSITY STATISTICS - CONTEXT PLAN MINIMUM TARGET (APPROX)	Developable Area (approx)	Dwellings / Ha. (approx)	Total Dwellings (approx)
NEIGHBOURHOOD 1			
ANNEX LAND			
Low Density Residential (inc. local roads & neighbourhood recreation parks)	60.6	15	909
Low Density Residential (inc. local roads & neighbourhood recreation parks) - slope constrained	57.1	8	457
Sub Total	198.9		1,366
EXTERNAL LAND			
Low Density Residential (inc. local roads & neighbourhood recreation parks)	40.7	15	611
Low Density Residential (inc. local roads & neighbourhood recreation parks) - slope constrained	20.8	8	165
Sub Total	61.5		777
WEST (NEIGHBOURHOOD 1) TOTAL	172.3	11.3 average	2,037
NEIGHBOURHOOD 2			
ANNEX LAND			
Low Density Residential (inc. local roads & neighbourhood recreation parks)	22.0	15	330
Low Density Residential (inc. local roads & neighbourhood recreation parks) - slope constrained	7.9	8	59
Sub Total	29.9		389
EXTERNAL LAND			
Low Density Residential (inc. local roads & neighbourhood recreation parks)	49.5	15	705
Low Density Residential (inc. local roads & neighbourhood recreation parks) - slope constrained	15.8	8	125
Sub Total	63.9		830
WEST (NEIGHBOURHOOD 2) TOTAL	93.4	13.3 average	1,243

PROJECT: RIPLEY WEST
CONTEXT PLAN LAND USE
1:4000
191173-11
F

Supporting Plan included as part of 10397/2023/MAPDA

Interchange location and design subject to DTMR requirements

Centenary Highway

Urban Core
'subject to separate application'

Creek

Ripley Road

Secondary Urban Centre East
'subject to separate application'

Bundamba

Watsons Road

Boundary subject to site specific investigations

Neighbourhood 1

Neighbourhood 2

Further investigations required

Boundary subject to site specific investigations

Legend

General
- Stockland Land Boundary
- Context Plan Boundary
- Neighbourhood Recreation Parks (5000m²)

Road Hierarchy
- Regional (Motorway)
- Intersuburban (Arterial)
- Suburban (Sub-Arterial)
- Neighbourhood (Major Collector)
- Neighbourhood (Minor Collector)

Bus
- Possible Bus Route Options
- Possible Bus Stop
- Bus Stop 400m Catchment

Rail
- Regional Transit Corridor
- Station 800m Catchment
- Transit Station

Cycle
- On Road Cycle Lane
- Off Road Facility

CONTEXT PLAN

MOVEMENT NETWORK

PLAN REF: 111179 – 13
Rev No: F
DATE: 26 SEPTEMBER 2023
CLIENT: STOCKLAND
DRAWN BY: MD
CHECKED BY: JK

DISCLAIMER:

The Context Plans are intended to guide development within the Secondary Urban Centre East and show the preferred land use designations and structural elements. The Context Plans do not prescribe these designations and structural elements with complete accuracy and the final location will be determined through further detailed design and development applications.

NOTES:

The boundaries shown on this plan should not be used for final detailed engineers design.

Boundaries taken from DCDB

Contours supplied by Cardno & Ipswich City Council.

REVISION

A: 22/07/13 Amend land use and road
B: 24/07/13 Amend land uses
C: 02/12/13 Amend further issues
D: 20/01/14 Amend areas
E: 12/06/23 Amend development extent and areas
F: 28/09/23 Amend bus route

URBAN DESIGN
Level 4 HQ South
526 Wickham Street
PO Box 1099
Fortitude Valley QLD 4006
T +61 7 3329 9500
W rpsgroup.com

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Appendix C Bus Coverage Map

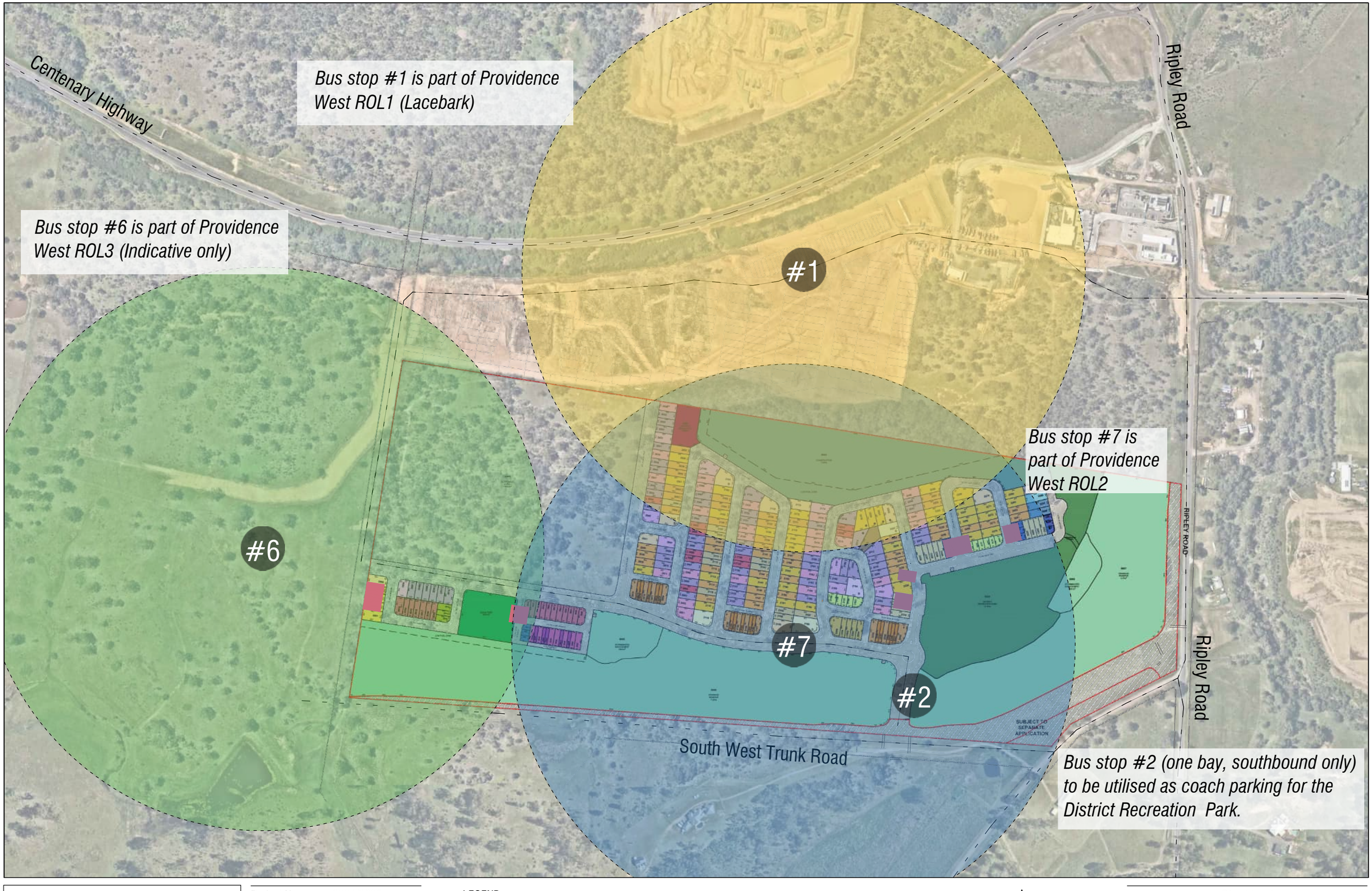
Providence West ROL 2, 817 Ripley Road

Traffic Impact Assessment

Stockland

SLR Project No.: 620.30351.02004

13 March 2026



SLR
LEVEL 16, 175 EAGLE ST
BRISBANE
QUEENSLAND 4000
AUSTRALIA
T: 61 7 3858 4800
www.slrconsulting.com

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SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Project No:	620.V30351
Date:	10-03-2026
Drawn by:	DC&NN
Certified by:	-
Sheet Size:	A3
Projection:	-

LEGEND
- 400m walk radius (from mid point to bus stop pair)
- #1 Bus Stop Number
- Road Alignment
- Bus Route

N

0.0 50 100 150 200
METRES
SCALE 1:5000

Stockland

Ripley Providence West

Bus Coverage Map (Indicative)

FIGURE 620.V30351 - SK02

Appendix D Traffic Flow Diagrams

Providence West ROL 2, 817 Ripley Road

Traffic Impact Assessment

Stockland

SLR Project No.: 620.30351.02004

13 March 2026

App D1 - Ripley Road Traffic Counts

Link Counts - Ripley Road

			Ripley Road								Average Growth Rate (linear per annum)		
29-11-2017	*303*	*(134)*	***4,180 vpd***	*136*	*(263)*								
			Ripley Road										
19-10-2021	*640*	*(405)*	***10,940 vpd***	*463*	*(680)*	from	2017	to	2021	***40.4%***	***% p.a.***		
			Ripley Road										
28-02-2023	*653*	*(418)*	***11,055 vpd***	*476*	*(664)*	from	2021	to	2023	***0.5%***	***% p.a.***		
						from	2017	to	2023	***27.4%***	***% p.a.***		
			Ripley Road										
13-08-2024	*698*	*(483)*	***12,385 vpd***	*665*	*(631)*	from	2023	to	2024	***12.0%***	***% p.a.***		
	average over the past 3 years is most suitable for background (and reflects new devt traffic)					from	2021	to	2024	***4.4%***	***% p.a.***		
						from	2017	to	2024	***28.0%***	***% p.a.***		

Intersection Counts - Ripley Road / Providenec Parade

		588	*(536)*		*Ripley Road*		*454*	*(510)*					
0					*15*	*439*				*444*			
(0)					*(36)*	*(474)*				*(477)*			
	Scott PDI			*right*	*thru*	*left*							
			left				*right*	*565*	*(509)*				
			thru		**20-05-2021**		*thru*						
			right		***10,485 vpd***		*left*	*1*	*(0)*				
				left	*thru*	*right*			*Providence Pde*				
0					*23*	*5*				*566*			
(0)					*(27)*	*(3)*				*(509)*			
		28	*(30)*		*Ripley Road*		*16*	*(36)*					
					550 vpd								
		1.5%	*1.4%*				*12.0%*	*4.4%*					

		614	*(559)*		*Ripley Road*		*618*	*(578)*					
0					*20*	*598*				*605*			
(0)					*(31)*	*(547)*				*(552)*			
	Scott PDI			*right*	*thru*	*left*							
			left				*right*	*512*	*(468)*				
			thru		**26-03-2024**		*thru*						
			right		***11,935 vpd***		*left*	*2*	*(4)*				
				left	*thru*	*right*			*Providence Pde*				
0					*102*	*7*				*514*			
(0)					*(91)*	*(5)*				*(472)*			
		109	*(96)*		*Ripley Road*		*22*	*(35)*					
		96.4%	*73.3%*		***1,310 vpd***		*12.5%*	*-0.9%*					

											Average Growth Rate (linear per annum)		
											from 2021 to 2024	***4.6%***	***% p.a.***
											12.1%		
											5.2%		
											-3.1%		
											-2.4%		

App D2 - Interim Volumes - SW18 / SW19

	school		125	dwellings	20	(67)		from Prov West ROL2		80	(33)			
	0%	0			40	(87)		*Prov West ROL2*		100	(53)			
	occupied	dwellings	10				10	10	80					80
	0	0	(10)				(10)	(10)	(33)					(33)
	(0)	(0)	South West Trunk Road				right	thru	left					
				10	(10)	left		**SW18 / SW19**		right	20	(67)		
to/ from east	50%	from WEST		0	(0)	thru		**2029**		thru	0	(0)		
to/ from south	10%			0	(0)	right		**1,398 vpd**		left	0	(0)		
							left	thru	right				South West Trunk Road	
	0	0	20				0	10	0					20
	(0)	(0)	(20)				(0)	(10)	(0)					(67)
					10	(10)		*Future Watsons Road*		10	(10)			
			20	vph	0	(0)		from existing Watsons Rd		0	(0)			
			0	dwellings	0	(0)		from future dwellings		0	(0)			

	school		366	dwellings	58	(196)		from Prov West ROL2		234	(96)			
	0%	0			78	(216)		*Prov West ROL2*		254	(116)			
	occupied	dwellings	10				10	10	234					234
	0	0	(10)				(10)	(10)	(96)					(96)
	(0)	(0)	South West Trunk Road				right	thru	left					
				10	(10)	left		**SW18 / SW19**		right	58	(196)		
to/ from east	50%	from WEST		0	(0)	thru		**2030**		thru	0	(0)		
to/ from south	10%			0	(0)	right		**3,324 vpd**		left	0	(0)		
							left	thru	right				South West Trunk Road	
	0	0	20				0	10	0					58
	(0)	(0)	(20)				(0)	(10)	(0)					(196)
					10	(10)		*Future Watsons Road*		10	(10)			
			20	vph	0	(0)		from existing Watsons Rd		0	(0)			
			0	dwellings	0	(0)		from future dwellings		0	(0)			

	school		486	dwellings	78	(260)		from Prov West ROL2		311	(128)			
	0%	180			98	(280)		*Prov West ROL2*		331	(148)			
	occupied	dwellings	125				10	10	311					426
	0	115	(58)				(10)	(10)	(128)					(176)
	(0)	(48)	South West Trunk Road				right	thru	left					
				10	(10)	left		**SW18 / SW19**		right	78	(260)		
to/ from east	50%	from WEST		115	(48)	thru		**2031**		thru	29	(96)		
to/ from south	10%			0	(0)	right		**5,724 vpd**		left	0	(0)		
							left	thru	right				South West Trunk Road	
	0	29	49				0	10	0					106
	(0)	(96)	(116)				(0)	(10)	(0)					(357)
					10	(10)		*Future Watsons Road*		10	(10)			
			20	vph	0	(0)		from existing Watsons Rd		0	(0)			
			0	dwellings	0	(0)		from future dwellings		0	(0)			

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D3 - Interim Volumes - SW18 / SW19

	school		486	dwellings	78	(260)		from Prov West ROL2		311	(128)			
	0%	360			98	(280)		*Prov West ROL2*		331	(148)			
	occupied	dwellings	240				10	10	311					605
	0	230	(105)				(10)	(10)	(128)					(250)
	(0)	(95)	South West Trunk Road				right	thru	left					
				10	(10)	left		**SW18 / SW19**		right	78	(260)		
to/ from east	50%	from WEST		230	(95)	thru		**2032**		thru	58	(193)		
to/ from south	10%			0	(0)	right		***7,964 vpd***		left	16	(54)		
							left	thru	right			South West Trunk Road		
	0	58	142				0	10	64					151
	(0)	(193)	(239)				(0)	(10)	(26)					(507)
					74	(36)		*Future Watsons Road*		26	(64)			
			20	vph	0	(0)		from existing Watsons Rd		0	(0)			
			100	dwellings	64	(26)		from future dwellings		16	(54)			

	school		486	dwellings	78	(260)		from Prov West ROL2		311	(128)			
	0%	890			98	(280)		*Prov West ROL2*		331	(148)			
	occupied	dwellings	580				10	10	311					1,008
	0	570	(245)				(10)	(10)	(128)					(416)
	(0)	(235)	South West Trunk Road				right	thru	left					
				10	(10)	left		**SW18 / SW19**		right	78	(260)		
to/ from east	50%	from WEST		570	(235)	thru		**2033**		thru	142	(477)		
to/ from south	10%			0	(0)	right		***13,004 vpd***		left	32	(107)		
							left	thru	right			South West Trunk Road		
	0	142	290				0	10	128					252
	(0)	(477)	(550)				(0)	(10)	(53)					(844)
					138	(63)		*Future Watsons Road*		42	(117)			
			20	vph	0	(0)		from existing Watsons Rd		0	(0)			
			200	dwellings	128	(53)		from future dwellings		32	(107)			

	school		486	dwellings	78	(260)		from Prov West ROL2		311	(128)			
	20%	1,140			98	(280)		*Prov West ROL2*		331	(148)			
	occupied	dwellings	824				10	10	311					1,303
	141	730	(413)				(10)	(10)	(128)					(594)
	(170)	(301)	South West Trunk Road				right	thru	left					
				10	(10)	left		**SW18 / SW19**		right	78	(260)		
to/ from east	50%	from WEST		800	(386)	thru		**2034**		thru	288	(668)		
to/ from south	10%			14	(17)	right		***17,712 vpd***		left	48	(161)		
							left	thru	right			South West Trunk Road		
	211	182	521				21	10	192					414
	(114)	(611)	(778)				(11)	(10)	(79)					(1089)
					223	(101)		*Future Watsons Road*		72	(188)			
			20	vph	0	(0)		from existing Watsons Rd		0	(0)			
			300	dwellings	192	(79)		from future dwellings		48	(161)			

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D4 - Interim Volumes - SW18 / SW19

school			486	dwellings	78	(260)		from Prov West ROL2			311	(128)			
40%	1,390				98	(280)		*Prov West ROL2*			331	(148)			
occupied	dwellings		1,069					10	10	311					1,597
282	890		(581)					(10)	(10)	(128)					(771)
(341)	(367)		South West Trunk Road					right	thru	left					
				10	(10)	left			**SW18 / SW19**		right	78	(260)		
to/ from east	50%	from WEST		1,030	(537)	thru			**2035**		thru	434	(859)		
to/ from south	10%			28	(34)	right			**22,420 vpd**		left	64	(214)		
								left	thru	right				South West Trunk Road	
422	222		752					42	10	256					575
(227)	(745)		(1007)					(23)	(10)	(106)					(1333)
					308	(138)		*Future Watsons Road*			102	(258)			
			20	vph	0	(0)		from existing Watsons Rd			0	(0)			
			400	dwellings	256	(106)		from future dwellings			64	(214)			

school			486	dwellings	78	(260)		from Prov West ROL2			311	(128)			
60%	1,640				98	(280)		*Prov West ROL2*			331	(148)			
occupied	dwellings		1,313					10	10	311					1,892
422	1,050		(750)					(10)	(10)	(128)					(949)
(511)	(433)		South West Trunk Road					right	thru	left					
				10	(10)	left			**SW18 / SW19**		right	78	(260)		
to/ from east	50%	from WEST		1,261	(689)	thru			**2036**		thru	579	(1049)		
to/ from south	10%			42	(51)	right			**27,128 vpd**		left	80	(268)		
								left	thru	right				South West Trunk Road	
634	262		983					63	10	320					737
(341)	(879)		(1236)					(34)	(10)	(132)					(1578)
					393	(176)		*Future Watsons Road*			132	(329)			
			20	vph	0	(0)		from existing Watsons Rd			0	(0)			
			500	dwellings	320	(132)		from future dwellings			80	(268)			

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D5 - Interim Volumes - SW18

		30	(77)		Prov West ROL2		90	(43)			
20				10		80					90
(20)				(10)		(33)					(43)
South West Trunk Road				right	thru	left					
	10	(10)	left		**SW18**		right	20	(67)		
	10	(10)	thru		**2029**		thru	16	(7)		
			right		**1,411 vpd**		left				
				left	thru	right			South West Trunk Road		
26											36
(17)											(73)

		68	(206)		Prov West ROL2		244	(106)			
10				10		234					234
(10)				(10)		(96)					(96)
South West Trunk Road				right	thru	left					
	10	(10)	left		**SW18**		right	58	(196)		
	0	(0)	thru		**2030**		thru	16	(7)		
			right		**3,237 vpd**		left				
				left	thru	right			South West Trunk Road		
26											74
(17)											(203)

		88	(270)		Prov West ROL2		321	(138)			
125				10		311					426
(58)				(10)		(128)					(176)
South West Trunk Road				right	thru	left					
	10	(10)	left		**SW18**		right	78	(260)		
	115	(48)	thru		**2031**		thru	45	(103)		
			right		**5,637 vpd**		left				
				left	thru	right			South West Trunk Road		
55											122
(113)											(363)

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D6 - Interim Volumes - SW18

			88	(270)		Prov West ROL2		321	(138)		
240					10		311				541
(105)					(10)		(128)				(223)
South West Trunk Road					right	thru	left				
		10	(10)	left		**SW18**		right	78	(260)	
		230	(95)	thru		**2032**		thru	138	(226)	
				right		**7,529 vpd**		left			
					left	thru	right			South West Trunk Road	
148											215
(236)											(486)

			88	(270)		Prov West ROL2		321	(138)		
580					10		311				880
(245)					(10)		(128)				(363)
South West Trunk Road					right	thru	left				
		10	(10)	left		**SW18**		right	78	(260)	
		570	(235)	thru		**2033**		thru	286	(536)	
				right		**12,221 vpd**		left			
					left	thru	right			South West Trunk Road	
296											364
(546)											(797)

			88	(270)		Prov West ROL2		321	(138)		
824					10		311				1,125
(413)					(10)		(128)				(531)
South West Trunk Road					right	thru	left				
		10	(10)	left		**SW18**		right	78	(260)	
		814	(403)	thru		**2034**		thru	517	(765)	
				right		**16,581 vpd**		left			
					left	thru	right			South West Trunk Road	
527											595
(775)											(1025)

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D7 - Interim Volumes - SW18

			88	(270)		Prov West ROL2			321	(138)		
1,069					10			311				1,369
(581)					(10)			(128)				(700)
South West Trunk Road					right	thru		left				
	10	(10)		left		**SW18**			right	78	(260)	
	1,059	(571)		thru		**2035**			thru	748	(994)	
				right		**20,941 vpd**			left			
					left	thru		right			South West Trunk Road	
758												826
(1004)												(1254)

			88	(270)		Prov West ROL2			321	(138)		
1,313					10			311				1,614
(750)					(10)			(128)				(868)
South West Trunk Road					right	thru		left				
	10	(10)		left		**SW18**			right	78	(260)	
	1,303	(740)		thru		**2036**			thru	979	(1222)	
				right		**25,301 vpd**			left			
					left	thru		right			South West Trunk Road	
989												1,056
(1232)												(1482)

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D8 - Interim Volumes - SW19 TEMP

										80
										(33)
South West Trunk Road										
					SW19 TEMP					
		80	(33)	thru	**2029**	thru	20	(67)		
		0	(0)	right	**1,198 vpd**	left	4	(13)		
					left	right			South West Trunk Road	
					0	16				36
					(0)	(7)				(73)
			16	(7)	Watsons Road		4	(13)		
			16	(7)	from existing Watsons Rd		4	(13)		
0	dwellings		0	(0)	from future dwellings		0	(0)		

										234
										(96)
South West Trunk Road										
					SW19 TEMP					
		234	(96)	thru	**2030**	thru	58	(196)		
		0	(0)	right	**3,124 vpd**	left	4	(13)		
					left	right			South West Trunk Road	
					0	16				74
					(0)	(7)				(203)
			16	(7)	Watsons Road		4	(13)		
			16	(7)	from existing Watsons Rd		4	(13)		
0	dwellings		0	(0)	from future dwellings		0	(0)		

										426
										(176)
South West Trunk Road										
					SW19 TEMP					
		426	(176)	thru	**2031**	thru	106	(357)		
		0	(0)	right	**5,524 vpd**	left	4	(13)		
					left	right			South West Trunk Road	
					0	16				122
					(0)	(7)				(363)
			16	(7)	Watsons Road		4	(13)		
			16	(7)	from existing Watsons Rd		4	(13)		
0	dwellings		0	(0)	from future dwellings		0	(0)		

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D9 - Interim Volumes - SW19 TEMP

541										621
(223)										(256)
South West Trunk Road										
					SW19 TEMP					
	541	(223)	thru		**2032**		thru	135	(453)	
	0	(0)	right		***7,764 vpd***		left	20	(67)	
				left		right			South West Trunk Road	
215				0		80				155
(486)				(0)		(33)				(520)
		80	(33)		Watsons Road		20	(67)		
		16	(7)		from existing Watsons Rd		4	(13)		
100	dwellings	64	(26)		from future dwellings		16	(54)		

880										1,024
(363)										(423)
South West Trunk Road										
					SW19 TEMP					
	880	(363)	thru		**2033**		thru	220	(737)	
	0	(0)	right		***12,804 vpd***		left	36	(121)	
				left		right			South West Trunk Road	
364				0		144				256
(797)				(0)		(59)				(858)
		144	(59)		Watsons Road		36	(121)		
		16	(7)		from existing Watsons Rd		4	(13)		
200	dwellings	128	(53)		from future dwellings		32	(107)		

1,125										1,319
(531)										(600)
South West Trunk Road										
					SW19 TEMP					
	1,111	(514)	thru		**2034**		thru	366	(928)	
	14	(17)	right		***17,512 vpd***		left	52	(174)	
				left		right			South West Trunk Road	
595				21		208				418
(1025)				(11)		(86)				(1102)
		229	(97)		Watsons Road		66	(191)		
		16	(7)		from existing Watsons Rd		4	(13)		
300	dwellings	192	(79)		from future dwellings		48	(161)		

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D10 - Interim Volumes - SW19 TEMP

1,369										*1,613*
(700)										*(778)*
South West Trunk Road										
					SW19 TEMP					
	1,341	*(666)*	*thru*		***2035***		*thru*	*511*	*(1119)*	
	28	*(34)*	*right*		***22,220 vpd***		*left*	*68*	*(228)*	
				left		*right*			*South West Trunk Road*	
826				*42*		*272*				*579*
(1254)				*(23)*		*(112)*				*(1347)*
		314	*(135)*		*Watsons Road*		*96*	*(262)*		
		16	*(7)*	from existing Watsons Rd			*4*	*(13)*		
400	*dwellings*	*256*	*(106)*	from future dwellings			*64*	*(214)*		

1,614										*1,908*
(868)										*(955)*
South West Trunk Road										
					SW19 TEMP					
	1,572	*(817)*	*thru*		***2036***		*thru*	*657*	*(1310)*	
	42	*(51)*	*right*		***26,928 vpd***		*left*	*84*	*(281)*	
				left		*right*			*South West Trunk Road*	
1,056				*63*		*336*				*741*
(1482)				*(34)*		*(139)*				*(1591)*
		399	*(173)*		*Watsons Road*		*126*	*(333)*		
		16	*(7)*	from existing Watsons Rd			*4*	*(13)*		
500	*dwellings*	*320*	*(132)*	from future dwellings			*80*	*(268)*		

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

App D11 - Interim Volumes - SW20

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

			642	*(271)*		*Ripley Road*	*104*	*(325)*		
		96			*24*	*80*				
		(40)			*(80)*	*(245)*				
		South West Trunk Road			*right*	*thru*				
to/ from east	40%	*96*	*(40)*	*left*		***SW20***				
school						***2029***				
to/ from south	10%	*0*	*(0)*	*right*		***6,706 vpd***				
					left	*thru*				
		570			*0*	*546*				
		(311)			*(0)*	*(231)*				
			546	*(231)*		*Ripley Road*	*80*	*(245)*		
			48	*(20)*		from existing Bayliss Road	*12*	*(40)*	*498*	
			498	*(211)*		from SE01	*68*	*(204)*	*(211)*	
						5,508 vpd				

			1,084	*(455)*		*Ripley Road*	*174*	*(552)*		
		250			*62*	*112*				
		(103)			*(209)*	*(342)*				
		South West Trunk Road			*right*	*thru*				
to/ from east	40%	*250*	*(103)*	*left*		***SW20***				
school						***2030***				
to/ from south	10%	*0*	*(0)*	*right*		***11,321 vpd***				
					left	*thru*				
		896			*0*	*834*				
		(561)			*(0)*	*(352)*				
			834	*(352)*		*Ripley Road*	*112*	*(342)*		
			48	*(20)*		from existing Bayliss Road	*12*	*(40)*	*786*	
			786	*(332)*		from SE01	*100*	*(302)*	*(332)*	
						8,197 vpd				

			1,447	*(607)*		*Ripley Road*	*244*	*(776)*		
		442			*110*	*133*				
		(182)			*(370)*	*(406)*				
		South West Trunk Road			*right*	*thru*				
to/ from east	40%	*442*	*(182)*	*left*		***SW20***				
school						***2031***				
to/ from south	10%	*0*	*(0)*	*right*		***15,365 vpd***				
					left	*thru*				
		1,115			*0*	*1,005*				
		(794)			*(0)*	*(424)*				
			1,005	*(424)*		*Ripley Road*	*133*	*(406)*		
			48	*(20)*		from existing Bayliss Road	*12*	*(40)*	*957*	
			957	*(405)*		from SE01	*121*	*(366)*	*(405)*	
						9,841 vpd				

App D12 - Interim Volumes - SW20

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

			1,797	*(753)*		*Ripley Road*	*310*	*(990)*		
		621			*155*	*155*				
		(256)			*(520)*	*(470)*				
		South West Trunk Road			*right*	*thru*				
to/ from east	40%	*621*	*(256)*	*left*		***SW20***				
school						***2032***				
to/ from south	10%	*0*	*(0)*	*right*		***19,249 vpd***				
					left	*thru*				
		1,331			*0*	*1,176*				
		(1017)			*(0)*	*(497)*				
			1,176	*(497)*		*Ripley Road*	*155*	*(470)*		
			48	*(20)*	from existing Bayliss Road		*12*	*(40)*		*1,128*
			1,128	*(477)*	from SE01		*143*	*(429)*		*(477)*
					11,485 vpd					

			2,264	*(946)*		*Ripley Road*	*416*	*(1346)*		
		1,024			*256*	*160*				
		(423)			*(858)*	*(488)*				
		South West Trunk Road			*right*	*thru*				
to/ from east	40%	*1,024*	*(423)*	*left*		***SW20***				
school						***2033***				
to/ from south	10%	*0*	*(0)*	*right*		***24,862 vpd***				
					left	*thru*				
		1,496			*0*	*1,240*				
		(1381)			*(0)*	*(523)*				
			1,240	*(523)*		*Ripley Road*	*160*	*(488)*		
			48	*(20)*	from existing Bayliss Road		*12*	*(40)*		*1,192*
			1,192	*(504)*	from SE01		*148*	*(448)*		*(504)*
					12,058 vpd					

			2,608	*(1133)*		*Ripley Road*	*562*	*(1598)*		
		1,319			*397*	*166*				
		(600)			*(1091)*	*(507)*				
		South West Trunk Road			*right*	*thru*				
to/ from east	40%	*1,305*	*(583)*	*left*		***SW20***				
school						***2034***				
to/ from south	10%	*14*	*(17)*	*right*		***29,826 vpd***				
					left	*thru*				
		1,721			*21*	*1,304*				
		(1652)			*(11)*	*(550)*				
			1,325	*(561)*		*Ripley Road*	*180*	*(524)*		
			48	*(20)*	from existing Bayliss Road		*12*	*(40)*		*1,256*
			1,256	*(530)*	from SE01		*154*	*(467)*		*(530)*
					12,950 vpd					

App D13 - Interim Volumes - SW20

This assumes that a Wensley Road overpass or interchange is NOT in place until 2037

			2,953	*(1320)*		*Ripley Road*	*708*	*(1850)*	
		1,613			*537*	*171*			
		(778)			*(1324)*	*(526)*			
		South West Trunk Road			*right*	*thru*			
to/ from east	40%		*1,585*	*(744)*	*left*	***SW20***			
school						***2035***			
to/ from south	10%		*28*	*(34)*	*right*	***34,790 vpd***			
					left	*thru*			
		1,947			*42*	*1,368*			
		(1923)			*(23)*	*(576)*			
			1,410	*(599)*		*Ripley Road*	*200*	*(560)*	
			48	*(20)*	from existing Bayliss Road		*12*	*(40)*	*1,320*
			1,320	*(556)*	from SE01		*159*	*(486)*	*(556)*
					13,842 vpd				

			3,297	*(1507)*		*Ripley Road*	*855*	*(2102)*	
		1,908			*678*	*177*			
		(955)			*(1557)*	*(545)*			
		South West Trunk Road			*right*	*thru*			
to/ from east	40%		*1,865*	*(904)*	*left*	***SW20***			
school						***2036***			
to/ from south	10%		*42*	*(51)*	*right*	***39,754 vpd***			
					left	*thru*			
		2,173			*63*	*1,432*			
		(2194)			*(34)*	*(603)*			
			1,495	*(637)*		*Ripley Road*	*219*	*(596)*	
			48	*(20)*	from existing Bayliss Road		*12*	*(40)*	*1,384*
			1,384	*(583)*	from SE01		*165*	*(504)*	*(583)*
					14,734 vpd				

App D14 - Ultimate (Model) Volumes - SW18 / SW19

		98	(280)		Prov West ROL2		331	(148)		
166				10	10	311				551
(352)				(10)	(10)	(128)				(532)
South West Trunk Road				right	thru	left				
	10	(10)	left		**ICC Aimsun Model**		right	78	(260)	
	146	(322)	thru		**2031**		thru	432	(250)	
	10	(20)	right		**13,004 vpd**		left	68	(194)	
				left	thru	right			South West Trunk Road	
616				70	10	94				578
(408)				(56)	(10)	(82)				(704)
		174	(148)		Future Watsons Road		88	(224)		

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

		98	(280)		Prov West ROL2		331	(148)		
368				10	10	311				827
(582)				(10)	(10)	(128)				(730)
South West Trunk Road				right	thru	left				
	10	(10)	left		**ICC Aimsun Model**		right	78	(260)	
	268	(416)	thru		**2041**		thru	516	(468)	
	90	(156)	right		**20,784 vpd**		left	206	(324)	
				left	thru	right			South West Trunk Road	
1,108				324	10	248				800
(772)				(98)	(10)	(186)				(1052)
		582	(294)		Future Watsons Road		306	(490)		

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

		98	(280)		Prov West ROL2		331	(148)		
508				10	10	311				1,083
(1004)				(10)	(10)	(128)				(1094)
South West Trunk Road				right	thru	left				
	10	(10)	left		**ICC Aimsun Model**		right	78	(260)	
	362	(632)	thru		**2046**		thru	750	(638)	
	136	(362)	right		**29,854 vpd**		left	376	(490)	
				left	thru	right			South West Trunk Road	
1,644				464	10	410				1,204
(1152)				(160)	(10)	(334)				(1388)
		884	(504)		Future Watsons Road		522	(862)		

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

App D15 - Ultimate (Model) Volumes - SW18

			88	(270)		Prov West ROL2		321	(138)		
	166				10		311				467
	(352)				(10)		(128)				(470)
South West Trunk Road					right	thru	left				
		10	(10)	left		**ICC Aimsun Model**		right	78	(260)	
		156	(342)	thru		**2031**		thru	502	(306)	
				right		**10,614 vpd**		left			
					left	thru	right			South West Trunk Road	
	512										580
	(316)										(566)

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

			88	(270)		Prov West ROL2		321	(138)		
	368				10		311				669
	(582)				(10)		(128)				(700)
South West Trunk Road					right	thru	left				
		10	(10)	left		**ICC Aimsun Model**		right	78	(260)	
		358	(572)	thru		**2041**		thru	840	(566)	
				right		**15,764 vpd**		left			
					left	thru	right			South West Trunk Road	
	850										918
	(576)										(826)

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

			88	(270)		Prov West ROL2		321	(138)		
	508				10		311				809
	(1004)				(10)		(128)				(1122)
South West Trunk Road					right	thru	left				
		10	(10)	left		**ICC Aimsun Model**		right	78	(260)	
		498	(994)	thru		**2046**		thru	1,214	(798)	
				right		**21,604 vpd**		left			
					left	thru	right			South West Trunk Road	
	1,224										1,292
	(808)										(1058)

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

App D16 - Ultimate (Model) Volumes - SW19 TEMP

156									240
(342)									(404)
South West Trunk Road									
				ICC Aimsun Model					
	146	(322)	thru	**2031**		thru	432	(250)	
	10	(20)	right	**8,720 vpd**		left	68	(194)	
				left	right			South West Trunk Road	
596				70	94				500
(388)				(56)	(82)				(444)
		164	(138)	Watsons Road		78	(214)		

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

358									516
(572)									(602)
South West Trunk Road									
				ICC Aimsun Model					
	268	(416)	thru	**2041**		thru	516	(468)	
	90	(156)	right	**16,500 vpd**		left	206	(324)	
				left	right			South West Trunk Road	
1,088				324	248				722
(752)				(98)	(186)				(792)
		572	(284)	Watsons Road		296	(480)		

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

498									772
(994)									(966)
South West Trunk Road									
				ICC Aimsun Model					
	362	(632)	thru	**2046**		thru	750	(638)	
	136	(362)	right	**25,570 vpd**		left	376	(490)	
				left	right			South West Trunk Road	
1,624				464	410				1,126
(1132)				(160)	(334)				(1128)
		874	(494)	Watsons Road		512	(852)		

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

App D17 - Ultimate (Model) Volumes - SW20

		520	(516)		Ripley Road	392	(806)
	264			180	212		
	(422)			(338)	(468)		
South West Trunk Road				right	thru		
	140	(324)	left	**ICC Aimsun Model (RI018) 2031**			
	124	(98)	right	**14,140 vpd**			
				left	thru		
	826			266	380		
	(636)			(106)	(192)		
		646	(298)		Ripley Road	336	(566)

9,230 vpd

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

		778	(426)		Ripley Road	704	(1436)
	522			320	384		
	(570)			(570)	(866)		
South West Trunk Road				right	thru		
	298	(226)	left	**ICC Aimsun Model (RI018) 2041**			
	224	(344)	right	**22,870 vpd**			
				left	thru		
	1,208			408	480		
	(1024)			(254)	(200)		
		888	(454)		Ripley Road	608	(1210)

15,800 vpd

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

		1,094	(686)		Ripley Road	972	(1958)
	764			496	476		
	(968)			(834)	(1124)		
South West Trunk Road				right	thru		
	480	(348)	left	**ICC Aimsun Model (RI018) 2046**			
	284	(620)	right	**32,690 vpd**			
				left	thru		
	1,738			628	614		
	(1468)			(296)	(338)		
		1,242	(634)		Ripley Road	760	(1744)

21,900 vpd

THIS ASSUMES THAT A WENSLEY ROAD OVERPASS OR INTERCHANGE IS IN PLACE FROM 2031

Appendix E SIDRA Results

Providence West ROL 2, 817 Ripley Road

Traffic Impact Assessment

Stockland

SLR Project No.: 620.30351.02004

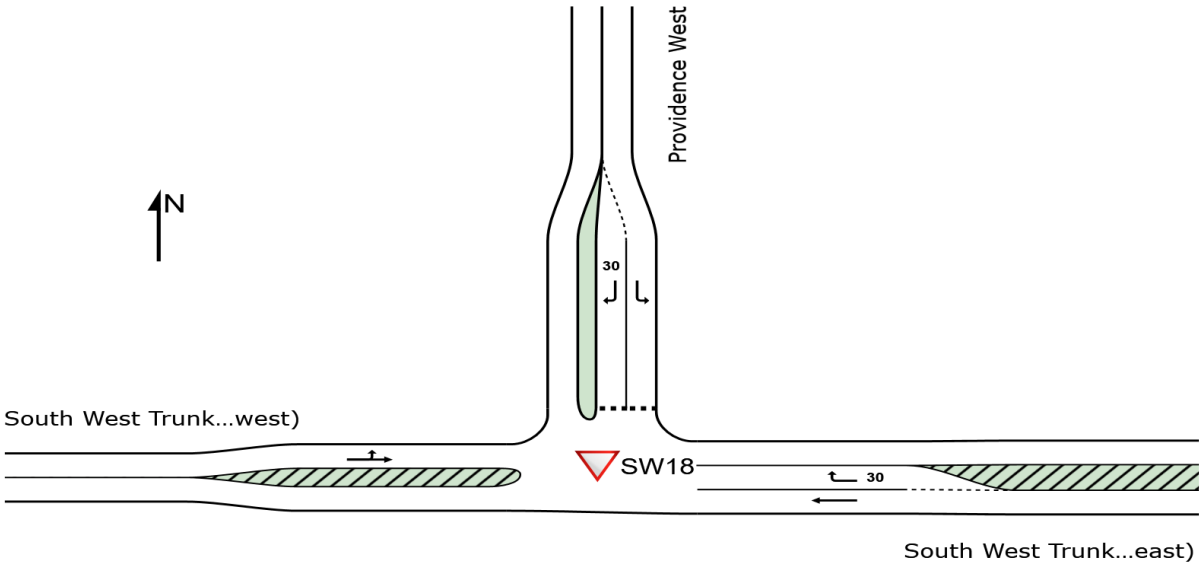
13 March 2026

SITE LAYOUT

Site: SW18 [I1 (SW18) Interim - 2029 No WR - AM (Site Folder: General)]

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

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



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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	11	0.0	11	0.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	21	0.0	21	0.0	0.012	5.6	LOS A	0.1	0.4	0.08	0.55	0.08	52.6
Approach			32	0.0	32	0.0	0.012	3.7	NA	0.1	0.4	0.05	0.36	0.05	54.9
North: Providence West															
7	L2	All MCs	84	0.0	84	0.0	0.052	5.6	LOS A	0.2	1.5	0.05	0.56	0.05	52.7
9	R2	All MCs	11	0.0	11	0.0	0.009	5.7	LOS A	0.0	0.2	0.14	0.54	0.14	52.4
Approach			95	0.0	95	0.0	0.052	5.6	LOS A	0.2	1.5	0.06	0.55	0.06	52.7
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.011	5.5	LOS A	0.0	0.0	0.00	0.30	0.00	55.1
11	T1	All MCs	11	0.0	11	0.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.30	0.00	57.4
Approach			21	0.0	21	0.0	0.011	2.8	NA	0.0	0.0	0.00	0.30	0.00	56.2
All Vehicles			147	0.0	147	0.0	0.052	4.8	NA	0.2	1.5	0.05	0.48	0.05	53.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	11	0.0	11	0.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	70	0.0	70	0.0	0.040	5.6	LOS A	0.2	1.3	0.08	0.55	0.08	52.6
Approach			81	0.0	81	0.0	0.040	4.9	NA	0.2	1.3	0.07	0.48	0.07	53.5
North: Providence West															
7	L2	All MCs	35	0.0	35	0.0	0.021	5.6	LOS A	0.1	0.6	0.05	0.56	0.05	52.7
9	R2	All MCs	11	0.0	11	0.0	0.010	6.0	LOS A	0.0	0.3	0.21	0.54	0.21	52.2
Approach			45	0.0	45	0.0	0.021	5.7	LOS A	0.1	0.6	0.09	0.55	0.09	52.6
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.011	5.5	LOS A	0.0	0.0	0.00	0.30	0.00	55.1
11	T1	All MCs	11	0.0	11	0.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.30	0.00	57.4
Approach			21	0.0	21	0.0	0.011	2.8	NA	0.0	0.0	0.00	0.30	0.00	56.2
All Vehicles			147	0.0	147	0.0	0.040	4.8	NA	0.2	1.3	0.06	0.47	0.06	53.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	11	0.0	11	0.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	62	0.0	62	0.0	0.035	5.6	LOS A	0.2	1.1	0.08	0.55	0.08	52.6
Approach			72	0.0	72	0.0	0.035	4.8	NA	0.2	1.1	0.07	0.47	0.07	53.6
North: Providence West															
7	L2	All MCs	246	0.0	246	0.0	0.152	5.6	LOS A	0.7	4.8	0.05	0.55	0.05	52.7
9	R2	All MCs	11	0.0	11	0.0	0.010	5.9	LOS A	0.0	0.3	0.20	0.54	0.20	52.2
Approach			257	0.0	257	0.0	0.152	5.6	LOS A	0.7	4.8	0.06	0.55	0.06	52.7
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.011	5.5	LOS A	0.0	0.0	0.00	0.30	0.00	55.1
11	T1	All MCs	11	0.0	11	0.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.30	0.00	57.4
Approach			21	0.0	21	0.0	0.011	2.8	NA	0.0	0.0	0.00	0.30	0.00	56.2
All Vehicles			350	0.0	350	0.0	0.152	5.2	NA	0.7	4.8	0.06	0.52	0.06	53.1

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	11	0.0	11	0.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	206	0.0	206	0.0	0.117	5.6	LOS A	0.6	4.0	0.09	0.55	0.09	52.6
Approach			217	0.0	217	0.0	0.117	5.3	NA	0.6	4.0	0.08	0.52	0.08	52.9
North: Providence West															
7	L2	All MCs	102	0.0	102	0.0	0.063	5.6	LOS A	0.3	1.8	0.05	0.56	0.05	52.7
9	R2	All MCs	11	0.0	11	0.0	0.011	6.7	LOS A	0.0	0.3	0.34	0.57	0.34	51.8
Approach			112	0.0	112	0.0	0.063	5.7	LOS A	0.3	1.8	0.08	0.56	0.08	52.7
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.011	5.5	LOS A	0.0	0.0	0.00	0.30	0.00	55.1
11	T1	All MCs	11	0.0	11	0.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.30	0.00	57.4
Approach			21	0.0	21	0.0	0.011	2.8	NA	0.0	0.0	0.00	0.30	0.00	56.2
All Vehicles			350	0.0	350	0.0	0.117	5.3	NA	0.6	4.0	0.08	0.52	0.08	53.0

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	30	0.0	30	0.0	0.016	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	82	0.0	82	0.0	0.051	5.9	LOS A	0.2	1.6	0.24	0.54	0.24	52.1
Approach			112	0.0	112	0.0	0.051	4.3	NA	0.2	1.6	0.17	0.40	0.17	54.1
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	0.221	6.0	LOS A	1.0	7.3	0.25	0.56	0.25	52.1
9	R2	All MCs	11	0.0	11	0.0	0.011	6.8	LOS A	0.0	0.3	0.35	0.57	0.35	51.8
Approach			338	0.0	338	0.0	0.221	6.0	LOS A	1.0	7.3	0.25	0.56	0.25	52.1
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.068	5.6	LOS A	0.0	0.0	0.00	0.05	0.00	57.1
11	T1	All MCs	121	0.0	121	0.0	0.068	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	59.5
Approach			132	0.0	132	0.0	0.068	0.5	NA	0.0	0.0	0.00	0.05	0.00	59.3
All Vehicles			581	0.0	581	0.0	0.221	4.4	NA	1.0	7.3	0.18	0.41	0.18	54.0

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	102	0.0	102	0.0	0.052	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	274	0.0	274	0.0	0.160	5.7	LOS A	0.8	5.7	0.17	0.54	0.17	52.4
Approach			375	0.0	375	0.0	0.160	4.2	NA	0.8	5.7	0.12	0.39	0.12	54.2
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.086	5.7	LOS A	0.4	2.5	0.13	0.54	0.13	52.5
9	R2	All MCs	11	0.0	11	0.0	0.015	8.1	LOS A	0.1	0.4	0.47	0.63	0.47	50.9
Approach			145	0.0	145	0.0	0.086	5.9	LOS A	0.4	2.5	0.16	0.55	0.16	52.4
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.031	5.5	LOS A	0.0	0.0	0.00	0.10	0.00	56.6
11	T1	All MCs	50	0.0	50	0.0	0.031	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	59.1
Approach			61	0.0	61	0.0	0.031	1.0	NA	0.0	0.0	0.00	0.10	0.00	58.6
All Vehicles			581	0.0	581	0.0	0.160	4.3	NA	0.8	5.7	0.12	0.40	0.12	54.2

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	61	0.0	61	0.0	0.031	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	82	0.0	82	0.0	0.057	6.3	LOS A	0.3	1.8	0.35	0.58	0.35	51.8
Approach			142	0.0	142	0.0	0.057	3.6	NA	0.3	1.8	0.20	0.33	0.20	55.0
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	0.248	6.5	LOS A	1.1	8.0	0.37	0.60	0.37	51.8
9	R2	All MCs	11	0.0	11	0.0	0.014	7.8	LOS A	0.1	0.4	0.45	0.62	0.45	51.1
Approach			338	0.0	338	0.0	0.248	6.6	LOS A	1.1	8.0	0.37	0.60	0.37	51.7
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.130	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.2
11	T1	All MCs	243	0.0	243	0.0	0.130	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.7
Approach			253	0.0	253	0.0	0.130	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.6
All Vehicles			733	0.0	733	0.0	0.248	3.8	NA	1.1	8.0	0.21	0.35	0.21	54.9

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	203	0.0	203	0.0	0.104	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	274	0.0	274	0.0	0.168	5.9	LOS A	0.8	5.9	0.24	0.55	0.24	52.1
Approach			477	0.0	477	0.0	0.168	3.4	NA	0.8	5.9	0.14	0.31	0.14	55.2
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.090	5.8	LOS A	0.4	2.6	0.20	0.55	0.20	52.3
9	R2	All MCs	11	0.0	11	0.0	0.018	9.4	LOS A	0.1	0.4	0.54	0.69	0.54	50.0
Approach			145	0.0	145	0.0	0.090	6.1	LOS A	0.4	2.6	0.22	0.56	0.22	52.1
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.057	5.6	LOS A	0.0	0.0	0.00	0.06	0.00	57.0
11	T1	All MCs	100	0.0	100	0.0	0.057	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	59.5
Approach			111	0.0	111	0.0	0.057	0.5	NA	0.0	0.0	0.00	0.06	0.00	59.2
All Vehicles			733	0.0	733	0.0	0.168	3.5	NA	0.8	5.9	0.13	0.32	0.13	55.1

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	150	0.0	150	0.0	0.077	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	82	0.0	82	0.0	0.087	8.2	LOS A	0.4	2.5	0.56	0.74	0.56	50.9
Approach			232	0.0	232	0.0	0.087	2.9	NA	0.4	2.5	0.20	0.26	0.20	56.4
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	0.372	9.4	LOS A	1.9	13.5	0.61	0.86	0.77	50.1
9	R2	All MCs	11	0.0	11	0.0	0.027	13.2	LOS A	0.1	0.7	0.68	0.82	0.68	47.5
Approach			338	0.0	338	0.0	0.372	9.5	LOS A	1.9	13.5	0.61	0.86	0.77	50.0
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.313	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.3
11	T1	All MCs	600	0.0	600	0.0	0.313	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.7
Approach			610	0.0	610	0.0	0.313	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles			1179	0.0	1179	0.0	0.372	3.4	NA	1.9	13.5	0.21	0.30	0.26	56.0

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	502	0.0	502	0.0	0.258	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	274	0.0	274	0.0	0.193	6.5	LOS A	0.9	6.6	0.39	0.60	0.39	51.7
Approach			776	0.0	776	0.0	0.258	2.3	NA	0.9	6.6	0.14	0.21	0.14	56.7
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.103	6.4	LOS A	0.4	2.9	0.33	0.59	0.33	51.9
9	R2	All MCs	11	0.0	11	0.0	0.035	16.1	LOS B	0.1	0.8	0.75	0.90	0.75	45.8
Approach			145	0.0	145	0.0	0.103	7.1	LOS A	0.4	2.9	0.36	0.61	0.36	51.4
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.133	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.3
11	T1	All MCs	247	0.0	247	0.0	0.133	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.7
Approach			258	0.0	258	0.0	0.133	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.6
All Vehicles			1179	0.0	1179	0.0	0.258	2.5	NA	0.9	6.6	0.14	0.22	0.14	56.6

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	303	0.0	303	0.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	82	0.0	82	0.0	0.128	10.6	LOS A	0.5	3.4	0.68	0.86	0.68	49.3
Approach			385	0.0	385	0.0	0.155	2.3	NA	0.5	3.4	0.14	0.18	0.14	57.3
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	0.540	13.8	LOS A	3.0	20.8	0.79	1.05	1.26	47.3
9	R2	All MCs	11	0.0	11	0.0	0.058	24.4	LOS B	0.2	1.3	0.86	0.94	0.86	41.5
Approach			338	0.0	338	0.0	0.540	14.1	LOS A	3.0	20.8	0.79	1.04	1.24	47.0
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.438	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.2
11	T1	All MCs	842	0.0	842	0.0	0.438	0.2	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Approach			853	0.0	853	0.0	0.438	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.6
All Vehicles			1575	0.0	1575	0.0	0.540	3.7	NA	3.0	20.8	0.20	0.27	0.30	55.9

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	703	0.0	703	0.0	0.361	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
6	R2	All MCs	274	0.0	274	0.0	0.229	7.3	LOS A	1.1	7.6	0.51	0.68	0.51	51.4
Approach			977	0.0	977	0.0	0.361	2.1	NA	1.1	7.6	0.14	0.19	0.14	57.1
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.121	7.1	LOS A	0.5	3.4	0.44	0.67	0.44	51.5
9	R2	All MCs	11	0.0	11	0.0	0.068	28.1	LOS B	0.2	1.5	0.88	0.95	0.88	39.8
Approach			145	0.0	145	0.0	0.121	8.6	LOS A	0.5	3.4	0.47	0.69	0.47	50.5
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.214	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.3
11	T1	All MCs	406	0.0	406	0.0	0.214	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Approach			417	0.0	417	0.0	0.214	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.7
All Vehicles			1539	0.0	1539	0.0	0.361	2.2	NA	1.1	7.6	0.13	0.19	0.13	57.1

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	456	0.0	456	0.0	0.234	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	82	0.0	82	0.0	0.214	15.5	LOS B	0.8	5.4	0.83	0.94	0.88	46.2
Approach			538	0.0	538	0.0	0.234	2.4	NA	0.8	5.4	0.13	0.14	0.13	57.3
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	0.888	36.4	LOS C	7.4	51.8	0.97	1.54	3.11	36.6
9	R2	All MCs	11	0.0	11	0.0	0.152	56.5	LOS D	0.4	3.0	0.95	0.98	0.96	30.4
Approach			338	0.0	338	0.0	0.888	37.0	LOS C	7.4	51.8	0.97	1.52	3.04	36.3
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.562	5.8	LOS A	0.0	0.0	0.00	0.01	0.00	57.0
11	T1	All MCs	1085	0.0	1085	0.0	0.562	0.3	LOS A	0.0	0.0	0.00	0.01	0.00	59.4
Approach			1095	0.0	1095	0.0	0.562	0.3	NA	0.0	0.0	0.00	0.01	0.00	59.4
All Vehicles			1971	0.0	1971	0.0	0.888	7.2	NA	7.4	51.8	0.20	0.30	0.56	53.1

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	904	0.0	904	0.0	0.464	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
6	R2	All MCs	274	0.0	274	0.0	0.280	8.5	LOS A	1.3	9.4	0.60	0.78	0.63	50.7
Approach			1178	0.0	1178	0.0	0.464	2.1	NA	1.3	9.4	0.14	0.18	0.15	57.3
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.147	8.1	LOS A	0.6	4.0	0.53	0.75	0.53	51.0
9	R2	All MCs	11	0.0	11	0.0	0.155	58.0	LOS E	0.4	3.1	0.95	0.98	0.96	30.0
Approach			145	0.0	145	0.0	0.155	11.7	LOS A	0.6	4.0	0.56	0.77	0.56	48.6
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.296	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.3
11	T1	All MCs	566	0.0	566	0.0	0.296	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.7
Approach			576	0.0	576	0.0	0.296	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles			1899	0.0	1899	0.0	0.464	2.3	NA	1.3	9.4	0.13	0.17	0.13	57.2

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	610	0.0	610	0.0	0.313	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
6	R2	All MCs	82	0.0	82	0.0	0.442	32.2	LOS C	1.6	11.0	0.94	1.03	1.18	38.2
Approach			691	0.0	691	0.0	0.442	3.9	NA	1.6	11.0	0.11	0.12	0.14	56.1
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	1.795	749.4	LOS F	93.8	656.3	1.00	5.45	19.94	4.5
9	R2	All MCs	11	0.0	11	0.0	0.537	251.2	LOS F	1.4	10.0	0.99	1.02	1.12	11.6
Approach			338	0.0	338	0.0	1.795	733.8	LOS F	93.8	656.3	1.00	5.31	19.35	4.6
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.686	5.9	LOS A	0.0	0.0	0.00	0.00	0.00	56.7
11	T1	All MCs	1327	0.0	1327	0.0	0.686	0.5	LOS A	0.0	0.0	0.00	0.00	0.00	59.1
Approach			1338	0.0	1338	0.0	0.686	0.5	NA	0.0	0.0	0.00	0.00	0.00	59.1
All Vehicles			2367	0.0	2367	0.0	1.795	106.1	NA	93.8	656.3	0.18	0.80	2.80	21.8

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	1105	0.0	1105	0.0	0.566	0.3	LOS A	0.0	0.0	0.00	0.00	0.00	59.5
6	R2	All MCs	274	0.0	274	0.0	0.353	10.6	LOS A	1.8	12.7	0.67	0.92	0.85	49.3
Approach			1379	0.0	1379	0.0	0.566	2.3	NA	1.8	12.7	0.13	0.18	0.17	57.1
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.184	9.4	LOS A	0.7	4.8	0.60	0.83	0.60	50.1
9	R2	All MCs	11	0.0	11	0.0	0.430	186.7	LOS F	1.2	8.1	0.99	1.02	1.09	14.6
Approach			145	0.0	145	0.0	0.430	22.2	LOS B	1.2	8.1	0.63	0.84	0.64	42.6
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.377	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.2
11	T1	All MCs	725	0.0	725	0.0	0.377	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.7
Approach			735	0.0	735	0.0	0.377	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.6
All Vehicles			2259	0.0	2259	0.0	0.566	2.9	NA	1.8	12.7	0.12	0.17	0.14	56.7

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	455	0.0	455	0.0	0.233	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	82	0.0	82	0.0	0.053	6.0	LOS A	0.2	1.7	0.27	0.55	0.27	52.0
Approach			537	0.0	537	0.0	0.233	1.0	NA	0.2	1.7	0.04	0.08	0.04	58.5
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.094	6.0	LOS A	0.4	2.7	0.25	0.56	0.25	52.1
9	R2	All MCs	11	0.0	11	0.0	0.021	10.9	LOS A	0.1	0.5	0.59	0.74	0.59	49.0
Approach			145	0.0	145	0.0	0.094	6.4	LOS A	0.4	2.7	0.28	0.57	0.28	51.9
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.084	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	57.2
11	T1	All MCs	154	0.0	154	0.0	0.084	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach			164	0.0	164	0.0	0.084	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.5
All Vehicles			846	0.0	846	0.0	0.233	1.8	NA	0.4	2.7	0.07	0.16	0.07	57.4

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	263	0.0	263	0.0	0.135	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	274	0.0	274	0.0	0.212	7.0	LOS A	1.0	7.1	0.46	0.65	0.46	51.5
Approach			537	0.0	537	0.0	0.212	3.6	NA	1.0	7.1	0.23	0.33	0.23	55.3
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	0.273	7.0	LOS A	1.2	8.7	0.45	0.65	0.45	51.5
9	R2	All MCs	11	0.0	11	0.0	0.027	13.0	LOS A	0.1	0.6	0.68	0.82	0.68	47.6
Approach			338	0.0	338	0.0	0.273	7.2	LOS A	1.2	8.7	0.46	0.66	0.46	51.4
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.179	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.3
11	T1	All MCs	339	0.0	339	0.0	0.179	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.7
Approach			349	0.0	349	0.0	0.179	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.7
All Vehicles			1224	0.0	1224	0.0	0.273	3.6	NA	1.2	8.7	0.23	0.33	0.23	55.3

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	543	0.0	543	0.0	0.279	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
6	R2	All MCs	82	0.0	82	0.0	0.060	6.5	LOS A	0.3	1.8	0.38	0.59	0.38	51.7
Approach			625	0.0	625	0.0	0.279	0.9	NA	0.3	1.8	0.05	0.08	0.05	58.6
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	0.258	6.7	LOS A	1.2	8.2	0.40	0.62	0.40	51.7
9	R2	All MCs	11	0.0	11	0.0	0.030	14.3	LOS A	0.1	0.7	0.71	0.86	0.71	46.9
Approach			338	0.0	338	0.0	0.258	6.9	LOS A	1.2	8.2	0.41	0.63	0.41	51.5
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.150	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.3
11	T1	All MCs	282	0.0	282	0.0	0.150	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.7
Approach			293	0.0	293	0.0	0.150	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.6
All Vehicles			1255	0.0	1255	0.0	0.279	2.4	NA	1.2	8.2	0.14	0.21	0.14	56.7

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	493	0.0	493	0.0	0.253	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	274	0.0	274	0.0	0.238	7.5	LOS A	1.1	7.8	0.53	0.70	0.53	51.3
Approach			767	0.0	767	0.0	0.253	2.7	NA	1.1	7.8	0.19	0.25	0.19	56.5
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.126	7.3	LOS A	0.5	3.5	0.46	0.68	0.46	51.5
9	R2	All MCs	11	0.0	11	0.0	0.046	20.2	LOS B	0.1	1.0	0.82	0.92	0.82	43.6
Approach			145	0.0	145	0.0	0.126	8.2	LOS A	0.5	3.5	0.49	0.70	0.49	50.8
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.230	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.3
11	T1	All MCs	438	0.0	438	0.0	0.230	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
Approach			448	0.0	448	0.0	0.230	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles			1360	0.0	1360	0.0	0.253	2.5	NA	1.1	7.8	0.16	0.22	0.16	56.8

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	789	0.0	789	0.0	0.405	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
6	R2	All MCs	82	0.0	82	0.0	0.066	6.9	LOS A	0.3	2.0	0.44	0.63	0.44	51.5
Approach			871	0.0	871	0.0	0.405	0.8	NA	0.3	2.0	0.04	0.06	0.04	58.8
North: Providence West															
7	L2	All MCs	327	0.0	327	0.0	0.286	7.2	LOS A	1.3	9.0	0.48	0.68	0.48	51.4
9	R2	All MCs	11	0.0	11	0.0	0.059	24.7	LOS B	0.2	1.3	0.86	0.94	0.86	41.3
Approach			338	0.0	338	0.0	0.286	7.8	LOS A	1.3	9.0	0.49	0.68	0.49	51.1
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.201	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.3
11	T1	All MCs	381	0.0	381	0.0	0.201	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Approach			392	0.0	392	0.0	0.201	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.7
All Vehicles			1600	0.0	1600	0.0	0.405	2.1	NA	1.3	9.0	0.13	0.18	0.13	57.2

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Interim - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: South West Trunk Road (east)															
5	T1	All MCs	672	0.0	672	0.0	0.344	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
6	R2	All MCs	274	0.0	274	0.0	0.322	9.7	LOS A	1.6	11.4	0.65	0.87	0.77	49.9
Approach			946	0.0	946	0.0	0.344	2.9	NA	1.6	11.4	0.19	0.25	0.22	56.5
North: Providence West															
7	L2	All MCs	135	0.0	135	0.0	0.168	8.8	LOS A	0.6	4.5	0.57	0.80	0.57	50.5
9	R2	All MCs	11	0.0	11	0.0	0.101	39.2	LOS C	0.3	2.1	0.92	0.97	0.92	35.5
Approach			145	0.0	145	0.0	0.168	11.0	LOS A	0.6	4.5	0.60	0.81	0.60	49.0
West: South West Trunk Road (west)															
10	L2	All MCs	11	0.0	11	0.0	0.347	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	57.2
11	T1	All MCs	665	0.0	665	0.0	0.347	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.7
Approach			676	0.0	676	0.0	0.347	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.7
All Vehicles			1767	0.0	1767	0.0	0.347	2.5	NA	1.6	11.4	0.15	0.20	0.17	56.9

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

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

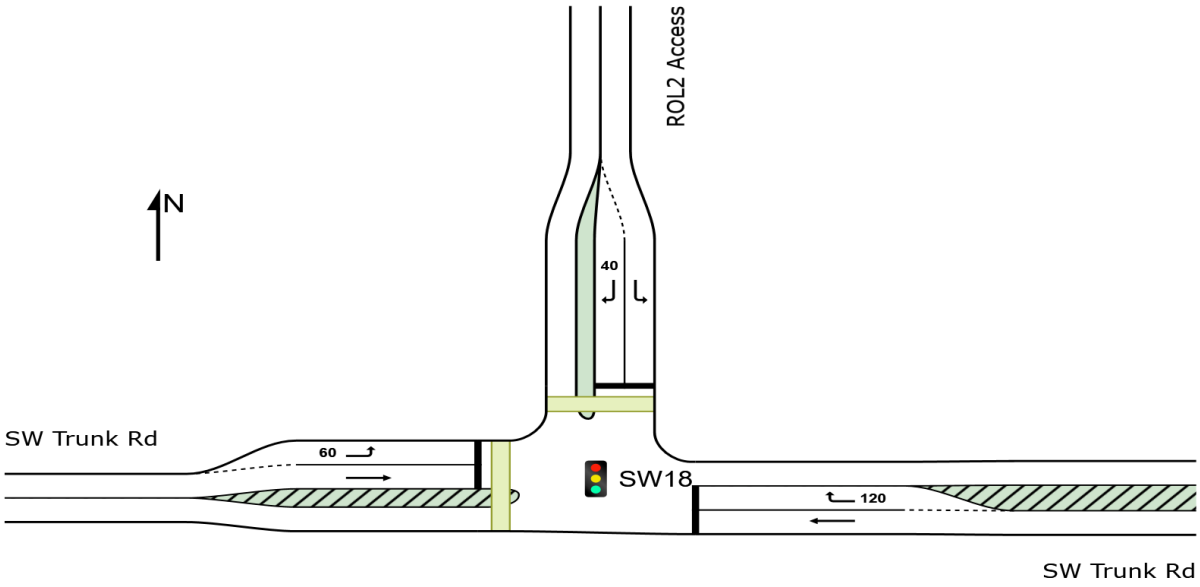
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SITE LAYOUT

Site: SW18 [I1 (SW18) Intermediate - 2029 No WR - AM (Site Folder: General)]

SW Trunk Rd / ROL2 Access
Prepared by: NN
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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Organisation: SLR CONSULTING AUSTRALIA | Licence: NETWORK / 1PC | Created: Thursday, 19 February 2026 2:39:10 PM
Project: C:\Users\nneale\OneDrive - SLR Consulting Limited\Documents_Assessments\Prov West\ROL2\Updated vol\SW18 - SW Trunk Rd & ROL2 Access - v0.2 - 20251029.sip9

MOVEMENT SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	11	5.0	11	5.0	0.010	5.7	LOS A	0.1	0.9	0.48	0.33	0.48	54.9
6	R2	All MCs	21	5.0	21	5.0	* 0.059	23.6	LOS B	0.4	3.1	0.84	0.69	0.84	41.8
Approach			32	5.0	32	5.0	0.059	17.6	LOS B	0.4	3.1	0.72	0.57	0.72	45.4
North: ROL2 Access															
7	L2	All MCs	84	5.0	84	5.0	0.087	11.6	LOS A	1.0	7.2	0.51	0.68	0.51	48.5
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			95	5.0	95	5.0	0.087	12.9	LOS A	1.0	7.2	0.54	0.68	0.54	47.7
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	11	5.0	11	5.0	0.025	16.8	LOS B	0.2	1.5	0.81	0.55	0.81	47.0
Approach			21	5.0	21	5.0	0.027	19.6	LOS B	0.2	1.5	0.81	0.61	0.81	44.6
All Vehicles			147	5.0	147	5.0	0.087	14.9	LOS B	1.0	7.2	0.62	0.65	0.62	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

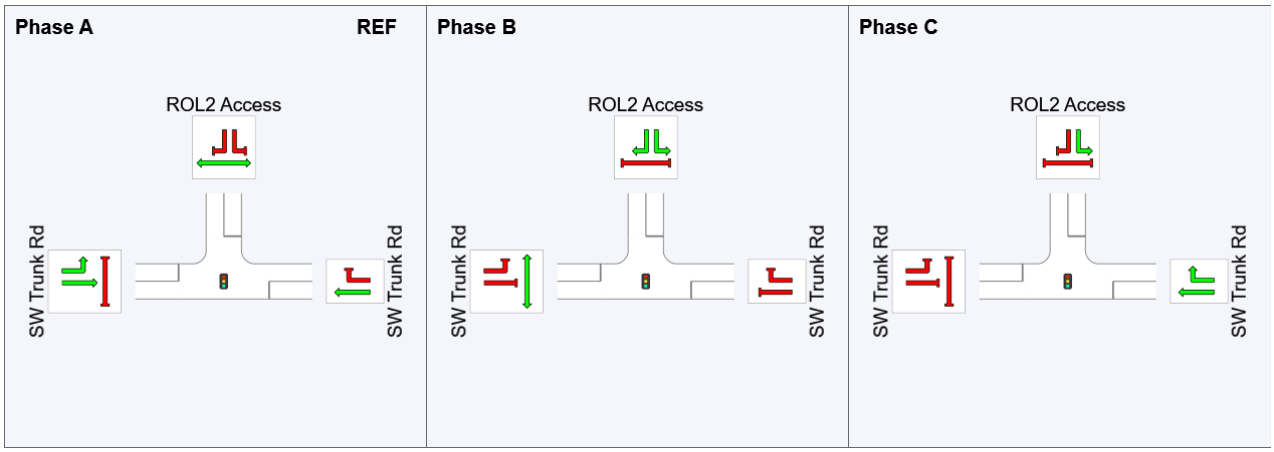
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

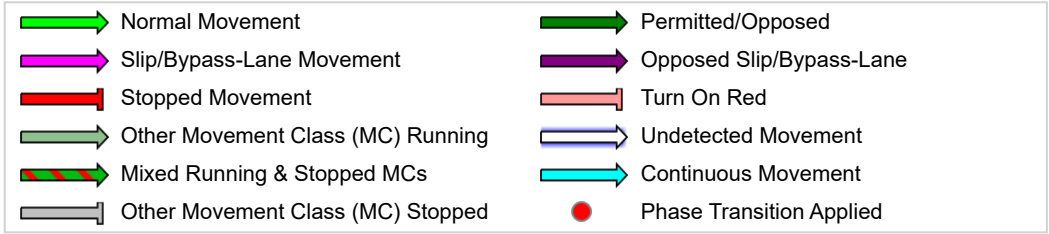
Phase	A	B	C
Phase Change Time (sec)	0	17	34
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	11	5.0	11	5.0	0.010	5.7	LOS A	0.1	0.9	0.48	0.33	0.48	54.9
6	R2	All MCs	70	5.0	70	5.0	* 0.196	24.4	LOS B	1.5	11.0	0.87	0.74	0.87	41.4
Approach			81	5.0	81	5.0	0.196	22.0	LOS B	1.5	11.0	0.82	0.69	0.82	42.8
North: ROL2 Access															
7	L2	All MCs	35	5.0	35	5.0	0.036	11.4	LOS A	0.4	2.9	0.49	0.66	0.49	48.6
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			45	5.0	45	5.0	0.036	14.2	LOS A	0.4	2.9	0.57	0.66	0.57	46.9
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	11	5.0	11	5.0	0.025	16.8	LOS B	0.2	1.5	0.81	0.55	0.81	47.0
Approach			21	5.0	21	5.0	0.027	19.6	LOS B	0.2	1.5	0.81	0.61	0.81	44.6
All Vehicles			147	5.0	147	5.0	0.196	19.2	LOS B	1.5	11.0	0.74	0.67	0.74	44.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

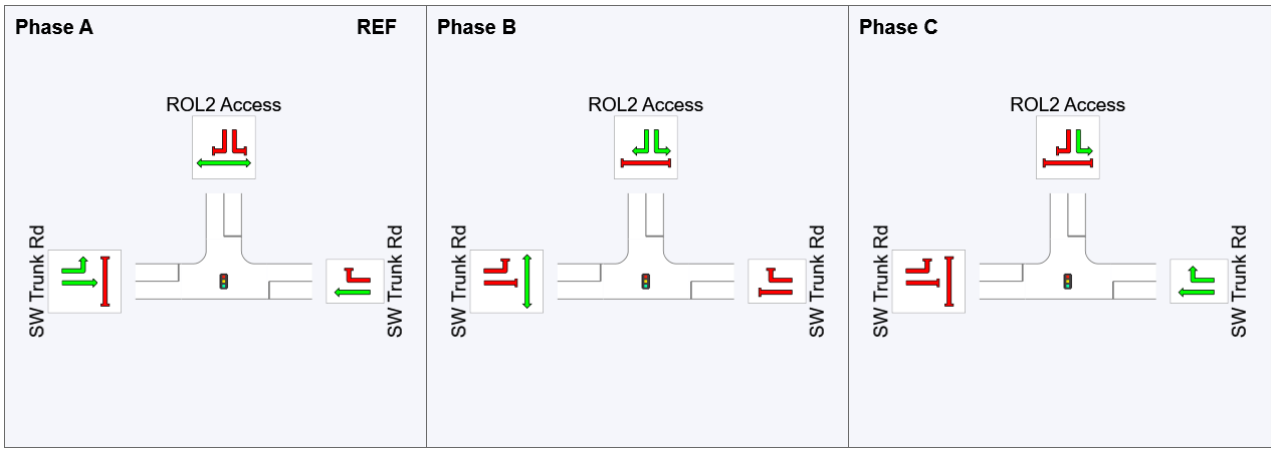
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

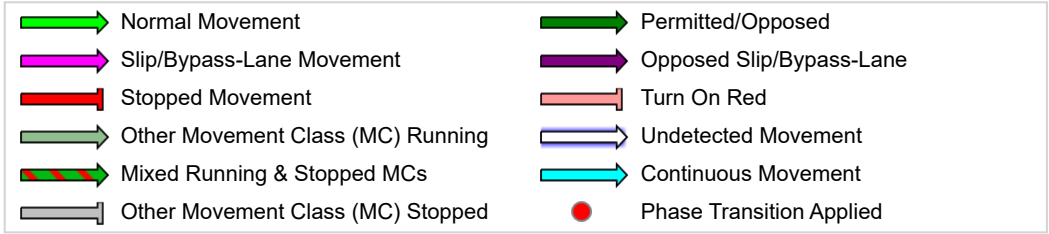
Phase	A	B	C
Phase Change Time (sec)	0	17	34
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	11	5.0	11	5.0	0.010	5.7	LOS A	0.1	0.9	0.48	0.33	0.48	54.9
6	R2	All MCs	62	5.0	62	5.0	* 0.172	24.3	LOS B	1.3	9.5	0.86	0.73	0.86	41.5
Approach			72	5.0	72	5.0	0.172	21.6	LOS B	1.3	9.5	0.81	0.68	0.81	43.0
North: ROL2 Access															
7	L2	All MCs	246	5.0	246	5.0	0.254	12.3	LOS A	3.2	23.7	0.57	0.73	0.57	48.1
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			257	5.0	257	5.0	0.254	12.7	LOS A	3.2	23.7	0.58	0.72	0.58	47.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	11	5.0	11	5.0	0.025	16.8	LOS B	0.2	1.5	0.81	0.55	0.81	47.0
Approach			21	5.0	21	5.0	0.027	19.6	LOS B	0.2	1.5	0.81	0.61	0.81	44.6
All Vehicles			350	5.0	350	5.0	0.254	15.0	LOS B	3.2	23.7	0.64	0.71	0.64	46.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

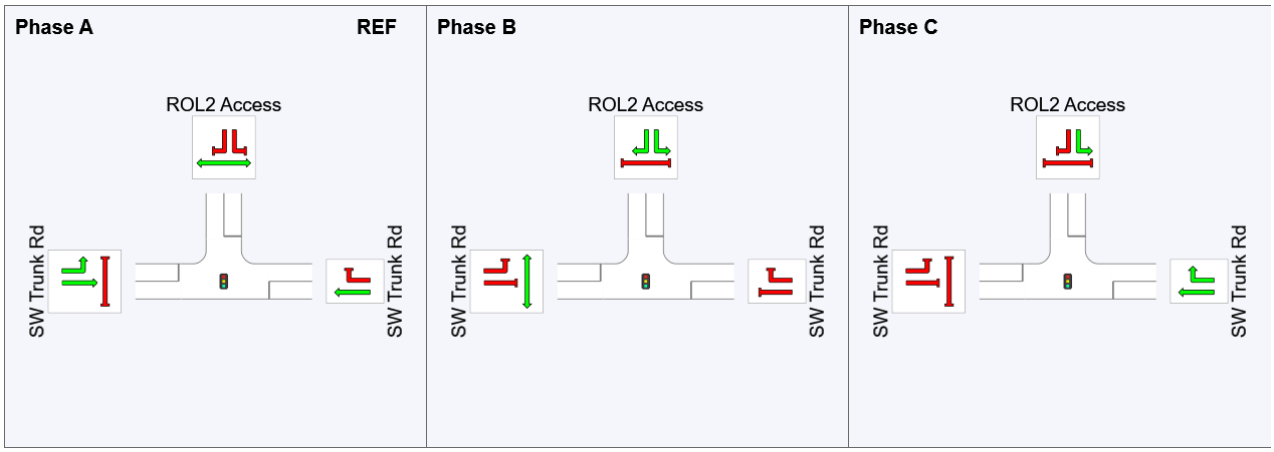
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

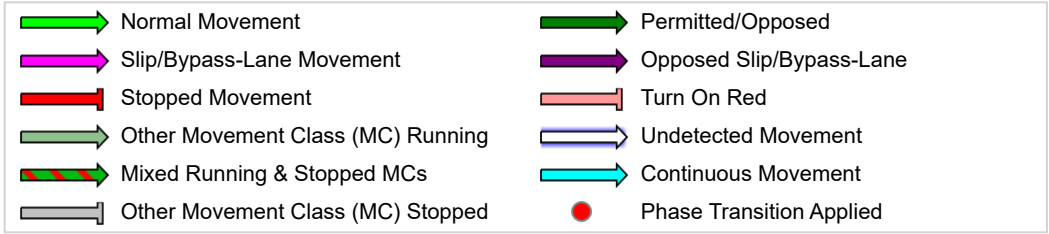
Phase	A	B	C
Phase Change Time (sec)	0	17	34
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	11	5.0	11	5.0	0.010	5.7	LOS A	0.1	0.9	0.48	0.33	0.48	54.9
6	R2	All MCs	206	5.0	206	5.0	* 0.575	26.4	LOS B	4.9	35.5	0.95	0.81	0.97	40.5
Approach			217	5.0	217	5.0	0.575	25.4	LOS B	4.9	35.5	0.93	0.79	0.95	41.0
North: ROL2 Access															
7	L2	All MCs	102	5.0	102	5.0	0.105	11.7	LOS A	1.2	8.9	0.51	0.69	0.51	48.5
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			112	5.0	112	5.0	0.105	12.8	LOS A	1.2	8.9	0.54	0.69	0.54	47.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	11	5.0	11	5.0	0.025	16.8	LOS B	0.2	1.5	0.81	0.55	0.81	47.0
Approach			21	5.0	21	5.0	0.027	19.6	LOS B	0.2	1.5	0.81	0.61	0.81	44.6
All Vehicles			350	5.0	350	5.0	0.575	21.0	LOS B	4.9	35.5	0.80	0.75	0.81	43.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

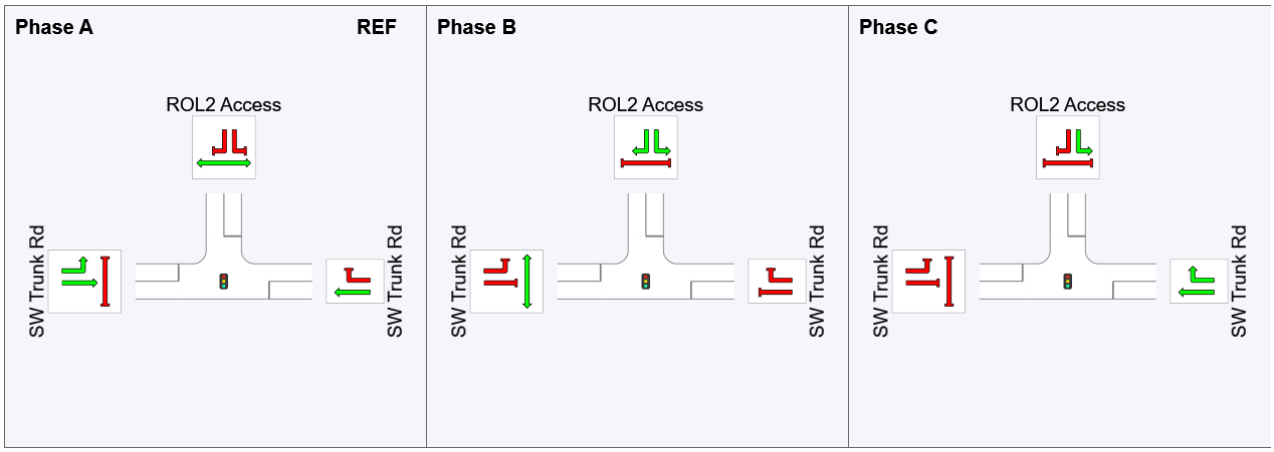
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	17	34
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	30	5.0	30	5.0	0.031	6.3	LOS A	0.4	2.6	0.51	0.38	0.51	54.4
6	R2	All MCs	82	5.0	82	5.0	* 0.253	25.6	LOS B	1.8	13.2	0.90	0.75	0.90	40.9
Approach			112	5.0	112	5.0	0.253	20.4	LOS B	1.8	13.2	0.79	0.65	0.79	43.8
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.338	12.7	LOS A	4.6	33.2	0.60	0.74	0.60	47.8
9	R2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
Approach			338	5.0	338	5.0	0.338	13.0	LOS A	4.6	33.2	0.61	0.74	0.61	47.6
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	121	5.0	121	5.0	* 0.292	18.3	LOS B	2.6	18.8	0.87	0.69	0.87	46.1
Approach			132	5.0	132	5.0	0.292	18.6	LOS B	2.6	18.8	0.87	0.69	0.87	45.8
All Vehicles			581	5.0	581	5.0	0.338	15.7	LOS B	4.6	33.2	0.70	0.71	0.70	46.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

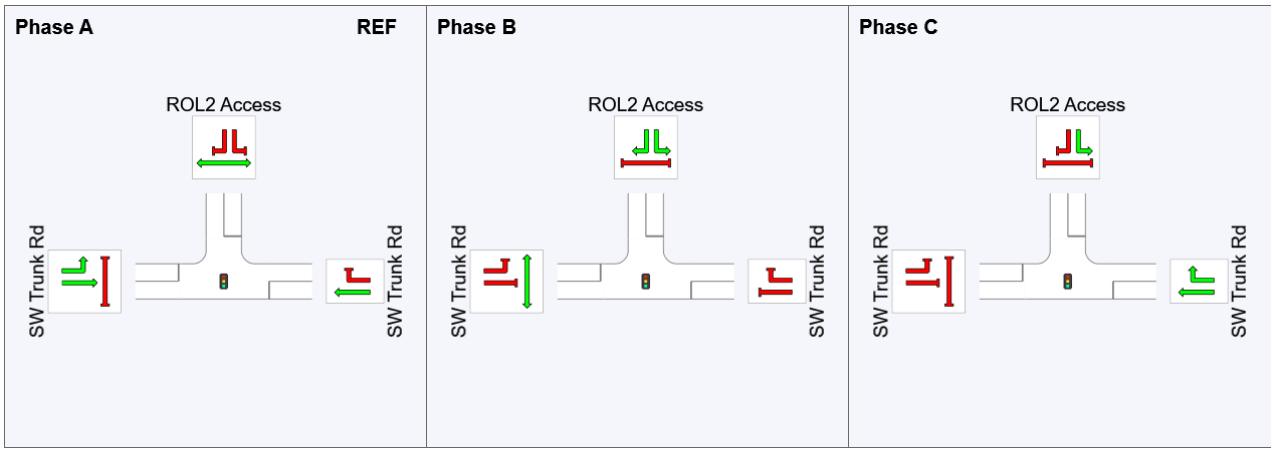
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

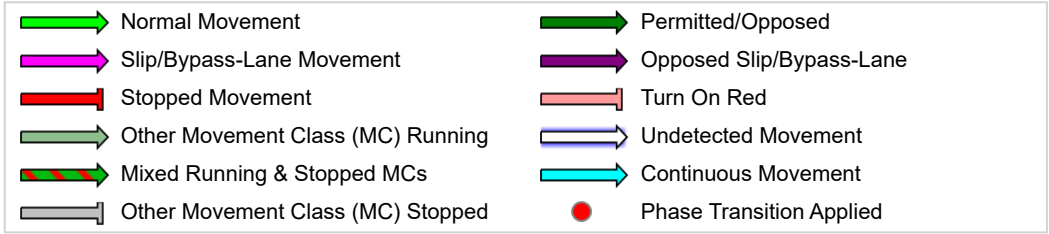
Phase	A	B	C
Phase Change Time (sec)	0	17	35
Green Time (sec)	11	12	9
Phase Time (sec)	17	18	15
Phase Split	34%	36%	30%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	102	5.0	102	5.0	0.100	6.0	LOS A	1.2	8.8	0.51	0.41	0.51	54.6
6	R2	All MCs	274	5.0	274	5.0	* 0.764	29.7	LOS C	7.2	52.9	1.00	0.92	1.23	39.1
Approach			375	5.0	375	5.0	0.764	23.3	LOS B	7.2	52.9	0.87	0.78	1.04	42.3
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.139	11.8	LOS A	1.6	12.0	0.52	0.70	0.52	48.4
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			145	5.0	145	5.0	0.139	12.6	LOS A	1.6	12.0	0.55	0.70	0.55	47.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	50	5.0	50	5.0	* 0.120	17.4	LOS B	1.0	7.4	0.83	0.62	0.83	46.6
Approach			61	5.0	61	5.0	0.120	18.3	LOS B	1.0	7.4	0.83	0.63	0.83	45.8
All Vehicles			581	5.0	581	5.0	0.764	20.1	LOS B	7.2	52.9	0.78	0.75	0.89	43.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

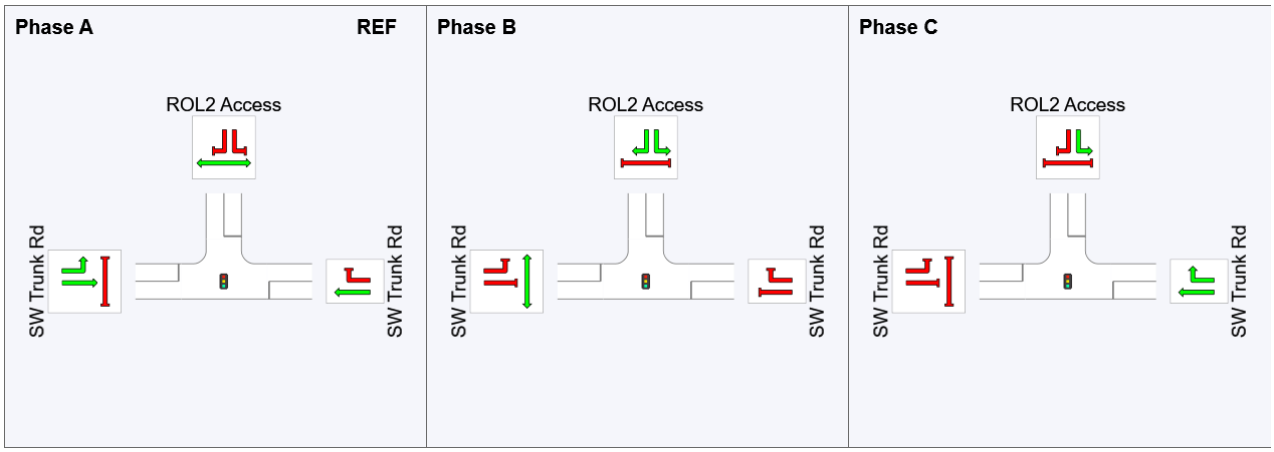
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	17	34
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	61	5.0	61	5.0	0.059	5.9	LOS A	0.7	5.1	0.50	0.38	0.50	54.7
6	R2	All MCs	82	5.0	82	5.0	* 0.380	29.3	LOS C	2.0	14.6	0.96	0.76	0.96	39.2
Approach			142	5.0	142	5.0	0.380	19.3	LOS B	2.0	14.6	0.76	0.60	0.76	44.6
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.397	15.4	LOS B	5.4	39.3	0.70	0.77	0.70	46.2
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			338	5.0	338	5.0	0.397	15.7	LOS B	5.4	39.3	0.71	0.77	0.71	46.0
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.020	19.0	LOS B	0.2	1.3	0.73	0.66	0.73	44.2
11	T1	All MCs	243	5.0	243	5.0	* 0.428	15.7	LOS B	4.9	36.0	0.85	0.70	0.85	47.7
Approach			253	5.0	253	5.0	0.428	15.8	LOS B	4.9	36.0	0.84	0.70	0.84	47.6
All Vehicles			733	5.0	733	5.0	0.428	16.4	LOS B	5.4	39.3	0.76	0.71	0.76	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

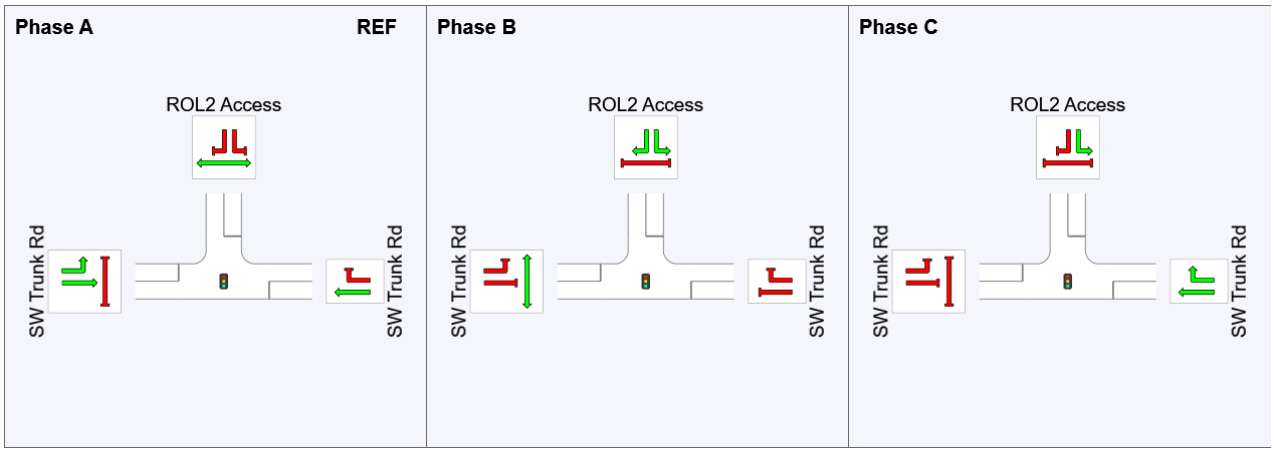
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Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

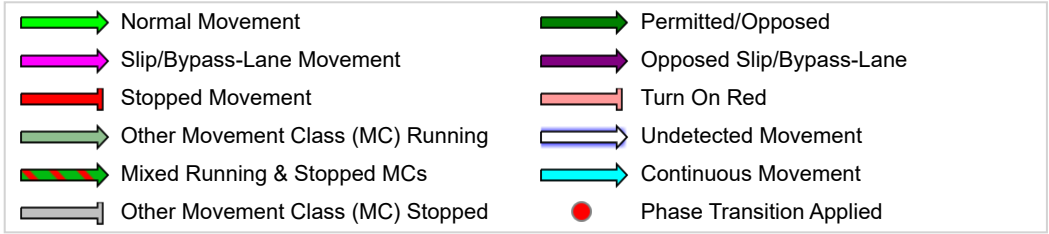
Phase	A	B	C
Phase Change Time (sec)	0	21	38
Green Time (sec)	15	11	6
Phase Time (sec)	21	17	12
Phase Split	42%	34%	24%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	203	5.0	203	5.0	0.199	6.4	LOS A	2.6	18.8	0.55	0.45	0.55	54.3
6	R2	All MCs	274	5.0	274	5.0	* 0.764	29.7	LOS C	7.2	52.9	1.00	0.92	1.23	39.1
Approach			477	5.0	477	5.0	0.764	19.8	LOS B	7.2	52.9	0.81	0.72	0.94	44.4
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.139	11.8	LOS A	1.6	12.0	0.52	0.70	0.52	48.4
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			145	5.0	145	5.0	0.139	12.6	LOS A	1.6	12.0	0.55	0.70	0.55	47.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	100	5.0	100	5.0	* 0.241	18.1	LOS B	2.1	15.3	0.86	0.67	0.86	46.3
Approach			111	5.0	111	5.0	0.241	18.5	LOS B	2.1	15.3	0.86	0.67	0.86	45.9
All Vehicles			733	5.0	733	5.0	0.764	18.2	LOS B	7.2	52.9	0.76	0.71	0.85	45.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

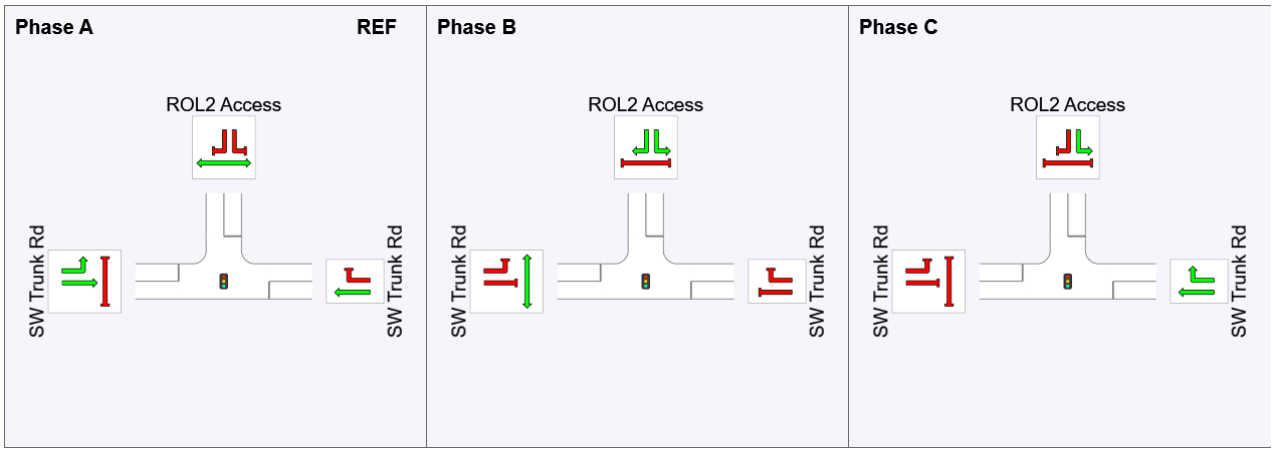
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	17	34
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	150	5.0	150	5.0	0.129	5.1	LOS A	1.8	13.3	0.44	0.36	0.44	55.3
6	R2	All MCs	82	5.0	82	5.0	* 0.456	35.4	LOS C	2.5	17.9	0.98	0.76	0.98	36.8
Approach			232	5.0	232	5.0	0.456	15.8	LOS B	2.5	17.9	0.63	0.50	0.63	47.0
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.476	20.9	LOS B	7.4	53.9	0.80	0.80	0.80	43.1
9	R2	All MCs	11	5.0	11	5.0	* 0.039	29.9	LOS C	0.3	2.0	0.88	0.67	0.88	39.1
Approach			338	5.0	338	5.0	0.476	21.2	LOS B	7.4	53.9	0.80	0.79	0.80	43.0
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.014	17.1	LOS B	0.2	1.3	0.61	0.65	0.61	45.5
11	T1	All MCs	600	5.0	600	5.0	* 0.762	19.1	LOS B	16.4	119.7	0.92	0.87	1.00	46.0
Approach			610	5.0	610	5.0	0.762	19.1	LOS B	16.4	119.7	0.91	0.86	0.99	45.7
All Vehicles			1179	5.0	1179	5.0	0.762	19.0	LOS B	16.4	119.7	0.83	0.77	0.87	45.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk Rd												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		100	105	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

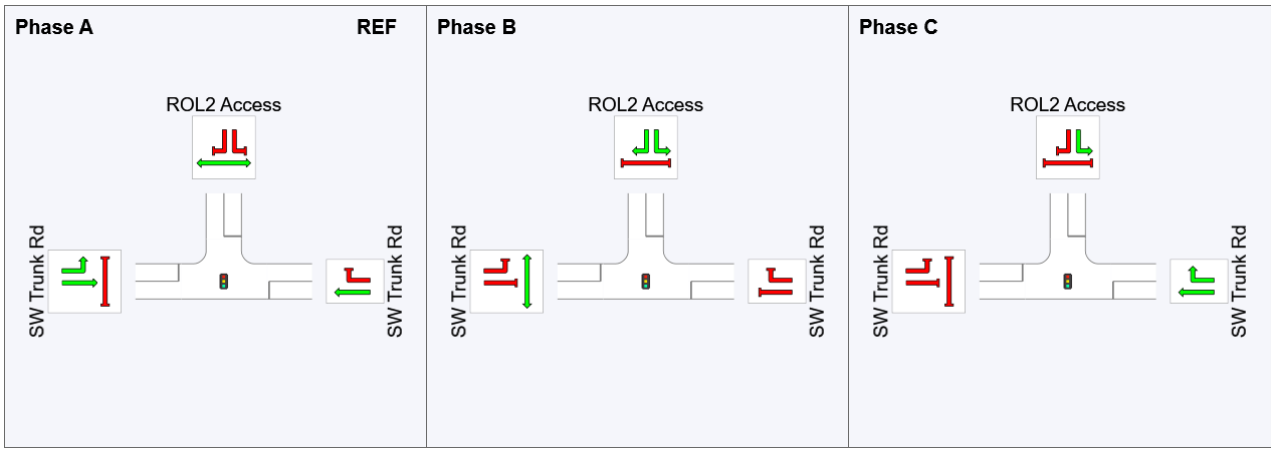
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

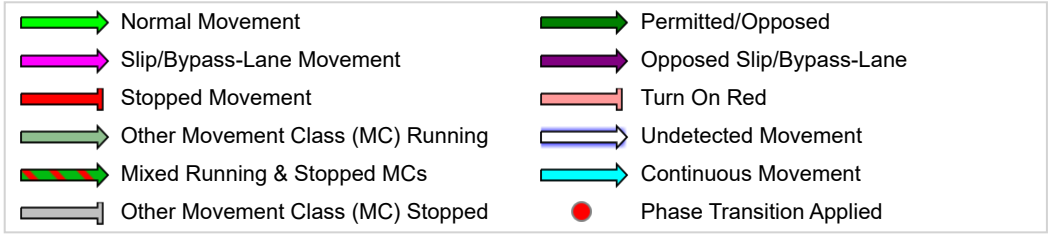
Phase	A	B	C
Phase Change Time (sec)	0	31	48
Green Time (sec)	25	11	6
Phase Time (sec)	31	17	12
Phase Split	52%	28%	20%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	502	5.0	502	5.0	0.492	7.9	LOS A	7.8	56.9	0.67	0.59	0.67	53.1
6	R2	All MCs	274	5.0	274	5.0	* 0.764	29.7	LOS C	7.2	52.9	1.00	0.92	1.23	39.1
Approach			776	5.0	776	5.0	0.764	15.6	LOS B	7.8	56.9	0.79	0.71	0.87	47.1
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.139	11.8	LOS A	1.6	12.0	0.52	0.70	0.52	48.4
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			145	5.0	145	5.0	0.139	12.6	LOS A	1.6	12.0	0.55	0.70	0.55	47.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	247	5.0	247	5.0	* 0.595	20.0	LOS B	5.8	42.0	0.95	0.79	0.97	45.1
Approach			258	5.0	258	5.0	0.595	20.1	LOS B	5.8	42.0	0.94	0.79	0.96	45.0
All Vehicles			1179	5.0	1179	5.0	0.764	16.2	LOS B	7.8	56.9	0.79	0.72	0.85	46.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

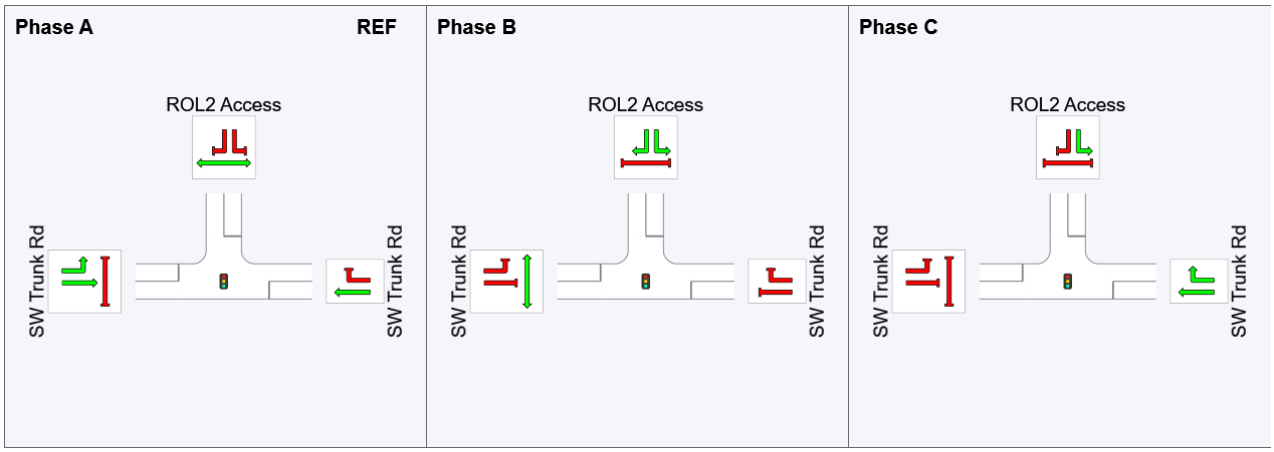
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	17	34
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	303	5.0	303	5.0	0.229	4.6	LOS A	4.2	30.4	0.38	0.33	0.38	55.8
6	R2	All MCs	82	5.0	82	5.0	* 0.608	48.0	LOS D	3.4	24.8	1.00	0.81	1.09	32.7
Approach			385	5.0	385	5.0	0.608	13.8	LOS A	4.2	30.4	0.51	0.43	0.53	48.5
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.610	34.8	LOS C	11.2	81.4	0.91	0.83	0.91	38.2
9	R2	All MCs	11	5.0	11	5.0	* 0.047	42.6	LOS D	0.4	2.7	0.91	0.67	0.91	35.4
Approach			338	5.0	338	5.0	0.610	35.0	LOS C	11.2	81.4	0.91	0.82	0.91	37.0
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.011	20.9	LOS B	0.2	1.3	0.47	0.64	0.47	46.9
11	T1	All MCs	842	5.0	842	5.0	* 0.816	25.6	LOS B	29.0	212.0	0.88	0.85	0.94	45.8
Approach			853	5.0	853	5.0	0.816	25.6	LOS B	29.0	212.0	0.88	0.85	0.94	42.2
All Vehicles			1575	5.0	1575	5.0	0.816	24.7	LOS B	29.0	212.0	0.80	0.74	0.83	42.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: SW Trunk Rd												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		100	105	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

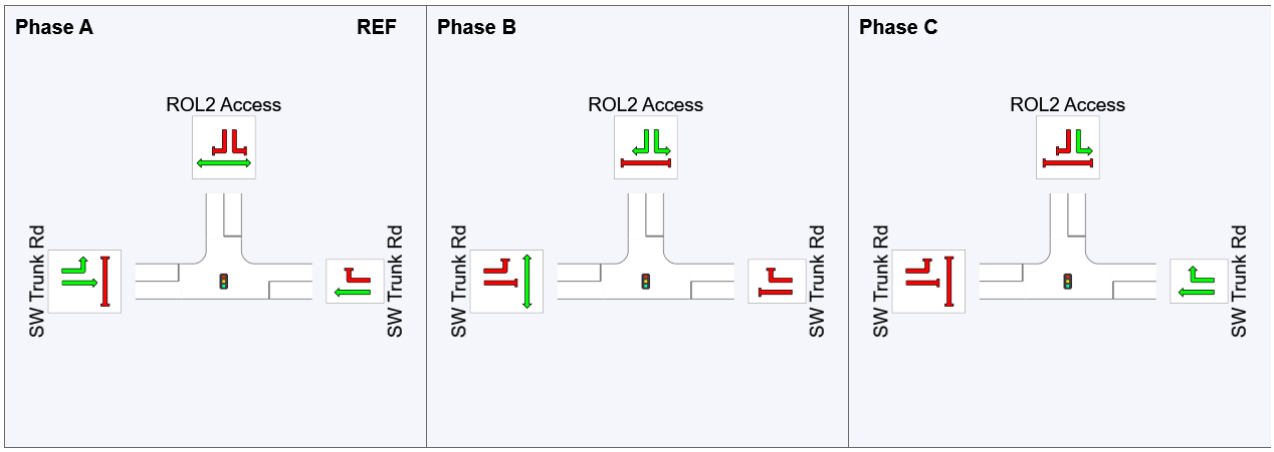
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

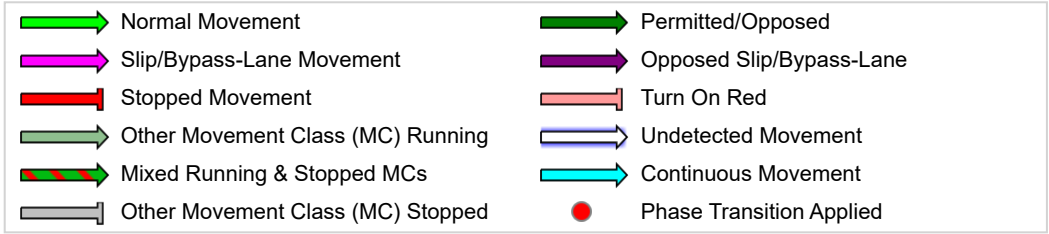
Phase	A	B	C
Phase Change Time (sec)	0	50	68
Green Time (sec)	44	12	6
Phase Time (sec)	50	18	12
Phase Split	63%	23%	15%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	703	5.0	703	5.0	0.689	9.4	LOS A	12.9	94.2	0.79	0.71	0.80	52.0
6	R2	All MCs	274	5.0	274	5.0	* 0.849	34.1	LOS C	8.0	58.0	1.00	1.03	1.44	37.3
Approach			977	5.0	977	5.0	0.849	16.3	LOS B	12.9	94.2	0.85	0.80	0.98	46.8
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.145	12.4	LOS A	1.7	12.6	0.55	0.70	0.55	48.0
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			145	5.0	145	5.0	0.145	13.2	LOS A	1.7	12.6	0.57	0.70	0.57	47.5
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.024	21.5	LOS B	0.2	1.5	0.79	0.66	0.79	42.8
11	T1	All MCs	406	5.0	406	5.0	* 0.897	31.0	LOS C	12.8	93.2	1.00	1.15	1.53	39.8
Approach			417	5.0	417	5.0	0.897	30.7	LOS C	12.8	93.2	0.99	1.13	1.51	39.8
All Vehicles			1539	5.0	1539	5.0	0.897	19.9	LOS B	12.9	94.2	0.86	0.88	1.08	44.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

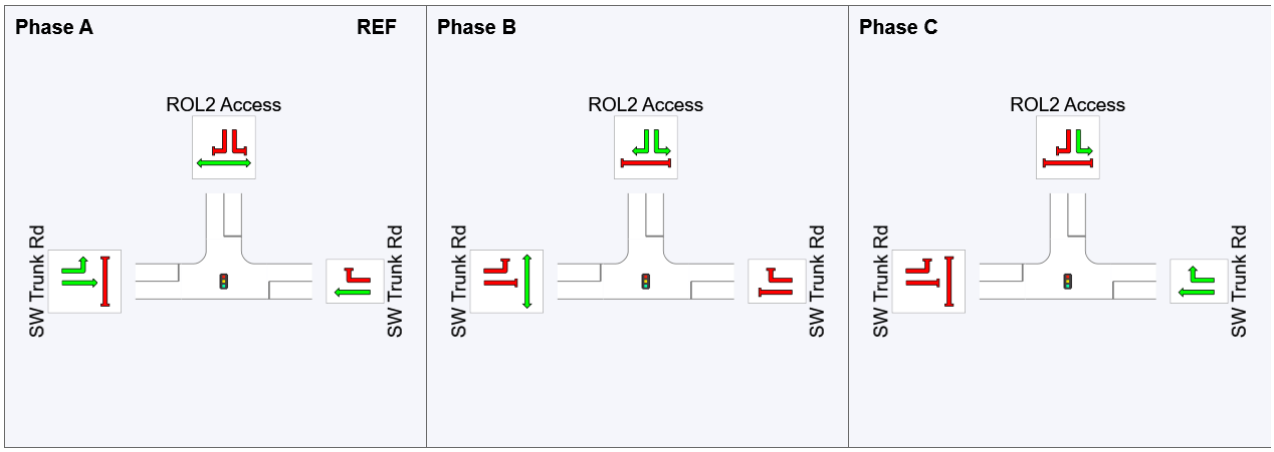
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

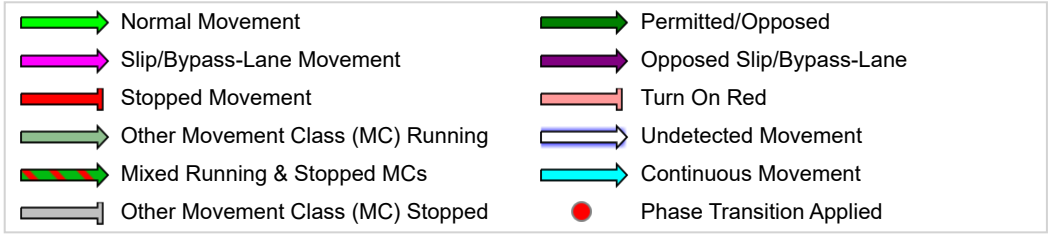
Phase	A	B	C
Phase Change Time (sec)	0	18	35
Green Time (sec)	12	11	9
Phase Time (sec)	18	17	15
Phase Split	36%	34%	30%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	456	5.0	456	5.0	0.316	4.3	LOS A	7.5	54.5	0.34	0.30	0.34	56.1
6	R2	All MCs	82	5.0	82	5.0	* 0.836	70.0	LOS E	4.9	36.1	1.00	0.93	1.37	27.3
Approach			538	5.0	538	5.0	0.836	14.3	LOS A	7.5	54.5	0.44	0.39	0.49	48.3
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.782	67.9	LOS E	17.5	128.0	1.00	0.89	1.09	31.7
9	R2	All MCs	11	5.0	11	5.0	* 0.059	71.3	LOS F	0.5	3.8	0.93	0.68	0.93	30.8
Approach			338	5.0	338	5.0	0.782	68.0	LOS E	17.5	128.0	1.00	0.89	1.09	27.7
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.009	23.3	LOS B	0.2	1.4	0.36	0.62	0.36	47.9
11	T1	All MCs	1085	5.0	1085	5.0	* 0.884	33.2	LOS C	52.1	380.7	0.89	0.87	0.95	43.9
Approach			1095	5.0	1095	5.0	0.884	33.1	LOS C	52.1	380.7	0.89	0.86	0.95	38.8
All Vehicles			1971	5.0	1971	5.0	0.884	34.0	LOS C	52.1	380.7	0.78	0.74	0.85	38.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
West: SW Trunk Rd												
P4	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
All Pedestrians		100	105	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

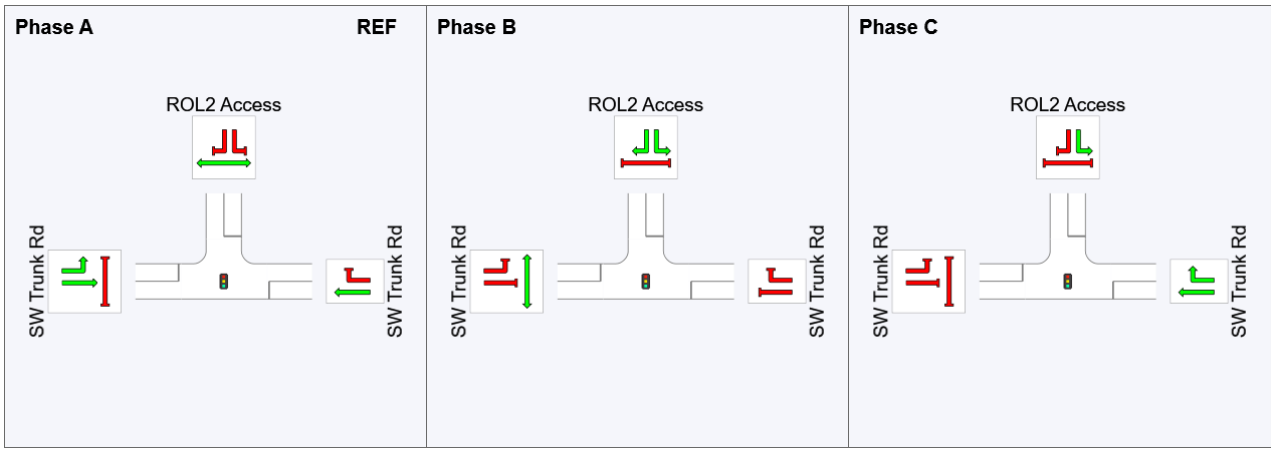
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	78	98
Green Time (sec)	72	14	6
Phase Time (sec)	78	20	12
Phase Split	71%	18%	11%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	904	5.0	904	5.0	0.776	10.8	LOS A	20.9	152.9	0.79	0.76	0.84	50.9
6	R2	All MCs	274	5.0	274	5.0	* 0.833	37.6	LOS C	9.2	66.9	1.00	0.98	1.34	36.0
Approach			1178	5.0	1178	5.0	0.833	17.1	LOS B	20.9	152.9	0.84	0.81	0.96	46.5
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.161	15.6	LOS B	2.3	16.7	0.61	0.72	0.61	46.1
9	R2	All MCs	11	5.0	11	5.0	* 0.039	29.9	LOS C	0.3	2.0	0.88	0.67	0.88	39.1
Approach			145	5.0	145	5.0	0.161	16.6	LOS B	2.3	16.7	0.63	0.72	0.63	45.5
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.018	21.6	LOS B	0.2	1.5	0.69	0.66	0.69	43.6
11	T1	All MCs	566	5.0	566	5.0	* 0.900	34.7	LOS C	20.8	152.1	1.00	1.14	1.39	38.9
Approach			576	5.0	576	5.0	0.900	34.5	LOS C	20.8	152.1	0.99	1.13	1.38	38.3
All Vehicles			1899	5.0	1899	5.0	0.900	22.3	LOS B	20.9	152.9	0.87	0.90	1.06	43.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk Rd												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		100	105	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

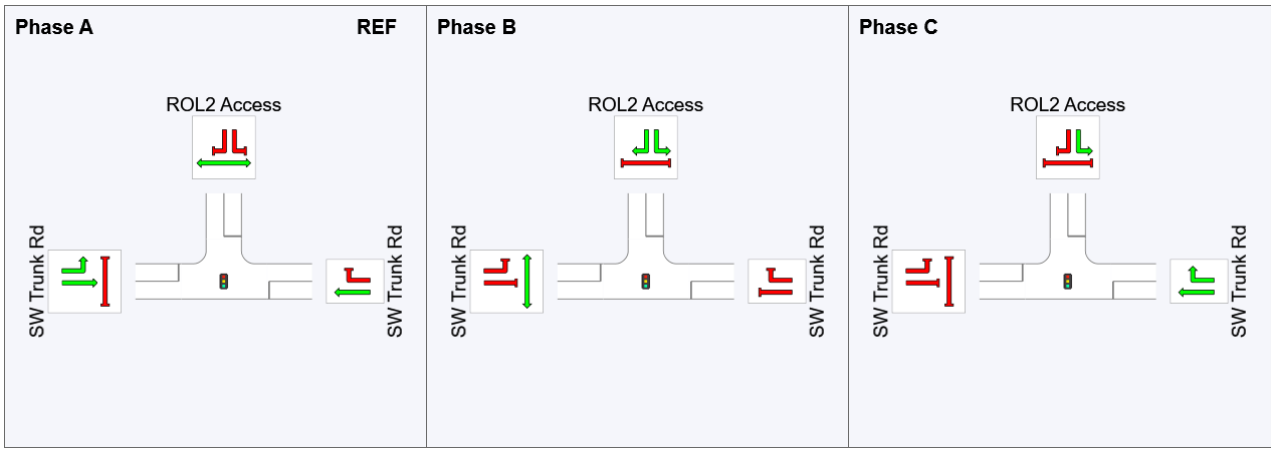
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	26	43
Green Time (sec)	20	11	11
Phase Time (sec)	26	17	17
Phase Split	43%	28%	28%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	610	5.0	610	5.0	0.391	3.5	LOS A	11.1	80.9	0.28	0.25	0.28	56.8
6	R2	All MCs	82	5.0	82	5.0	0.760	87.0	LOS F	6.4	46.5	1.00	0.86	1.18	24.2
Approach			691	5.0	691	5.0	0.760	13.3	LOS A	11.1	80.9	0.36	0.33	0.38	49.0
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	* 0.961	134.6	LOS F	29.6	215.8	1.00	1.05	1.36	22.4
9	R2	All MCs	11	5.0	11	5.0	0.080	112.5	LOS F	0.7	5.4	0.96	0.68	0.96	26.0
Approach			338	5.0	338	5.0	0.961	134.0	LOS F	29.6	215.8	1.00	1.04	1.35	18.5
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.008	27.5	LOS B	0.2	1.5	0.29	0.62	0.29	48.6
11	T1	All MCs	1327	5.0	1327	5.0	* 0.974	58.2	LOS E	106.8	779.4	1.00	1.04	1.13	35.5
Approach			1338	5.0	1338	5.0	0.974	57.9	LOS E	106.8	779.4	0.99	1.04	1.13	30.7
All Vehicles			2367	5.0	2367	5.0	0.974	55.7	LOS D	106.8	779.4	0.81	0.83	0.94	31.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: SW Trunk Rd												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		100	105	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

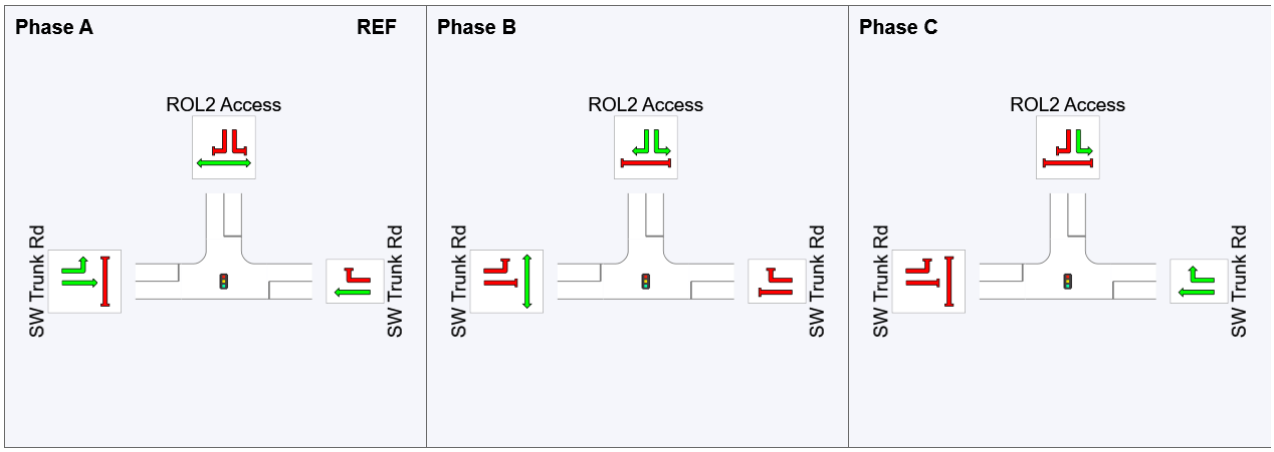
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	0	115	135
Green Time (sec)	109	14	9
Phase Time (sec)	115	20	15
Phase Split	77%	13%	10%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	1105	5.0	1105	5.0	0.851	14.8	LOS B	36.0	263.0	0.81	0.80	0.88	48.7
6	R2	All MCs	274	5.0	274	5.0	* 0.873	50.7	LOS D	12.4	90.7	1.00	1.01	1.36	32.1
Approach			1379	5.0	1379	5.0	0.873	21.9	LOS B	36.0	263.0	0.85	0.84	0.97	43.8
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.188	22.4	LOS B	3.4	25.0	0.68	0.74	0.68	42.4
9	R2	All MCs	11	5.0	11	5.0	* 0.047	39.7	LOS C	0.4	2.7	0.91	0.67	0.91	35.4
Approach			145	5.0	145	5.0	0.188	23.6	LOS B	3.4	25.0	0.70	0.73	0.70	41.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.013	26.9	LOS B	0.2	1.6	0.57	0.65	0.57	44.5
11	T1	All MCs	725	5.0	725	5.0	* 0.858	37.0	LOS C	29.6	215.9	0.97	0.99	1.12	40.9
Approach			735	5.0	735	5.0	0.858	36.8	LOS C	29.6	215.9	0.96	0.98	1.11	37.4
All Vehicles			2259	5.0	2259	5.0	0.873	26.9	LOS B	36.0	263.0	0.87	0.88	1.00	41.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: SW Trunk Rd												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		100	105	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

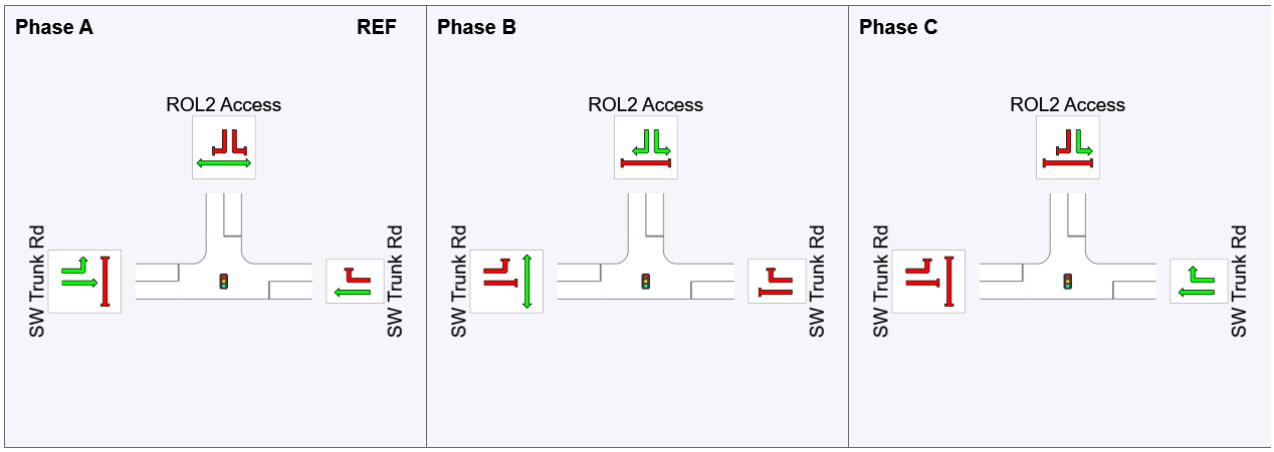
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

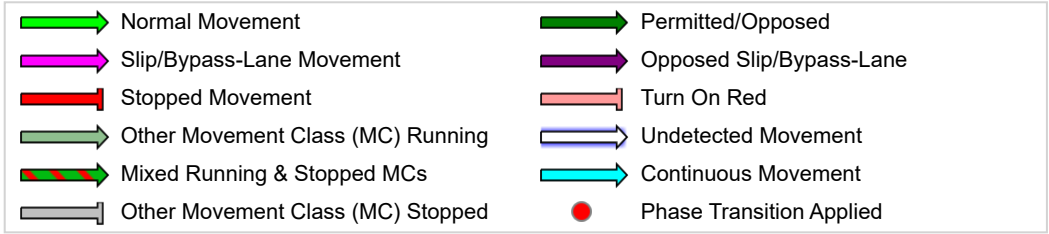
Phase	A	B	C
Phase Change Time (sec)	0	42	60
Green Time (sec)	36	12	14
Phase Time (sec)	42	18	20
Phase Split	53%	23%	25%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	455	5.0	455	5.0	0.446	7.6	LOS A	6.8	49.8	0.65	0.56	0.65	53.3
6	R2	All MCs	82	5.0	82	5.0	* 0.285	26.8	LOS B	1.9	13.7	0.92	0.75	0.92	40.3
Approach			537	5.0	537	5.0	0.446	10.5	LOS A	6.8	49.8	0.69	0.59	0.69	50.8
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.150	12.9	LOS A	1.8	13.1	0.57	0.71	0.57	47.6
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			145	5.0	145	5.0	0.150	13.7	LOS A	1.8	13.1	0.59	0.71	0.59	47.2
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.023	20.7	LOS B	0.2	1.4	0.77	0.66	0.77	43.3
11	T1	All MCs	154	5.0	154	5.0	* 0.313	16.7	LOS B	3.1	22.9	0.85	0.68	0.85	47.1
Approach			164	5.0	164	5.0	0.313	16.9	LOS B	3.1	22.9	0.84	0.68	0.84	46.8
All Vehicles			846	5.0	846	5.0	0.446	12.3	LOS A	6.8	49.8	0.70	0.63	0.70	49.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

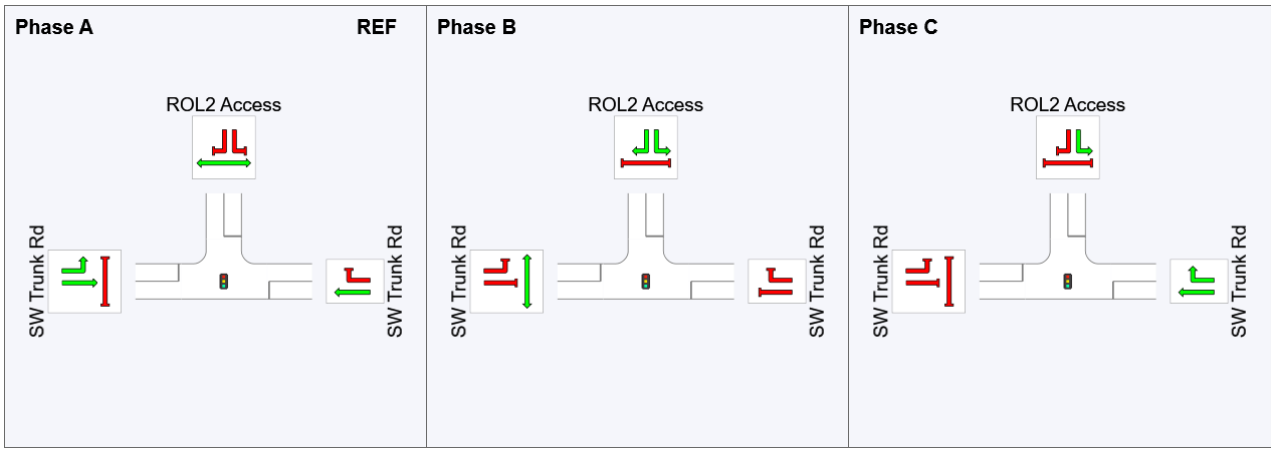
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

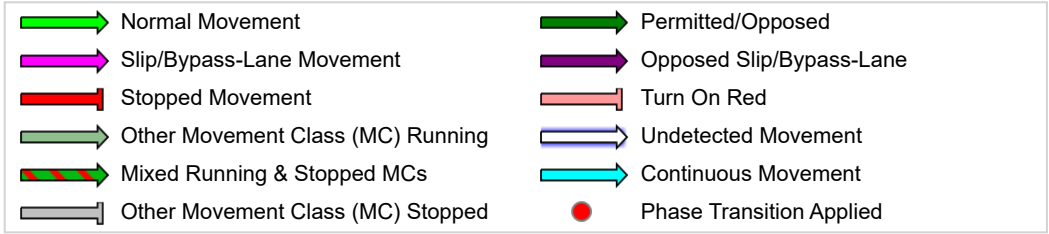
Phase	A	B	C
Phase Change Time (sec)	0	19	36
Green Time (sec)	13	11	8
Phase Time (sec)	19	17	14
Phase Split	38%	34%	28%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	263	5.0	263	5.0	0.258	6.7	LOS A	3.5	25.3	0.57	0.48	0.57	54.1
6	R2	All MCs	274	5.0	274	5.0	* 0.764	29.7	LOS C	7.2	52.9	1.00	0.92	1.23	39.1
Approach			537	5.0	537	5.0	0.764	18.4	LOS B	7.2	52.9	0.79	0.71	0.91	45.2
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.338	12.7	LOS A	4.6	33.2	0.60	0.74	0.60	47.8
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			338	5.0	338	5.0	0.338	13.0	LOS A	4.6	33.2	0.61	0.74	0.61	47.6
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.4
11	T1	All MCs	339	5.0	339	5.0	* 0.816	25.2	LOS B	9.3	68.0	1.00	1.00	1.31	42.4
Approach			349	5.0	349	5.0	0.816	25.2	LOS B	9.3	68.0	0.99	0.99	1.29	42.4
All Vehicles			1224	5.0	1224	5.0	0.816	18.9	LOS B	9.3	68.0	0.80	0.80	0.93	45.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

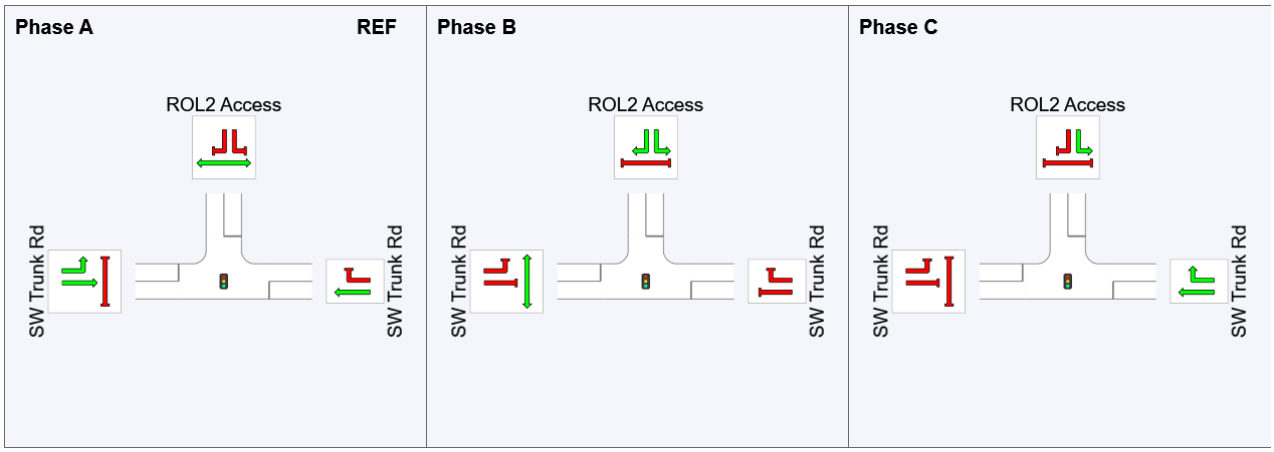
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

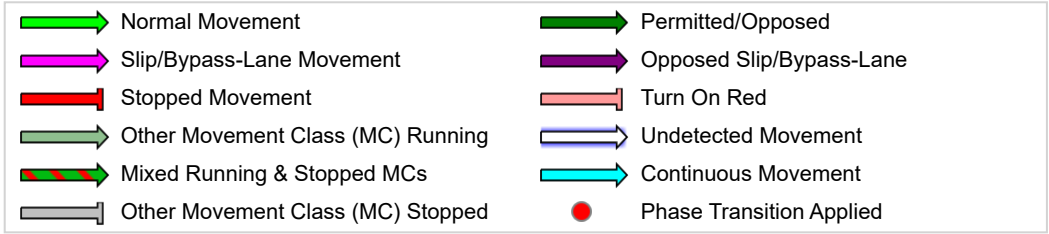
Phase	A	B	C
Phase Change Time (sec)	0	17	34
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	543	5.0	543	5.0	0.533	8.1	LOS A	8.7	63.5	0.69	0.61	0.69	52.9
6	R2	All MCs	82	5.0	82	5.0	* 0.380	29.3	LOS C	2.0	14.6	0.96	0.76	0.96	39.2
Approach			625	5.0	625	5.0	0.533	10.9	LOS A	8.7	63.5	0.73	0.63	0.73	50.6
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.397	15.4	LOS B	5.4	39.3	0.70	0.77	0.70	46.2
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			338	5.0	338	5.0	0.397	15.7	LOS B	5.4	39.3	0.71	0.77	0.71	46.0
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.020	19.0	LOS B	0.2	1.3	0.73	0.66	0.73	44.2
11	T1	All MCs	282	5.0	282	5.0	* 0.498	16.1	LOS B	5.9	42.9	0.87	0.73	0.87	47.5
Approach			293	5.0	293	5.0	0.498	16.2	LOS B	5.9	42.9	0.87	0.73	0.87	47.3
All Vehicles			1255	5.0	1255	5.0	0.533	13.4	LOS A	8.7	63.5	0.75	0.69	0.75	48.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

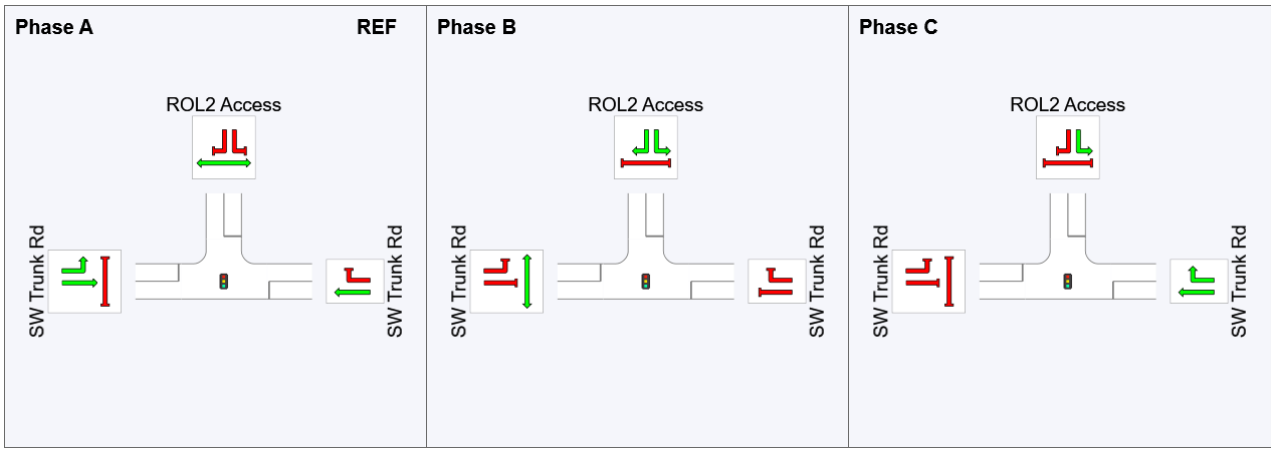
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

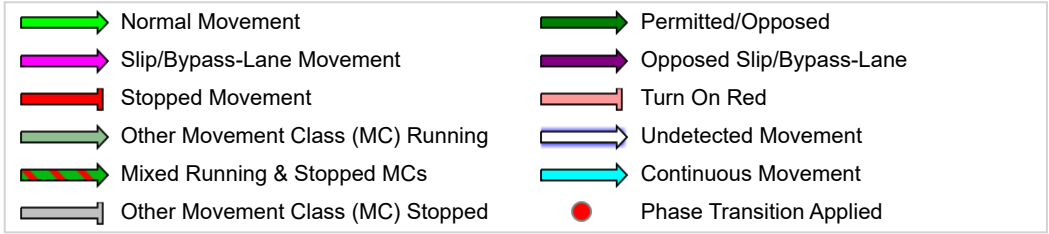
Phase	A	B	C
Phase Change Time (sec)	0	21	38
Green Time (sec)	15	11	6
Phase Time (sec)	21	17	12
Phase Split	42%	34%	24%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	493	5.0	493	5.0	0.423	6.4	LOS A	7.5	54.8	0.56	0.49	0.56	54.3
6	R2	All MCs	274	5.0	274	5.0	* 0.764	33.9	LOS C	8.5	62.2	1.00	0.91	1.19	37.4
Approach			767	5.0	767	5.0	0.764	16.2	LOS B	8.5	62.2	0.71	0.64	0.78	46.7
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.156	15.0	LOS B	2.2	16.2	0.59	0.72	0.59	46.4
9	R2	All MCs	11	5.0	11	5.0	* 0.039	29.9	LOS C	0.3	2.0	0.88	0.67	0.88	39.1
Approach			145	5.0	145	5.0	0.156	16.0	LOS B	2.2	16.2	0.61	0.71	0.61	45.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.019	20.8	LOS B	0.2	1.5	0.71	0.66	0.71	43.2
11	T1	All MCs	438	5.0	438	5.0	* 0.732	21.8	LOS B	12.3	90.1	0.95	0.87	1.03	44.2
Approach			448	5.0	448	5.0	0.732	21.8	LOS B	12.3	90.1	0.94	0.87	1.03	44.2
All Vehicles			1360	5.0	1360	5.0	0.764	18.0	LOS B	12.3	90.1	0.78	0.72	0.84	45.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk Rd												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		100	105	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

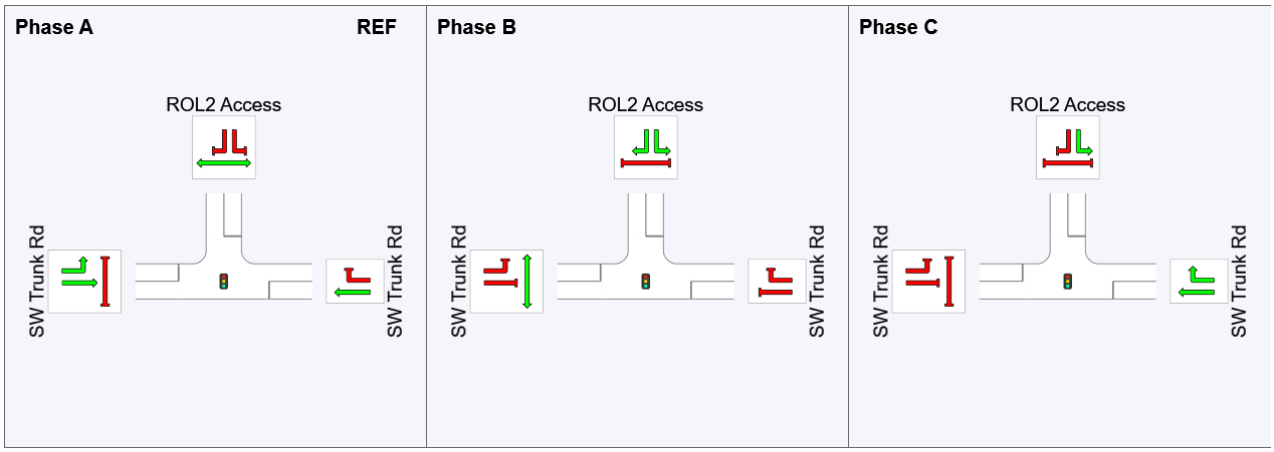
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

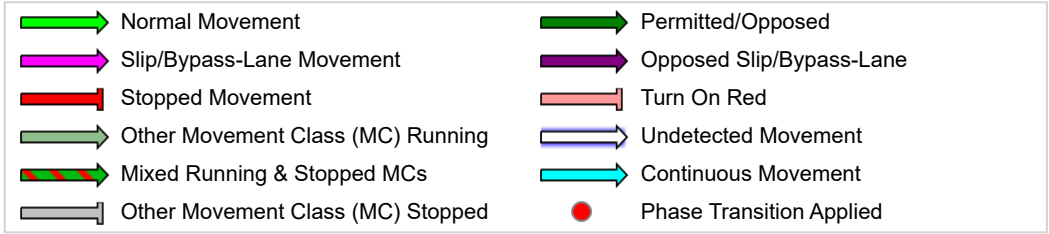
Phase	A	B	C
Phase Change Time (sec)	0	25	42
Green Time (sec)	19	11	12
Phase Time (sec)	25	17	18
Phase Split	42%	28%	30%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	789	5.0	789	5.0	* 0.774	12.4	LOS A	17.1	125.0	0.85	0.83	0.94	49.9
6	R2	All MCs	82	5.0	82	5.0	0.380	29.3	LOS C	2.0	14.6	0.96	0.76	0.96	39.2
Approach			871	5.0	871	5.0	0.774	13.9	LOS A	17.1	125.0	0.86	0.82	0.94	48.6
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.397	15.4	LOS B	5.4	39.3	0.70	0.77	0.70	46.2
9	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			338	5.0	338	5.0	0.397	15.7	LOS B	5.4	39.3	0.71	0.77	0.71	46.0
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.020	19.0	LOS B	0.2	1.3	0.73	0.66	0.73	44.2
11	T1	All MCs	381	5.0	381	5.0	0.673	17.9	LOS B	8.7	63.7	0.93	0.83	0.99	46.4
Approach			392	5.0	392	5.0	0.673	17.9	LOS B	8.7	63.7	0.93	0.82	0.98	46.3
All Vehicles			1600	5.0	1600	5.0	0.774	15.3	LOS B	17.1	125.0	0.84	0.81	0.90	47.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: SW Trunk Rd												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		100	105	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

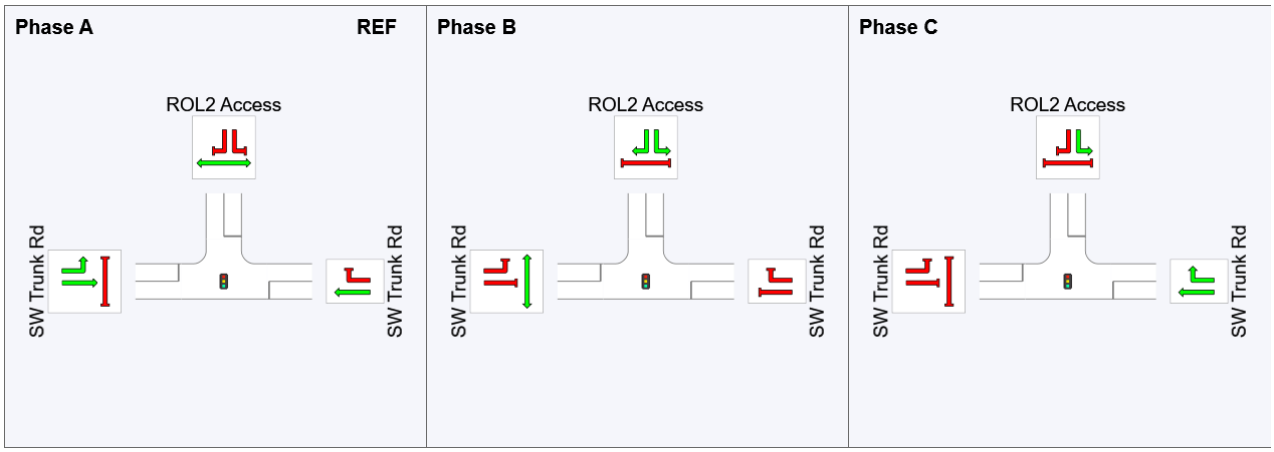
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

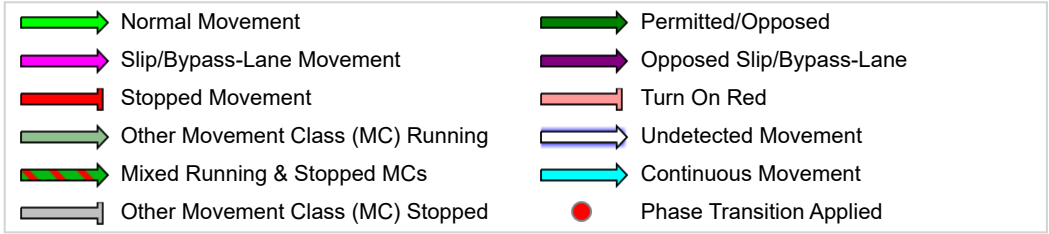
Phase	A	B	C
Phase Change Time (sec)	0	21	38
Green Time (sec)	15	11	6
Phase Time (sec)	21	17	12
Phase Split	42%	34%	24%
Phase Frequency (%)	100.0	100.0	100.0

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: SW18 [I1 (SW18) Intermediate - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: SW Trunk Rd															
5	T1	All MCs	672	5.0	672	5.0	0.541	6.9	LOS A	12.2	88.8	0.57	0.52	0.57	53.9
6	R2	All MCs	274	5.0	274	5.0	*0.891	47.5	LOS D	11.4	82.9	1.00	1.05	1.46	32.8
Approach			946	5.0	946	5.0	0.891	18.6	LOS B	12.2	88.8	0.70	0.67	0.83	45.5
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.176	18.9	LOS B	2.9	20.9	0.65	0.73	0.65	44.2
9	R2	All MCs	11	5.0	11	5.0	*0.041	34.3	LOS C	0.3	2.3	0.89	0.67	0.89	37.3
Approach			145	5.0	145	5.0	0.176	20.1	LOS B	2.9	20.9	0.67	0.73	0.67	43.6
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.015	25.2	LOS B	0.2	1.6	0.62	0.65	0.62	44.1
11	T1	All MCs	665	5.0	665	5.0	*0.885	37.9	LOS C	26.5	193.2	1.00	1.08	1.26	39.4
Approach			676	5.0	676	5.0	0.885	37.7	LOS C	26.5	193.2	0.99	1.07	1.25	37.0
All Vehicles			1767	5.0	1767	5.0	0.891	26.1	LOS B	26.5	193.2	0.81	0.83	0.98	41.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
North: ROL2 Access												
P3	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
West: SW Trunk Rd												
P4	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
All Pedestrians		100	105	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

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.

PHASING SUMMARY

Site: SW18 [I1 (SW18) Intermediate - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

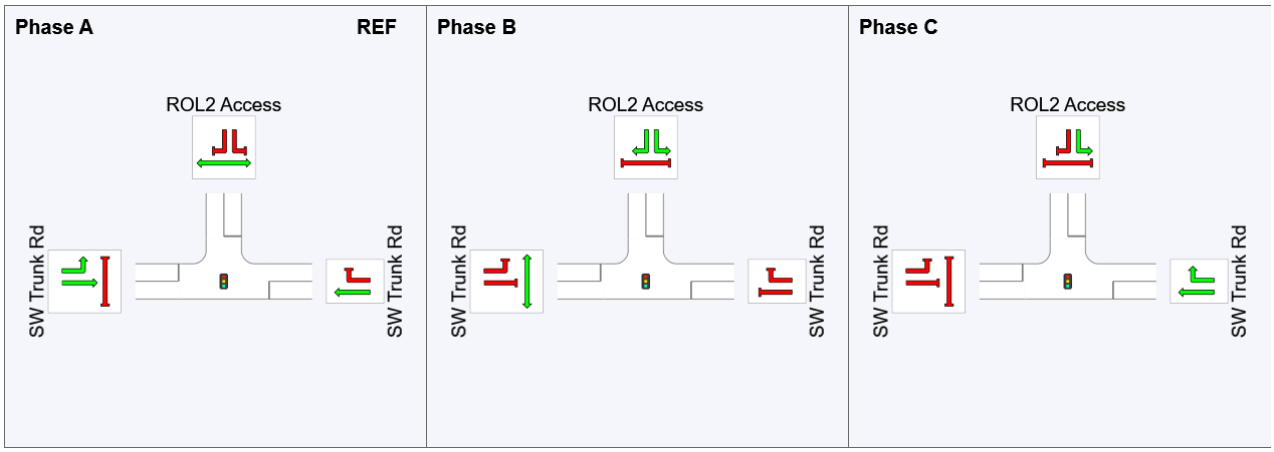
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

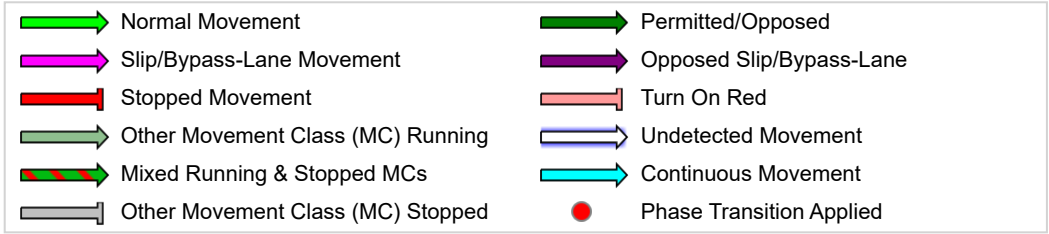
Phase	A	B	C
Phase Change Time (sec)	0	34	52
Green Time (sec)	28	12	12
Phase Time (sec)	34	18	18
Phase Split	49%	26%	26%
Phase Frequency (%)	100.0	100.0	100.0

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

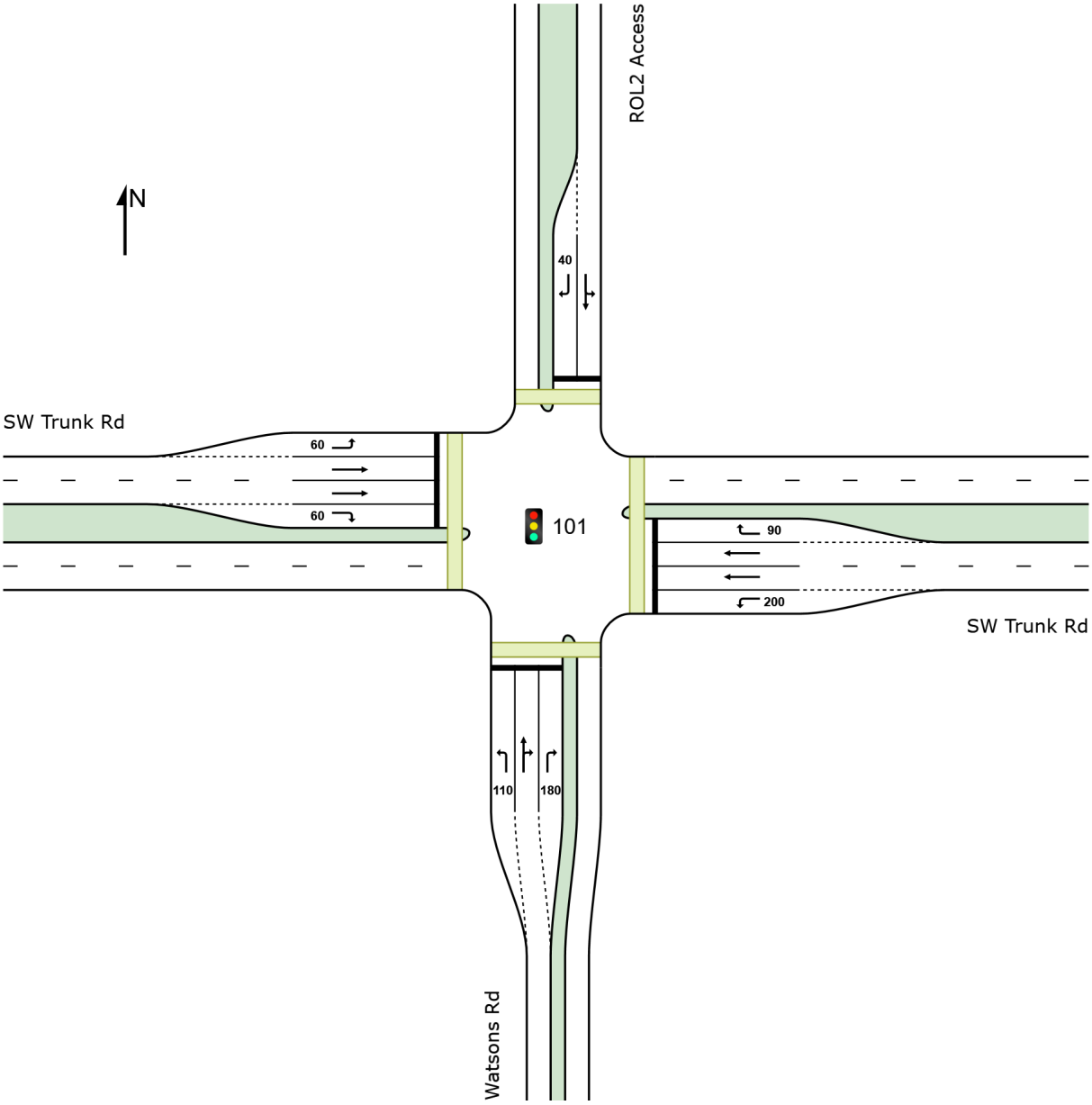


SITE LAYOUT

Site: 101 [I1 (SW18/19) Ult - 2029-No WR - AM (Site Folder: General)]

SW Trunk Rd / ROL2 Access / Watsons Rd
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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Organisation: SLR CONSULTING AUSTRALIA | Licence: NETWORK / 1PC | Created: Thursday, 19 February 2026 2:43:52 PM
Project: C:\Users\nneale\OneDrive - SLR Consulting Limited\Documents_Assessments\Prov West\ROL2\Updated vol\SW18_SW19 - SW Trunk Rd & ROL2 Access - v0.2 - 20251029.sip9

MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2029-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.016	24.1	LOS C	0.3	2.1	0.65	0.66	0.65	41.6
2	T1	All MCs	11	5.0	11	5.0	*0.029	31.2	LOS C	0.4	2.8	0.83	0.58	0.83	39.7
3	R2	All MCs	11	5.0	11	5.0	0.029	36.9	LOS D	0.4	2.8	0.83	0.66	0.83	36.6
Approach			32	5.0	32	5.0	0.029	30.8	LOS C	0.4	2.8	0.77	0.63	0.77	39.2
East: SW Trunk Rd															
4	L2	All MCs	11	5.0	11	5.0	0.016	15.5	LOS B	0.2	1.2	0.66	0.65	0.66	46.1
5	T1	All MCs	11	5.0	11	5.0	0.015	31.9	LOS C	0.2	1.4	0.84	0.55	0.84	39.4
6	R2	All MCs	21	5.0	21	5.0	0.088	43.4	LOS D	0.8	6.1	0.91	0.70	0.91	34.2
Approach			42	5.0	42	5.0	0.088	33.5	LOS C	0.8	6.1	0.83	0.65	0.83	37.9
North: ROL2 Access															
7	L2	All MCs	84	5.0	84	5.0	*0.183	16.6	LOS B	1.6	12.0	0.78	0.72	0.78	44.7
8	T1	All MCs	11	5.0	11	5.0	*0.183	29.8	LOS C	1.6	12.0	0.78	0.72	0.78	46.3
9	R2	All MCs	11	5.0	11	5.0	0.028	36.0	LOS D	0.4	2.7	0.82	0.67	0.82	36.9
Approach			105	5.0	105	5.0	0.183	19.9	LOS B	1.6	12.0	0.78	0.72	0.78	43.9
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.013	20.3	LOS C	0.3	1.8	0.58	0.65	0.58	43.5
11	T1	All MCs	11	5.0	11	5.0	0.015	31.9	LOS C	0.2	1.4	0.84	0.55	0.84	39.4
12	R2	All MCs	11	5.0	11	5.0	0.044	43.0	LOS D	0.4	3.0	0.90	0.67	0.90	34.4
Approach			32	5.0	32	5.0	0.044	31.7	LOS C	0.4	3.0	0.77	0.62	0.77	38.7
All Vehicles			210	5.0	210	5.0	0.183	26.0	LOS C	1.6	12.0	0.79	0.68	0.79	41.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
East: SW Trunk Rd												

P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: ROL2 Access												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
West: SW Trunk Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		200	211	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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: 101 [I1 (SW18/19) Ult - 2029-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

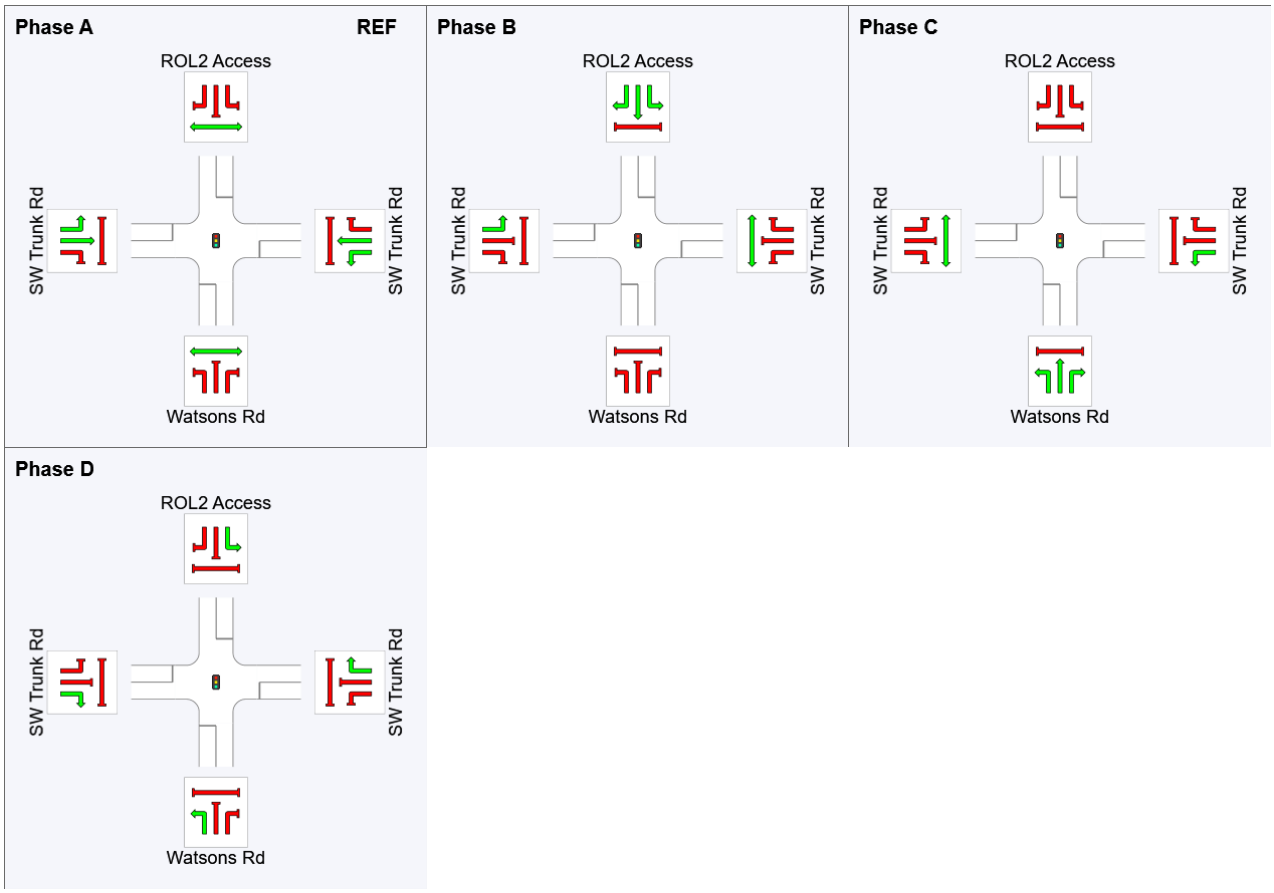
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	23	48	72
Green Time (sec)	17	19	18	12
Phase Time (sec)	23	25	24	18
Phase Split	26%	28%	27%	20%
Phase Frequency (%)	100.0	100.0	100.0	100.0

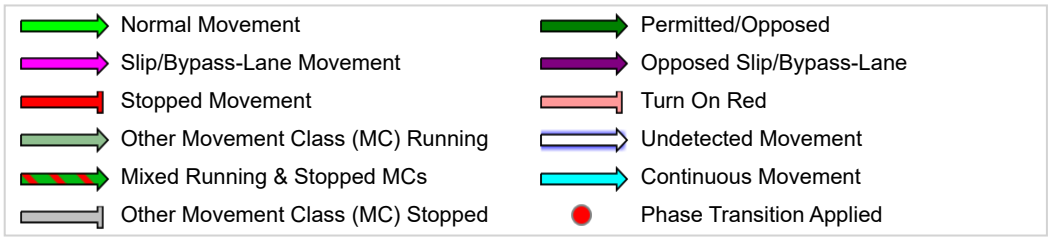
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2029-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.015	23.5	LOS C	0.3	2.0	0.64	0.65	0.64	41.9
2	T1	All MCs	11	5.0	11	5.0	* 0.029	31.2	LOS C	0.4	2.8	0.83	0.58	0.83	39.7
3	R2	All MCs	11	5.0	11	5.0	0.029	36.9	LOS D	0.4	2.8	0.83	0.66	0.83	36.6
Approach			32	5.0	32	5.0	0.029	30.5	LOS C	0.4	2.8	0.76	0.63	0.76	39.3
East: SW Trunk Rd															
4	L2	All MCs	11	5.0	11	5.0	0.016	15.5	LOS B	0.2	1.1	0.66	0.65	0.66	46.1
5	T1	All MCs	11	5.0	11	5.0	0.015	31.9	LOS C	0.2	1.4	0.84	0.55	0.84	39.4
6	R2	All MCs	70	5.0	70	5.0	* 0.272	43.8	LOS D	2.8	20.8	0.93	0.75	0.93	34.1
Approach			91	5.0	91	5.0	0.272	39.2	LOS D	2.8	20.8	0.89	0.72	0.89	35.7
North: ROL2 Access															
7	L2	All MCs	35	5.0	35	5.0	0.102	15.9	LOS B	0.9	6.2	0.80	0.69	0.80	44.3
8	T1	All MCs	11	5.0	11	5.0	* 0.102	28.6	LOS C	0.9	6.2	0.80	0.69	0.80	45.9
9	R2	All MCs	11	5.0	11	5.0	0.029	36.9	LOS D	0.4	2.7	0.83	0.67	0.83	36.5
Approach			56	5.0	56	5.0	0.102	22.3	LOS C	0.9	6.2	0.80	0.68	0.80	42.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.014	20.9	LOS C	0.3	1.9	0.59	0.65	0.59	43.2
11	T1	All MCs	11	5.0	11	5.0	0.015	31.9	LOS C	0.2	1.4	0.84	0.55	0.84	39.4
12	R2	All MCs	11	5.0	11	5.0	0.041	41.9	LOS D	0.4	3.0	0.89	0.67	0.89	34.8
Approach			32	5.0	32	5.0	0.041	31.6	LOS C	0.4	3.0	0.77	0.62	0.77	38.8
All Vehicles			210	5.0	210	5.0	0.272	32.3	LOS C	2.8	20.8	0.83	0.68	0.83	38.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
East: SW Trunk Rd												

P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: ROL2 Access												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
West: SW Trunk Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		200	211	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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: 101 [I1 (SW18/19) Ult - 2029-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

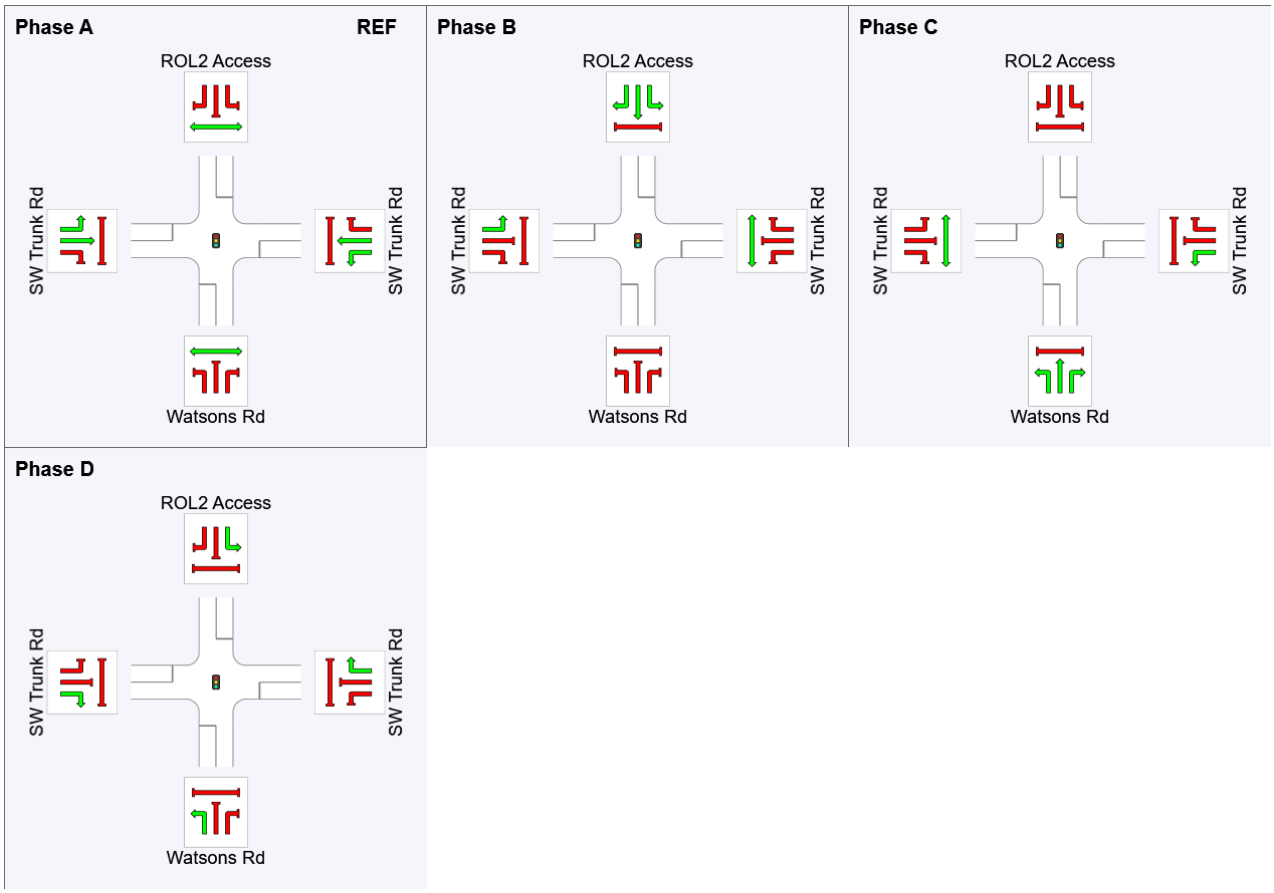
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	23	47	71
Green Time (sec)	17	18	18	13
Phase Time (sec)	23	24	24	19
Phase Split	26%	27%	27%	21%
Phase Frequency (%)	100.0	100.0	100.0	100.0

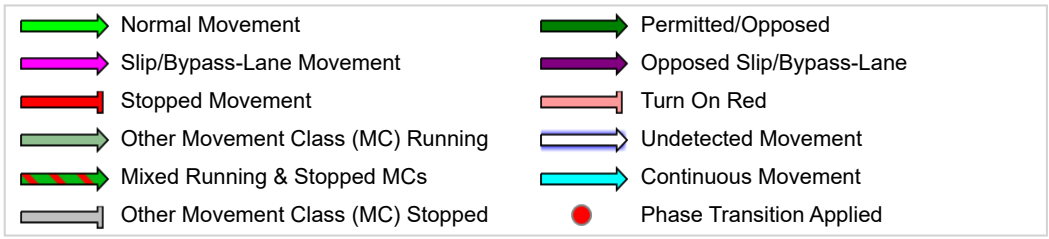
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2030-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.017	25.5	LOS C	0.3	2.2	0.67	0.66	0.67	40.9
2	T1	All MCs	11	5.0	11	5.0	*0.029	31.2	LOS C	0.4	2.8	0.83	0.58	0.83	39.7
3	R2	All MCs	11	5.0	11	5.0	0.029	36.9	LOS D	0.4	2.8	0.83	0.66	0.83	36.6
Approach			32	5.0	32	5.0	0.029	31.2	LOS C	0.4	2.8	0.78	0.63	0.78	39.0
East: SW Trunk Rd															
4	L2	All MCs	11	5.0	11	5.0	0.016	15.7	LOS B	0.2	1.2	0.66	0.65	0.66	46.0
5	T1	All MCs	11	5.0	11	5.0	0.015	31.9	LOS C	0.2	1.4	0.84	0.55	0.84	39.4
6	R2	All MCs	62	5.0	62	5.0	0.309	47.2	LOS D	2.6	19.0	0.96	0.75	0.96	33.0
Approach			83	5.0	83	5.0	0.309	41.2	LOS D	2.6	19.0	0.90	0.71	0.90	35.0
North: ROL2 Access															
7	L2	All MCs	246	5.0	246	5.0	*0.448	18.1	LOS B	4.7	34.5	0.83	0.79	0.83	44.4
8	T1	All MCs	11	5.0	11	5.0	*0.448	31.9	LOS C	4.7	34.5	0.83	0.79	0.83	46.0
9	R2	All MCs	11	5.0	11	5.0	0.025	34.2	LOS C	0.4	2.6	0.80	0.66	0.80	37.5
Approach			267	5.0	267	5.0	0.448	19.3	LOS B	4.7	34.5	0.83	0.78	0.83	44.1
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.013	19.1	LOS B	0.2	1.8	0.55	0.65	0.55	44.1
11	T1	All MCs	11	5.0	11	5.0	0.015	31.9	LOS C	0.2	1.4	0.84	0.55	0.84	39.4
12	R2	All MCs	11	5.0	11	5.0	0.053	45.3	LOS D	0.4	3.1	0.92	0.67	0.92	33.7
Approach			32	5.0	32	5.0	0.053	32.1	LOS C	0.4	3.1	0.77	0.62	0.77	38.6
All Vehicles			413	5.0	413	5.0	0.448	25.5	LOS C	4.7	34.5	0.83	0.74	0.83	41.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
East: SW Trunk Rd												

P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: ROL2 Access												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
West: SW Trunk Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		200	211	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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: 101 [I1 (SW18/19) Ult - 2030-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

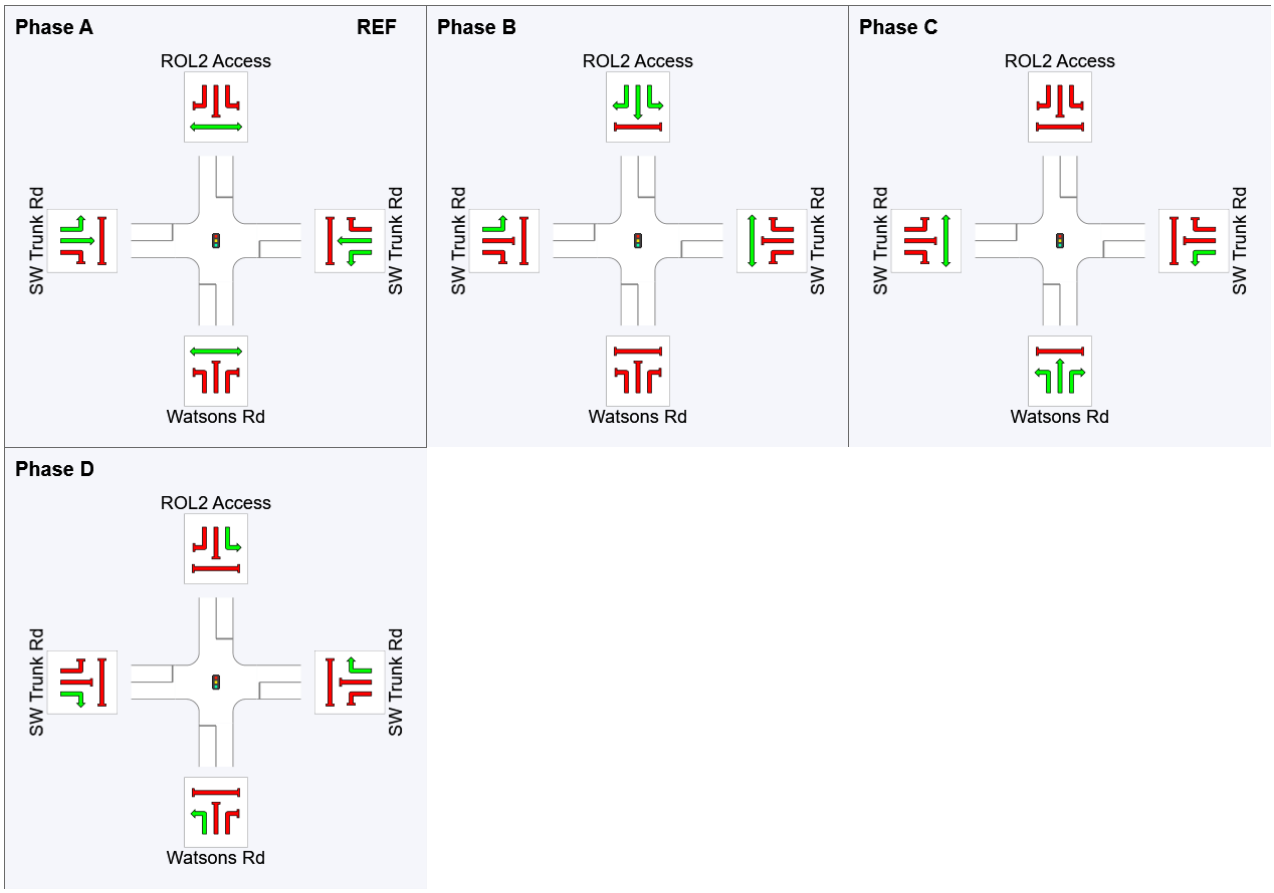
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	23	50	74
Green Time (sec)	17	21	18	10
Phase Time (sec)	23	27	24	16
Phase Split	26%	30%	27%	18%
Phase Frequency (%)	100.0	100.0	100.0	100.0

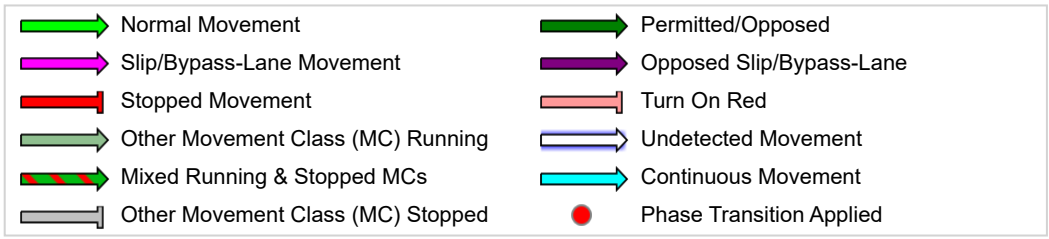
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2030-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.015	23.5	LOS C	0.3	2.0	0.64	0.65	0.64	41.9
2	T1	All MCs	11	5.0	11	5.0	* 0.029	31.2	LOS C	0.4	2.8	0.83	0.58	0.83	39.7
3	R2	All MCs	11	5.0	11	5.0	0.029	36.9	LOS D	0.4	2.8	0.83	0.66	0.83	36.6
Approach			32	5.0	32	5.0	0.029	30.5	LOS C	0.4	2.8	0.76	0.63	0.76	39.3
East: SW Trunk Rd															
4	L2	All MCs	11	5.0	11	5.0	0.016	15.5	LOS B	0.2	1.1	0.66	0.65	0.66	46.1
5	T1	All MCs	11	5.0	11	5.0	0.015	31.9	LOS C	0.2	1.4	0.84	0.55	0.84	39.4
6	R2	All MCs	206	5.0	206	5.0	* 0.796	51.2	LOS D	9.7	71.0	1.00	0.93	1.21	31.9
Approach			227	5.0	227	5.0	0.796	48.6	LOS D	9.7	71.0	0.98	0.90	1.17	32.6
North: ROL2 Access															
7	L2	All MCs	102	5.0	102	5.0	0.217	17.0	LOS B	2.0	14.5	0.79	0.74	0.79	44.5
8	T1	All MCs	11	5.0	11	5.0	* 0.217	31.6	LOS C	2.0	14.5	0.79	0.74	0.79	46.2
9	R2	All MCs	11	5.0	11	5.0	0.029	36.9	LOS D	0.4	2.7	0.83	0.67	0.83	36.5
Approach			123	5.0	123	5.0	0.217	19.9	LOS B	2.0	14.5	0.79	0.73	0.79	43.8
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.014	20.9	LOS C	0.3	1.9	0.59	0.65	0.59	43.2
11	T1	All MCs	11	5.0	11	5.0	0.015	31.9	LOS C	0.2	1.4	0.84	0.55	0.84	39.4
12	R2	All MCs	11	5.0	11	5.0	0.041	41.9	LOS D	0.4	3.0	0.89	0.67	0.89	34.8
Approach			32	5.0	32	5.0	0.041	31.6	LOS C	0.4	3.0	0.77	0.62	0.77	38.8
All Vehicles			413	5.0	413	5.0	0.796	37.4	LOS D	9.7	71.0	0.89	0.81	0.99	36.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
East: SW Trunk Rd												

P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: ROL2 Access												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
West: SW Trunk Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		200	211	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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: 101 [I1 (SW18/19) Ult - 2030-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

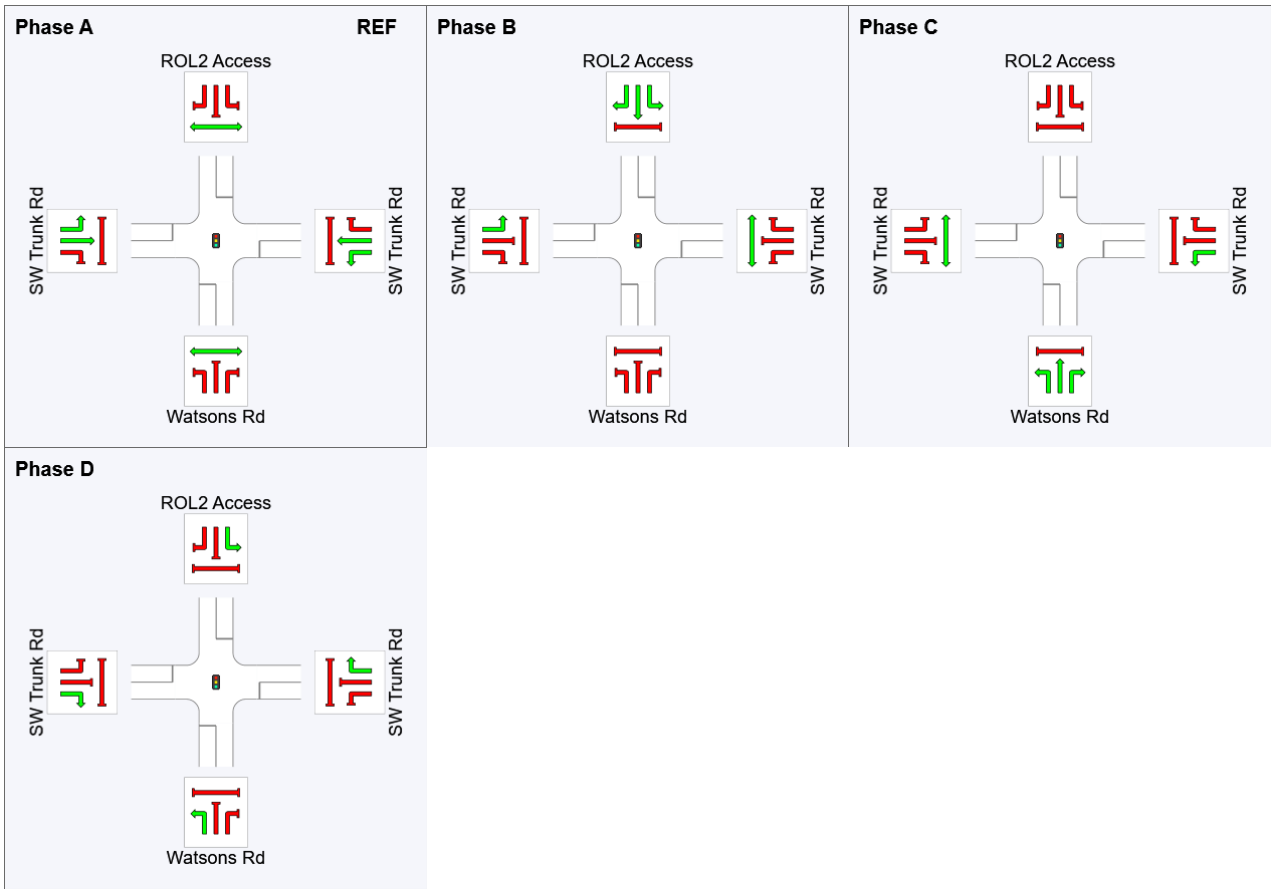
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	23	47	71
Green Time (sec)	17	18	18	13
Phase Time (sec)	23	24	24	19
Phase Split	26%	27%	27%	21%
Phase Frequency (%)	100.0	100.0	100.0	100.0

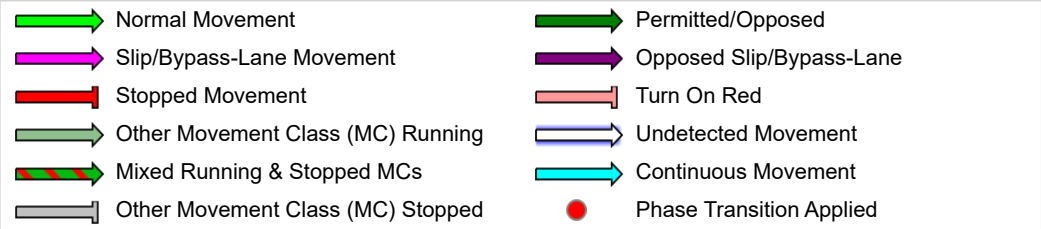
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2031-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.017	28.8	LOS C	0.3	2.4	0.69	0.66	0.69	39.5
2	T1	All MCs	11	5.0	11	5.0	* 0.030	35.5	LOS D	0.4	3.1	0.84	0.58	0.84	38.0
3	R2	All MCs	11	5.0	11	5.0	0.030	41.2	LOS D	0.4	3.1	0.84	0.67	0.84	35.1
Approach			32	5.0	32	5.0	0.030	35.2	LOS D	0.4	3.1	0.79	0.64	0.79	37.4
East: SW Trunk Rd															
4	L2	All MCs	11	5.0	11	5.0	0.017	17.8	LOS B	0.2	1.5	0.68	0.65	0.68	44.8
5	T1	All MCs	30	5.0	30	5.0	0.045	36.6	LOS D	0.6	4.5	0.85	0.60	0.85	37.5
6	R2	All MCs	82	5.0	82	5.0	0.380	51.1	LOS D	3.8	27.9	0.96	0.77	0.96	31.9
Approach			123	5.0	123	5.0	0.380	44.6	LOS D	3.8	27.9	0.91	0.72	0.91	34.0
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	* 0.528	18.7	LOS B	6.7	49.1	0.83	0.80	0.83	44.0
8	T1	All MCs	11	5.0	11	5.0	* 0.528	34.2	LOS C	6.7	49.1	0.83	0.80	0.83	45.6
9	R2	All MCs	11	5.0	11	5.0	0.022	34.2	LOS C	0.4	2.7	0.76	0.66	0.76	37.5
Approach			348	5.0	348	5.0	0.528	19.7	LOS B	6.7	49.1	0.83	0.80	0.83	43.9
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.012	19.9	LOS B	0.3	1.9	0.54	0.65	0.54	43.7
11	T1	All MCs	121	5.0	121	5.0	* 0.178	37.9	LOS D	2.5	18.6	0.88	0.68	0.88	37.0
12	R2	All MCs	11	5.0	11	5.0	0.049	48.4	LOS D	0.5	3.4	0.91	0.67	0.91	32.8
Approach			142	5.0	142	5.0	0.178	37.4	LOS D	2.5	18.6	0.86	0.67	0.86	37.1
All Vehicles			645	5.0	645	5.0	0.528	29.1	LOS C	6.7	49.1	0.85	0.75	0.85	39.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2031-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

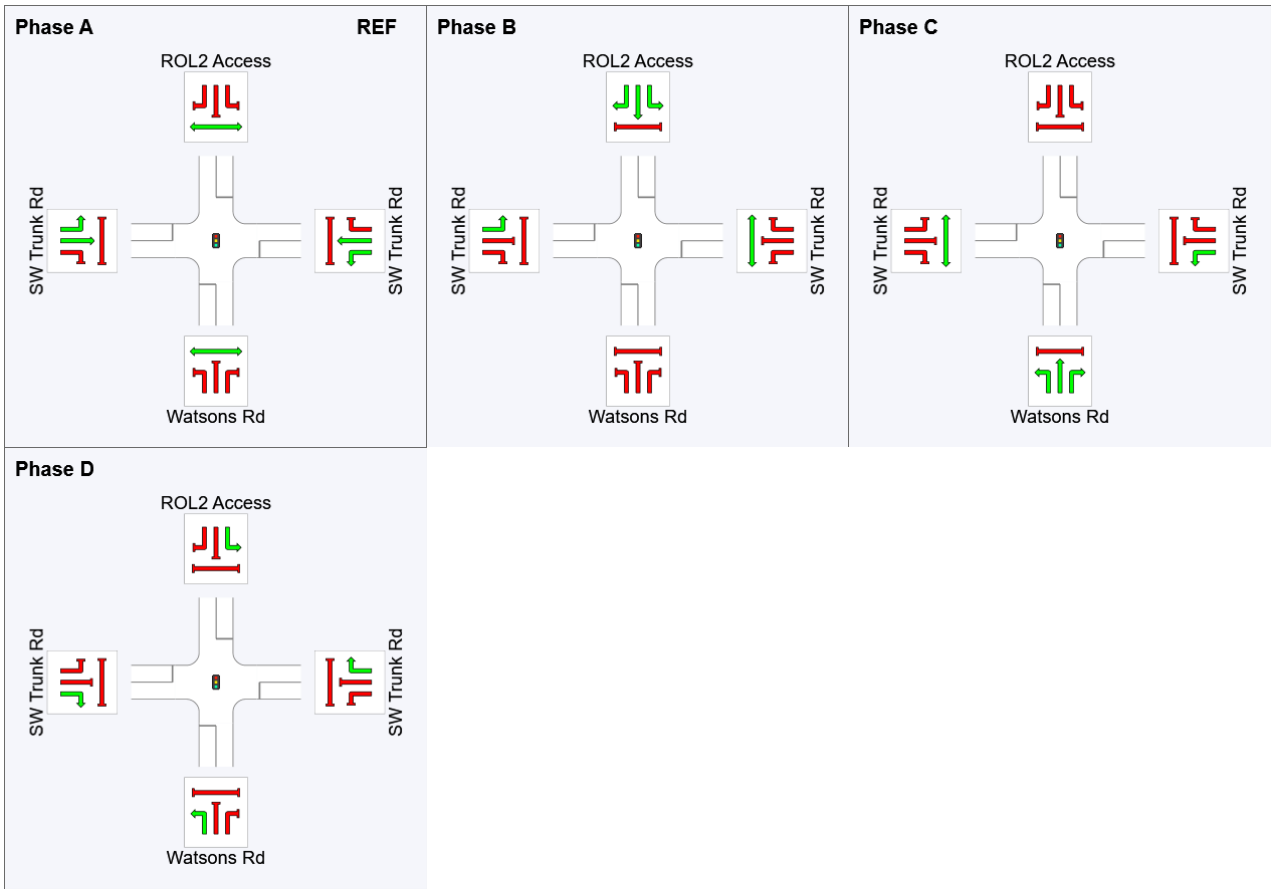
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	24	57	82
Green Time (sec)	18	27	19	12
Phase Time (sec)	24	33	25	18
Phase Split	24%	33%	25%	18%
Phase Frequency (%)	100.0	100.0	100.0	100.0

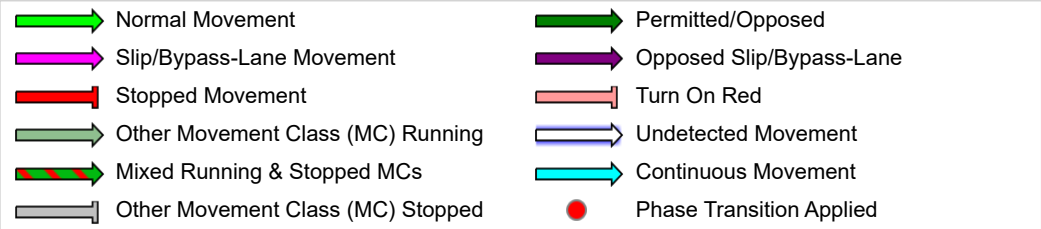
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2031-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.014	23.4	LOS C	0.3	2.1	0.60	0.65	0.60	41.9
2	T1	All MCs	11	5.0	11	5.0	* 0.030	35.5	LOS D	0.4	3.1	0.84	0.58	0.84	38.0
3	R2	All MCs	11	5.0	11	5.0	0.030	41.2	LOS D	0.4	3.1	0.84	0.67	0.84	35.1
Approach			32	5.0	32	5.0	0.030	33.4	LOS C	0.4	3.1	0.76	0.63	0.76	38.1
East: SW Trunk Rd															
4	L2	All MCs	11	5.0	11	5.0	0.017	17.5	LOS B	0.2	1.3	0.68	0.65	0.68	45.0
5	T1	All MCs	102	5.0	102	5.0	* 0.149	37.7	LOS D	2.1	15.4	0.88	0.67	0.88	37.1
6	R2	All MCs	274	5.0	274	5.0	* 0.764	49.9	LOS D	13.5	98.8	1.00	0.89	1.11	32.3
Approach			386	5.0	386	5.0	0.764	45.8	LOS D	13.5	98.8	0.96	0.82	1.03	33.7
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.268	17.8	LOS B	3.0	21.6	0.78	0.75	0.78	44.0
8	T1	All MCs	11	5.0	11	5.0	* 0.268	39.2	LOS D	3.0	21.6	0.78	0.75	0.78	45.6
9	R2	All MCs	11	5.0	11	5.0	0.031	41.2	LOS D	0.4	3.1	0.84	0.67	0.84	35.0
Approach			156	5.0	156	5.0	0.268	20.9	LOS C	3.0	21.6	0.79	0.74	0.79	43.3
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.015	24.7	LOS C	0.3	2.2	0.62	0.65	0.62	41.3
11	T1	All MCs	50	5.0	50	5.0	0.074	36.9	LOS D	1.0	7.5	0.86	0.63	0.86	37.4
12	R2	All MCs	11	5.0	11	5.0	0.029	40.3	LOS D	0.4	3.0	0.83	0.67	0.83	35.3
Approach			71	5.0	71	5.0	0.074	35.6	LOS D	1.0	7.5	0.82	0.64	0.82	37.6
All Vehicles			645	5.0	645	5.0	0.764	38.0	LOS D	13.5	98.8	0.89	0.77	0.94	36.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2031-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

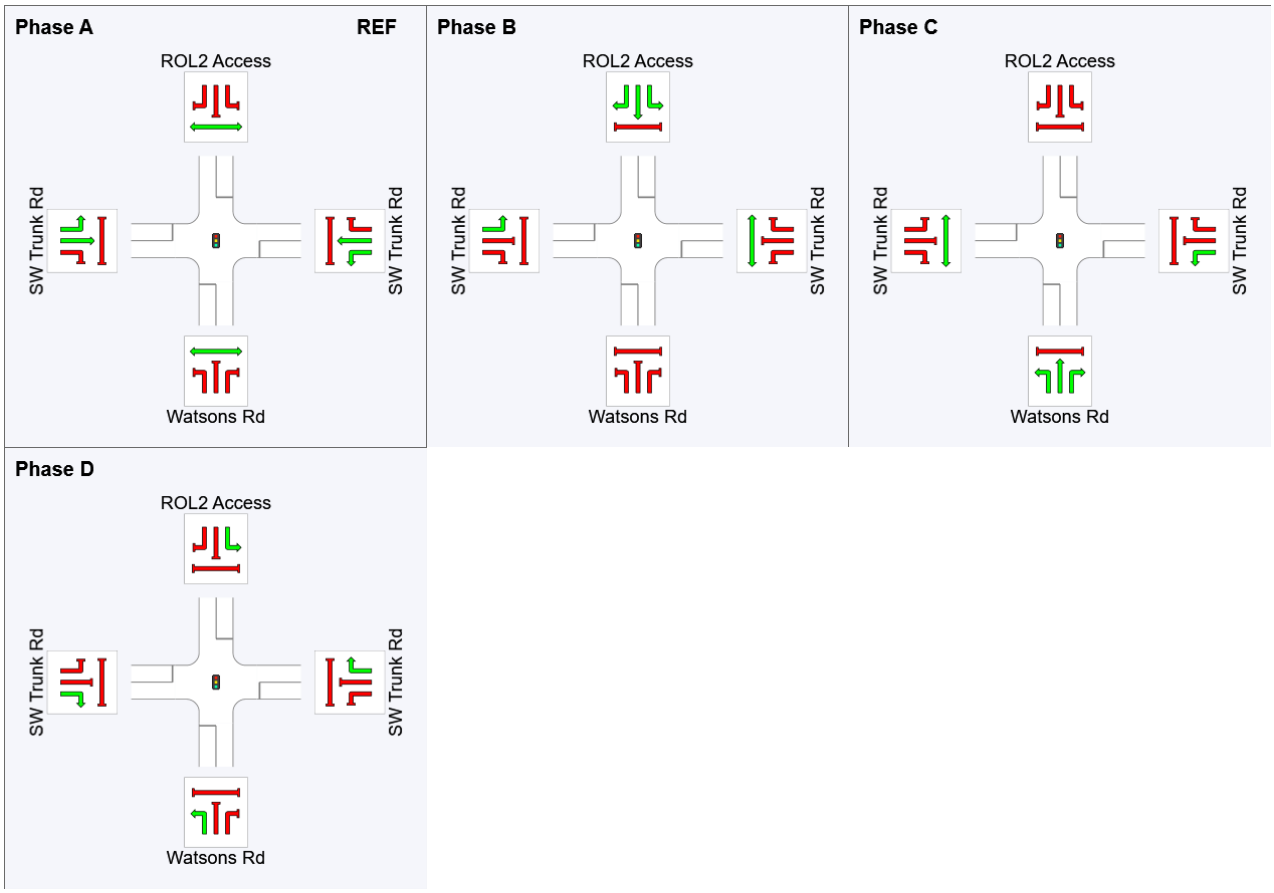
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	24	49	74
Green Time (sec)	18	19	19	20
Phase Time (sec)	24	25	25	26
Phase Split	24%	25%	25%	26%
Phase Frequency (%)	100.0	100.0	100.0	100.0

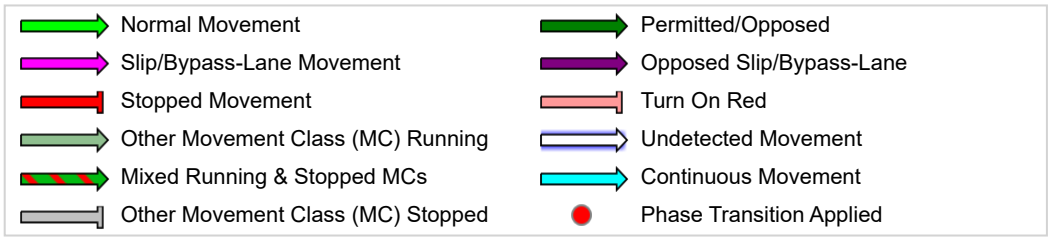
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2032-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.017	28.8	LOS C	0.3	2.4	0.69	0.66	0.69	39.5
2	T1	All MCs	11	5.0	11	5.0	* 0.114	36.5	LOS D	1.6	11.7	0.86	0.70	0.86	36.1
3	R2	All MCs	67	5.0	67	5.0	0.114	42.1	LOS D	1.6	11.7	0.86	0.71	0.86	34.9
Approach			88	5.0	88	5.0	0.114	39.9	LOS D	1.6	11.7	0.84	0.70	0.84	35.6
East: SW Trunk Rd															
4	L2	All MCs	17	5.0	17	5.0	0.028	17.9	LOS B	0.3	2.4	0.69	0.67	0.69	44.7
5	T1	All MCs	61	5.0	61	5.0	0.089	37.1	LOS D	1.2	9.1	0.87	0.64	0.87	37.3
6	R2	All MCs	82	5.0	82	5.0	0.380	51.1	LOS D	3.8	27.9	0.96	0.77	0.96	31.9
Approach			159	5.0	159	5.0	0.380	42.3	LOS D	3.8	27.9	0.90	0.71	0.90	34.9
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	* 0.528	18.7	LOS B	6.7	49.1	0.83	0.80	0.83	44.0
8	T1	All MCs	11	5.0	11	5.0	* 0.528	34.2	LOS C	6.7	49.1	0.83	0.80	0.83	45.6
9	R2	All MCs	11	5.0	11	5.0	0.022	34.2	LOS C	0.4	2.7	0.76	0.66	0.76	37.5
Approach			348	5.0	348	5.0	0.528	19.7	LOS B	6.7	49.1	0.83	0.80	0.83	43.9
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.012	19.9	LOS B	0.3	1.9	0.54	0.65	0.54	43.7
11	T1	All MCs	243	5.0	243	5.0	* 0.357	39.5	LOS D	5.3	38.6	0.92	0.73	0.92	36.5
12	R2	All MCs	11	5.0	11	5.0	0.049	48.4	LOS D	0.5	3.4	0.91	0.67	0.91	32.8
Approach			264	5.0	264	5.0	0.357	39.1	LOS D	5.3	38.6	0.91	0.73	0.91	36.5
All Vehicles			859	5.0	859	5.0	0.528	31.9	LOS C	6.7	49.1	0.87	0.75	0.87	38.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2032-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

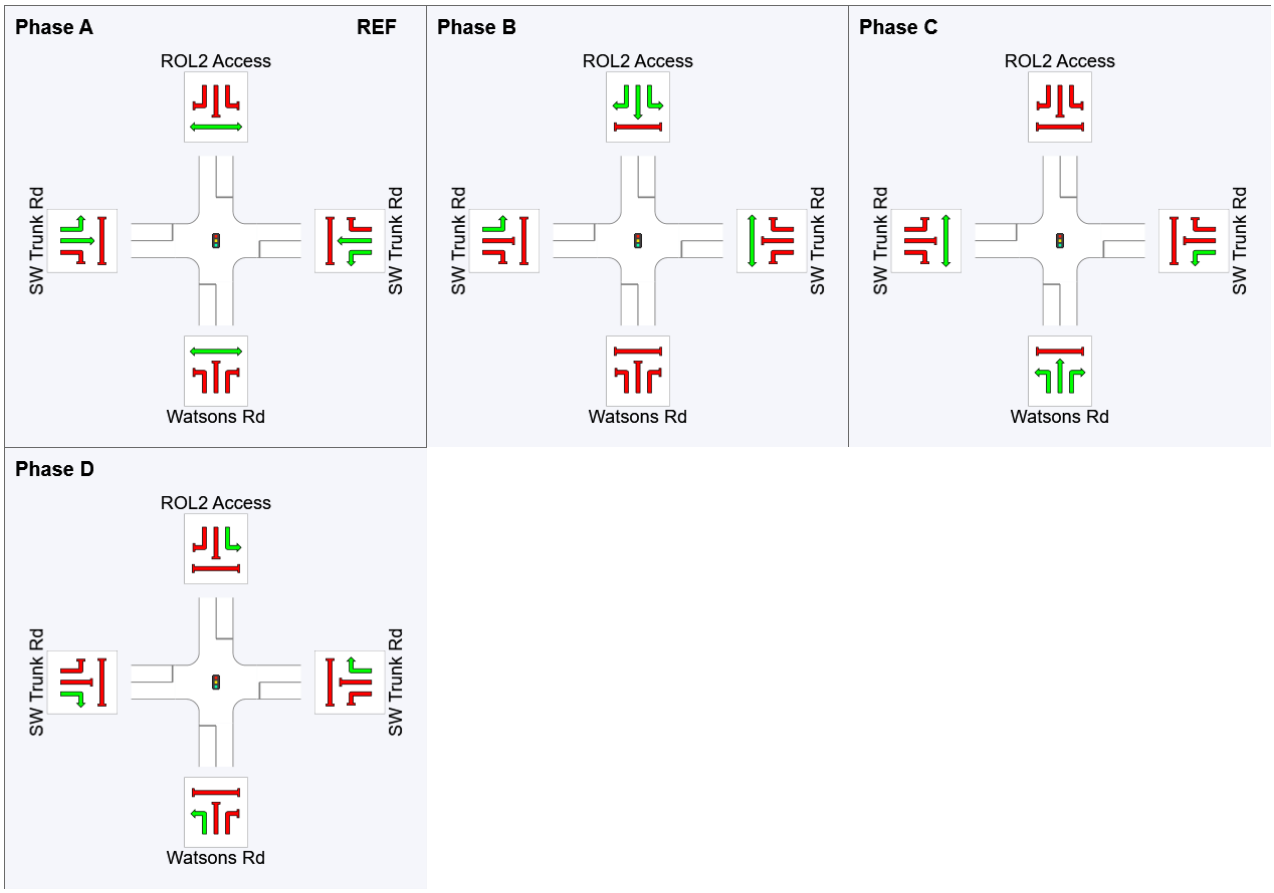
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	24	57	82
Green Time (sec)	18	27	19	12
Phase Time (sec)	24	33	25	18
Phase Split	24%	33%	25%	18%
Phase Frequency (%)	100.0	100.0	100.0	100.0

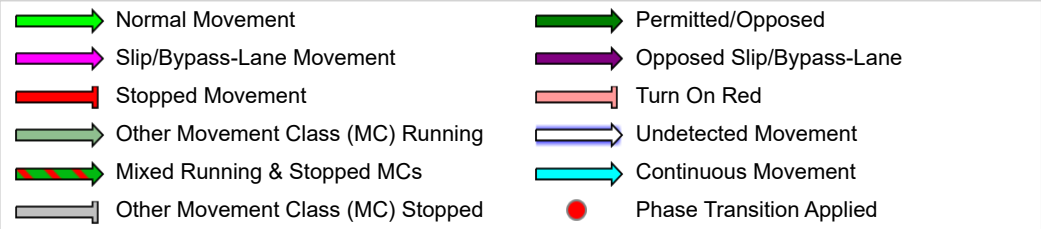
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2032-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.014	23.4	LOS C	0.3	2.1	0.60	0.65	0.60	41.9
2	T1	All MCs	11	5.0	11	5.0	0.055	35.9	LOS D	0.8	5.7	0.85	0.65	0.85	36.9
3	R2	All MCs	28	5.0	28	5.0	0.055	41.5	LOS D	0.8	5.7	0.85	0.68	0.85	35.3
Approach			49	5.0	49	5.0	0.055	36.4	LOS D	0.8	5.7	0.79	0.67	0.79	36.9
East: SW Trunk Rd															
4	L2	All MCs	56	5.0	56	5.0	* 0.093	18.0	LOS B	1.0	7.4	0.71	0.71	0.71	44.7
5	T1	All MCs	203	5.0	203	5.0	* 0.299	39.0	LOS D	4.4	32.0	0.91	0.72	0.91	36.6
6	R2	All MCs	274	5.0	274	5.0	* 0.764	49.9	LOS D	13.5	98.8	1.00	0.89	1.11	32.3
Approach			533	5.0	533	5.0	0.764	42.4	LOS D	13.5	98.8	0.93	0.80	0.99	34.9
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.268	17.8	LOS B	3.0	21.6	0.78	0.75	0.78	44.0
8	T1	All MCs	11	5.0	11	5.0	* 0.268	39.2	LOS D	3.0	21.6	0.78	0.75	0.78	45.6
9	R2	All MCs	11	5.0	11	5.0	0.031	41.2	LOS D	0.4	3.1	0.84	0.67	0.84	35.0
Approach			156	5.0	156	5.0	0.268	20.9	LOS C	3.0	21.6	0.79	0.74	0.79	43.3
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.015	24.7	LOS C	0.3	2.2	0.62	0.65	0.62	41.3
11	T1	All MCs	100	5.0	100	5.0	0.147	37.7	LOS D	2.1	15.2	0.88	0.66	0.88	37.1
12	R2	All MCs	11	5.0	11	5.0	0.029	40.3	LOS D	0.4	3.0	0.83	0.67	0.83	35.3
Approach			121	5.0	121	5.0	0.147	36.8	LOS D	2.1	15.2	0.85	0.66	0.85	37.3
All Vehicles			859	5.0	859	5.0	0.764	37.3	LOS D	13.5	98.8	0.89	0.77	0.92	36.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2032-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

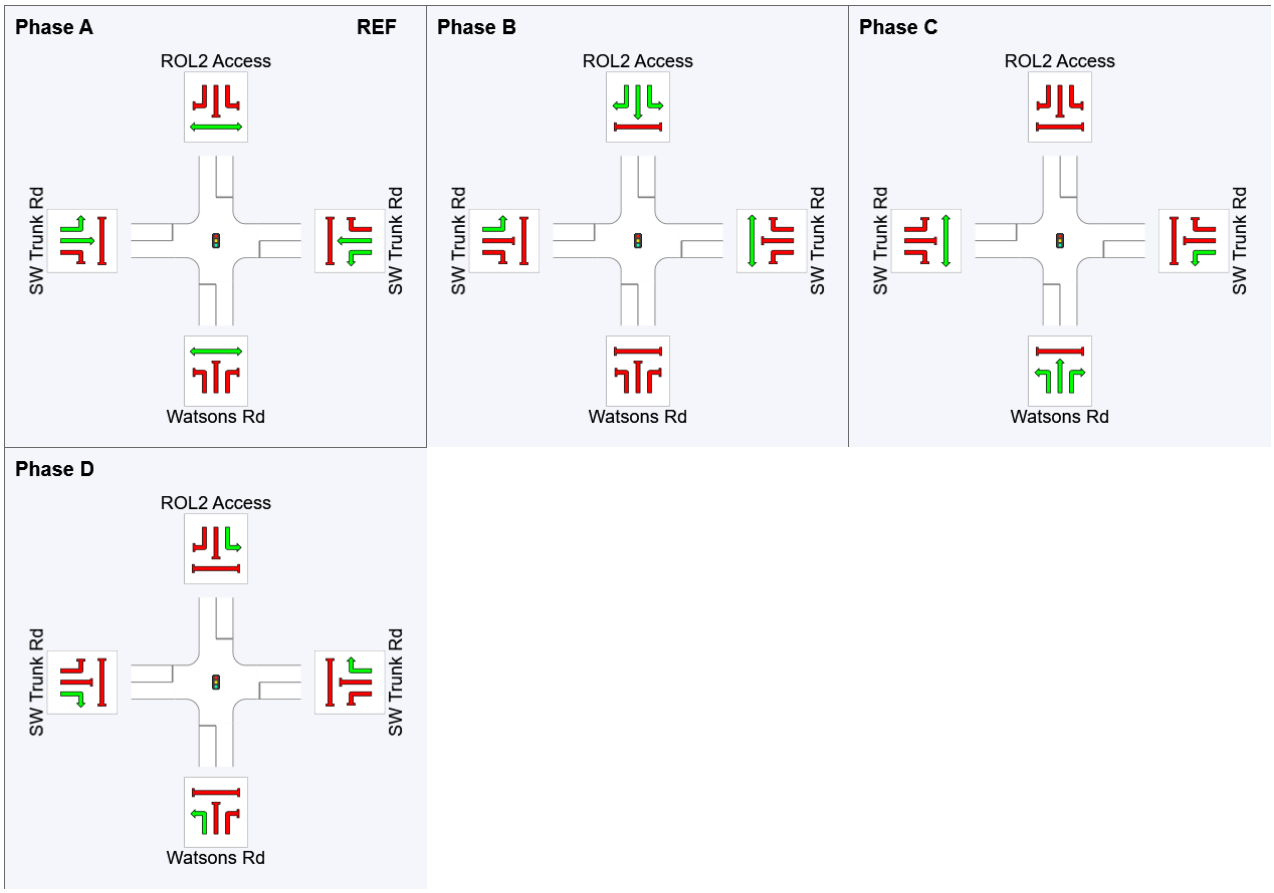
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	24	49	74
Green Time (sec)	18	19	19	20
Phase Time (sec)	24	25	25	26
Phase Split	24%	25%	25%	26%
Phase Frequency (%)	100.0	100.0	100.0	100.0

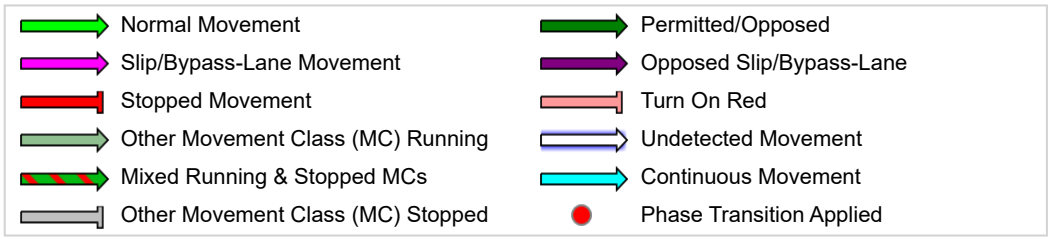
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2033-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.018	29.5	LOS C	0.3	2.5	0.70	0.66	0.70	39.2
2	T1	All MCs	11	5.0	11	5.0	*0.212	37.4	LOS D	3.1	22.3	0.88	0.74	0.88	35.6
3	R2	All MCs	135	5.0	135	5.0	0.212	43.1	LOS D	3.1	22.3	0.88	0.75	0.88	34.6
Approach			156	5.0	156	5.0	0.212	41.8	LOS D	3.1	22.3	0.87	0.74	0.87	34.9
East: SW Trunk Rd															
4	L2	All MCs	34	5.0	34	5.0	0.052	17.4	LOS B	0.6	4.7	0.68	0.69	0.68	45.1
5	T1	All MCs	150	5.0	150	5.0	0.198	36.3	LOS D	3.1	22.5	0.87	0.68	0.87	37.6
6	R2	All MCs	82	5.0	82	5.0	0.415	52.3	LOS D	3.9	28.4	0.97	0.77	0.97	31.6
Approach			265	5.0	265	5.0	0.415	38.8	LOS D	3.9	28.4	0.88	0.71	0.88	36.2
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	*0.556	19.7	LOS B	7.1	52.0	0.86	0.81	0.86	43.6
8	T1	All MCs	11	5.0	11	5.0	*0.556	35.2	LOS D	7.1	52.0	0.86	0.81	0.86	45.1
9	R2	All MCs	11	5.0	11	5.0	0.023	35.0	LOS D	0.4	2.8	0.77	0.66	0.77	37.2
Approach			348	5.0	348	5.0	0.556	20.6	LOS C	7.1	52.0	0.85	0.80	0.85	43.4
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.012	19.3	LOS B	0.3	1.9	0.53	0.64	0.53	44.0
11	T1	All MCs	600	5.0	600	5.0	*0.794	45.4	LOS D	15.1	110.1	1.00	0.94	1.13	34.4
12	R2	All MCs	11	5.0	11	5.0	0.053	49.6	LOS D	0.5	3.4	0.92	0.67	0.92	32.4
Approach			621	5.0	621	5.0	0.794	45.0	LOS D	15.1	110.1	0.99	0.93	1.12	34.5
All Vehicles			1390	5.0	1390	5.0	0.794	37.4	LOS D	15.1	110.1	0.92	0.83	0.98	36.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2033-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

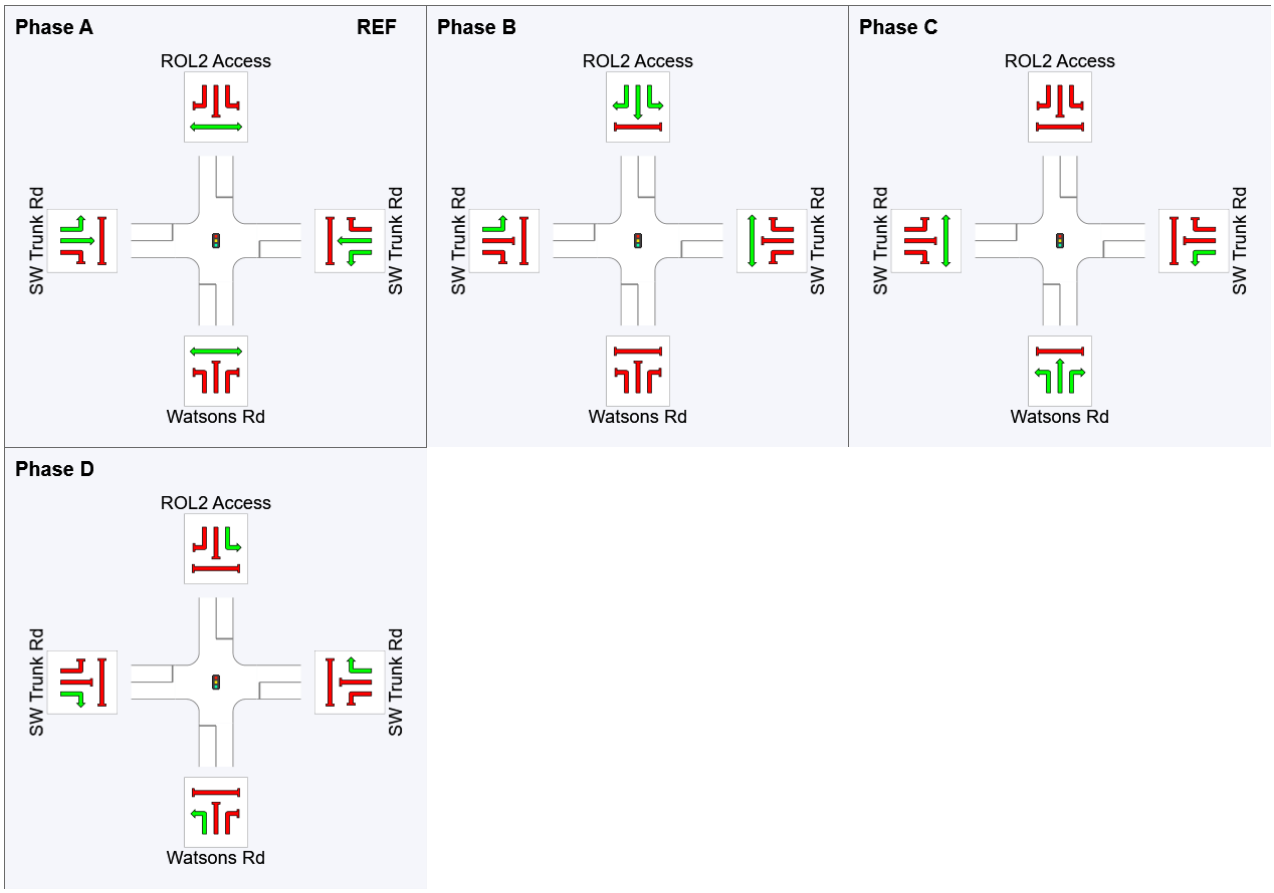
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	26	58	83
Green Time (sec)	20	26	19	11
Phase Time (sec)	26	32	25	17
Phase Split	26%	32%	25%	17%
Phase Frequency (%)	100.0	100.0	100.0	100.0

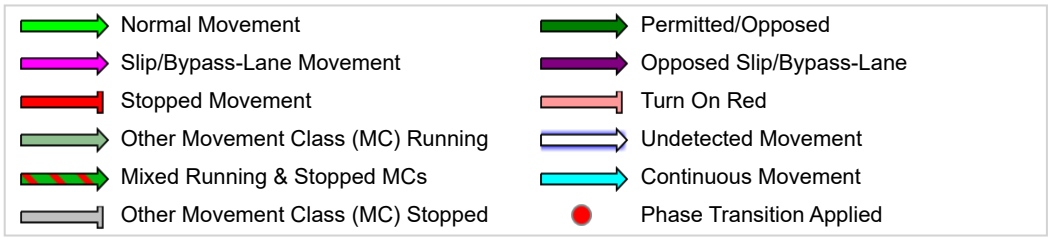
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2033-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	11	5.0	11	5.0	0.014	23.4	LOS C	0.3	2.1	0.60	0.65	0.60	41.9
2	T1	All MCs	11	5.0	11	5.0	0.096	36.3	LOS D	1.4	9.9	0.86	0.69	0.86	36.3
3	R2	All MCs	56	5.0	56	5.0	0.096	42.0	LOS D	1.4	9.9	0.86	0.70	0.86	35.0
Approach			77	5.0	77	5.0	0.096	38.6	LOS D	1.4	9.9	0.82	0.69	0.82	36.0
East: SW Trunk Rd															
4	L2	All MCs	113	5.0	113	5.0	* 0.185	18.5	LOS B	2.1	15.5	0.74	0.74	0.74	44.4
5	T1	All MCs	502	5.0	502	5.0	* 0.739	44.6	LOS D	12.3	89.7	1.00	0.89	1.09	34.7
6	R2	All MCs	274	5.0	274	5.0	* 0.764	49.9	LOS D	13.5	98.8	1.00	0.89	1.11	32.3
Approach			889	5.0	889	5.0	0.764	42.9	LOS D	13.5	98.8	0.97	0.87	1.05	34.8
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.268	17.8	LOS B	3.0	21.6	0.78	0.75	0.78	44.0
8	T1	All MCs	11	5.0	11	5.0	* 0.268	39.2	LOS D	3.0	21.6	0.78	0.75	0.78	45.6
9	R2	All MCs	11	5.0	11	5.0	0.031	41.2	LOS D	0.4	3.1	0.84	0.67	0.84	35.0
Approach			156	5.0	156	5.0	0.268	20.9	LOS C	3.0	21.6	0.79	0.74	0.79	43.3
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.015	24.7	LOS C	0.3	2.2	0.62	0.65	0.62	41.3
11	T1	All MCs	247	5.0	247	5.0	0.364	39.5	LOS D	5.4	39.5	0.92	0.74	0.92	36.4
12	R2	All MCs	11	5.0	11	5.0	0.029	40.3	LOS D	0.4	3.0	0.83	0.67	0.83	35.3
Approach			268	5.0	268	5.0	0.364	39.0	LOS D	5.4	39.5	0.91	0.73	0.91	36.6
All Vehicles			1390	5.0	1390	5.0	0.764	39.5	LOS D	13.5	98.8	0.93	0.82	0.98	36.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2033-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

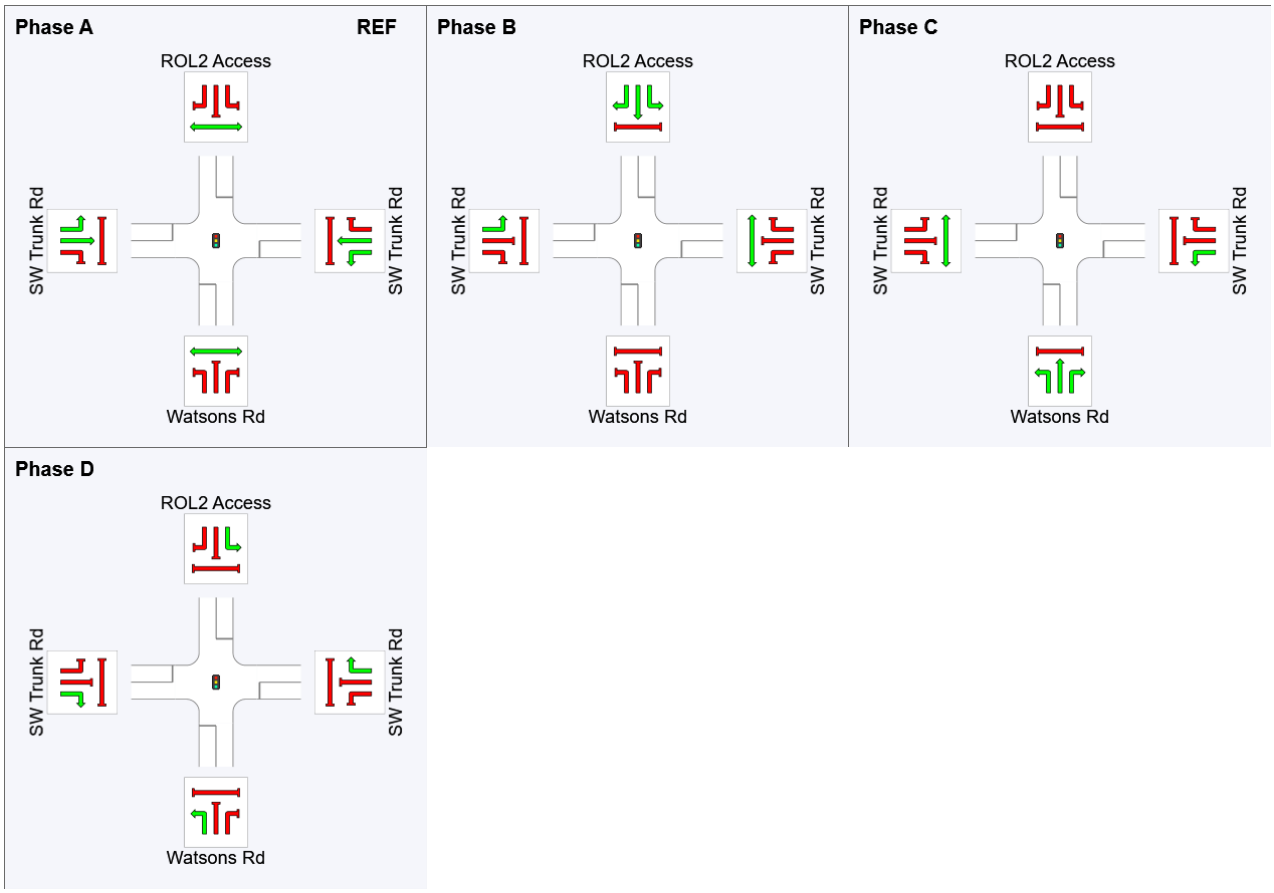
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	24	49	74
Green Time (sec)	18	19	19	20
Phase Time (sec)	24	25	25	26
Phase Split	24%	25%	25%	26%
Phase Frequency (%)	100.0	100.0	100.0	100.0

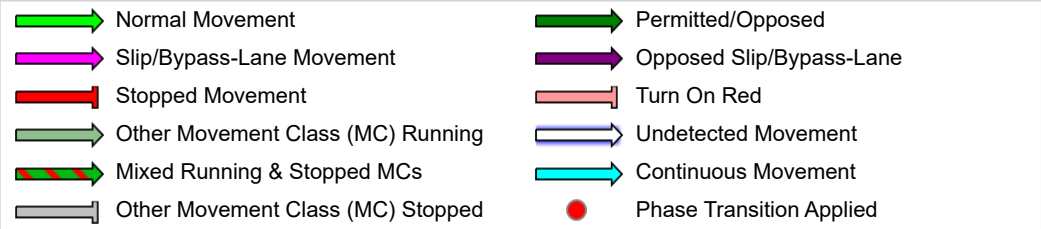
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2034-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	22	5.0	22	5.0	0.043	35.4	LOS D	0.8	6.2	0.75	0.69	0.75	36.9
2	T1	All MCs	11	5.0	11	5.0	* 0.342	43.9	LOS D	5.1	37.4	0.92	0.77	0.92	33.4
3	R2	All MCs	202	5.0	202	5.0	0.342	49.6	LOS D	5.1	37.4	0.92	0.77	0.92	32.5
Approach			235	5.0	235	5.0	0.342	48.0	LOS D	5.1	37.4	0.91	0.77	0.91	32.9
East: SW Trunk Rd															
4	L2	All MCs	51	5.0	51	5.0	0.069	16.9	LOS B	1.0	7.5	0.63	0.69	0.63	45.3
5	T1	All MCs	303	5.0	303	5.0	0.304	35.0	LOS D	6.5	47.7	0.85	0.69	0.85	38.1
6	R2	All MCs	82	5.0	82	5.0	0.502	59.5	LOS E	4.4	32.1	0.99	0.77	0.99	29.7
Approach			435	5.0	435	5.0	0.502	37.5	LOS D	6.5	47.7	0.85	0.71	0.85	36.9
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	* 0.591	22.6	LOS C	9.0	65.4	0.89	0.82	0.89	42.1
8	T1	All MCs	11	5.0	11	5.0	* 0.591	39.4	LOS D	9.0	65.4	0.89	0.82	0.89	43.6
9	R2	All MCs	11	5.0	11	5.0	0.023	38.4	LOS D	0.4	3.1	0.77	0.66	0.77	36.0
Approach			348	5.0	348	5.0	0.591	23.5	LOS C	9.0	65.4	0.88	0.81	0.88	41.9
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.011	30.1	LOS C	0.3	1.8	0.47	0.64	0.47	45.0
11	T1	All MCs	842	5.0	842	5.0	* 0.854	61.6	LOS E	24.0	175.5	1.00	1.00	1.16	33.3
12	R2	All MCs	15	5.0	15	5.0	0.091	69.1	LOS E	0.8	5.5	0.95	0.69	0.95	30.5
Approach			867	5.0	867	5.0	0.854	61.3	LOS E	24.0	175.5	0.99	0.99	1.15	29.9
All Vehicles			1886	5.0	1886	5.0	0.854	47.2	LOS D	24.0	175.5	0.93	0.86	1.00	33.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
East: SW Trunk Rd												

P2	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
North: ROL2 Access												
P3	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
West: SW Trunk Rd												
P4	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
All Pedestrians		200	211	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98

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: 101 [I1 (SW18/19) Ult - 2034-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

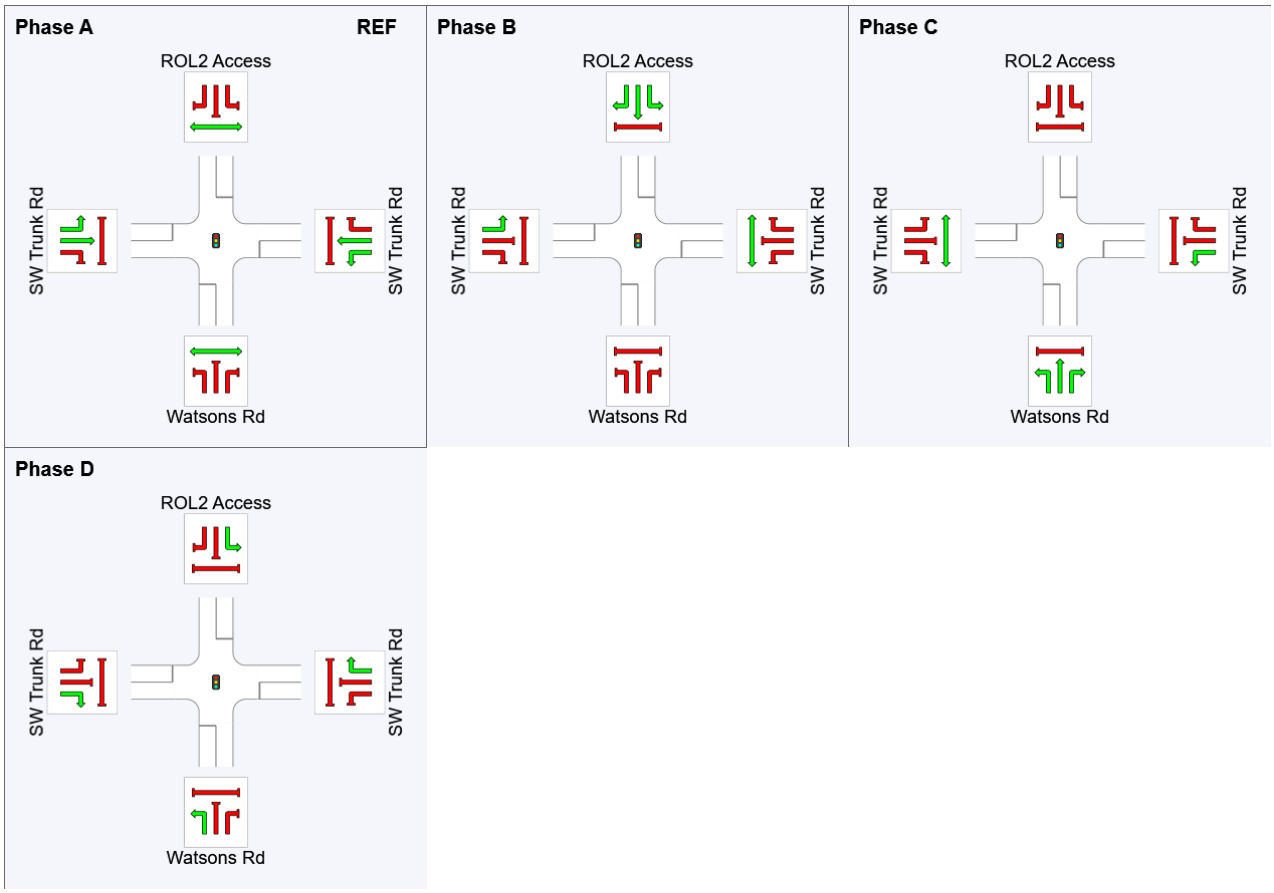
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	35	69	94
Green Time (sec)	29	28	19	10
Phase Time (sec)	35	34	25	16
Phase Split	32%	31%	23%	15%
Phase Frequency (%)	100.0	100.0	100.0	100.0

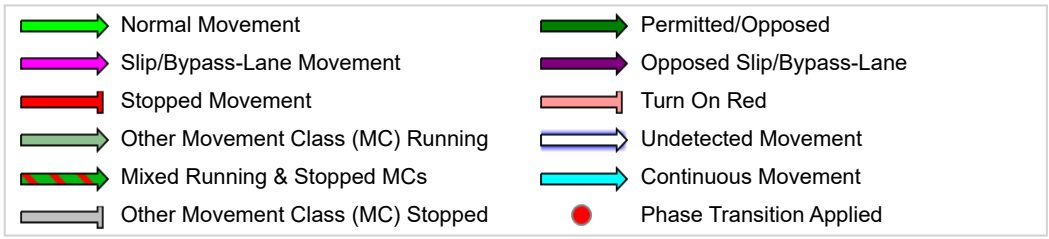
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Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2034-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	12	5.0	12	5.0	0.017	26.6	LOS C	0.4	2.8	0.63	0.66	0.63	40.5
2	T1	All MCs	11	5.0	11	5.0	0.151	42.1	LOS D	2.2	15.9	0.89	0.72	0.89	34.2
3	R2	All MCs	83	5.0	83	5.0	0.151	47.8	LOS D	2.2	15.9	0.89	0.73	0.89	33.1
Approach			106	5.0	106	5.0	0.151	44.8	LOS D	2.2	15.9	0.86	0.72	0.86	33.9
East: SW Trunk Rd															
4	L2	All MCs	169	5.0	169	5.0	*0.247	18.4	LOS B	3.4	25.0	0.72	0.75	0.72	44.5
5	T1	All MCs	703	5.0	703	5.0	*0.787	46.0	LOS D	18.8	137.4	1.00	0.92	1.09	34.2
6	R2	All MCs	274	5.0	274	5.0	*0.764	53.8	LOS D	14.8	107.7	1.00	0.89	1.09	31.2
Approach			1146	5.0	1146	5.0	0.787	43.8	LOS D	18.8	137.4	0.96	0.89	1.04	34.6
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.287	20.7	LOS C	3.8	27.4	0.81	0.76	0.81	42.3
8	T1	All MCs	11	5.0	11	5.0	*0.287	47.5	LOS D	3.8	27.4	0.81	0.76	0.81	43.8
9	R2	All MCs	11	5.0	11	5.0	0.034	46.5	LOS D	0.5	3.4	0.86	0.67	0.86	33.4
Approach			156	5.0	156	5.0	0.287	24.3	LOS C	3.8	27.4	0.82	0.75	0.82	41.6
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.013	24.0	LOS C	0.3	2.3	0.59	0.65	0.59	41.6
11	T1	All MCs	406	5.0	406	5.0	0.455	39.1	LOS D	9.4	68.8	0.91	0.75	0.91	36.6
12	R2	All MCs	18	5.0	18	5.0	0.050	43.9	LOS D	0.8	5.7	0.84	0.69	0.84	34.1
Approach			435	5.0	435	5.0	0.455	38.9	LOS D	9.4	68.8	0.89	0.75	0.89	36.6
All Vehicles			1843	5.0	1843	5.0	0.787	41.0	LOS D	18.8	137.4	0.93	0.83	0.97	35.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
East: SW Trunk Rd												

P2	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
North: ROL2 Access												
P3	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
West: SW Trunk Rd												
P4	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
All Pedestrians		200	211	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98

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: 101 [I1 (SW18/19) Ult - 2034-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Optimum Cycle Time - Minimum Delay)

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

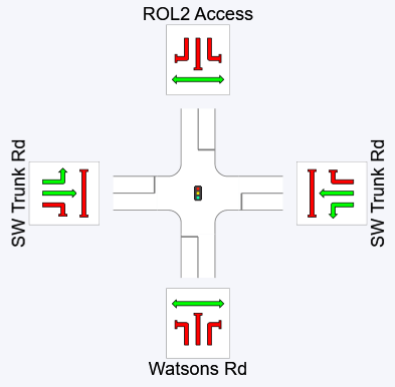
Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	32	57	82
Green Time (sec)	26	19	19	22
Phase Time (sec)	32	25	25	28
Phase Split	29%	23%	23%	25%
Phase Frequency (%)	100.0	100.0	100.0	100.0

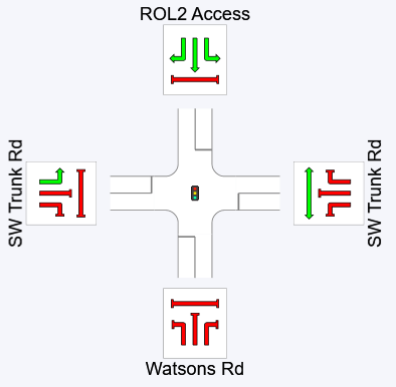
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence

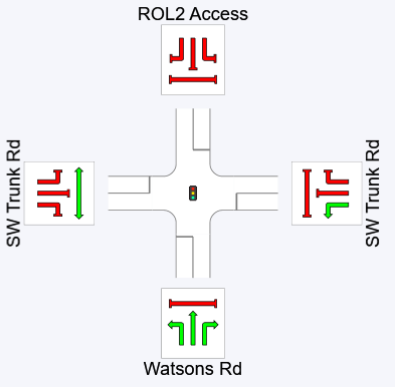
Phase A **REF**



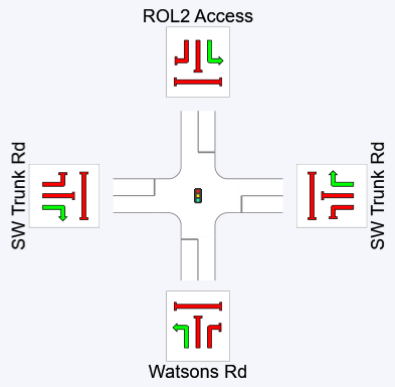
Phase B



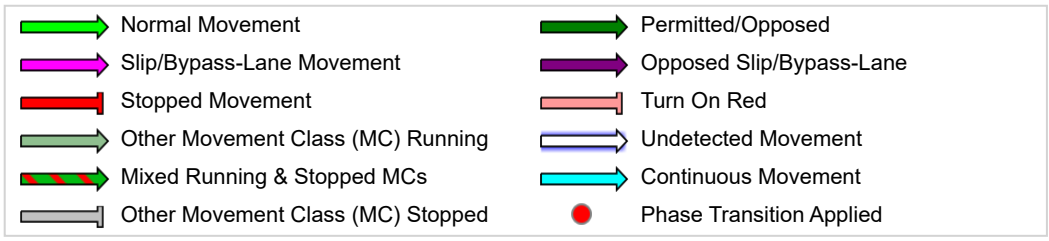
Phase C



Phase D



REF: Reference Phase
VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2035-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	44	5.0	44	5.0	0.098	45.2	LOS D	2.1	15.6	0.80	0.72	0.80	33.5
2	T1	All MCs	11	5.0	11	5.0	*0.507	55.4	LOS E	8.3	60.8	0.97	0.80	0.97	30.2
3	R2	All MCs	269	5.0	269	5.0	0.507	61.1	LOS E	8.3	60.8	0.97	0.80	0.97	29.5
Approach			324	5.0	324	5.0	0.507	58.7	LOS E	8.3	60.8	0.94	0.79	0.94	30.0
East: SW Trunk Rd															
4	L2	All MCs	67	5.0	67	5.0	0.080	16.7	LOS B	1.5	11.1	0.58	0.69	0.58	45.4
5	T1	All MCs	456	5.0	456	5.0	0.357	34.5	LOS C	10.8	78.9	0.80	0.68	0.80	38.3
6	R2	All MCs	82	5.0	82	5.0	0.593	71.5	LOS E	5.3	38.6	1.00	0.79	1.03	27.1
Approach			606	5.0	606	5.0	0.593	37.5	LOS D	10.8	78.9	0.80	0.69	0.81	36.9
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	*0.629	32.4	LOS C	12.0	87.7	0.91	0.83	0.91	39.6
8	T1	All MCs	11	5.0	11	5.0	*0.629	52.0	LOS D	12.0	87.7	0.91	0.83	0.91	40.9
9	R2	All MCs	11	5.0	11	5.0	0.024	49.5	LOS D	0.5	3.6	0.78	0.67	0.78	33.8
Approach			348	5.0	348	5.0	0.629	33.5	LOS C	12.0	87.7	0.91	0.82	0.91	37.6
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.010	38.3	LOS D	0.3	1.9	0.41	0.63	0.41	45.8
11	T1	All MCs	1085	5.0	1085	5.0	*0.866	72.8	LOS E	35.6	260.2	1.00	0.98	1.11	32.8
12	R2	All MCs	30	5.0	30	5.0	0.215	90.5	LOS F	1.8	13.4	0.97	0.72	0.97	27.8
Approach			1125	5.0	1125	5.0	0.866	73.0	LOS E	35.6	260.2	0.99	0.97	1.10	27.3
All Vehicles			2403	5.0	2403	5.0	0.866	56.4	LOS E	35.6	260.2	0.93	0.86	0.98	31.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
East: SW Trunk Rd												

P2	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
North: ROL2 Access												
P3	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
West: SW Trunk Rd												
P4	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94
All Pedestrians		200	211	59.3	LOS E	0.2	0.2	0.96	0.96	213.1	200.0	0.94

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: 101 [I1 (SW18/19) Ult - 2035-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Practical Cycle Time)

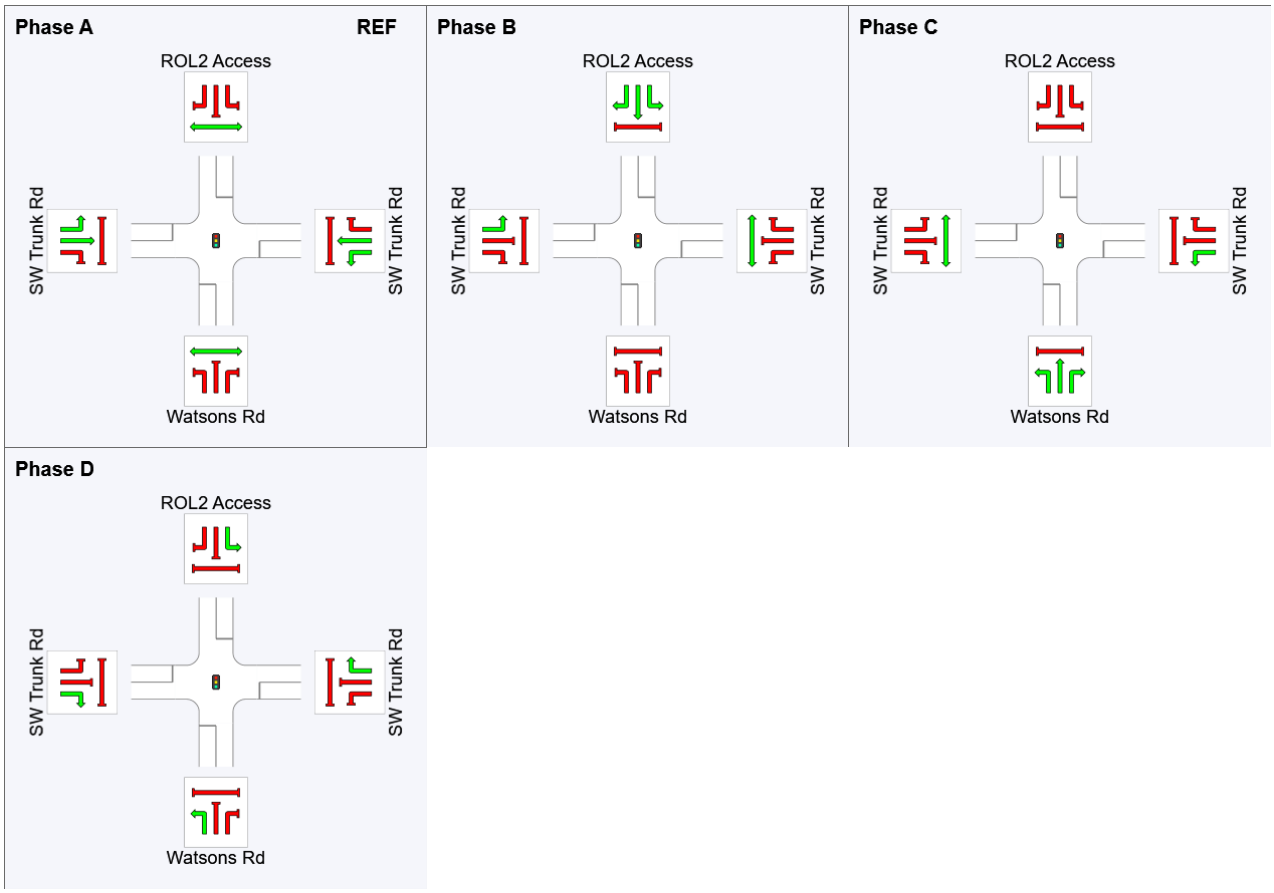
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	50	88	114
Green Time (sec)	44	32	20	10
Phase Time (sec)	50	38	26	16
Phase Split	38%	29%	20%	12%
Phase Frequency (%)	100.0	100.0	100.0	100.0

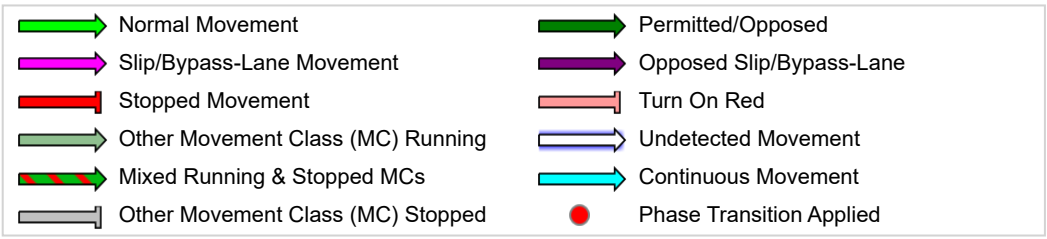
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2035-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	24	5.0	24	5.0	0.036	30.7	LOS C	0.9	6.3	0.66	0.68	0.66	38.7
2	T1	All MCs	11	5.0	11	5.0	0.203	47.0	LOS D	3.1	22.8	0.90	0.74	0.90	32.6
3	R2	All MCs	111	5.0	111	5.0	0.203	52.7	LOS D	3.1	22.8	0.90	0.74	0.90	31.7
Approach			146	5.0	146	5.0	0.203	48.6	LOS D	3.1	22.8	0.86	0.73	0.86	32.7
East: SW Trunk Rd															
4	L2	All MCs	226	5.0	226	5.0	* 0.296	18.0	LOS B	4.7	34.2	0.70	0.76	0.70	44.7
5	T1	All MCs	904	5.0	904	5.0	* 0.870	54.9	LOS D	29.1	212.2	1.00	1.02	1.16	32.1
6	R2	All MCs	274	5.0	274	5.0	* 0.833	67.3	LOS E	17.0	124.1	1.00	0.94	1.17	28.8
Approach			1403	5.0	1403	5.0	0.870	51.4	LOS D	29.1	212.2	0.95	0.96	1.09	32.3
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.304	23.5	LOS C	4.4	32.0	0.83	0.76	0.83	40.9
8	T1	All MCs	11	5.0	11	5.0	* 0.304	52.4	LOS D	4.4	32.0	0.83	0.76	0.83	42.3
9	R2	All MCs	11	5.0	11	5.0	0.035	50.7	LOS D	0.5	3.8	0.86	0.67	0.86	32.1
Approach			156	5.0	156	5.0	0.304	27.3	LOS C	4.4	32.0	0.84	0.76	0.84	40.2
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.012	23.0	LOS C	0.3	2.3	0.55	0.65	0.55	42.1
11	T1	All MCs	566	5.0	566	5.0	0.529	39.1	LOS D	14.0	102.1	0.90	0.76	0.90	36.6
12	R2	All MCs	36	5.0	36	5.0	0.109	49.8	LOS D	1.8	12.8	0.87	0.72	0.87	32.4
Approach			612	5.0	612	5.0	0.529	39.4	LOS D	14.0	102.1	0.89	0.76	0.89	36.4
All Vehicles			2317	5.0	2317	5.0	0.870	46.4	LOS D	29.1	212.2	0.92	0.88	1.00	33.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
East: SW Trunk Rd												

P2	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: ROL2 Access												
P3	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: SW Trunk Rd												
P4	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		200	211	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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: 101 [I1 (SW18/19) Ult - 2035-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

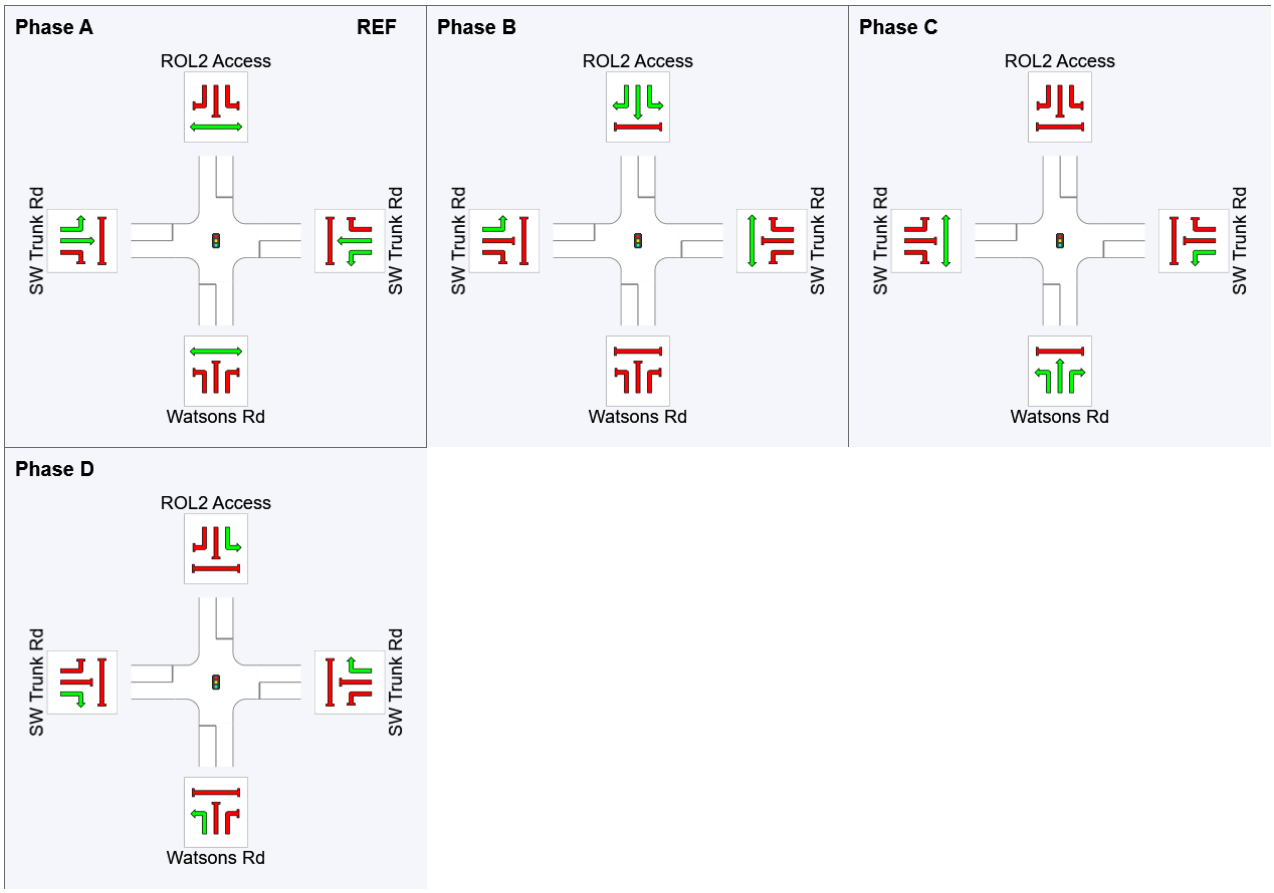
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	40	66	92
Green Time (sec)	34	20	20	22
Phase Time (sec)	40	26	26	28
Phase Split	33%	22%	22%	23%
Phase Frequency (%)	100.0	100.0	100.0	100.0

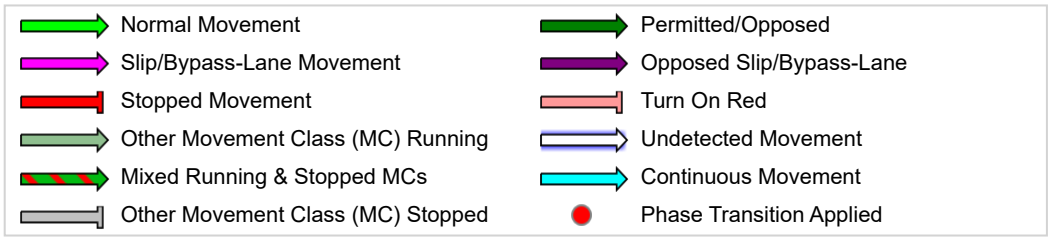
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2036-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	67	5.0	67	5.0	0.169	56.4	LOS E	3.9	28.7	0.85	0.75	0.85	30.4
2	T1	All MCs	11	5.0	11	5.0	*0.691	68.1	LOS E	12.5	91.1	1.00	0.84	1.03	27.3
3	R2	All MCs	337	5.0	337	5.0	0.691	73.8	LOS E	12.5	91.1	1.00	0.84	1.03	26.8
Approach			414	5.0	414	5.0	0.691	70.8	LOS E	12.5	91.1	0.98	0.82	1.00	27.3
East: SW Trunk Rd															
4	L2	All MCs	84	5.0	84	5.0	0.089	16.2	LOS B	2.1	15.0	0.52	0.69	0.52	45.7
5	T1	All MCs	610	5.0	610	5.0	0.397	33.3	LOS C	15.5	113.4	0.76	0.65	0.76	38.8
6	R2	All MCs	82	5.0	82	5.0	0.760	87.0	LOS F	6.4	46.5	1.00	0.87	1.18	24.3
Approach			776	5.0	776	5.0	0.760	37.1	LOS D	15.5	113.4	0.76	0.68	0.77	37.1
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	*0.691	46.2	LOS D	15.3	111.5	0.95	0.84	0.95	36.9
8	T1	All MCs	11	5.0	11	5.0	*0.691	67.6	LOS E	15.3	111.5	0.95	0.84	0.95	38.0
9	R2	All MCs	11	5.0	11	5.0	0.025	64.1	LOS E	0.6	4.3	0.80	0.67	0.80	31.6
Approach			348	5.0	348	5.0	0.691	47.4	LOS D	15.3	111.5	0.94	0.84	0.94	32.9
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.009	42.9	LOS D	0.3	1.8	0.35	0.62	0.35	46.6
11	T1	All MCs	1327	5.0	1327	5.0	*0.889	80.8	LOS F	49.9	364.1	1.00	0.98	1.09	32.2
12	R2	All MCs	44	5.0	44	5.0	0.413	110.0	LOS F	3.3	24.1	1.00	0.74	1.00	25.1
Approach			1382	5.0	1382	5.0	0.889	81.4	LOS F	49.9	364.1	1.00	0.97	1.08	25.7
All Vehicles			2920	5.0	2920	5.0	0.889	64.1	LOS E	49.9	364.1	0.92	0.86	0.97	29.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
East: SW Trunk Rd												

P2	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: ROL2 Access												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: SW Trunk Rd												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		200	211	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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: 101 [I1 (SW18/19) Ult - 2036-No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

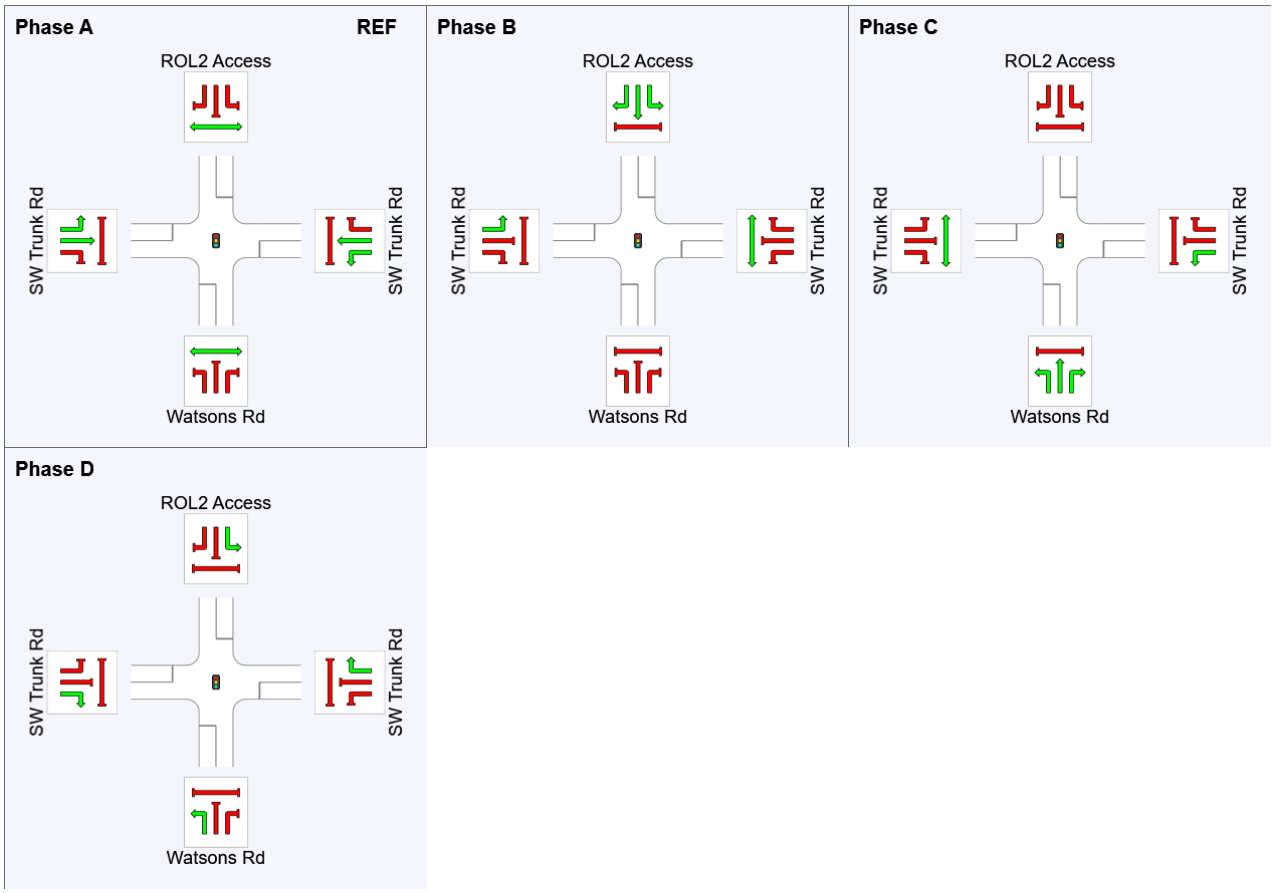
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	67	108	135
Green Time (sec)	61	35	21	9
Phase Time (sec)	67	41	27	15
Phase Split	45%	27%	18%	10%
Phase Frequency (%)	100.0	100.0	100.0	100.0

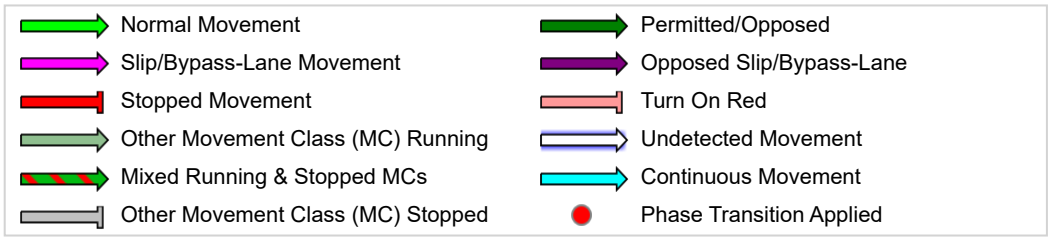
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2036-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 140 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	36	5.0	36	5.0	0.058	38.2	LOS D	1.6	11.8	0.70	0.70	0.70	35.9
2	T1	All MCs	11	5.0	11	5.0	0.291	58.6	LOS E	4.6	33.9	0.94	0.76	0.94	29.5
3	R2	All MCs	139	5.0	139	5.0	0.291	64.3	LOS E	4.6	33.9	0.94	0.76	0.94	28.8
Approach			185	5.0	185	5.0	0.291	58.9	LOS E	4.6	33.9	0.89	0.75	0.89	30.0
East: SW Trunk Rd															
4	L2	All MCs	282	5.0	282	5.0	*0.324	17.6	LOS B	6.5	47.3	0.65	0.75	0.65	44.9
5	T1	All MCs	1105	5.0	1105	5.0	*0.861	56.4	LOS E	40.1	293.0	1.00	0.96	1.09	32.7
6	R2	All MCs	274	5.0	274	5.0	*0.855	86.1	LOS F	20.0	145.8	1.00	0.95	1.18	26.6
Approach			1661	5.0	1661	5.0	0.861	54.7	LOS D	40.1	293.0	0.94	0.92	1.03	31.4
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.342	30.1	LOS C	5.8	42.5	0.86	0.77	0.86	37.9
8	T1	All MCs	11	5.0	11	5.0	*0.342	65.5	LOS E	5.8	42.5	0.86	0.77	0.86	39.1
9	R2	All MCs	11	5.0	11	5.0	0.041	61.3	LOS E	0.6	4.5	0.89	0.68	0.89	29.4
Approach			156	5.0	156	5.0	0.342	34.6	LOS C	5.8	42.5	0.87	0.77	0.87	37.3
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.011	31.4	LOS C	0.3	2.4	0.49	0.64	0.49	42.7
11	T1	All MCs	725	5.0	725	5.0	0.539	46.6	LOS D	19.7	143.6	0.85	0.74	0.85	37.2
12	R2	All MCs	54	5.0	54	5.0	0.168	66.9	LOS E	3.1	22.8	0.88	0.74	0.88	30.1
Approach			789	5.0	789	5.0	0.539	47.8	LOS D	19.7	143.6	0.84	0.74	0.84	33.6
All Vehicles			2791	5.0	2791	5.0	0.861	51.9	LOS D	40.1	293.0	0.90	0.85	0.96	32.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
East: SW Trunk Rd												

P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
North: ROL2 Access												
P3	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
West: SW Trunk Rd												
P4	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
All Pedestrians		200	211	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92

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: 101 [I1 (SW18/19) Ult - 2036-No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 140 seconds (Site Practical Cycle Time)

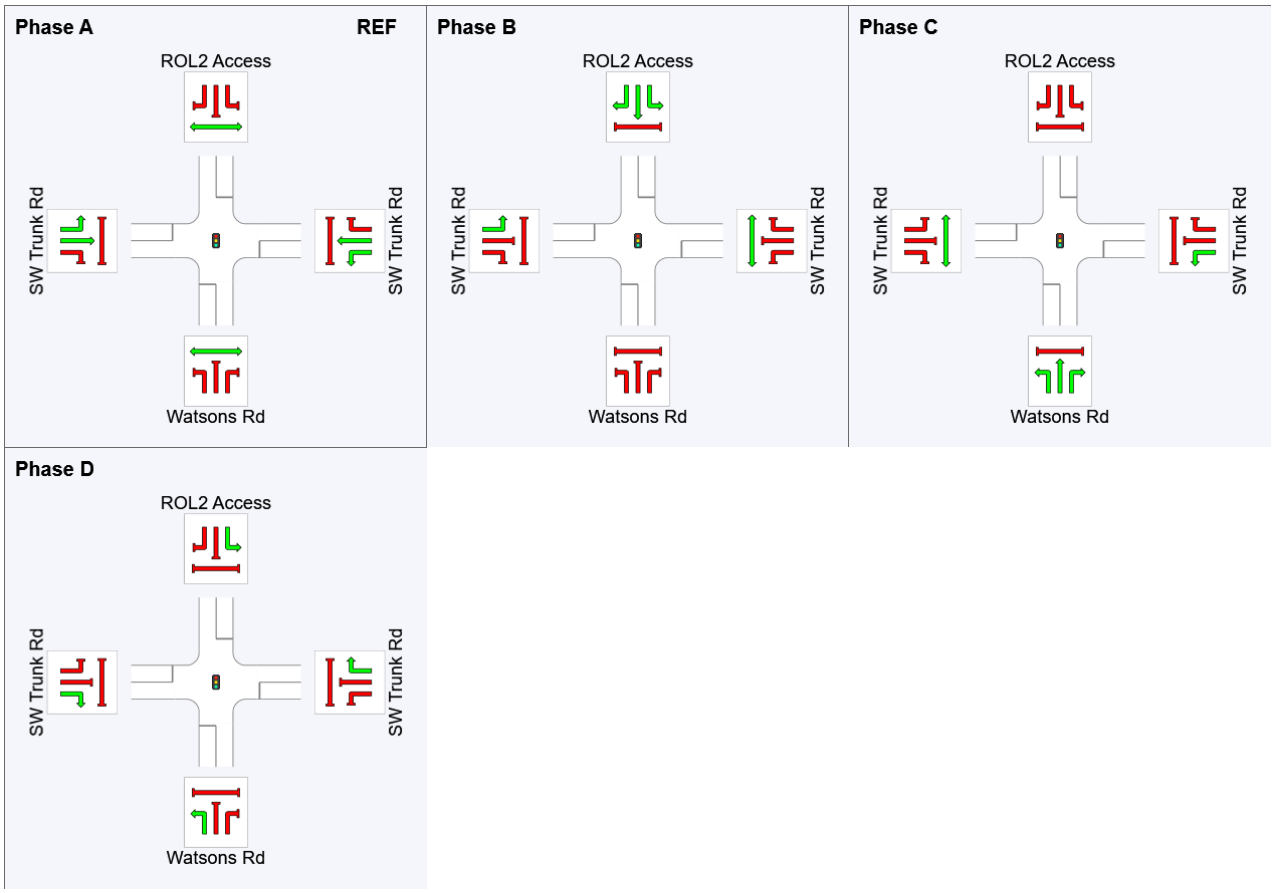
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	57	83	109
Green Time (sec)	51	20	20	25
Phase Time (sec)	57	26	26	31
Phase Split	41%	19%	19%	22%
Phase Frequency (%)	100.0	100.0	100.0	100.0

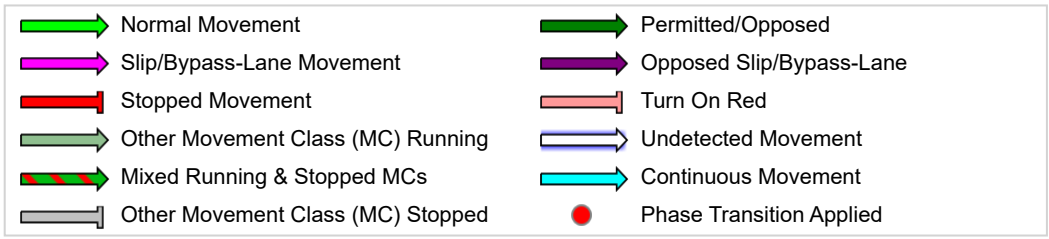
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2031-WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	74	5.0	74	5.0	0.123	28.0	LOS C	2.2	16.4	0.73	0.73	0.73	39.8
2	T1	All MCs	11	5.0	11	5.0	* 0.152	32.5	LOS C	2.0	14.8	0.86	0.72	0.86	37.4
3	R2	All MCs	99	5.0	99	5.0	0.152	38.2	LOS D	2.0	14.8	0.86	0.73	0.86	36.3
Approach			183	5.0	183	5.0	0.152	33.8	LOS C	2.2	16.4	0.81	0.73	0.81	37.7
East: SW Trunk Rd															
4	L2	All MCs	72	5.0	72	5.0	0.095	14.4	LOS B	1.1	8.1	0.63	0.70	0.63	46.8
5	T1	All MCs	455	5.0	455	5.0	* 0.492	32.0	LOS C	8.7	63.7	0.91	0.76	0.91	39.4
6	R2	All MCs	82	5.0	82	5.0	* 0.513	50.5	LOS D	3.7	26.7	1.00	0.77	1.00	32.1
Approach			608	5.0	608	5.0	0.513	32.4	LOS C	8.7	63.7	0.89	0.75	0.89	38.9
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.310	18.9	LOS B	2.8	20.4	0.83	0.76	0.83	43.7
8	T1	All MCs	11	5.0	11	5.0	* 0.310	31.5	LOS C	2.8	20.4	0.83	0.76	0.83	45.3
9	R2	All MCs	11	5.0	11	5.0	0.029	36.9	LOS D	0.4	2.7	0.83	0.67	0.83	36.5
Approach			156	5.0	156	5.0	0.310	21.0	LOS C	2.8	20.4	0.83	0.75	0.83	43.2
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.012	18.0	LOS B	0.2	1.7	0.53	0.64	0.53	44.7
11	T1	All MCs	154	5.0	154	5.0	0.166	29.1	LOS C	2.7	19.6	0.82	0.64	0.82	40.7
12	R2	All MCs	11	5.0	11	5.0	0.066	47.7	LOS D	0.4	3.2	0.94	0.67	0.94	33.0
Approach			175	5.0	175	5.0	0.166	29.5	LOS C	2.7	19.6	0.81	0.64	0.81	40.3
All Vehicles			1122	5.0	1122	5.0	0.513	30.6	LOS C	8.7	63.7	0.86	0.73	0.86	39.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
East: SW Trunk Rd												

P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: ROL2 Access												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
West: SW Trunk Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		200	211	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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: 101 [I1 (SW18/19) Ult - 2031-WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

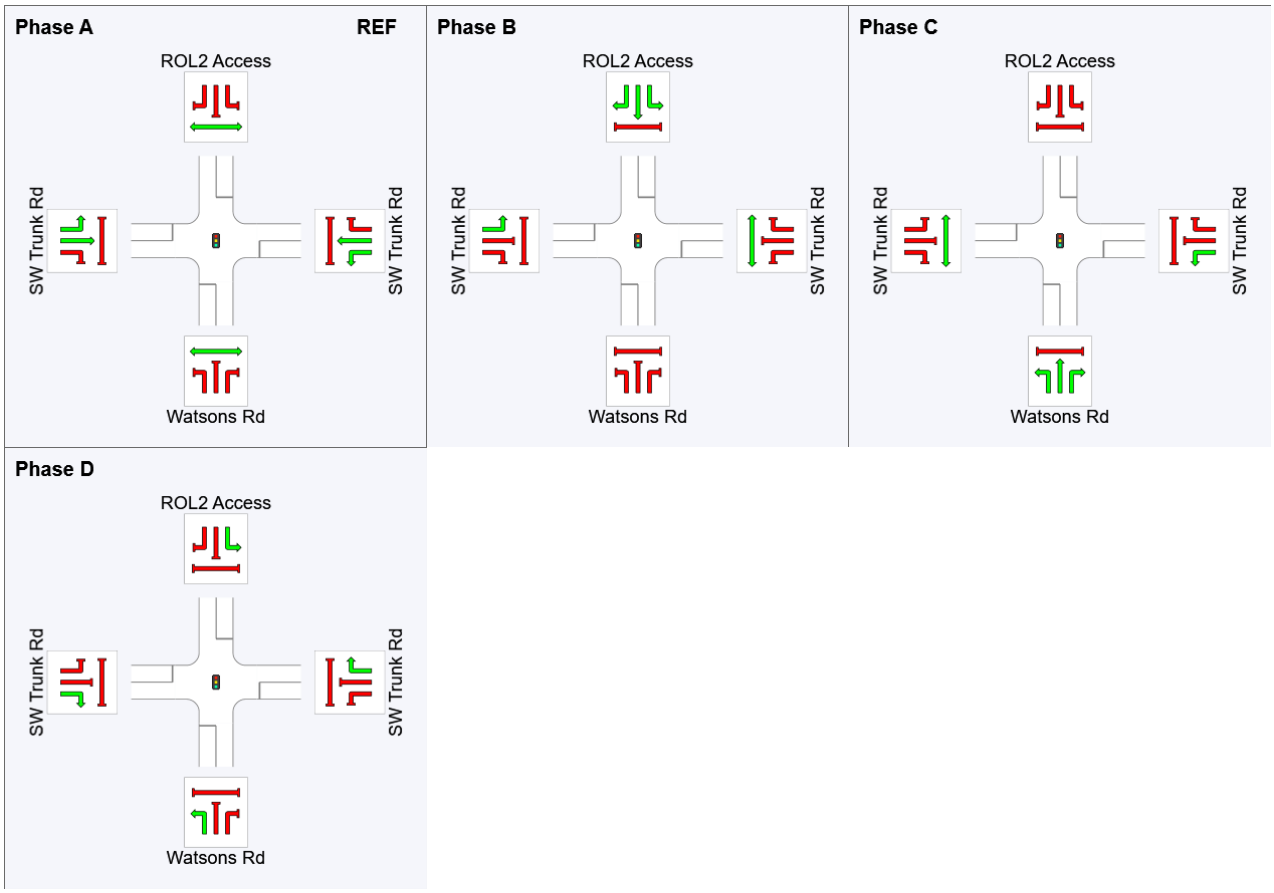
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	28	52	76
Green Time (sec)	22	18	18	8
Phase Time (sec)	28	24	24	14
Phase Split	31%	27%	27%	16%
Phase Frequency (%)	100.0	100.0	100.0	100.0

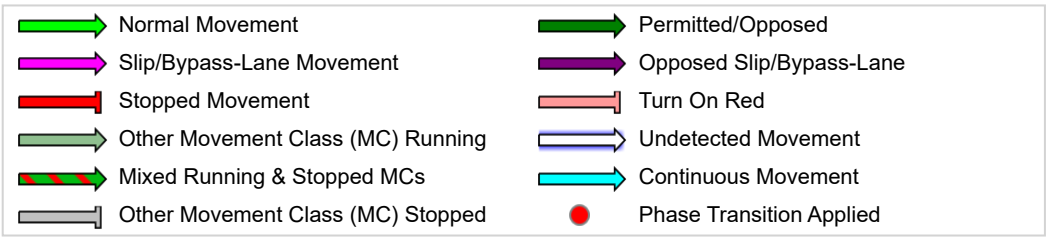
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2031-WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	59	5.0	59	5.0	0.084	28.0	LOS C	2.0	14.3	0.66	0.71	0.66	39.8
2	T1	All MCs	11	5.0	11	5.0	0.155	42.2	LOS D	2.2	16.4	0.89	0.72	0.89	34.1
3	R2	All MCs	86	5.0	86	5.0	0.155	47.8	LOS D	2.2	16.4	0.89	0.73	0.89	33.1
Approach			156	5.0	156	5.0	0.155	39.9	LOS D	2.2	16.4	0.80	0.72	0.80	35.4
East: SW Trunk Rd															
4	L2	All MCs	204	5.0	204	5.0	* 0.368	22.1	LOS C	4.6	33.7	0.82	0.78	0.82	42.6
5	T1	All MCs	263	5.0	263	5.0	0.426	45.5	LOS D	6.5	47.4	0.95	0.76	0.95	34.4
6	R2	All MCs	274	5.0	274	5.0	* 0.800	56.4	LOS E	15.2	111.2	1.00	0.91	1.14	30.5
Approach			741	5.0	741	5.0	0.800	43.1	LOS D	15.2	111.2	0.93	0.82	0.98	34.6
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	0.477	17.9	LOS B	7.1	51.7	0.78	0.79	0.78	44.4
8	T1	All MCs	11	5.0	11	5.0	* 0.477	40.4	LOS D	7.1	51.7	0.78	0.79	0.78	46.0
9	R2	All MCs	11	5.0	11	5.0	0.023	38.4	LOS D	0.4	3.1	0.77	0.66	0.77	36.0
Approach			348	5.0	348	5.0	0.477	19.2	LOS B	7.1	51.7	0.78	0.79	0.78	44.1
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.013	23.4	LOS C	0.3	2.2	0.58	0.65	0.58	41.9
11	T1	All MCs	339	5.0	339	5.0	* 0.548	46.6	LOS D	8.6	62.5	0.97	0.79	0.97	34.0
12	R2	All MCs	21	5.0	21	5.0	0.061	45.0	LOS D	0.9	6.8	0.85	0.70	0.85	33.8
Approach			371	5.0	371	5.0	0.548	45.8	LOS D	8.6	62.5	0.95	0.78	0.95	34.2
All Vehicles			1616	5.0	1616	5.0	0.800	38.3	LOS D	15.2	111.2	0.89	0.79	0.91	36.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
East: SW Trunk Rd												

P2	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
North: ROL2 Access												
P3	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
West: SW Trunk Rd												
P4	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98
All Pedestrians		200	211	49.3	LOS E	0.2	0.2	0.95	0.95	203.1	200.0	0.98

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: 101 [I1 (SW18/19) Ult - 2031-WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

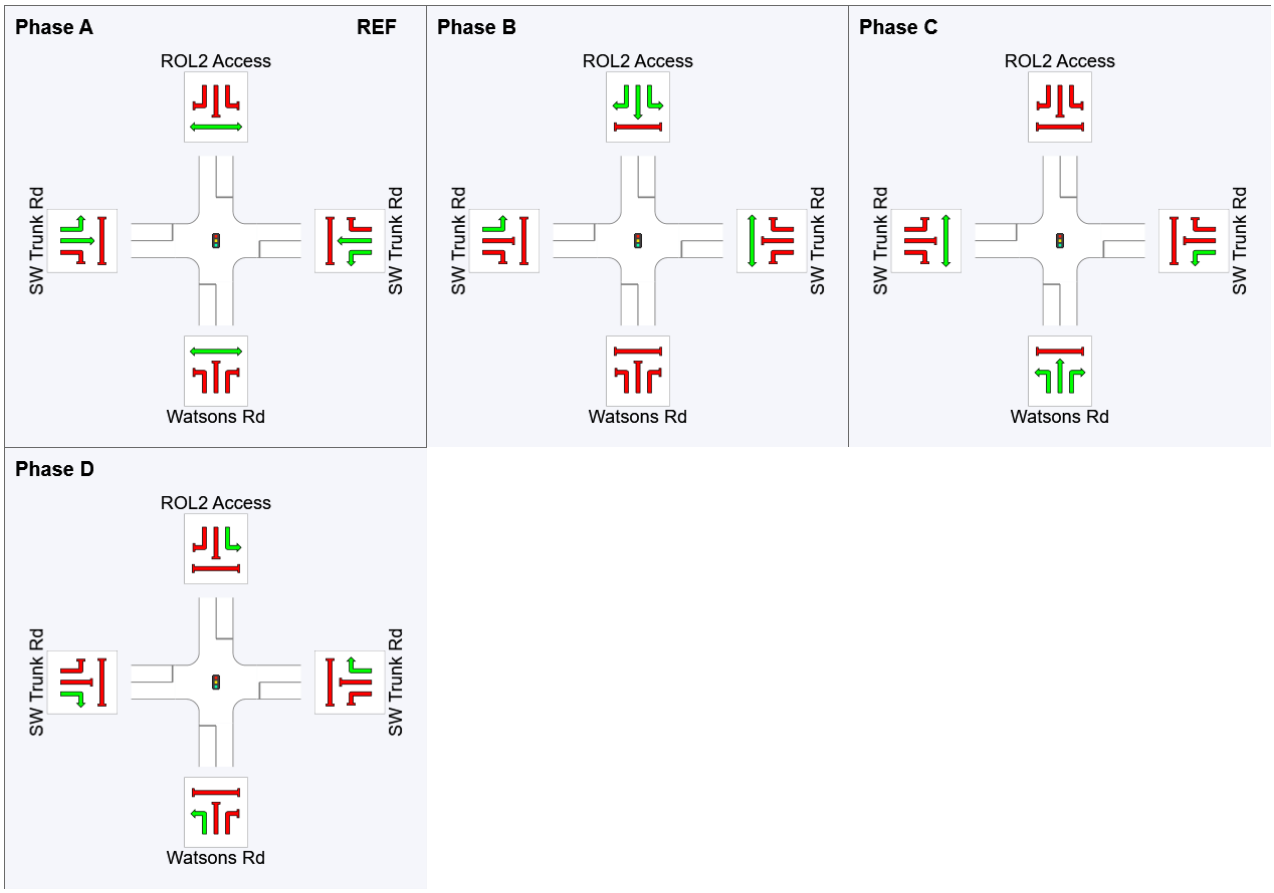
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	24	58	83
Green Time (sec)	18	28	19	21
Phase Time (sec)	24	34	25	27
Phase Split	22%	31%	23%	25%
Phase Frequency (%)	100.0	100.0	100.0	100.0

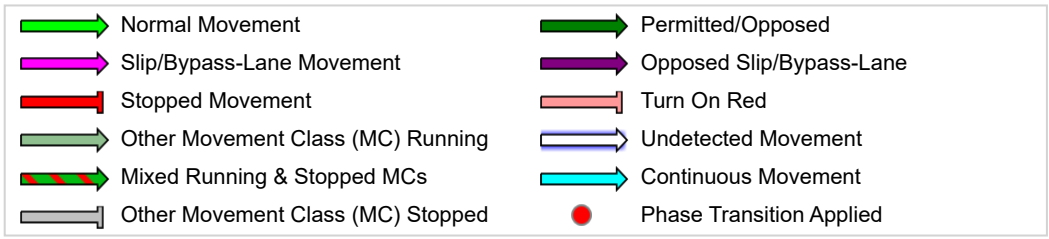
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2041-WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	341	5.0	341	5.0	0.559	34.7	LOS C	13.6	99.6	0.87	0.82	0.87	37.1
2	T1	All MCs	11	5.0	11	5.0	* 0.398	39.0	LOS D	5.9	43.4	0.92	0.78	0.92	34.9
3	R2	All MCs	261	5.0	261	5.0	0.398	44.7	LOS D	5.9	43.4	0.92	0.78	0.92	34.0
Approach			613	5.0	613	5.0	0.559	39.0	LOS D	13.6	99.6	0.89	0.81	0.89	35.7
East: SW Trunk Rd															
4	L2	All MCs	217	5.0	217	5.0	0.356	19.8	LOS B	4.8	35.2	0.79	0.78	0.79	43.7
5	T1	All MCs	543	5.0	543	5.0	* 0.799	47.2	LOS D	13.8	101.0	1.00	0.94	1.15	33.9
6	R2	All MCs	82	5.0	82	5.0	0.380	51.1	LOS D	3.8	27.9	0.96	0.77	0.96	31.9
Approach			842	5.0	842	5.0	0.799	40.5	LOS D	13.8	101.0	0.94	0.88	1.04	35.7
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	* 0.528	18.7	LOS B	6.7	49.1	0.83	0.80	0.83	44.0
8	T1	All MCs	11	5.0	11	5.0	* 0.528	34.2	LOS C	6.7	49.1	0.83	0.80	0.83	45.6
9	R2	All MCs	11	5.0	11	5.0	0.022	34.2	LOS C	0.4	2.7	0.76	0.66	0.76	37.5
Approach			348	5.0	348	5.0	0.528	19.7	LOS B	6.7	49.1	0.83	0.80	0.83	43.9
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.012	19.9	LOS B	0.3	1.9	0.54	0.65	0.54	43.7
11	T1	All MCs	282	5.0	282	5.0	0.415	40.0	LOS D	6.2	45.5	0.93	0.75	0.93	36.3
12	R2	All MCs	95	5.0	95	5.0	0.440	51.5	LOS D	4.5	32.7	0.97	0.78	0.97	31.9
Approach			387	5.0	387	5.0	0.440	42.3	LOS D	6.2	45.5	0.93	0.75	0.93	35.2
All Vehicles			2190	5.0	2190	5.0	0.799	37.1	LOS D	13.8	101.0	0.91	0.83	0.95	36.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2041-WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

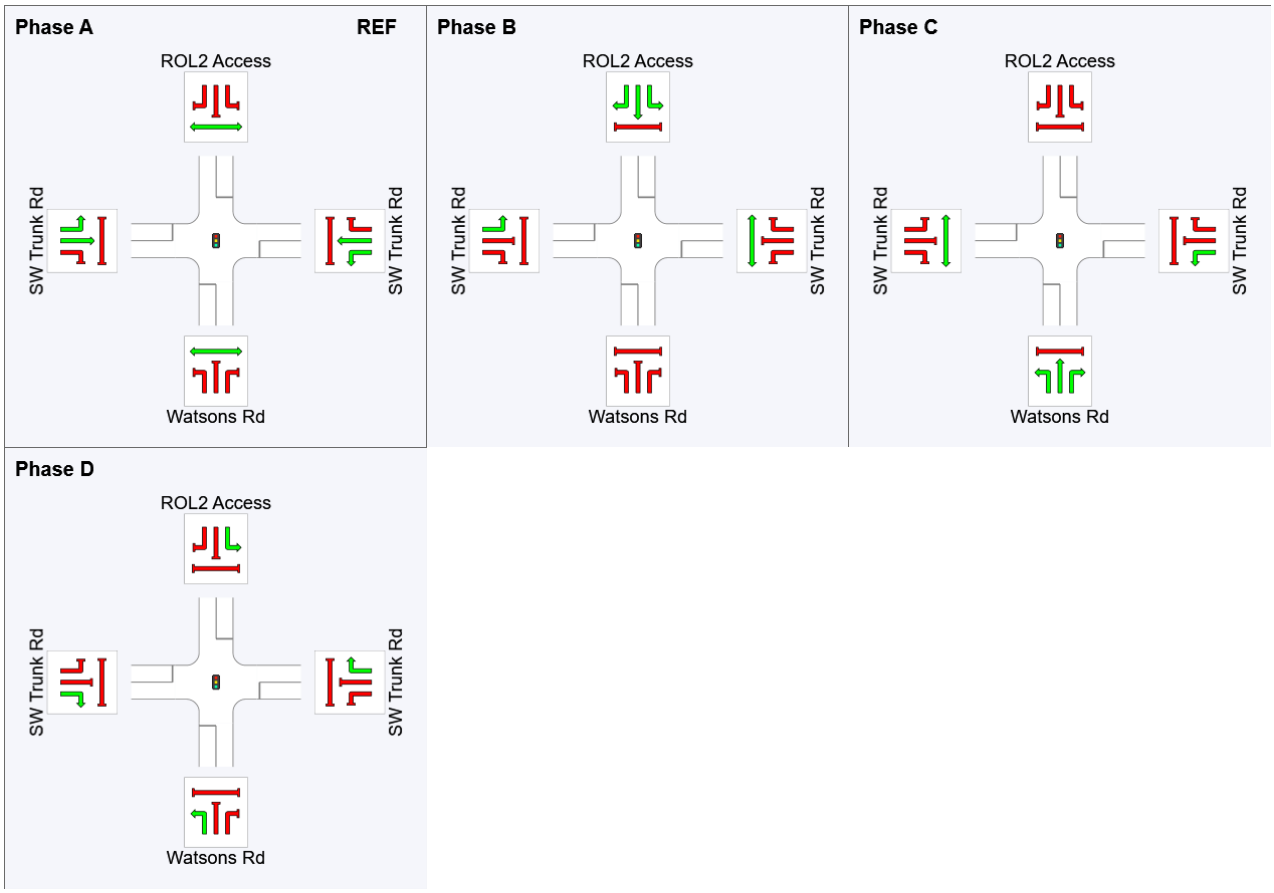
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	24	57	82
Green Time (sec)	18	27	19	12
Phase Time (sec)	24	33	25	18
Phase Split	24%	33%	25%	18%
Phase Frequency (%)	100.0	100.0	100.0	100.0

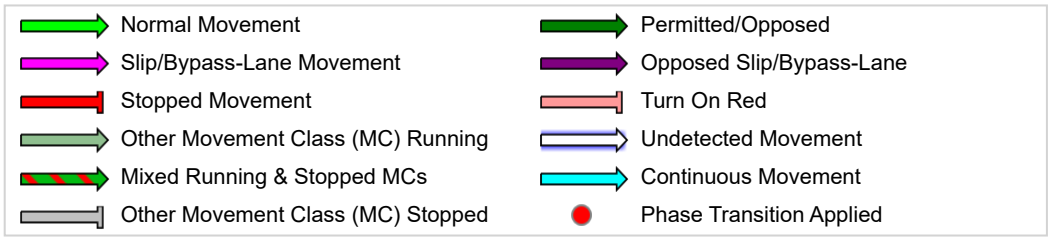
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2041-WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	103	5.0	103	5.0	0.137	24.6	LOS C	3.1	22.4	0.65	0.72	0.65	41.4
2	T1	All MCs	11	5.0	11	5.0	0.302	38.2	LOS D	4.4	32.3	0.90	0.76	0.90	35.2
3	R2	All MCs	196	5.0	196	5.0	0.302	43.9	LOS D	4.4	32.3	0.90	0.77	0.90	34.3
Approach			309	5.0	309	5.0	0.302	37.3	LOS D	4.4	32.3	0.82	0.75	0.82	36.4
East: SW Trunk Rd															
4	L2	All MCs	341	5.0	341	5.0	*0.559	20.7	LOS C	7.5	54.8	0.87	0.81	0.87	43.3
5	T1	All MCs	493	5.0	493	5.0	*0.725	44.2	LOS D	12.0	87.2	1.00	0.88	1.07	34.8
6	R2	All MCs	274	5.0	274	5.0	*0.764	49.9	LOS D	13.5	98.8	1.00	0.89	1.11	32.3
Approach			1108	5.0	1108	5.0	0.764	38.4	LOS D	13.5	98.8	0.96	0.86	1.02	36.3
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.268	17.8	LOS B	3.0	21.6	0.78	0.75	0.78	44.0
8	T1	All MCs	11	5.0	11	5.0	*0.268	39.2	LOS D	3.0	21.6	0.78	0.75	0.78	45.6
9	R2	All MCs	11	5.0	11	5.0	0.031	41.2	LOS D	0.4	3.1	0.84	0.67	0.84	35.0
Approach			156	5.0	156	5.0	0.268	20.9	LOS C	3.0	21.6	0.79	0.74	0.79	43.3
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.015	24.7	LOS C	0.3	2.2	0.62	0.65	0.62	41.3
11	T1	All MCs	438	5.0	438	5.0	0.644	42.2	LOS D	10.2	74.5	0.98	0.82	0.99	35.5
12	R2	All MCs	164	5.0	164	5.0	0.458	44.4	LOS D	7.2	52.6	0.93	0.80	0.93	34.0
Approach			613	5.0	613	5.0	0.644	42.5	LOS D	10.2	74.5	0.96	0.81	0.97	35.2
All Vehicles			2186	5.0	2186	5.0	0.764	38.1	LOS D	13.5	98.8	0.93	0.82	0.96	36.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2041-WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

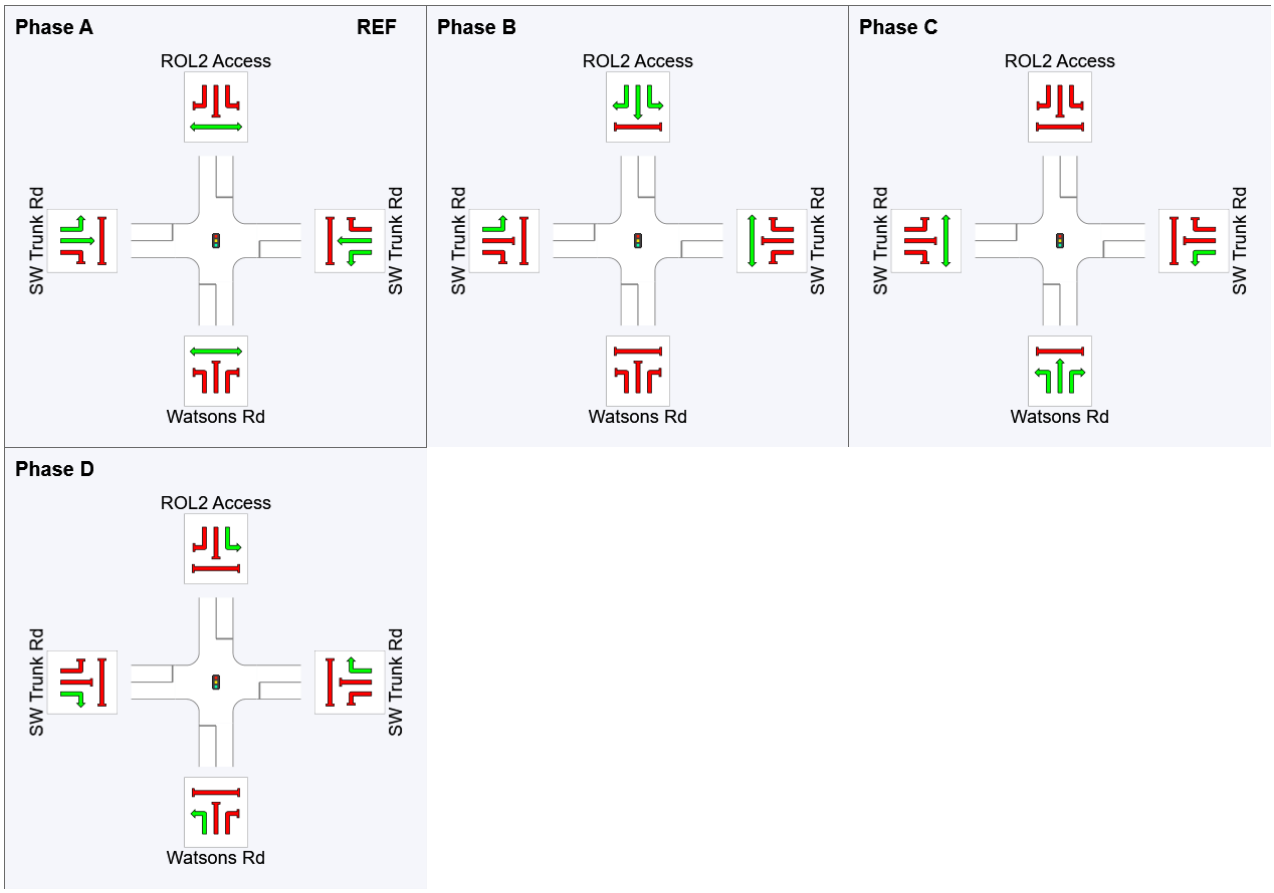
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	24	49	74
Green Time (sec)	18	19	19	20
Phase Time (sec)	24	25	25	26
Phase Split	24%	25%	25%	26%
Phase Frequency (%)	100.0	100.0	100.0	100.0

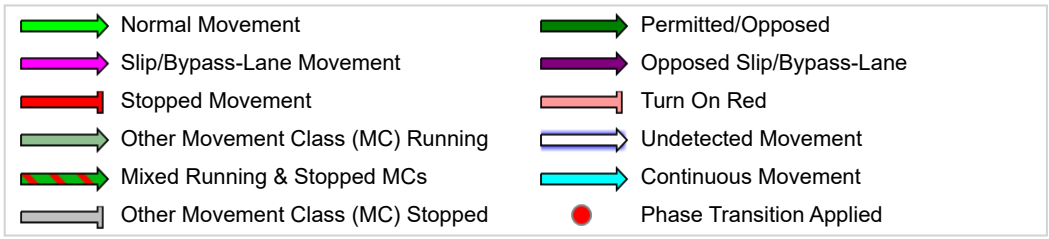
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2046-WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	488	5.0	488	5.0	0.879	51.3	LOS D	26.5	193.1	1.00	0.98	1.21	31.8
2	T1	All MCs	11	5.0	11	5.0	0.648	41.6	LOS D	10.3	75.1	0.98	0.83	0.99	34.0
3	R2	All MCs	432	5.0	432	5.0	0.648	47.2	LOS D	10.3	75.1	0.98	0.83	0.99	33.2
Approach			931	5.0	931	5.0	0.879	49.3	LOS D	26.5	193.1	0.99	0.91	1.10	32.4
East: SW Trunk Rd															
4	L2	All MCs	396	5.0	396	5.0	* 0.552	18.9	LOS B	9.2	67.3	0.82	0.81	0.82	44.2
5	T1	All MCs	789	5.0	789	5.0	* 0.871	48.7	LOS D	21.3	155.8	1.00	1.04	1.22	33.4
6	R2	All MCs	82	5.0	82	5.0	0.507	55.0	LOS E	4.0	29.4	1.00	0.77	1.00	30.9
Approach			1267	5.0	1267	5.0	0.871	39.8	LOS D	21.3	155.8	0.94	0.95	1.08	35.9
North: ROL2 Access															
7	L2	All MCs	327	5.0	327	5.0	* 0.623	21.4	LOS C	7.8	56.8	0.90	0.82	0.90	42.7
8	T1	All MCs	11	5.0	11	5.0	* 0.623	36.7	LOS D	7.8	56.8	0.90	0.82	0.90	44.2
9	R2	All MCs	11	5.0	11	5.0	0.024	36.7	LOS D	0.4	2.8	0.79	0.66	0.79	36.6
Approach			348	5.0	348	5.0	0.623	22.3	LOS C	7.8	56.8	0.90	0.82	0.90	42.5
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.012	18.2	LOS B	0.2	1.8	0.51	0.64	0.51	44.6
11	T1	All MCs	381	5.0	381	5.0	0.420	35.0	LOS C	8.0	58.1	0.89	0.74	0.89	38.2
12	R2	All MCs	143	5.0	143	5.0	0.887	65.6	LOS E	8.1	59.2	1.00	1.02	1.44	28.4
Approach			535	5.0	535	5.0	0.887	42.9	LOS D	8.1	59.2	0.91	0.81	1.03	35.0
All Vehicles			3080	5.0	3080	5.0	0.887	41.2	LOS D	26.5	193.1	0.95	0.90	1.06	35.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
East: SW Trunk Rd												

P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: ROL2 Access												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		200	211	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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: 101 [I1 (SW18/19) Ult - 2046-WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

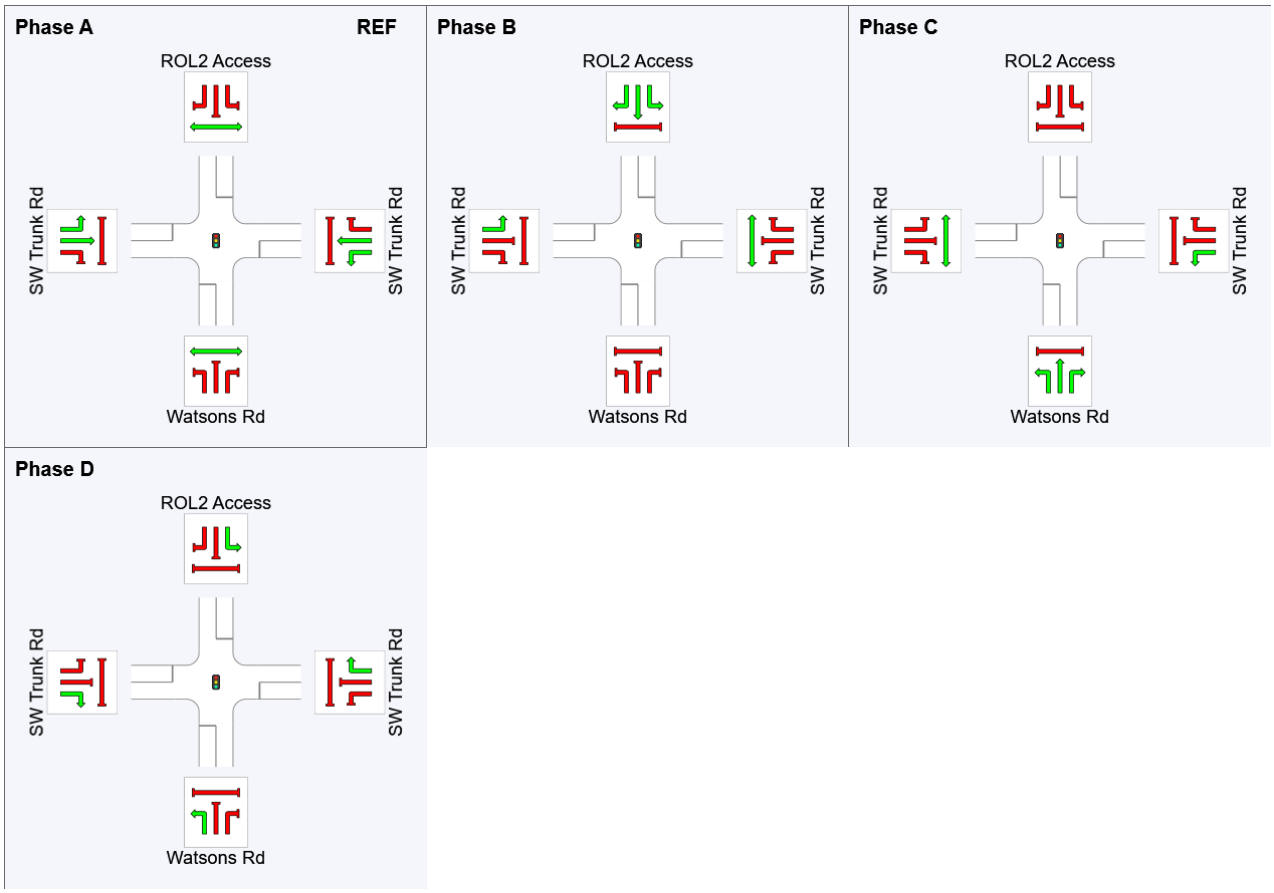
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	30	60	85
Green Time (sec)	24	24	19	9
Phase Time (sec)	30	30	25	15
Phase Split	30%	30%	25%	15%
Phase Frequency (%)	100.0	100.0	100.0	100.0

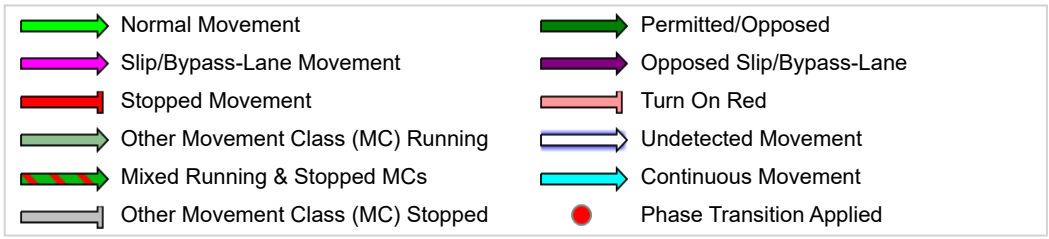
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



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MOVEMENT SUMMARY

Site: 101 [I1 (SW18/19) Ult - 2046-WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 140 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Watsons Rd															
1	L2	All MCs	168	5.0	168	5.0	0.196	27.8	LOS C	6.5	47.4	0.61	0.74	0.61	39.9
2	T1	All MCs	11	5.0	11	5.0	0.706	64.0	LOS E	12.2	89.4	1.00	0.85	1.05	28.2
3	R2	All MCs	352	5.0	352	5.0	0.706	69.7	LOS E	12.2	89.4	1.00	0.85	1.05	27.6
Approach			531	5.0	531	5.0	0.706	56.2	LOS E	12.2	89.4	0.88	0.81	0.91	30.6
East: SW Trunk Rd															
4	L2	All MCs	516	5.0	516	5.0	* 0.822	33.7	LOS C	22.6	165.1	0.98	0.89	1.03	37.5
5	T1	All MCs	672	5.0	672	5.0	0.778	57.0	LOS E	22.3	162.6	1.00	0.90	1.05	31.0
6	R2	All MCs	274	5.0	274	5.0	0.486	47.2	LOS D	15.1	110.0	0.86	0.82	0.86	33.0
Approach			1461	5.0	1461	5.0	0.822	46.9	LOS D	22.6	165.1	0.97	0.88	1.01	33.5
North: ROL2 Access															
7	L2	All MCs	135	5.0	135	5.0	0.297	25.5	LOS C	5.5	40.2	0.83	0.76	0.83	38.9
8	T1	All MCs	11	5.0	11	5.0	* 0.297	88.8	LOS F	5.5	40.2	0.83	0.76	0.83	40.2
9	R2	All MCs	11	5.0	11	5.0	0.041	61.3	LOS E	0.6	4.5	0.89	0.68	0.89	29.4
Approach			156	5.0	156	5.0	0.297	32.2	LOS C	5.5	40.2	0.83	0.76	0.83	38.2
West: SW Trunk Rd															
10	L2	All MCs	11	5.0	11	5.0	0.015	54.4	LOS D	0.4	3.1	0.63	0.66	0.63	37.9
11	T1	All MCs	665	5.0	665	5.0	* 0.881	86.8	LOS F	27.7	201.9	1.00	1.02	1.19	28.5
12	R2	All MCs	381	5.0	381	5.0	* 0.868	81.4	LOS F	27.5	200.9	1.00	0.95	1.16	28.6
Approach			1057	5.0	1057	5.0	0.881	84.5	LOS F	27.7	201.9	1.00	0.99	1.18	25.0
All Vehicles			3205	5.0	3205	5.0	0.881	60.2	LOS E	27.7	201.9	0.95	0.90	1.04	29.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Watsons Rd												
P1	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
East: SW Trunk Rd												

P2	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
North: ROL2 Access												
P3	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
West: SW Trunk Rd												
P4	Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
All Pedestrians		200	211	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92

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: 101 [I1 (SW18/19) Ult - 2046-WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

SW Trunk Rd / ROL2 Access / Watsons Rd
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 140 seconds (Site Practical Cycle Time)

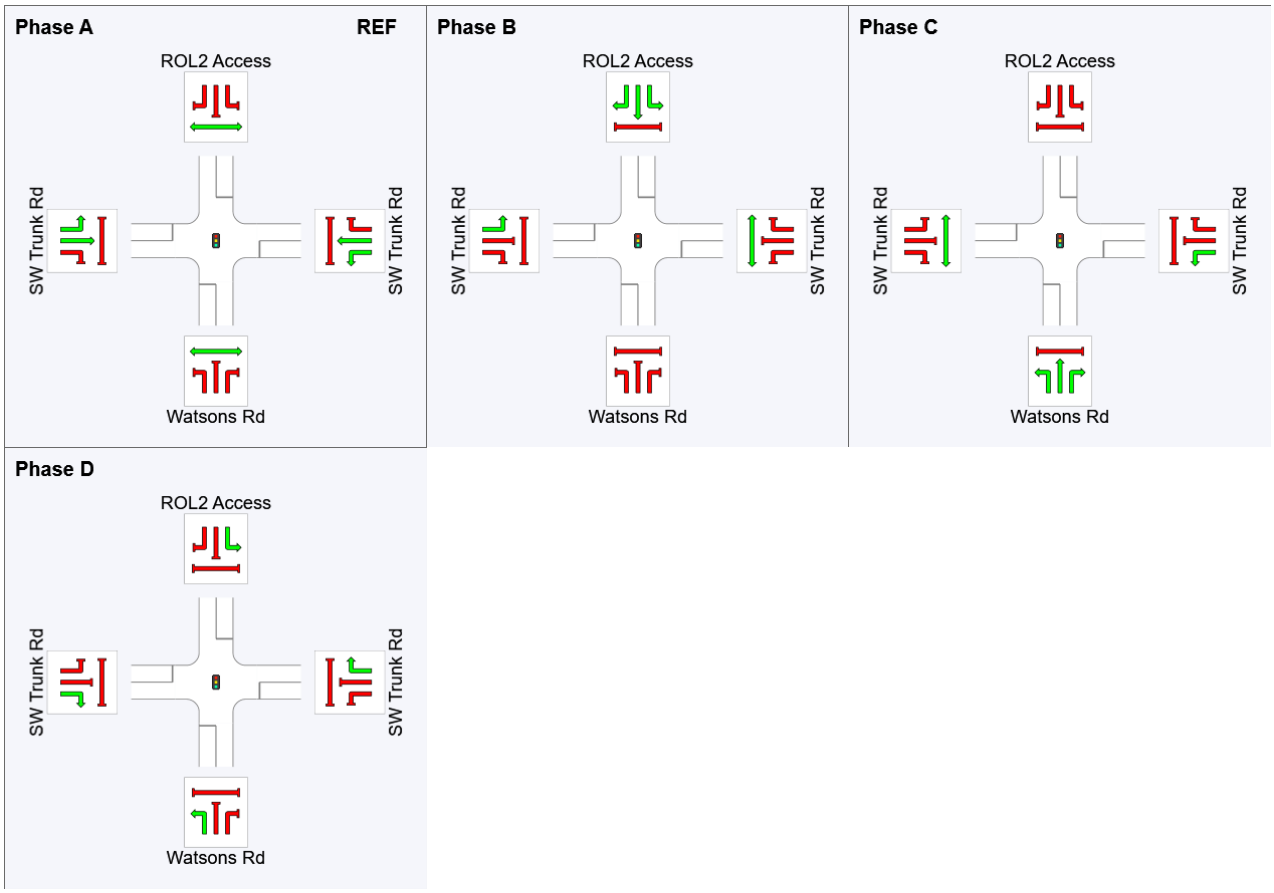
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C, D
Output Phase Sequence: A, B, C, D
Reference Phase: Phase A

Phase Timing Summary

Phase	A	B	C	D
Phase Change Time (sec)	0	38	64	90
Green Time (sec)	32	20	20	44
Phase Time (sec)	38	26	26	50
Phase Split	27%	19%	19%	36%
Phase Frequency (%)	100.0	100.0	100.0	100.0

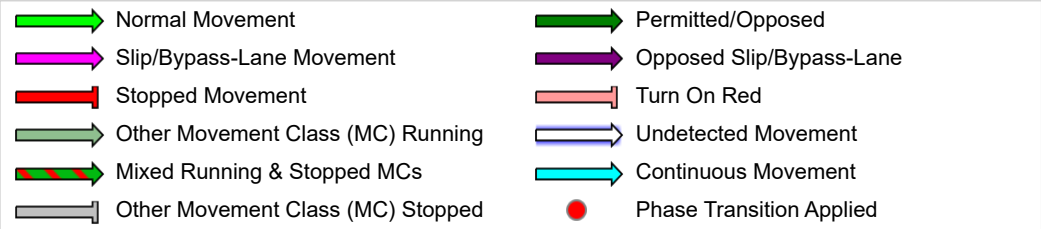
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence



REF: Reference Phase

VAR: Variable Phase



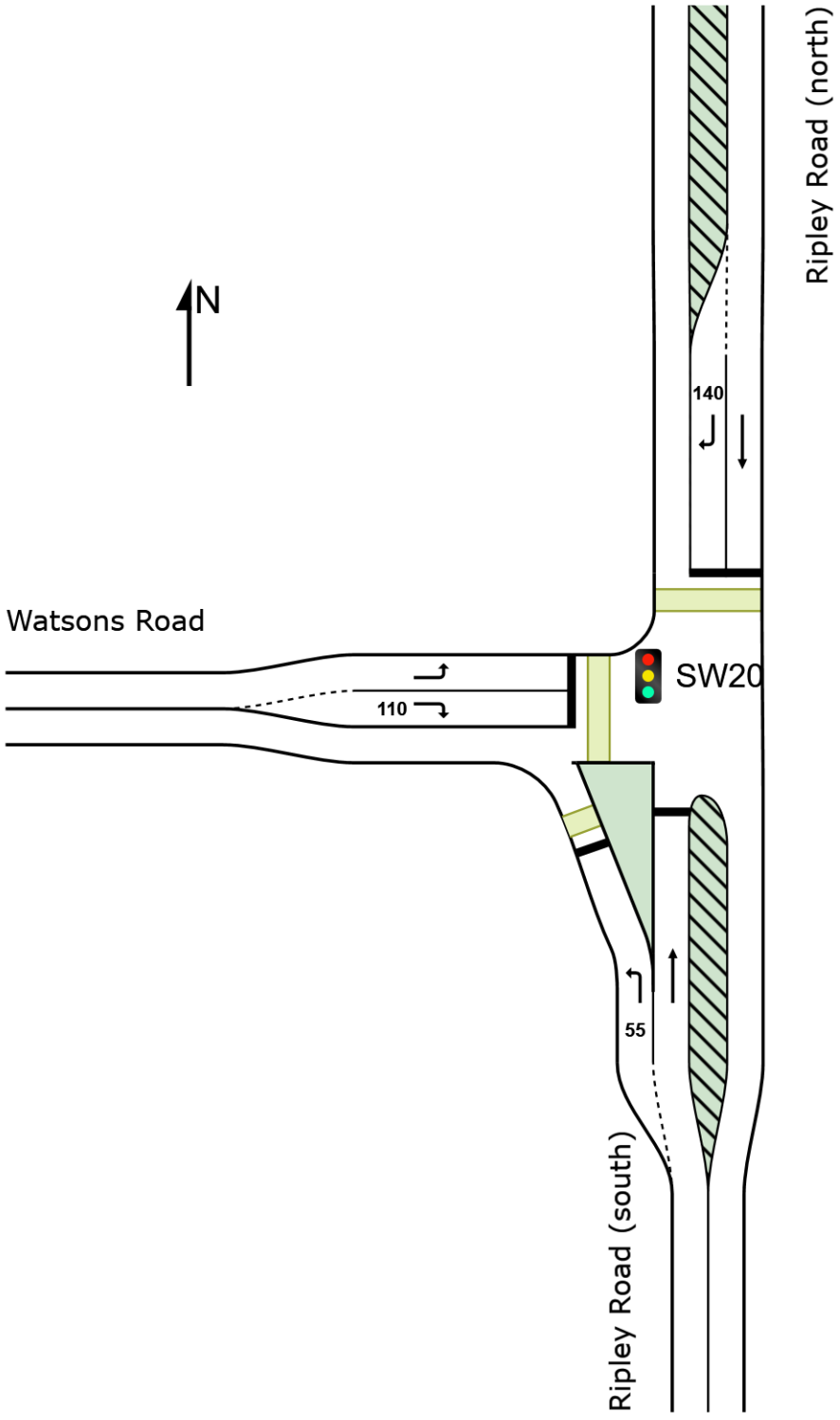
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SITE LAYOUT

Site: SW20 [I2 (SW20) Int1A - 2029 No WR - AM (Site Folder: General)]

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.008	9.0	LOS A	0.1	0.7	0.31	0.60	0.31	50.9
2	T1	All MCs	575	5.0	575	5.0	* 0.703	16.2	LOS B	14.2	103.9	0.87	0.79	0.90	47.7
Approach			585	5.0	585	5.0	0.703	16.0	LOS B	14.2	103.9	0.86	0.78	0.88	47.5
North: Ripley Road (north)															
8	T1	All MCs	84	5.0	84	5.0	0.070	4.5	LOS A	0.9	6.8	0.40	0.32	0.40	55.9
9	R2	All MCs	25	5.0	25	5.0	0.141	33.9	LOS C	0.7	5.3	0.94	0.71	0.94	37.3
Approach			109	5.0	109	5.0	0.141	11.3	LOS A	0.9	6.8	0.53	0.41	0.53	50.1
West: Watsons Road															
10	L2	All MCs	101	5.0	101	5.0	* 0.562	36.0	LOS C	3.1	22.6	1.00	0.79	1.05	36.6
12	R2	All MCs	11	5.0	11	5.0	* 0.035	28.8	LOS C	0.3	1.9	0.86	0.67	0.86	39.5
Approach			111	5.0	111	5.0	0.562	35.3	LOS C	3.1	22.6	0.98	0.78	1.03	36.9
All Vehicles			806	5.0	806	5.0	0.703	18.1	LOS B	14.2	103.9	0.83	0.73	0.86	46.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Road (north)												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: Watsons Road												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		50	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

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

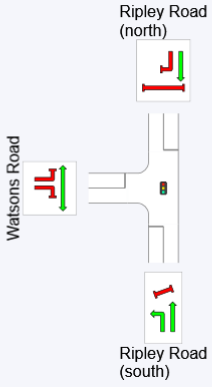
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	28	0	16
Green Time (sec)	26	10	6
Phase Time (sec)	32	16	12
Phase Split	53%	27%	20%
Phase Frequency (%)	100.0	100.0	100.0

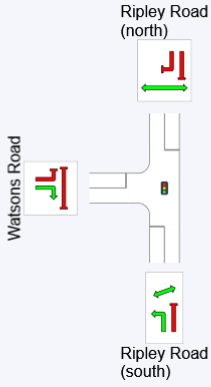
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence

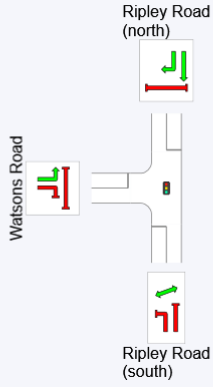
Phase A



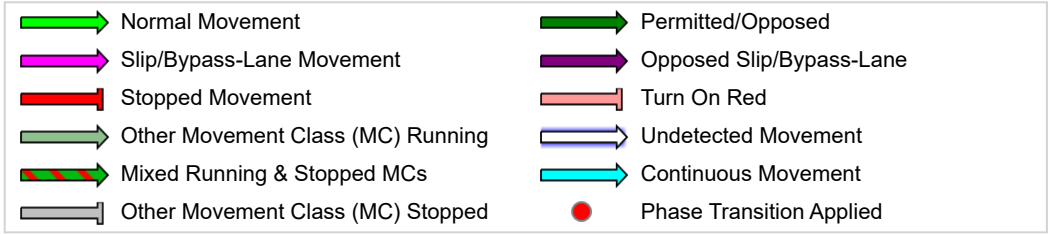
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase



MOVEMENT SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.1	LOS A	0.1	0.7	0.37	0.60	0.37	50.5
2	T1	All MCs	243	5.0	243	5.0	* 0.402	14.8	LOS B	4.8	34.9	0.83	0.69	0.83	48.3
Approach			254	5.0	254	5.0	0.402	14.5	LOS B	4.8	34.9	0.81	0.68	0.81	48.4
North: Ripley Road (north)															
8	T1	All MCs	257	5.0	257	5.0	0.243	6.1	LOS A	3.2	23.6	0.54	0.46	0.54	54.5
9	R2	All MCs	84	5.0	84	5.0	* 0.393	29.3	LOS C	2.1	15.1	0.96	0.76	0.96	39.2
Approach			342	5.0	342	5.0	0.393	11.8	LOS A	3.2	23.6	0.64	0.53	0.64	49.7
West: Watsons Road															
10	L2	All MCs	42	5.0	42	5.0	0.193	28.6	LOS C	1.0	7.2	0.93	0.72	0.93	39.6
12	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			52	5.0	52	5.0	0.193	27.5	LOS B	1.0	7.2	0.91	0.71	0.91	40.0
All Vehicles			648	5.0	648	5.0	0.402	14.1	LOS A	4.8	34.9	0.73	0.60	0.73	48.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

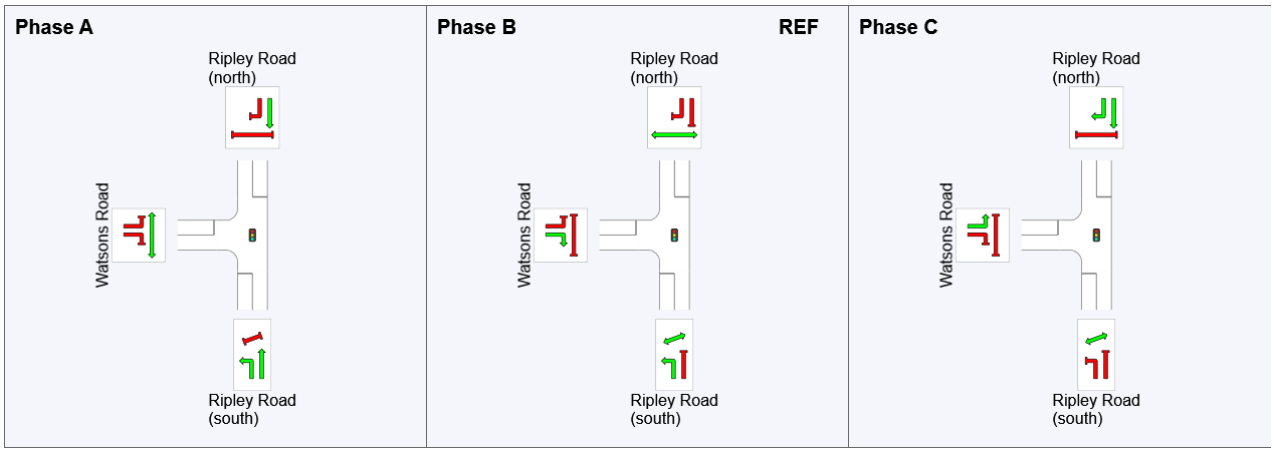
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

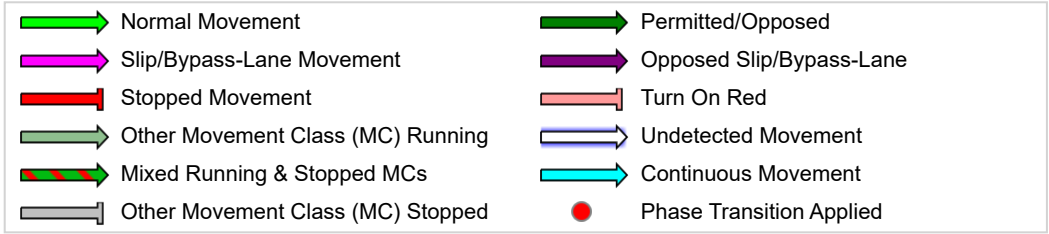
Phase	A	B	C
Phase Change Time (sec)	28	0	16
Green Time (sec)	16	10	6
Phase Time (sec)	22	16	12
Phase Split	44%	32%	24%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.008	23.5	LOS B	0.1	1.1	0.30	0.60	0.30	49.8
2	T1	All MCs	878	5.0	878	5.0	* 0.884	44.4	LOS D	43.6	318.0	0.96	0.97	1.07	39.7
Approach			888	5.0	888	5.0	0.884	44.2	LOS D	43.6	318.0	0.95	0.97	1.07	34.7
North: Ripley Road (north)															
8	T1	All MCs	117	5.0	117	5.0	0.082	3.2	LOS A	1.4	10.4	0.27	0.22	0.27	57.0
9	R2	All MCs	66	5.0	66	5.0	0.216	44.9	LOS D	2.8	20.6	0.90	0.75	0.90	33.6
Approach			183	5.0	183	5.0	0.216	18.2	LOS B	2.8	20.6	0.50	0.41	0.50	45.6
West: Watsons Road															
10	L2	All MCs	263	5.0	263	5.0	* 0.863	58.4	LOS E	14.4	104.8	1.00	0.97	1.28	29.9
12	R2	All MCs	11	5.0	11	5.0	* 0.049	48.4	LOS D	0.5	3.4	0.91	0.68	0.91	32.6
Approach			274	5.0	274	5.0	0.863	58.0	LOS E	14.4	104.8	1.00	0.96	1.26	30.0
All Vehicles			1345	5.0	1345	5.0	0.884	43.5	LOS D	43.6	318.0	0.90	0.89	1.03	34.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Ripley Road (north)												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: Watsons Road												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		50	158	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

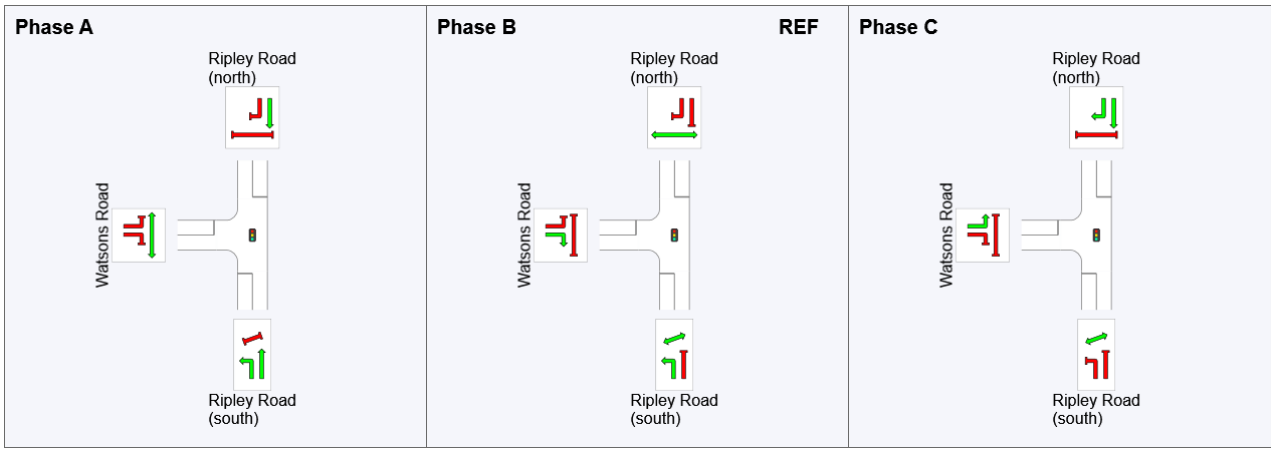
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

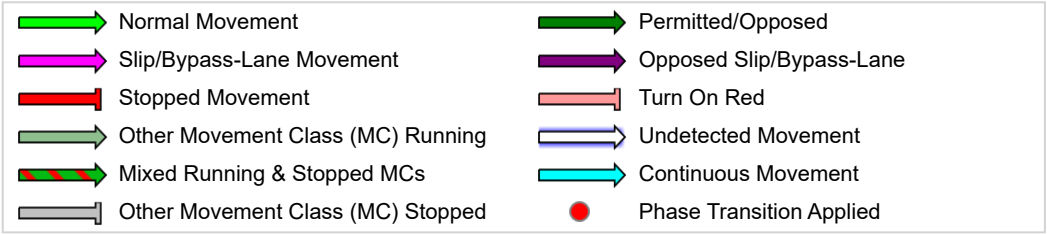
Phase	A	B	C
Phase Change Time (sec)	41	0	18
Green Time (sec)	53	12	17
Phase Time (sec)	59	18	23
Phase Split	59%	18%	23%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.010	10.4	LOS A	0.1	0.8	0.44	0.61	0.44	49.6
2	T1	All MCs	370	5.0	370	5.0	* 0.754	21.5	LOS B	9.4	68.5	0.98	0.92	1.15	44.4
Approach			381	5.0	381	5.0	0.754	21.1	LOS B	9.4	68.5	0.96	0.91	1.13	44.5
North: Ripley Road (north)															
8	T1	All MCs	360	5.0	360	5.0	0.341	6.5	LOS A	4.8	35.3	0.58	0.50	0.58	54.2
9	R2	All MCs	220	5.0	220	5.0	* 0.683	28.7	LOS C	5.6	40.7	0.98	0.87	1.12	39.4
Approach			581	5.0	581	5.0	0.683	14.9	LOS B	5.6	40.7	0.73	0.64	0.78	47.5
West: Watsons Road															
10	L2	All MCs	109	5.0	109	5.0	0.336	26.0	LOS B	2.5	17.9	0.91	0.77	0.91	40.7
12	R2	All MCs	11	5.0	11	5.0	* 0.029	23.4	LOS B	0.2	1.6	0.83	0.66	0.83	42.0
Approach			119	5.0	119	5.0	0.336	25.8	LOS B	2.5	17.9	0.91	0.76	0.91	40.8
All Vehicles			1081	5.0	1081	5.0	0.754	18.3	LOS B	9.4	68.5	0.83	0.75	0.92	45.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

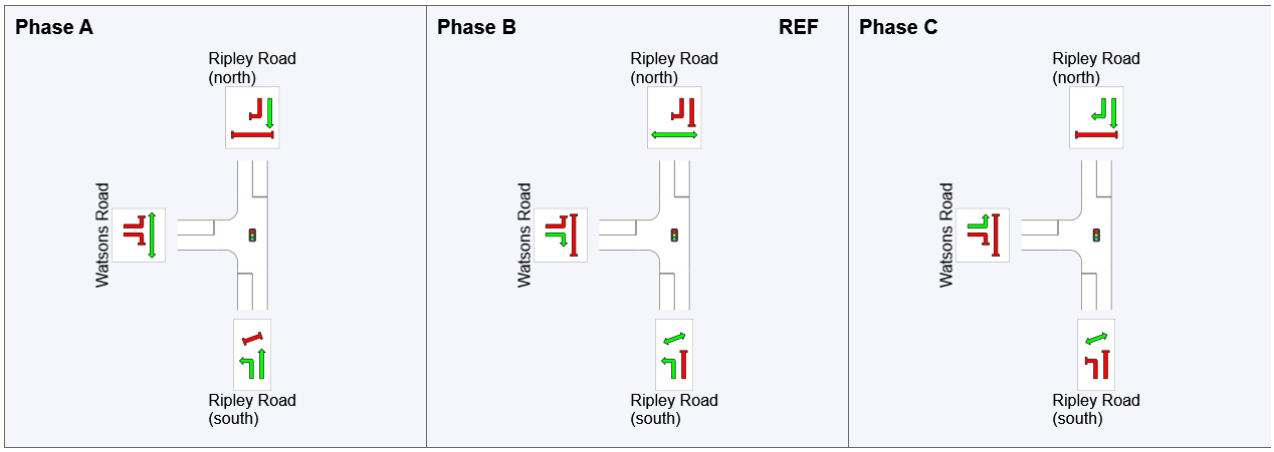
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

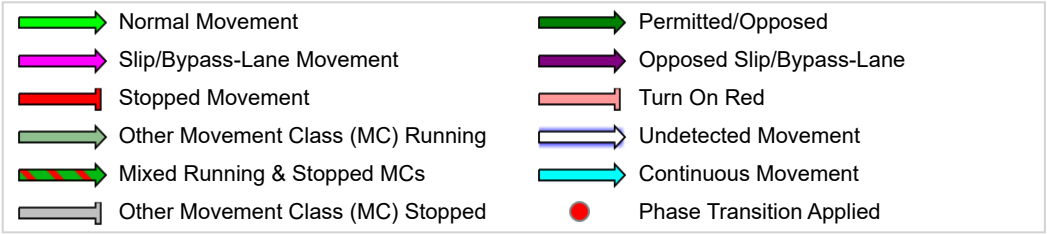
Phase	A	B	C
Phase Change Time (sec)	31	0	16
Green Time (sec)	13	10	9
Phase Time (sec)	19	16	15
Phase Split	38%	32%	30%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.009	43.2	LOS D	0.2	1.8	0.35	0.61	0.35	47.1
2	T1	All MCs	1058	5.0	1058	5.0	* 1.046	135.5	LOS F	109.8	801.4	1.00	1.35	1.45	21.8
Approach			1068	5.0	1068	5.0	1.046	134.6	LOS F	109.8	801.4	0.99	1.35	1.43	18.7
North: Ripley Road (north)															
8	T1	All MCs	140	5.0	140	5.0	0.089	2.3	LOS A	1.8	13.0	0.19	0.16	0.19	57.8
9	R2	All MCs	116	5.0	116	5.0	0.256	53.4	LOS D	6.8	49.3	0.84	0.77	0.84	31.1
Approach			256	5.0	256	5.0	0.256	25.5	LOS B	6.8	49.3	0.49	0.44	0.49	41.6
West: Watsons Road															
10	L2	All MCs	465	5.0	465	5.0	* 1.029	140.7	LOS F	47.9	349.9	1.00	1.15	1.51	19.1
12	R2	All MCs	11	5.0	11	5.0	* 0.068	87.3	LOS F	0.7	5.3	0.95	0.68	0.95	26.5
Approach			476	5.0	476	5.0	1.029	139.6	LOS F	47.9	349.9	1.00	1.14	1.50	18.0
All Vehicles			1800	5.0	1800	5.0	1.046	120.4	LOS F	109.8	801.4	0.92	1.16	1.32	20.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

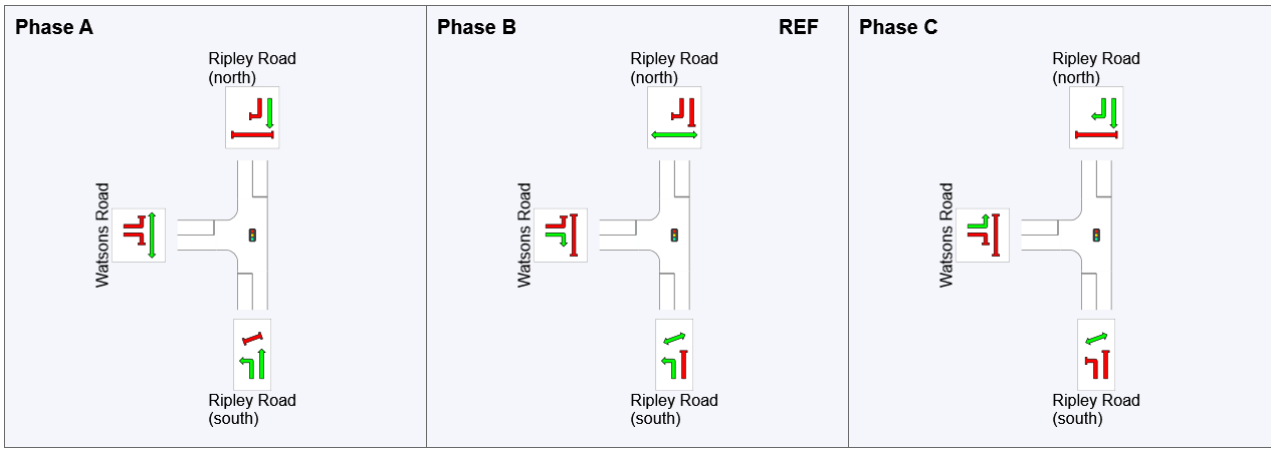
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

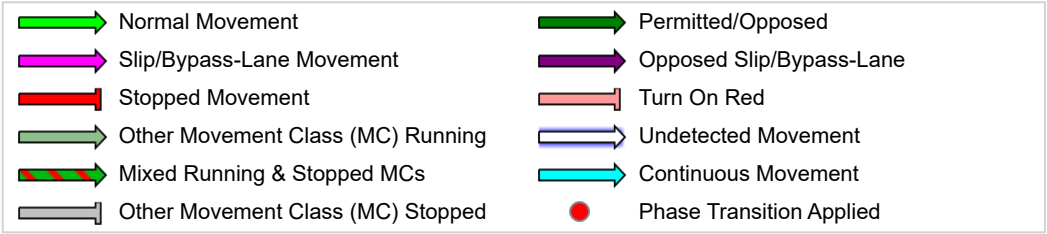
Phase	A	B	C
Phase Change Time (sec)	63	0	19
Green Time (sec)	81	13	38
Phase Time (sec)	87	19	44
Phase Split	58%	13%	29%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.011	12.1	LOS A	0.1	1.0	0.47	0.62	0.47	48.5
2	T1	All MCs	447	5.0	447	5.0	* 0.835	28.0	LOS B	14.5	106.2	1.00	1.01	1.25	41.1
Approach			457	5.0	457	5.0	0.835	27.7	LOS B	14.5	106.2	0.99	1.00	1.23	41.2
North: Ripley Road (north)															
8	T1	All MCs	427	5.0	427	5.0	0.357	5.6	LOS A	5.9	43.3	0.51	0.44	0.51	54.9
9	R2	All MCs	390	5.0	390	5.0	* 0.869	37.9	LOS C	13.6	99.2	1.00	1.01	1.37	35.8
Approach			817	5.0	817	5.0	0.869	21.0	LOS B	13.6	99.2	0.74	0.72	0.92	43.8
West: Watsons Road															
10	L2	All MCs	192	5.0	192	5.0	0.428	26.7	LOS B	4.9	35.7	0.89	0.79	0.89	40.4
12	R2	All MCs	11	5.0	11	5.0	* 0.035	28.8	LOS C	0.3	1.9	0.86	0.67	0.86	39.5
Approach			202	5.0	202	5.0	0.428	26.8	LOS B	4.9	35.7	0.88	0.79	0.88	40.4
All Vehicles			1477	5.0	1477	5.0	0.869	23.9	LOS B	14.5	106.2	0.84	0.81	1.01	42.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Road (north)												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: Watsons Road												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		50	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

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

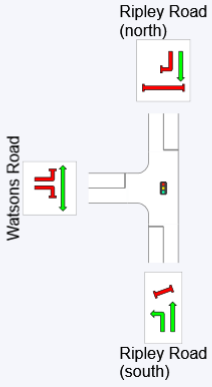
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	37	0	16
Green Time (sec)	17	10	15
Phase Time (sec)	23	16	21
Phase Split	38%	27%	35%
Phase Frequency (%)	100.0	100.0	100.0

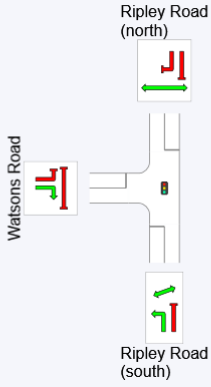
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence

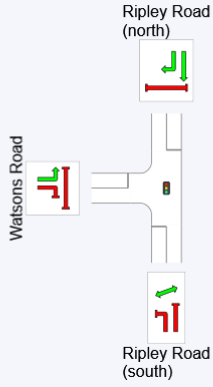
Phase A



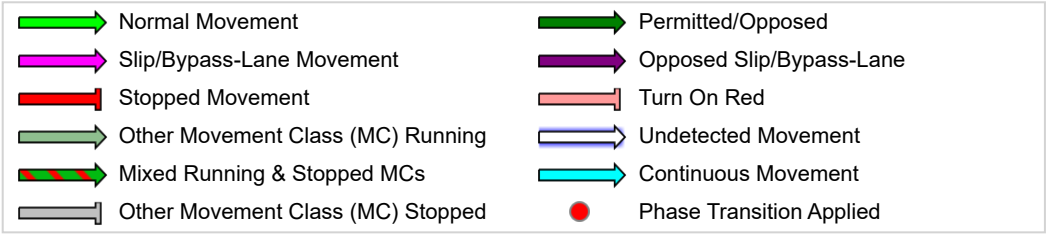
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase



MOVEMENT SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.009	49.4	LOS D	0.3	2.0	0.38	0.61	0.38	46.0
2	T1	All MCs	1238	5.0	1238	5.0	* 1.303	355.4	LOS F	193.1	1409.6	1.00	2.15	2.44	9.5
Approach			1248	5.0	1248	5.0	1.303	352.8	LOS F	193.1	1409.6	0.99	2.13	2.42	8.8
North: Ripley Road (north)															
8	T1	All MCs	163	5.0	163	5.0	0.103	2.4	LOS A	2.1	15.3	0.19	0.16	0.19	57.8
9	R2	All MCs	163	5.0	163	5.0	0.318	50.4	LOS D	9.3	68.0	0.83	0.79	0.83	31.9
Approach			326	5.0	326	5.0	0.318	26.4	LOS B	9.3	68.0	0.51	0.48	0.51	41.1
West: Watsons Road															
10	L2	All MCs	654	5.0	654	5.0	* 1.278	352.4	LOS F	99.6	727.4	1.00	1.52	2.40	9.4
12	R2	All MCs	11	5.0	11	5.0	* 0.068	101.6	LOS F	0.7	5.3	0.95	0.68	0.95	26.5
Approach			664	5.0	664	5.0	1.278	348.4	LOS F	99.6	727.4	1.00	1.51	2.37	8.9
All Vehicles			2239	5.0	2239	5.0	1.303	304.0	LOS F	193.1	1409.6	0.93	1.71	2.13	10.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

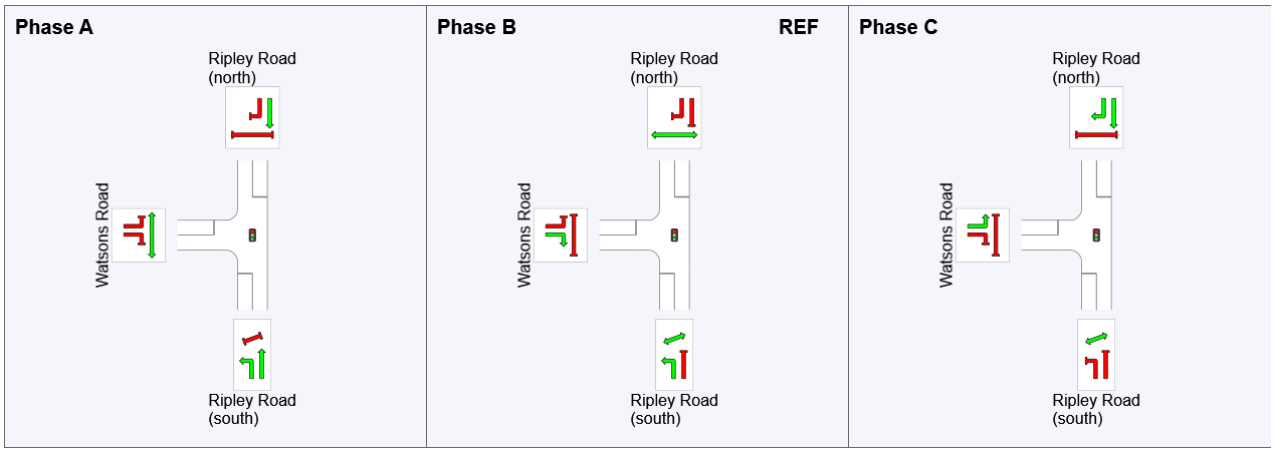
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

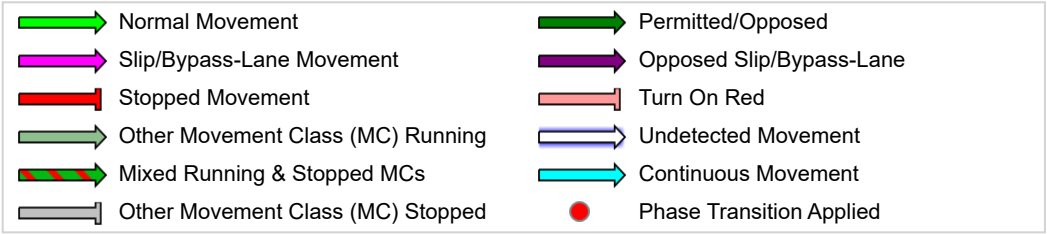
Phase	A	B	C
Phase Change Time (sec)	68	0	19
Green Time (sec)	76	13	43
Phase Time (sec)	82	19	49
Phase Split	55%	13%	33%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.011	28.1	LOS B	0.2	1.6	0.51	0.63	0.51	45.6
2	T1	All MCs	523	5.0	523	5.0	* 0.867	50.7	LOS D	25.1	183.5	1.00	1.03	1.19	36.3
Approach			534	5.0	534	5.0	0.867	50.2	LOS D	25.1	183.5	0.99	1.02	1.18	32.8
North: Ripley Road (north)															
8	T1	All MCs	494	5.0	494	5.0	0.352	4.2	LOS A	7.4	54.0	0.37	0.33	0.37	56.1
9	R2	All MCs	548	5.0	548	5.0	* 0.859	42.6	LOS D	25.8	188.4	1.00	0.95	1.17	34.3
Approach			1042	5.0	1042	5.0	0.859	24.4	LOS B	25.8	188.4	0.70	0.66	0.79	42.0
West: Watsons Road															
10	L2	All MCs	270	5.0	270	5.0	0.423	29.4	LOS C	9.0	66.0	0.81	0.80	0.81	39.2
12	R2	All MCs	11	5.0	11	5.0	* 0.048	44.1	LOS D	0.4	3.1	0.91	0.67	0.91	33.9
Approach			280	5.0	280	5.0	0.423	30.0	LOS C	9.0	66.0	0.81	0.79	0.81	39.0
All Vehicles			1856	5.0	1856	5.0	0.867	32.7	LOS C	25.8	188.4	0.80	0.78	0.91	38.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
North: Ripley Road (north)												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
West: Watsons Road												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04
All Pedestrians		50	158	39.3	LOS D	0.1	0.1	0.94	0.94	193.1	200.0	1.04

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

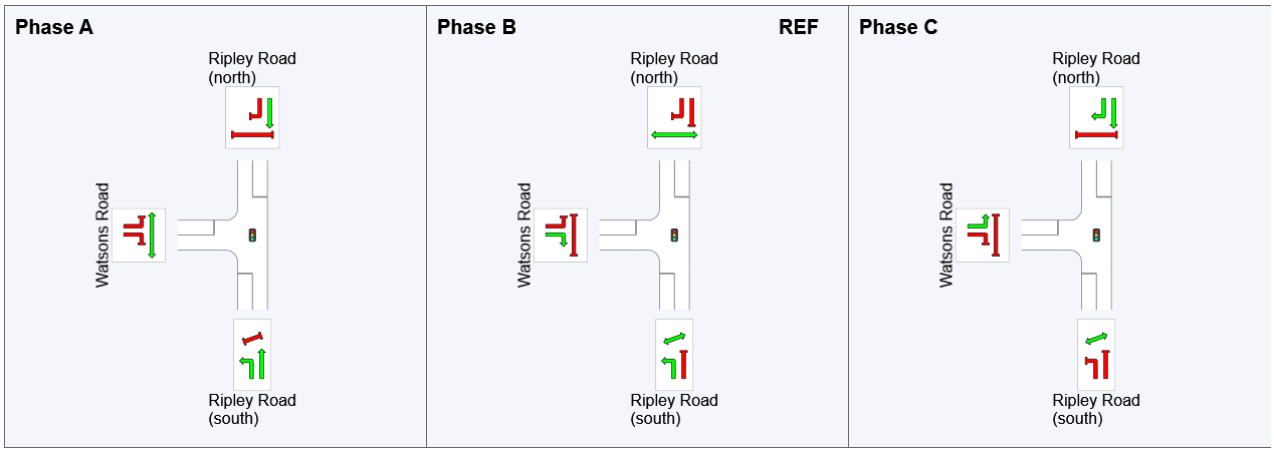
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	55	0	17
Green Time (sec)	29	11	32
Phase Time (sec)	35	17	38
Phase Split	39%	19%	42%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.011	61.1	LOS E	0.3	2.4	0.47	0.62	0.47	43.3
2	T1	All MCs	1305	5.0	1305	5.0	* 1.630	659.5	LOS F	267.8	1954.8	1.00	2.86	3.34	5.4
Approach			1315	5.0	1315	5.0	1.630	654.7	LOS F	267.8	1954.8	1.00	2.84	3.32	5.1
North: Ripley Road (north)															
8	T1	All MCs	169	5.0	169	5.0	0.107	2.4	LOS A	2.2	15.9	0.20	0.17	0.20	57.7
9	R2	All MCs	270	5.0	270	5.0	0.410	43.2	LOS D	14.5	106.0	0.80	0.80	0.80	34.1
Approach			438	5.0	438	5.0	0.410	27.5	LOS B	14.5	106.0	0.56	0.56	0.56	40.5
West: Watsons Road															
10	L2	All MCs	1078	5.0	1078	5.0	* 1.647	683.4	LOS F	223.8	1633.9	1.00	1.95	3.39	5.2
12	R2	All MCs	11	5.0	11	5.0	* 0.068	111.9	LOS F	0.7	5.3	0.95	0.68	0.95	26.5
Approach			1089	5.0	1089	5.0	1.647	677.9	LOS F	223.8	1633.9	1.00	1.94	3.36	4.9
All Vehicles			2842	5.0	2842	5.0	1.647	566.9	LOS F	267.8	1954.8	0.93	2.14	2.91	5.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

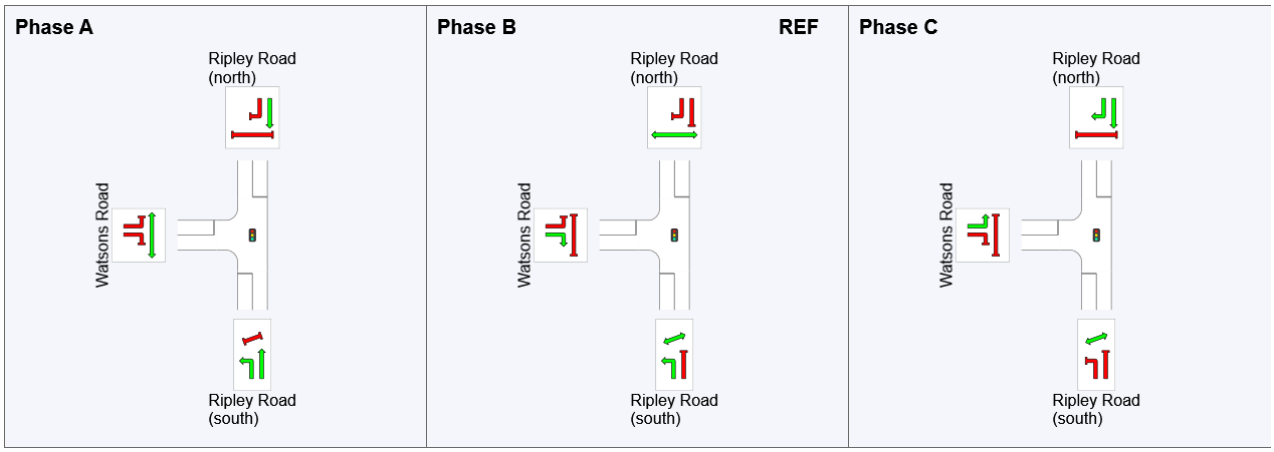
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

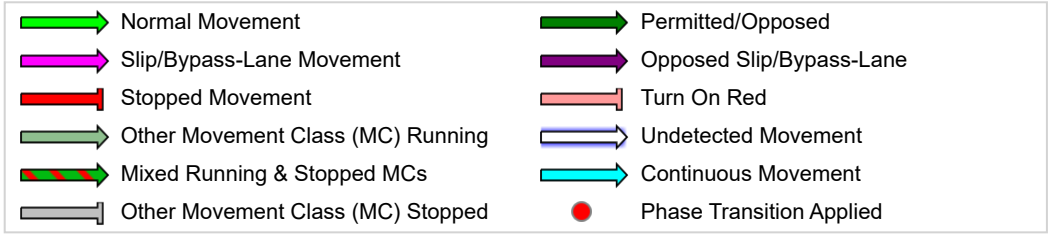
Phase	A	B	C
Phase Change Time (sec)	80	0	19
Green Time (sec)	64	13	55
Phase Time (sec)	70	19	61
Phase Split	47%	13%	41%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.015	73.4	LOS F	0.5	3.4	0.64	0.65	0.64	37.2
2	T1	All MCs	551	5.0	551	5.0	* 1.136	238.8	LOS F	68.2	498.2	1.00	1.66	1.89	13.9
Approach			561	5.0	561	5.0	1.136	235.7	LOS F	68.2	498.2	0.99	1.64	1.87	12.3
North: Ripley Road (north)															
8	T1	All MCs	514	5.0	514	5.0	0.327	19.0	LOS B	8.4	61.0	0.25	0.22	0.25	57.2
9	R2	All MCs	903	5.0	903	5.0	* 1.154	218.3	LOS F	116.5	850.5	1.00	1.35	1.92	13.7
Approach			1417	5.0	1417	5.0	1.154	146.0	LOS F	116.5	850.5	0.73	0.94	1.31	17.5
West: Watsons Road															
10	L2	All MCs	445	5.0	445	5.0	0.465	28.5	LOS C	19.8	144.6	0.67	0.79	0.67	39.6
12	R2	All MCs	11	5.0	11	5.0	* 0.068	74.5	LOS F	0.7	5.3	0.95	0.68	0.95	26.5
Approach			455	5.0	455	5.0	0.465	29.6	LOS C	19.8	144.6	0.67	0.78	0.67	39.2
All Vehicles			2434	5.0	2434	5.0	1.154	144.9	LOS F	116.5	850.5	0.78	1.07	1.32	17.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

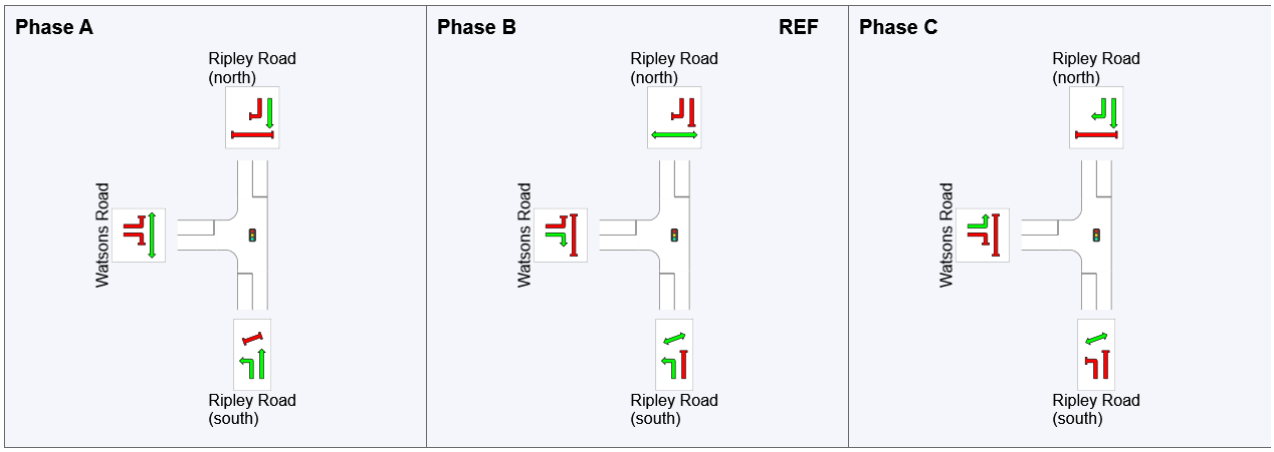
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

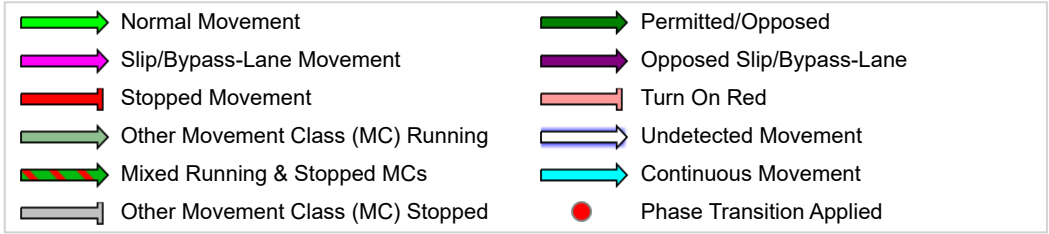
Phase	A	B	C
Phase Change Time (sec)	105	0	19
Green Time (sec)	39	13	80
Phase Time (sec)	45	19	86
Phase Split	30%	13%	57%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	22	5.0	22	5.0	0.024	67.7	LOS E	0.8	5.7	0.51	0.65	0.51	41.7
2	T1	All MCs	1372	5.0	1372	5.0	* 1.903	911.0	LOS F	321.0	2343.5	1.00	3.26	3.86	3.9
Approach			1394	5.0	1394	5.0	1.903	897.5	LOS F	321.0	2343.5	0.99	3.22	3.81	3.8
North: Ripley Road (north)															
8	T1	All MCs	175	5.0	175	5.0	0.111	2.4	LOS A	2.3	16.5	0.20	0.17	0.20	57.7
9	R2	All MCs	417	5.0	417	5.0	0.572	42.1	LOS C	23.3	170.3	0.83	0.83	0.83	34.4
Approach			592	5.0	592	5.0	0.572	30.4	LOS C	23.3	170.3	0.64	0.64	0.64	39.1
West: Watsons Road															
10	L2	All MCs	1373	5.0	1373	5.0	* 1.893	903.1	LOS F	320.2	2337.6	1.00	2.15	3.85	3.9
12	R2	All MCs	15	5.0	15	5.0	* 0.095	114.7	LOS F	1.0	7.4	0.95	0.69	0.95	26.4
Approach			1388	5.0	1388	5.0	1.893	894.6	LOS F	320.2	2337.6	1.00	2.13	3.82	3.8
All Vehicles			3375	5.0	3375	5.0	1.903	744.2	LOS F	321.0	2343.5	0.93	2.32	3.26	4.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

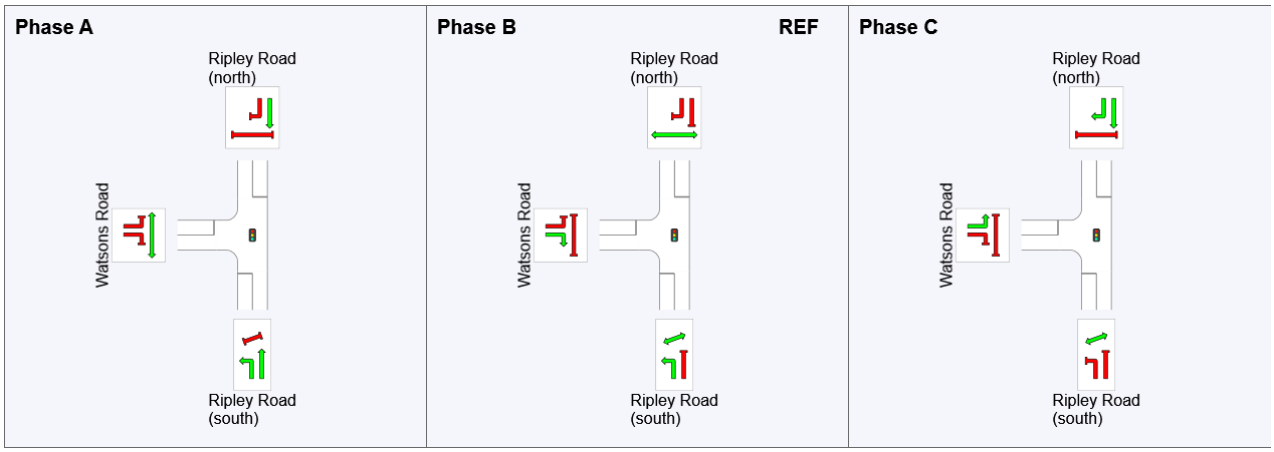
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

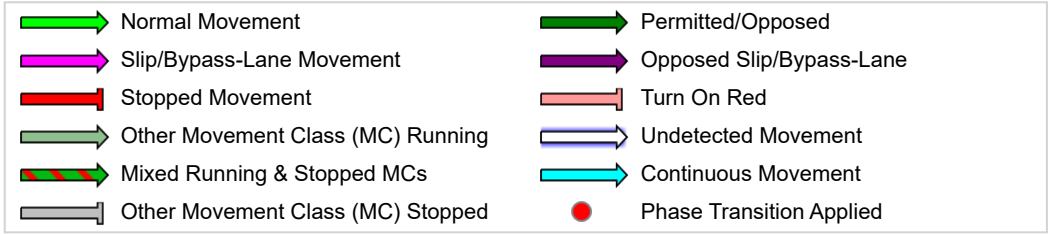
Phase	A	B	C
Phase Change Time (sec)	86	0	19
Green Time (sec)	58	13	61
Phase Time (sec)	64	19	67
Phase Split	43%	13%	45%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	12	5.0	12	5.0	0.019	80.5	LOS F	0.6	4.0	0.67	0.66	0.67	35.9
2	T1	All MCs	579	5.0	579	5.0	* 1.369	445.6	LOS F	97.4	710.7	1.00	2.25	2.69	7.8
Approach			591	5.0	591	5.0	1.369	438.2	LOS F	97.4	710.7	0.99	2.22	2.65	7.3
North: Ripley Road (north)															
8	T1	All MCs	534	5.0	534	5.0	0.339	24.7	LOS B	8.8	64.3	0.25	0.23	0.25	57.2
9	R2	All MCs	1148	5.0	1148	5.0	* 1.357	395.3	LOS F	191.5	1398.1	1.00	1.63	2.63	8.3
Approach			1682	5.0	1682	5.0	1.357	277.7	LOS F	191.5	1398.1	0.76	1.18	1.87	10.7
West: Watsons Road															
10	L2	All MCs	614	5.0	614	5.0	0.606	30.5	LOS C	29.1	212.2	0.71	0.81	0.71	39.7
12	R2	All MCs	18	5.0	18	5.0	* 0.115	77.3	LOS F	1.2	9.0	0.95	0.70	0.95	26.4
Approach			632	5.0	632	5.0	0.606	31.8	LOS C	29.1	212.2	0.72	0.81	0.72	38.2
All Vehicles			2905	5.0	2905	5.0	1.369	256.9	LOS F	191.5	1398.1	0.80	1.31	1.78	11.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

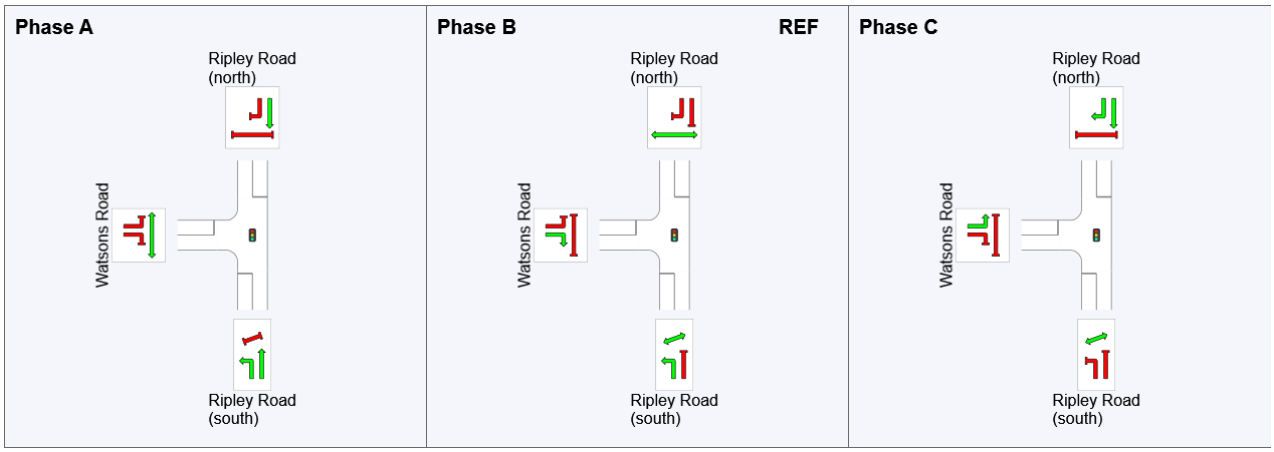
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

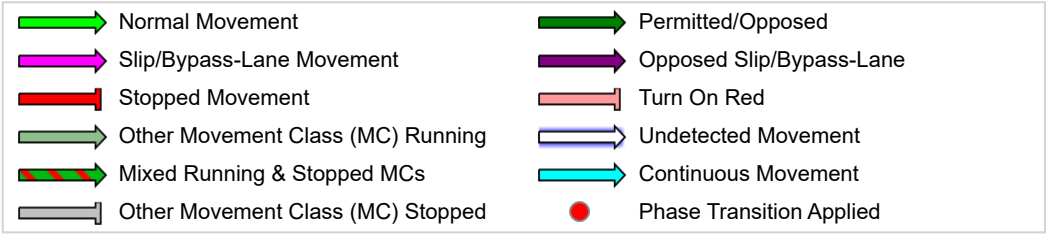
Phase	A	B	C
Phase Change Time (sec)	110	0	19
Green Time (sec)	34	13	85
Phase Time (sec)	40	19	91
Phase Split	27%	13%	61%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	44	5.0	44	5.0	0.051	72.6	LOS F	1.7	12.2	0.55	0.67	0.55	40.6
2	T1	All MCs	1440	5.0	1440	5.0	*2.168	1153.0	LOS F	367.1	2680.0	1.00	3.55	4.24	3.1
Approach			1484	5.0	1484	5.0	2.168	1120.6	LOS F	367.1	2680.0	0.99	3.47	4.13	3.1
North: Ripley Road (north)															
8	T1	All MCs	180	5.0	180	5.0	0.115	3.0	LOS A	2.3	17.1	0.20	0.17	0.20	57.7
9	R2	All MCs	565	5.0	565	5.0	0.733	43.6	LOS D	33.9	247.7	0.90	0.87	0.90	34.1
Approach			746	5.0	746	5.0	0.733	33.8	LOS C	33.9	247.7	0.73	0.70	0.73	37.6
West: Watsons Road															
10	L2	All MCs	1668	5.0	1668	5.0	*2.167	1148.1	LOS F	425.4	3105.5	1.00	2.32	4.24	3.1
12	R2	All MCs	30	5.0	30	5.0	*0.191	117.2	LOS F	2.1	15.1	0.96	0.72	0.96	26.2
Approach			1698	5.0	1698	5.0	2.167	1130.1	LOS F	425.4	3105.5	1.00	2.29	4.19	3.1
All Vehicles			3928	5.0	3928	5.0	2.168	918.4	LOS F	425.4	3105.5	0.94	2.43	3.51	3.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

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

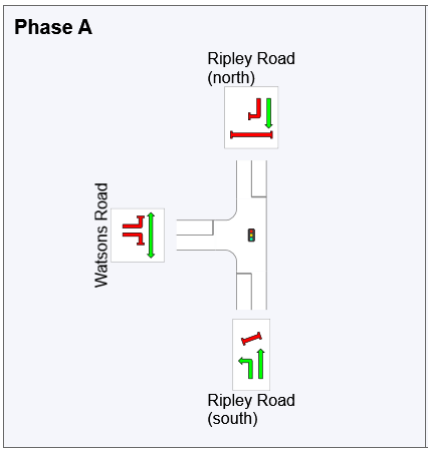
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	90	0	19
Green Time (sec)	54	13	65
Phase Time (sec)	60	19	71
Phase Split	40%	13%	47%
Phase Frequency (%)	100.0	100.0	100.0

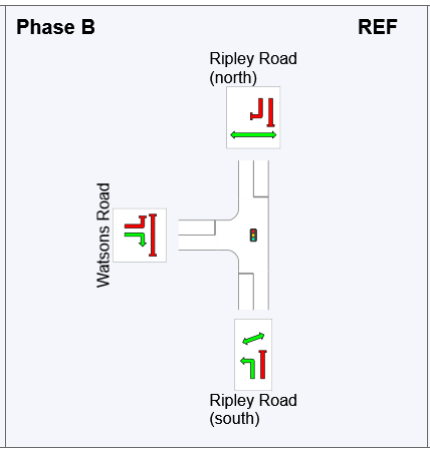
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence

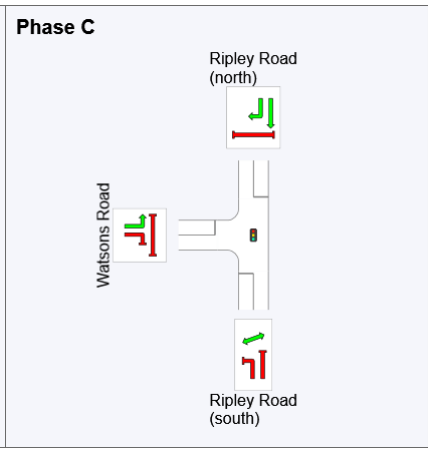
Phase A



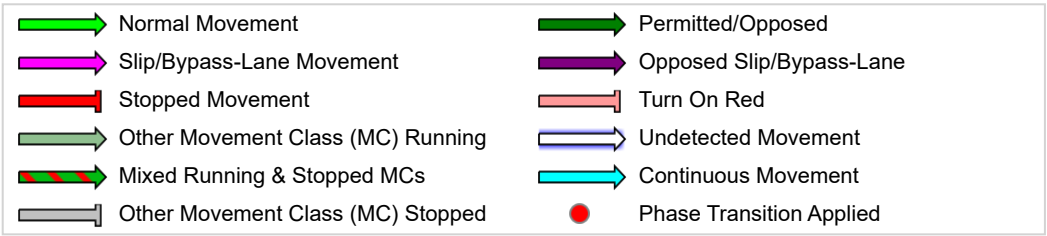
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase



MOVEMENT SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	24	5.0	24	5.0	0.039	84.3	LOS F	1.1	8.4	0.70	0.68	0.70	35.3
2	T1	All MCs	607	5.0	607	5.0	* 1.539	600.3	LOS F	117.6	858.8	1.00	2.56	3.15	5.9
Approach			630	5.0	630	5.0	1.539	580.7	LOS F	117.6	858.8	0.99	2.49	3.06	5.7
North: Ripley Road (north)															
8	T1	All MCs	554	5.0	554	5.0	0.352	29.1	LOS C	9.3	67.6	0.26	0.23	0.26	57.1
9	R2	All MCs	1394	5.0	1394	5.0	* 1.581	596.8	LOS F	278.1	2029.9	1.00	1.86	3.23	5.7
Approach			1947	5.0	1947	5.0	1.581	435.4	LOS F	278.1	2029.9	0.79	1.40	2.39	7.3
West: Watsons Road															
10	L2	All MCs	783	5.0	783	5.0	0.765	39.8	LOS C	42.5	309.9	0.82	0.86	0.82	38.7
12	R2	All MCs	36	5.0	36	5.0	* 0.231	85.3	LOS F	2.5	18.4	0.97	0.73	0.97	26.1
Approach			819	5.0	819	5.0	0.765	41.8	LOS C	42.5	309.9	0.83	0.85	0.83	34.6
All Vehicles			3396	5.0	3396	5.0	1.581	367.5	LOS F	278.1	2029.9	0.83	1.47	2.14	8.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

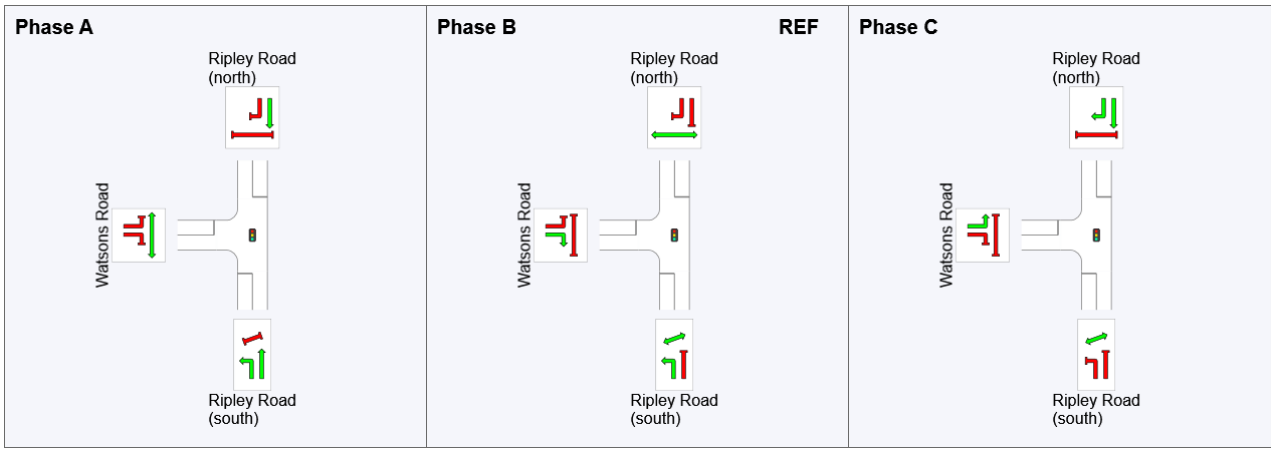
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

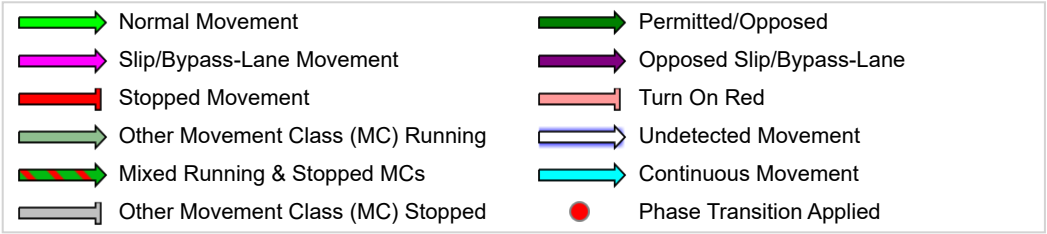
Phase	A	B	C
Phase Change Time (sec)	112	0	19
Green Time (sec)	32	13	87
Phase Time (sec)	38	19	93
Phase Split	25%	13%	62%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	67	5.0	67	5.0	0.082	78.8	LOS F	2.7	19.7	0.60	0.69	0.60	39.2
2	T1	All MCs	1507	5.0	1507	5.0	* 2.522	1477.2	LOS F	416.6	3040.9	1.00	3.85	4.63	2.4
Approach			1574	5.0	1574	5.0	2.522	1418.0	LOS F	416.6	3040.9	0.98	3.72	4.46	2.5
North: Ripley Road (north)															
8	T1	All MCs	186	5.0	186	5.0	0.118	12.6	LOS A	2.4	17.8	0.20	0.17	0.20	57.7
9	R2	All MCs	713	5.0	713	5.0	0.933	75.1	LOS F	58.0	423.4	1.00	1.00	1.16	28.3
Approach			899	5.0	899	5.0	0.933	62.2	LOS E	58.0	423.4	0.83	0.83	0.96	29.1
West: Watsons Road															
10	L2	All MCs	1963	5.0	1963	5.0	* 2.525	1465.6	LOS F	543.0	3963.8	1.00	2.48	4.63	2.5
12	R2	All MCs	44	5.0	44	5.0	* 0.286	116.4	LOS F	3.1	22.9	0.97	0.74	0.97	26.0
Approach			2008	5.0	2008	5.0	2.525	1435.7	LOS F	543.0	3963.8	1.00	2.44	4.55	2.4
All Vehicles			4481	5.0	4481	5.0	2.525	1153.8	LOS F	543.0	3963.8	0.96	2.57	3.80	3.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

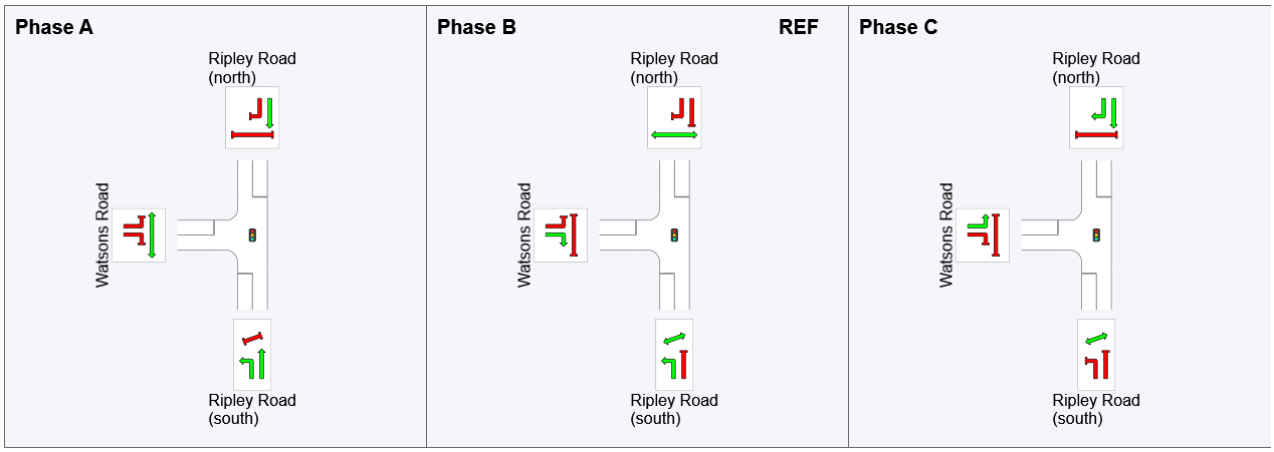
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

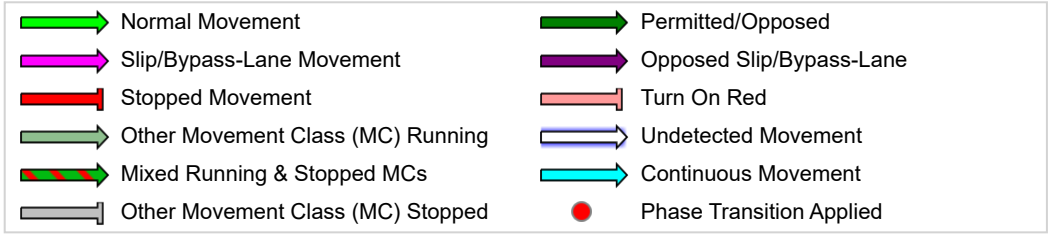
Phase	A	B	C
Phase Change Time (sec)	95	0	19
Green Time (sec)	49	13	70
Phase Time (sec)	55	19	76
Phase Split	37%	13%	51%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	36	5.0	36	5.0	0.063	89.3	LOS F	1.8	13.0	0.72	0.70	0.72	34.5
2	T1	All MCs	634	5.0	634	5.0	* 1.788	826.9	LOS F	141.6	1033.8	1.00	2.86	3.68	4.3
Approach			670	5.0	670	5.0	1.788	787.4	LOS F	141.6	1033.8	0.99	2.75	3.52	4.3
North: Ripley Road (north)															
8	T1	All MCs	573	5.0	573	5.0	0.364	31.3	LOS C	9.7	71.1	0.26	0.24	0.26	57.1
9	R2	All MCs	1639	5.0	1639	5.0	* 1.777	771.8	LOS F	363.6	2654.4	1.00	2.02	3.64	4.5
Approach			2212	5.0	2212	5.0	1.777	579.9	LOS F	363.6	2654.4	0.81	1.56	2.76	5.7
West: Watsons Road															
10	L2	All MCs	952	5.0	952	5.0	0.912	57.5	LOS E	66.9	488.5	0.96	0.93	1.03	34.3
12	R2	All MCs	54	5.0	54	5.0	* 0.346	91.9	LOS F	3.8	27.9	0.98	0.75	0.98	25.9
Approach			1006	5.0	1006	5.0	0.912	59.3	LOS E	66.9	488.5	0.96	0.92	1.03	29.7
All Vehicles			3888	5.0	3888	5.0	1.788	481.0	LOS F	363.6	2654.4	0.88	1.60	2.45	6.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

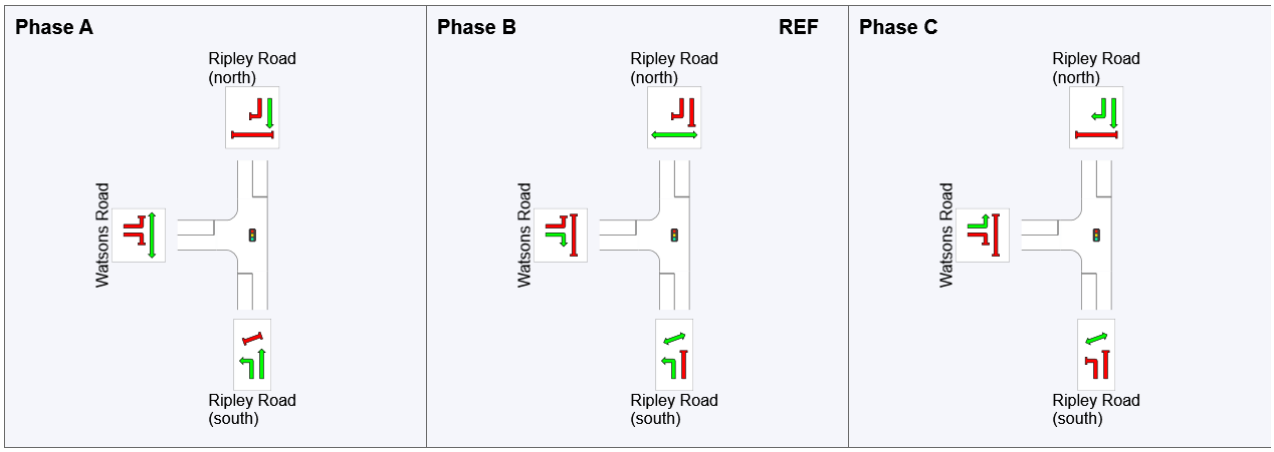
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	115	0	19
Green Time (sec)	29	13	90
Phase Time (sec)	35	19	96
Phase Split	23%	13%	64%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	280	5.0	280	5.0	0.252	10.3	LOS A	3.1	22.6	0.48	0.69	0.48	49.7
2	T1	All MCs	400	5.0	400	5.0	* 0.706	18.6	LOS B	9.4	69.0	0.94	0.86	1.03	45.9
Approach			680	5.0	680	5.0	0.706	15.2	LOS B	9.4	69.0	0.75	0.79	0.81	47.4
North: Ripley Road (north)															
8	T1	All MCs	223	5.0	223	5.0	0.211	6.0	LOS A	2.7	20.0	0.53	0.44	0.53	54.7
9	R2	All MCs	189	5.0	189	5.0	* 0.755	31.8	LOS C	5.1	37.4	1.00	0.92	1.28	38.1
Approach			413	5.0	413	5.0	0.755	17.8	LOS B	5.1	37.4	0.75	0.66	0.87	45.6
West: Watsons Road															
10	L2	All MCs	147	5.0	147	5.0	0.587	29.4	LOS C	3.7	27.0	0.98	0.82	1.05	39.2
12	R2	All MCs	131	5.0	131	5.0	* 0.364	25.2	LOS B	2.9	21.2	0.90	0.77	0.90	41.1
Approach			278	5.0	278	5.0	0.587	27.4	LOS B	3.7	27.0	0.95	0.80	0.98	40.1
All Vehicles			1371	5.0	1371	5.0	0.755	18.5	LOS B	9.4	69.0	0.79	0.75	0.86	45.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

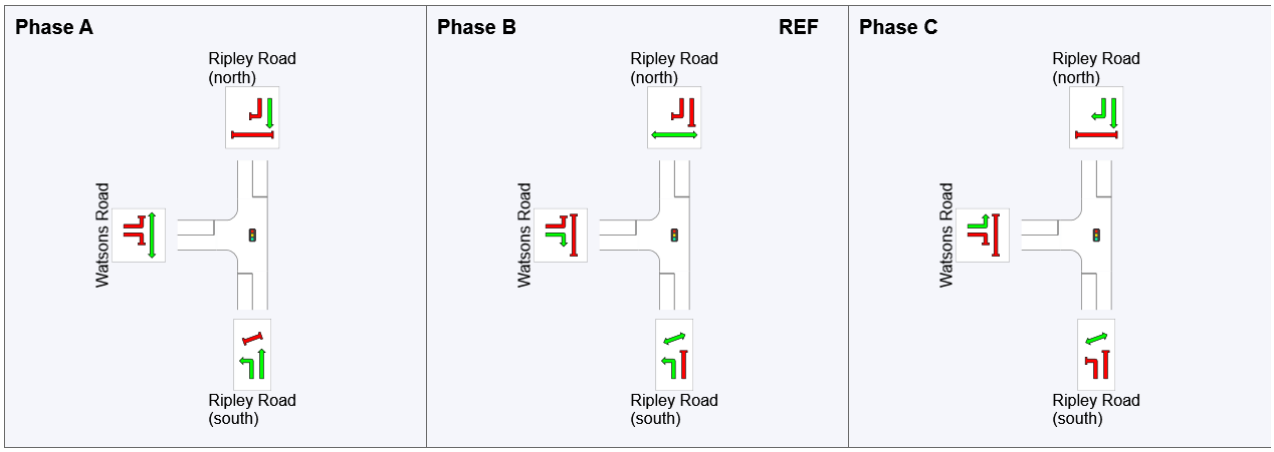
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

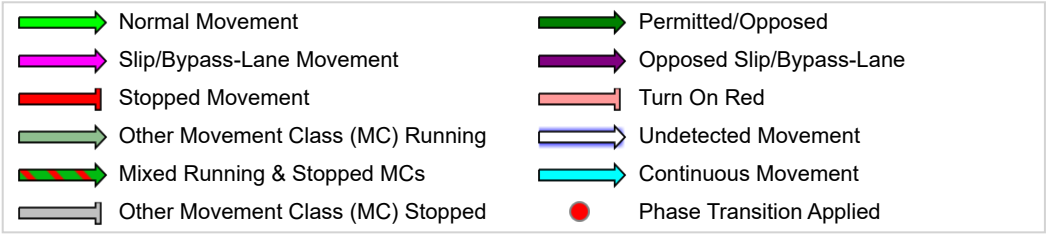
Phase	A	B	C
Phase Change Time (sec)	29	0	16
Green Time (sec)	15	10	7
Phase Time (sec)	21	16	13
Phase Split	42%	32%	26%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	112	5.0	112	5.0	0.120	12.3	LOS A	1.4	10.2	0.54	0.68	0.54	48.4
2	T1	All MCs	202	5.0	202	5.0	* 0.535	20.4	LOS B	4.7	34.1	0.94	0.77	0.94	44.9
Approach			314	5.0	314	5.0	0.535	17.5	LOS B	4.7	34.1	0.80	0.74	0.80	46.1
North: Ripley Road (north)															
8	T1	All MCs	493	5.0	493	5.0	0.466	7.1	LOS A	7.3	52.9	0.64	0.56	0.64	53.7
9	R2	All MCs	356	5.0	356	5.0	* 0.827	31.0	LOS C	9.9	72.5	1.00	0.98	1.33	38.5
Approach			848	5.0	848	5.0	0.827	17.1	LOS B	9.9	72.5	0.79	0.73	0.93	46.1
West: Watsons Road															
10	L2	All MCs	341	5.0	341	5.0	0.792	29.3	LOS C	9.1	66.6	0.99	0.95	1.25	39.3
12	R2	All MCs	103	5.0	103	5.0	* 0.288	24.9	LOS B	2.3	16.4	0.89	0.76	0.89	41.3
Approach			444	5.0	444	5.0	0.792	28.3	LOS B	9.1	66.6	0.97	0.90	1.17	39.7
All Vehicles			1606	5.0	1606	5.0	0.827	20.3	LOS B	9.9	72.5	0.84	0.78	0.97	44.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

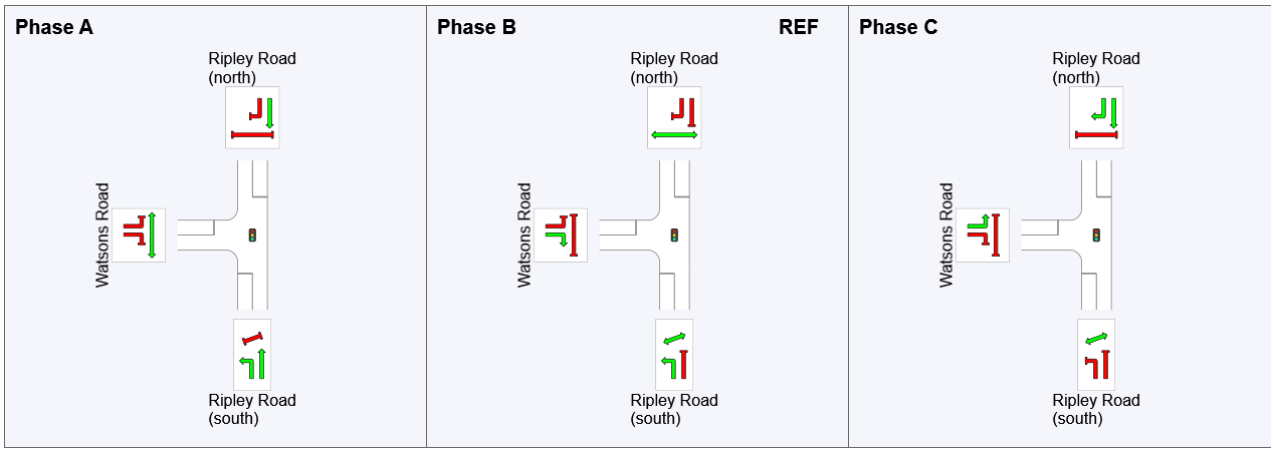
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	34	0	16
Green Time (sec)	10	10	12
Phase Time (sec)	16	16	18
Phase Split	32%	32%	36%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	429	5.0	429	5.0	0.390	15.2	LOS B	7.4	54.2	0.54	0.73	0.54	47.9
2	T1	All MCs	505	5.0	505	5.0	* 0.881	36.3	LOS C	20.5	149.5	1.00	1.08	1.31	38.5
Approach			935	5.0	935	5.0	0.881	26.6	LOS B	20.5	149.5	0.79	0.92	0.96	41.3
North: Ripley Road (north)															
8	T1	All MCs	404	5.0	404	5.0	0.319	5.1	LOS A	5.7	41.8	0.45	0.39	0.45	55.3
9	R2	All MCs	337	5.0	337	5.0	* 0.877	44.3	LOS D	13.6	99.5	1.00	1.01	1.37	33.7
Approach			741	5.0	741	5.0	0.877	22.9	LOS B	13.6	99.5	0.70	0.67	0.87	42.9
West: Watsons Road															
10	L2	All MCs	314	5.0	314	5.0	0.816	39.6	LOS C	11.7	85.5	1.00	0.95	1.24	35.4
12	R2	All MCs	236	5.0	236	5.0	* 0.837	43.5	LOS D	9.1	66.6	1.00	0.98	1.33	34.1
Approach			549	5.0	549	5.0	0.837	41.3	LOS C	11.7	85.5	1.00	0.96	1.28	34.8
All Vehicles			2225	5.0	2225	5.0	0.881	29.0	LOS C	20.5	149.5	0.81	0.85	1.01	39.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
North: Ripley Road (north)												
P3	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
West: Watsons Road												
P4	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
All Pedestrians		50	158	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

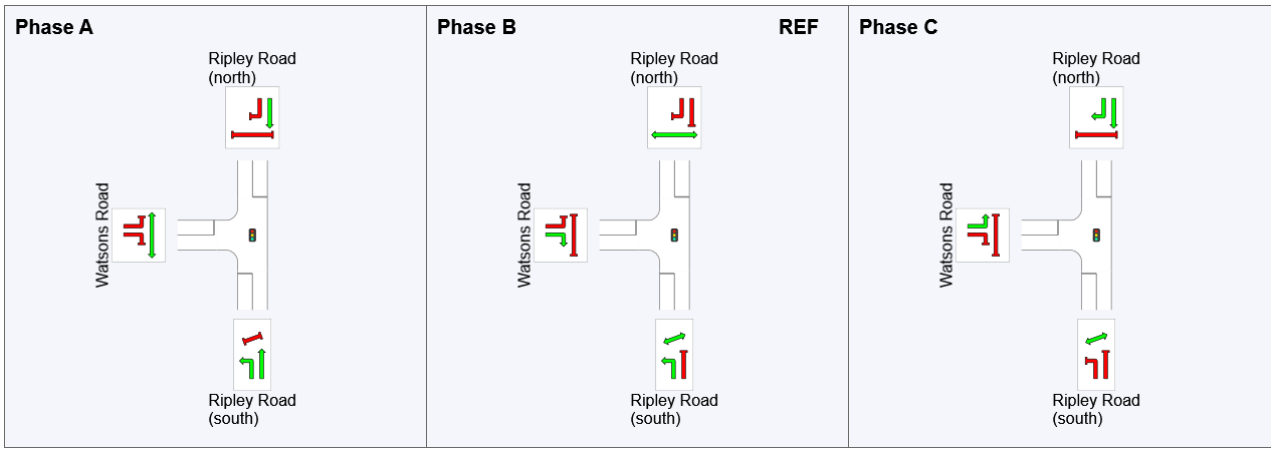
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

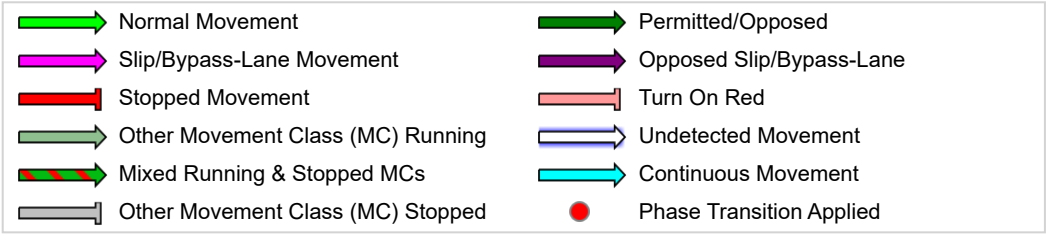
Phase	A	B	C
Phase Change Time (sec)	38	0	17
Green Time (sec)	26	11	15
Phase Time (sec)	32	17	21
Phase Split	46%	24%	30%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	267	5.0	267	5.0	0.331	21.0	LOS B	6.8	49.3	0.69	0.76	0.69	43.4
2	T1	All MCs	211	5.0	211	5.0	* 0.811	41.9	LOS C	9.0	65.6	1.00	0.96	1.26	35.5
Approach			478	5.0	478	5.0	0.811	30.2	LOS C	9.0	65.6	0.83	0.85	0.94	39.6
North: Ripley Road (north)															
8	T1	All MCs	912	5.0	912	5.0	0.788	13.4	LOS A	27.4	199.7	0.81	0.76	0.83	49.2
9	R2	All MCs	600	5.0	600	5.0	* 0.836	35.0	LOS C	24.1	176.2	0.97	0.94	1.11	36.9
Approach			1512	5.0	1512	5.0	0.836	22.0	LOS B	27.4	199.7	0.87	0.83	0.94	43.4
West: Watsons Road															
10	L2	All MCs	238	5.0	238	5.0	0.332	23.6	LOS B	6.5	47.1	0.73	0.77	0.73	41.9
12	R2	All MCs	362	5.0	362	5.0	* 0.850	44.9	LOS D	15.8	115.0	1.00	0.97	1.25	33.7
Approach			600	5.0	600	5.0	0.850	36.4	LOS C	15.8	115.0	0.89	0.89	1.05	36.5
All Vehicles			2589	5.0	2589	5.0	0.850	26.8	LOS B	27.4	199.7	0.87	0.85	0.97	40.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: Ripley Road (north)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: Watsons Road												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	158	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

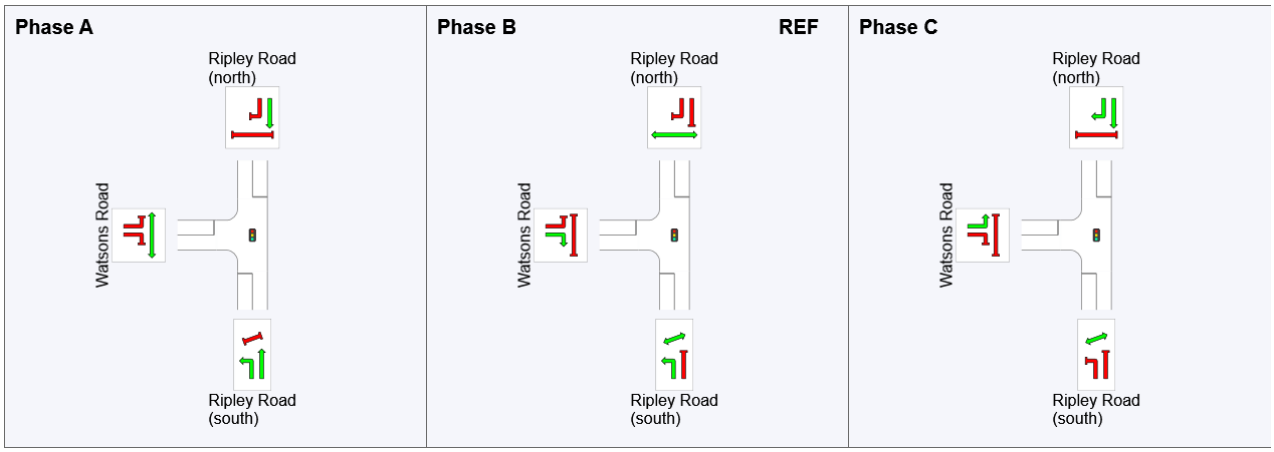
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

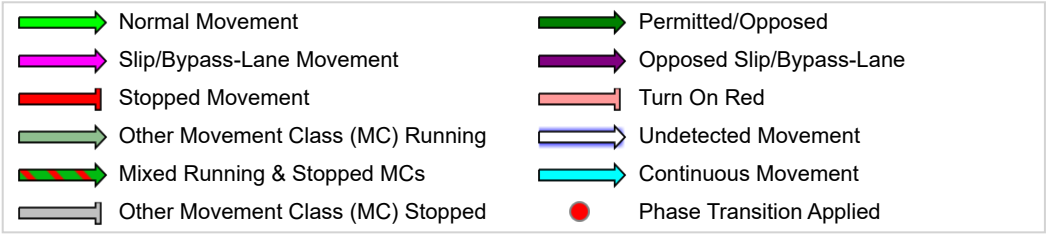
Phase	A	B	C
Phase Change Time (sec)	63	0	25
Green Time (sec)	11	19	32
Phase Time (sec)	17	25	38
Phase Split	21%	31%	48%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	661	5.0	661	5.0	0.865	59.0	LOS E	41.4	302.0	0.85	0.90	0.92	37.5
2	T1	All MCs	646	5.0	646	5.0	* 1.205	272.4	LOS F	91.3	666.5	1.00	1.91	2.15	11.8
Approach			1307	5.0	1307	5.0	1.205	164.5	LOS F	91.3	666.5	0.93	1.40	1.53	16.2
North: Ripley Road (north)															
8	T1	All MCs	501	5.0	501	5.0	0.340	14.3	LOS A	10.7	77.8	0.32	0.29	0.32	55.3
9	R2	All MCs	522	5.0	522	5.0	1.149	227.3	LOS F	66.3	483.7	1.00	1.31	1.95	12.9
Approach			1023	5.0	1023	5.0	1.149	123.0	LOS F	66.3	483.7	0.67	0.81	1.15	19.7
West: Watsons Road															
10	L2	All MCs	505	5.0	505	5.0	* 1.203	281.9	LOS F	69.9	510.1	1.00	1.41	2.16	11.1
12	R2	All MCs	299	5.0	299	5.0	* 1.191	278.7	LOS F	40.4	294.6	1.00	1.37	2.15	11.3
Approach			804	5.0	804	5.0	1.203	280.7	LOS F	69.9	510.1	1.00	1.40	2.16	10.6
All Vehicles			3135	5.0	3135	5.0	1.205	180.8	LOS F	91.3	666.5	0.86	1.21	1.57	15.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

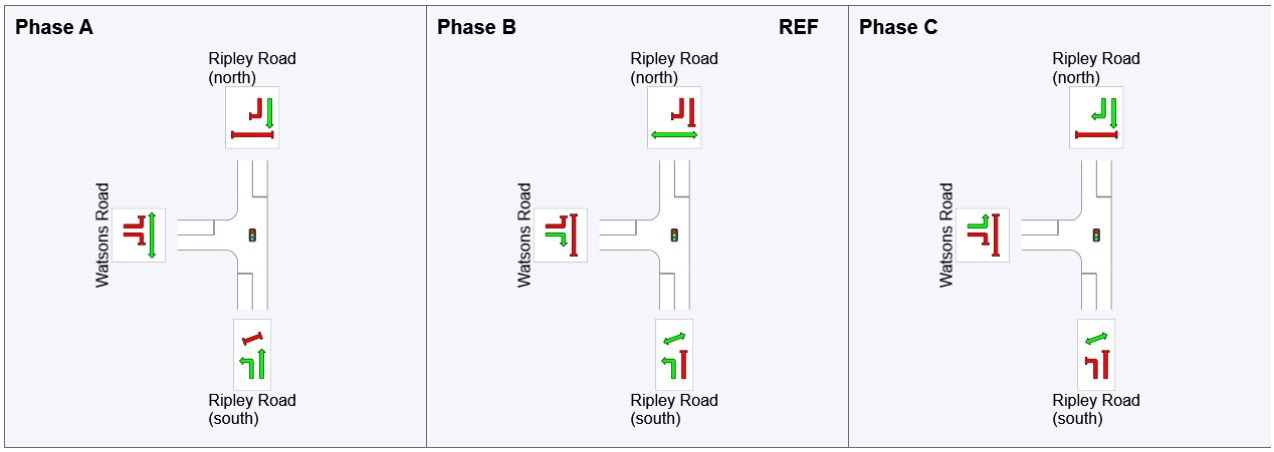
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

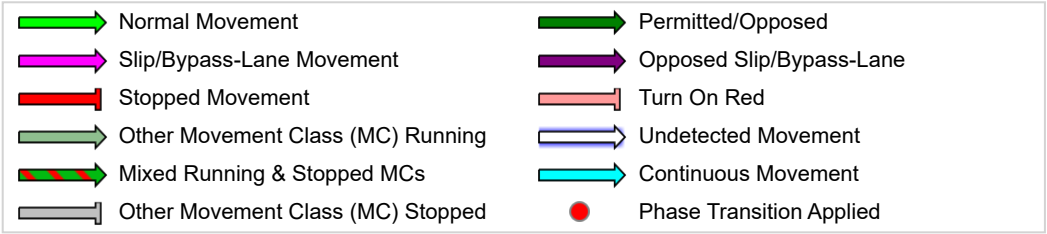
Phase	A	B	C
Phase Change Time (sec)	71	0	27
Green Time (sec)	73	21	38
Phase Time (sec)	79	27	44
Phase Split	53%	18%	29%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int1A - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	312	5.0	312	5.0	0.458	63.4	LOS E	14.8	107.9	0.71	0.78	0.71	38.2
2	T1	All MCs	356	5.0	356	5.0	* 1.420	486.1	LOS F	62.9	459.4	1.00	2.09	2.87	7.1
Approach			667	5.0	667	5.0	1.420	288.8	LOS F	62.9	459.4	0.86	1.48	1.86	10.4
North: Ripley Road (north)															
8	T1	All MCs	1183	5.0	1183	5.0	1.344	373.5	LOS F	194.8	1422.3	1.00	2.26	2.58	8.9
9	R2	All MCs	878	5.0	878	5.0	* 1.465	502.8	LOS F	161.7	1180.3	1.00	1.75	2.95	6.7
Approach			2061	5.0	2061	5.0	1.465	428.6	LOS F	194.8	1422.3	1.00	2.04	2.74	7.4
West: Watsons Road															
10	L2	All MCs	366	5.0	366	5.0	0.471	65.2	LOS E	18.8	137.3	0.76	0.81	0.76	36.0
12	R2	All MCs	653	5.0	653	5.0	* 1.445	501.4	LOS F	118.0	861.3	1.00	1.74	2.91	6.8
Approach			1019	5.0	1019	5.0	1.445	344.6	LOS F	118.0	861.3	0.91	1.41	2.14	9.0
All Vehicles			3747	5.0	3747	5.0	1.465	380.8	LOS F	194.8	1422.3	0.95	1.77	2.42	8.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int1A - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

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

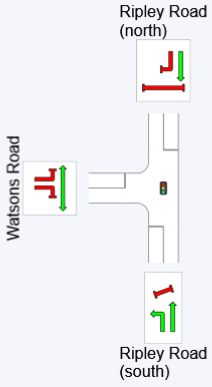
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	119	0	48
Green Time (sec)	25	42	65
Phase Time (sec)	31	48	71
Phase Split	21%	32%	47%
Phase Frequency (%)	100.0	100.0	100.0

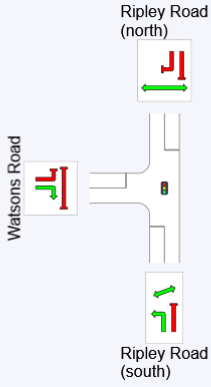
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence

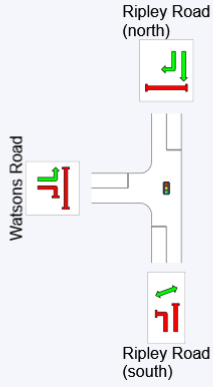
Phase A



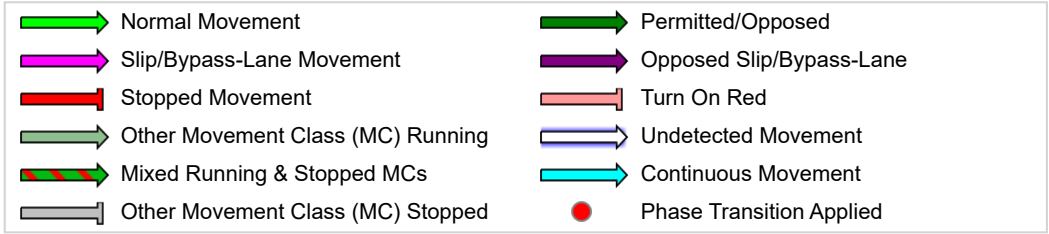
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase

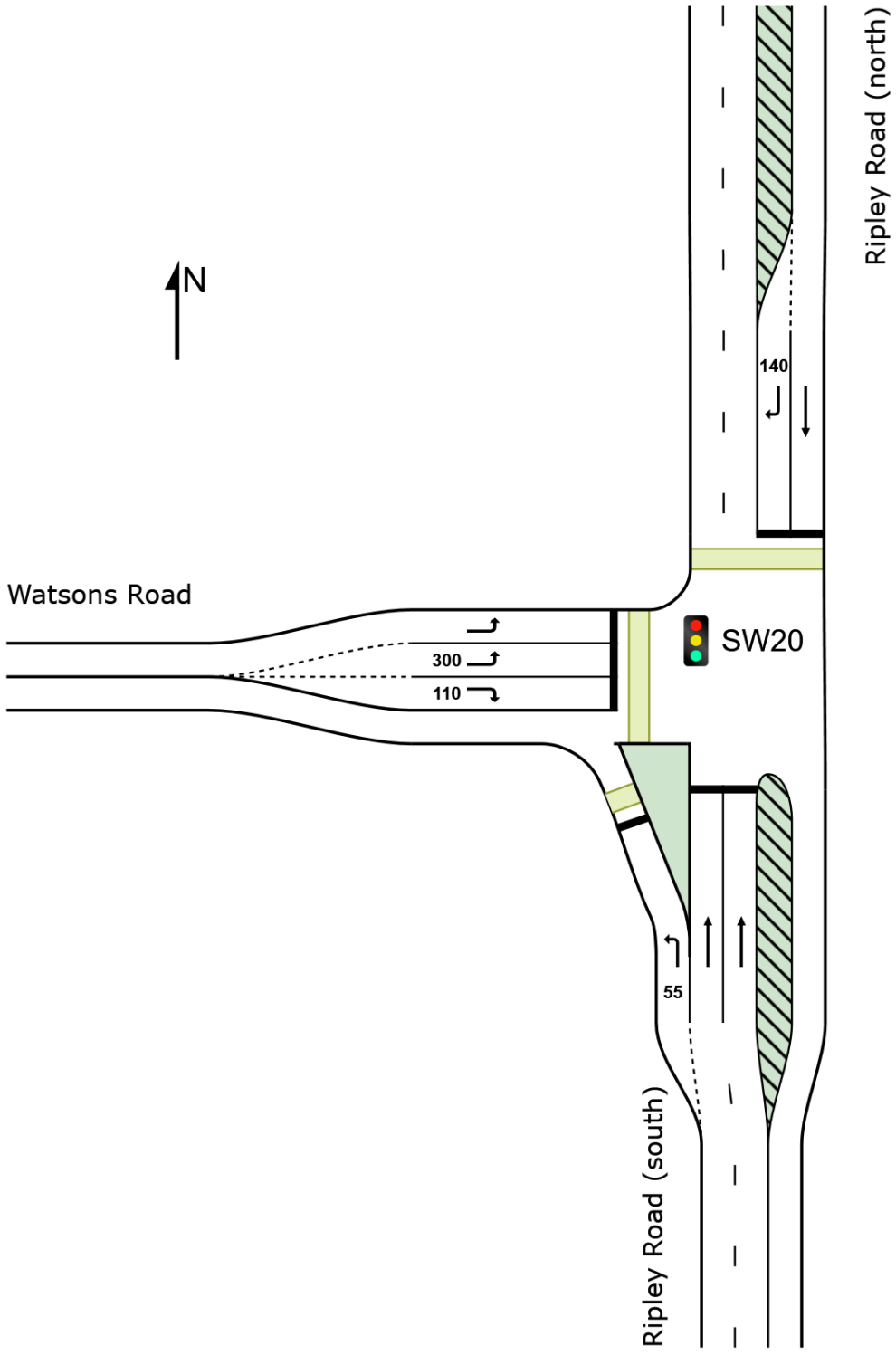


SITE LAYOUT

Site: SW20 [I2 (SW20) Int3 - 2029 No WR - AM (Site Folder: General)]

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.5	LOS A	0.1	0.7	0.39	0.61	0.39	50.2
2	T1	All MCs	575	5.0	575	5.0	* 0.544	17.2	LOS B	6.2	45.3	0.90	0.75	0.90	46.8
Approach			585	5.0	585	5.0	0.544	17.0	LOS B	6.2	45.3	0.89	0.75	0.89	46.9
North: Ripley Road (north)															
8	T1	All MCs	84	5.0	84	5.0	0.082	6.0	LOS A	1.0	7.2	0.50	0.40	0.50	54.7
9	R2	All MCs	25	5.0	25	5.0	0.100	27.0	LOS B	0.6	4.1	0.90	0.70	0.90	40.4
Approach			109	5.0	109	5.0	0.100	10.8	LOS A	1.0	7.2	0.60	0.47	0.60	50.5
West: Watsons Road															
10	L2	All MCs	101	5.0	101	5.0	* 0.201	27.5	LOS B	1.2	8.5	0.92	0.73	0.92	40.1
12	R2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.5
Approach			111	5.0	111	5.0	0.201	27.0	LOS B	1.2	8.5	0.91	0.72	0.91	40.3
All Vehicles			806	5.0	806	5.0	0.544	17.6	LOS B	6.2	45.3	0.85	0.71	0.85	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

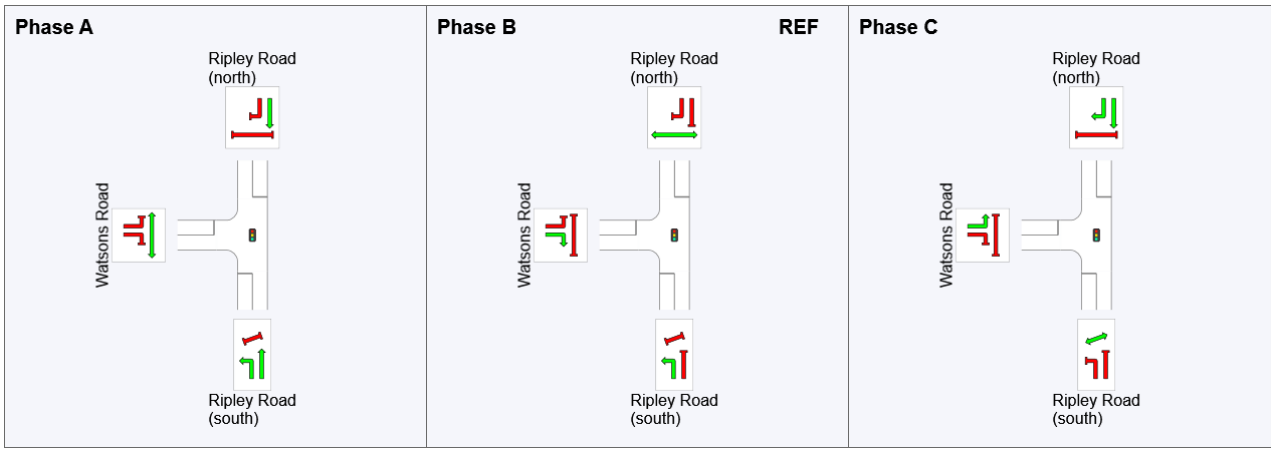
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

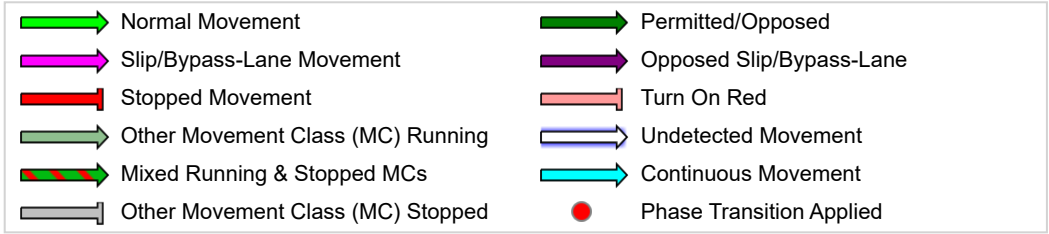
Phase	A	B	C
Phase Change Time (sec)	30	0	17
Green Time (sec)	14	11	7
Phase Time (sec)	20	17	13
Phase Split	40%	34%	26%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.010	10.4	LOS A	0.1	0.8	0.44	0.61	0.44	49.6
2	T1	All MCs	243	5.0	243	5.0	* 0.268	17.3	LOS B	2.5	18.3	0.85	0.67	0.85	46.7
Approach			254	5.0	254	5.0	0.268	17.0	LOS B	2.5	18.3	0.83	0.67	0.83	46.9
North: Ripley Road (north)															
8	T1	All MCs	257	5.0	257	5.0	0.252	6.7	LOS A	3.4	24.7	0.57	0.48	0.57	54.1
9	R2	All MCs	84	5.0	84	5.0	* 0.262	25.7	LOS B	1.9	13.7	0.90	0.75	0.90	40.9
Approach			342	5.0	342	5.0	0.262	11.4	LOS A	3.4	24.7	0.65	0.54	0.65	50.1
West: Watsons Road															
10	L2	All MCs	42	5.0	42	5.0	0.064	24.7	LOS B	0.4	3.2	0.86	0.69	0.86	41.3
12	R2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.5
Approach			52	5.0	52	5.0	0.064	24.2	LOS B	0.4	3.2	0.85	0.68	0.85	41.6
All Vehicles			648	5.0	648	5.0	0.268	14.6	LOS B	3.4	24.7	0.74	0.61	0.74	48.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

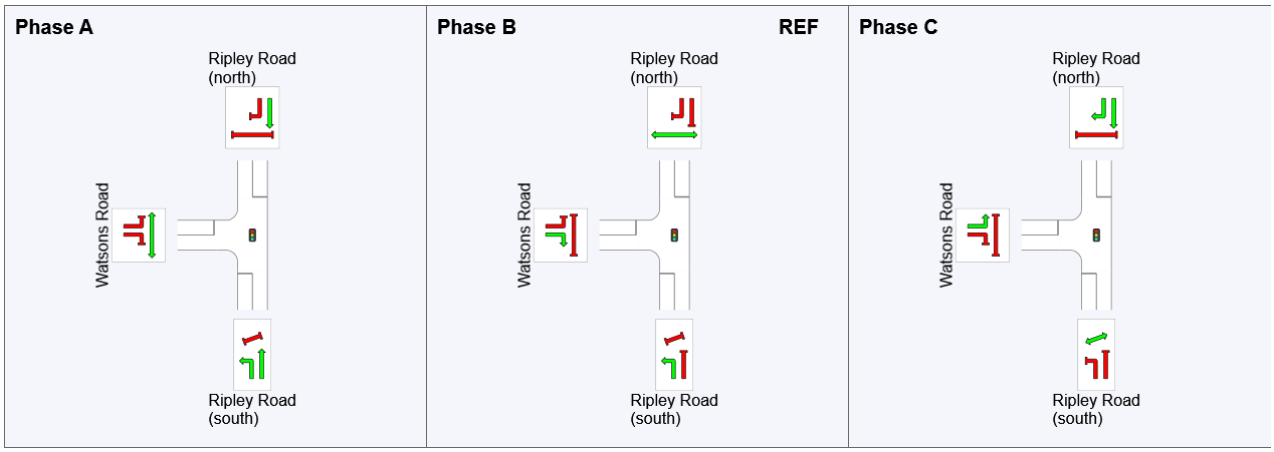
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

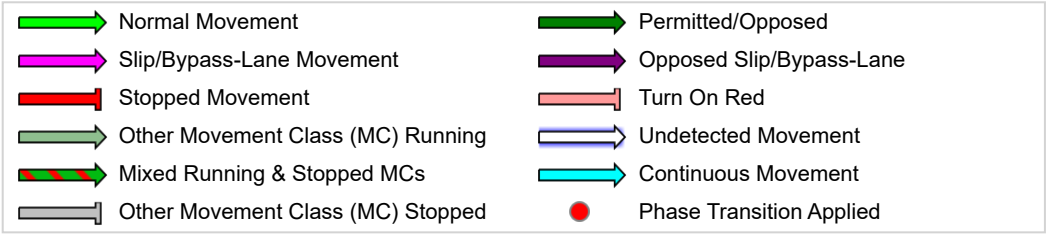
Phase	A	B	C
Phase Change Time (sec)	32	0	17
Green Time (sec)	12	11	9
Phase Time (sec)	18	17	15
Phase Split	36%	34%	30%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.5	LOS A	0.1	0.7	0.39	0.61	0.39	50.2
2	T1	All MCs	878	5.0	878	5.0	* 0.830	24.1	LOS B	12.1	88.5	1.00	1.01	1.29	43.0
Approach			888	5.0	888	5.0	0.830	23.9	LOS B	12.1	88.5	0.99	1.01	1.28	43.1
North: Ripley Road (north)															
8	T1	All MCs	117	5.0	117	5.0	0.115	6.1	LOS A	1.4	10.3	0.52	0.41	0.52	54.5
9	R2	All MCs	66	5.0	66	5.0	0.262	27.8	LOS B	1.5	11.2	0.93	0.74	0.93	40.0
Approach			183	5.0	183	5.0	0.262	13.9	LOS A	1.5	11.2	0.66	0.53	0.66	48.3
West: Watsons Road															
10	L2	All MCs	263	5.0	263	5.0	* 0.524	28.9	LOS C	3.2	23.6	0.97	0.79	0.98	39.5
12	R2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.5
Approach			274	5.0	274	5.0	0.524	28.6	LOS C	3.2	23.6	0.97	0.78	0.97	39.6
All Vehicles			1345	5.0	1345	5.0	0.830	23.5	LOS B	12.1	88.5	0.94	0.90	1.13	42.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

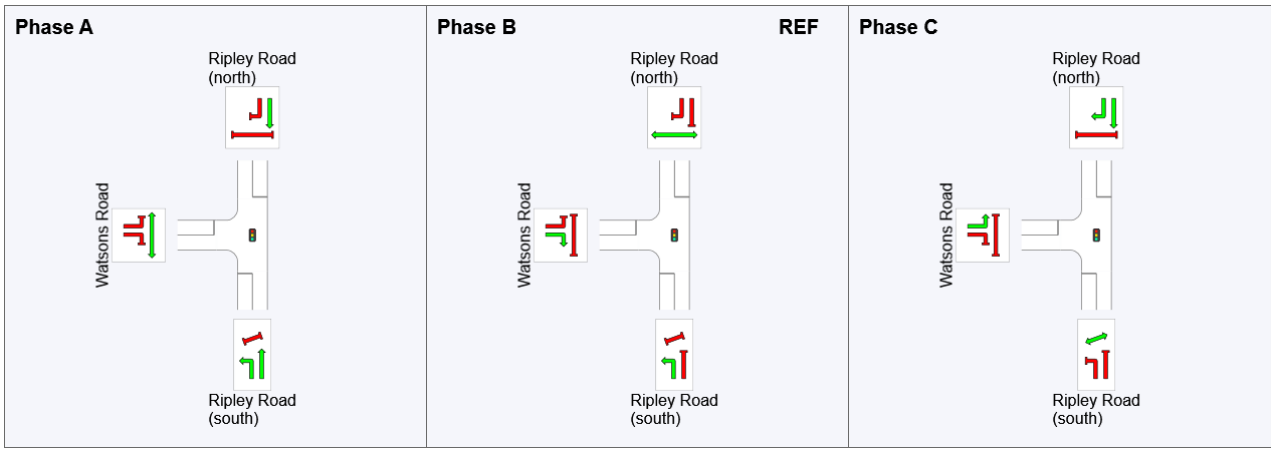
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

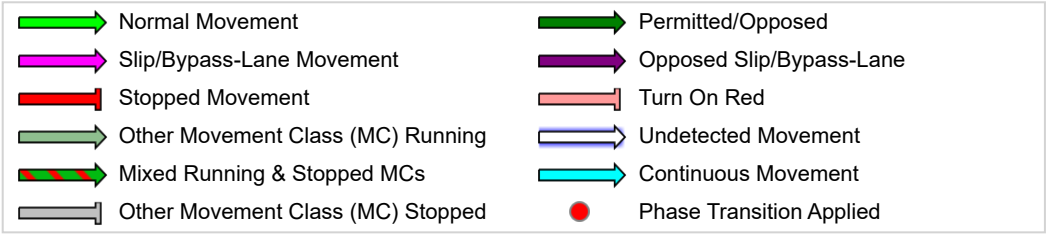
Phase	A	B	C
Phase Change Time (sec)	30	0	17
Green Time (sec)	14	11	7
Phase Time (sec)	20	17	13
Phase Split	40%	34%	26%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.010	10.8	LOS A	0.1	0.8	0.46	0.62	0.46	49.3
2	T1	All MCs	370	5.0	370	5.0	* 0.446	19.1	LOS B	4.1	30.0	0.91	0.74	0.91	45.7
Approach			381	5.0	381	5.0	0.446	18.9	LOS B	4.1	30.0	0.90	0.73	0.90	45.8
North: Ripley Road (north)															
8	T1	All MCs	360	5.0	360	5.0	0.353	7.1	LOS A	5.1	37.0	0.61	0.52	0.61	53.7
9	R2	All MCs	220	5.0	220	5.0	* 0.614	26.9	LOS B	5.3	38.6	0.96	0.83	1.01	40.4
Approach			581	5.0	581	5.0	0.614	14.6	LOS B	5.3	38.6	0.74	0.64	0.76	47.8
West: Watsons Road															
10	L2	All MCs	109	5.0	109	5.0	0.151	24.2	LOS B	1.1	8.3	0.86	0.73	0.86	41.6
12	R2	All MCs	11	5.0	11	5.0	* 0.027	22.5	LOS B	0.2	1.5	0.81	0.66	0.81	42.5
Approach			119	5.0	119	5.0	0.151	24.0	LOS B	1.1	8.3	0.85	0.72	0.85	41.6
All Vehicles			1081	5.0	1081	5.0	0.614	17.2	LOS B	5.3	38.6	0.81	0.68	0.82	46.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

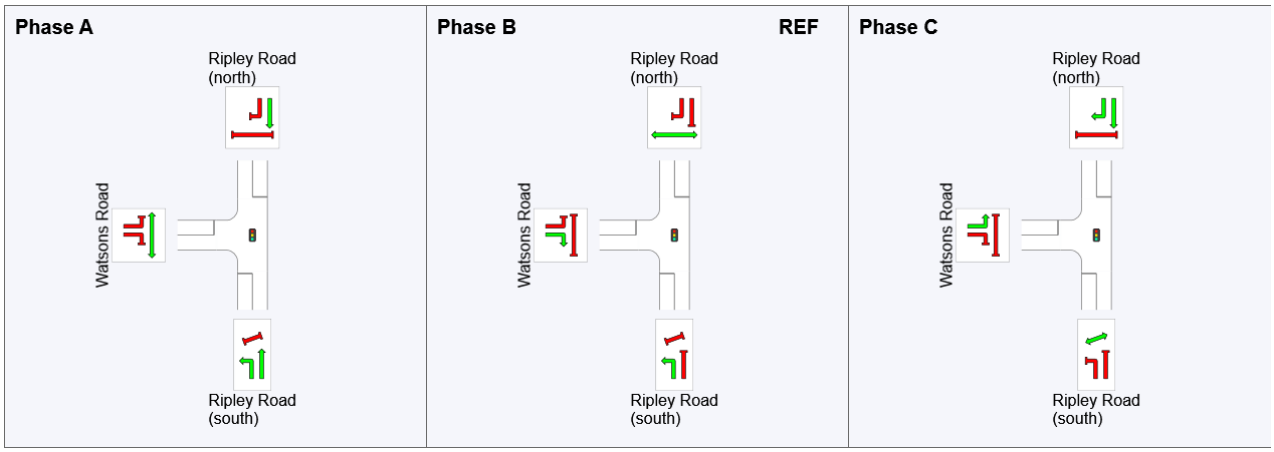
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

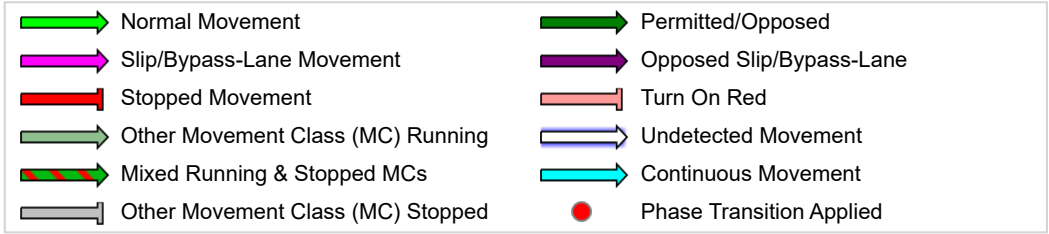
Phase	A	B	C
Phase Change Time (sec)	33	0	17
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.009	11.3	LOS A	0.1	0.8	0.38	0.61	0.38	49.9
2	T1	All MCs	1058	5.0	1058	5.0	* 0.841	27.2	LOS B	17.1	125.2	0.99	1.01	1.22	41.8
Approach			1068	5.0	1068	5.0	0.841	27.1	LOS B	17.1	125.2	0.98	1.01	1.22	41.5
North: Ripley Road (north)															
8	T1	All MCs	140	5.0	140	5.0	0.124	5.6	LOS A	1.8	12.9	0.46	0.37	0.46	55.0
9	R2	All MCs	116	5.0	116	5.0	0.389	30.9	LOS C	3.2	23.4	0.93	0.77	0.93	38.7
Approach			256	5.0	256	5.0	0.389	17.1	LOS B	3.2	23.4	0.67	0.55	0.67	46.2
West: Watsons Road															
10	L2	All MCs	465	5.0	465	5.0	* 0.778	35.9	LOS C	7.4	54.2	1.00	0.93	1.25	36.7
12	R2	All MCs	11	5.0	11	5.0	* 0.029	26.8	LOS B	0.3	1.8	0.83	0.66	0.83	40.5
Approach			476	5.0	476	5.0	0.778	35.7	LOS C	7.4	54.2	1.00	0.92	1.24	36.8
All Vehicles			1800	5.0	1800	5.0	0.841	27.9	LOS B	17.1	125.2	0.94	0.92	1.14	40.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Road (north)												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: Watsons Road												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		50	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

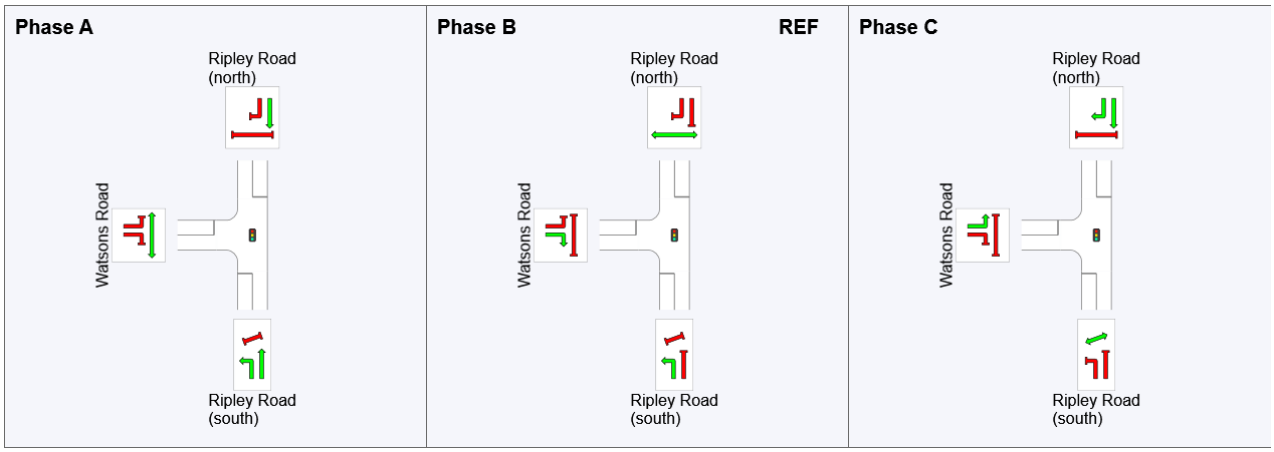
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

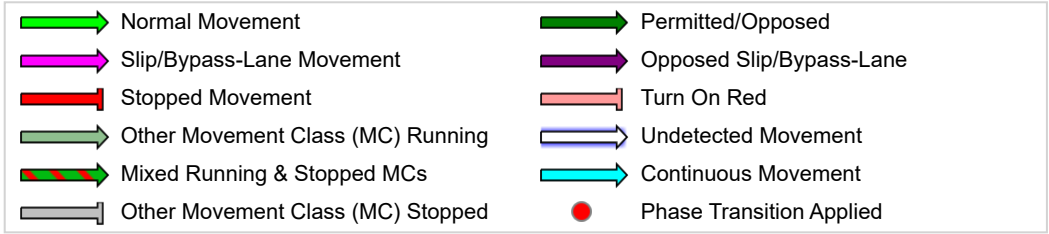
Phase	A	B	C
Phase Change Time (sec)	34	0	18
Green Time (sec)	20	12	10
Phase Time (sec)	26	18	16
Phase Split	43%	30%	27%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.012	13.7	LOS A	0.2	1.1	0.52	0.63	0.52	47.5
2	T1	All MCs	447	5.0	447	5.0	* 0.591	24.7	LOS B	6.2	45.6	0.96	0.79	0.97	42.7
Approach			457	5.0	457	5.0	0.591	24.4	LOS B	6.2	45.6	0.95	0.79	0.96	42.8
North: Ripley Road (north)															
8	T1	All MCs	427	5.0	427	5.0	0.377	6.7	LOS A	6.5	47.4	0.55	0.48	0.55	54.1
9	R2	All MCs	390	5.0	390	5.0	* 0.724	28.1	LOS B	11.1	80.9	0.95	0.88	1.04	39.9
Approach			817	5.0	817	5.0	0.724	16.9	LOS B	11.1	80.9	0.74	0.67	0.79	46.2
West: Watsons Road															
10	L2	All MCs	192	5.0	192	5.0	0.178	22.7	LOS B	2.1	15.5	0.78	0.74	0.78	42.3
12	R2	All MCs	11	5.0	11	5.0	* 0.029	26.8	LOS B	0.3	1.8	0.83	0.66	0.83	40.5
Approach			202	5.0	202	5.0	0.178	22.9	LOS B	2.1	15.5	0.78	0.74	0.78	42.2
All Vehicles			1477	5.0	1477	5.0	0.724	20.0	LOS B	11.1	80.9	0.81	0.72	0.84	44.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Road (north)												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: Watsons Road												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		50	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

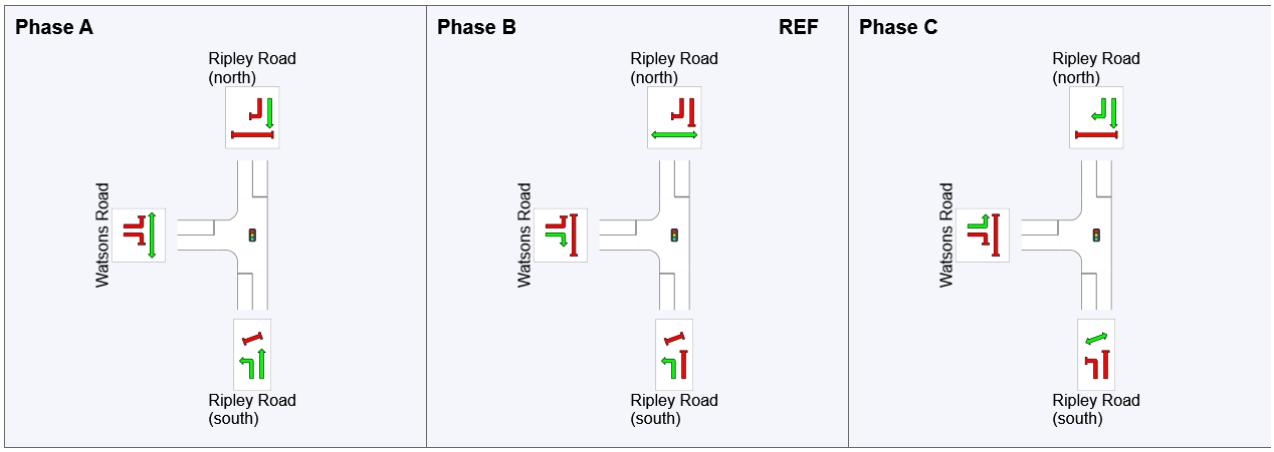
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

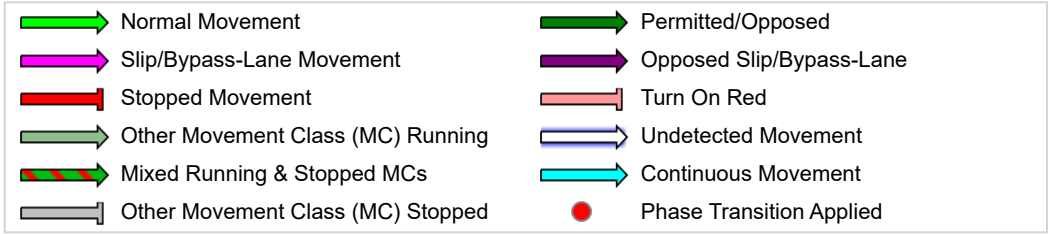
Phase	A	B	C
Phase Change Time (sec)	42	0	18
Green Time (sec)	12	12	18
Phase Time (sec)	18	18	24
Phase Split	30%	30%	40%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.009	20.4	LOS B	0.2	1.1	0.39	0.61	0.39	48.8
2	T1	All MCs	1238	5.0	1238	5.0	* 0.849	35.2	LOS C	25.5	186.1	0.98	0.99	1.14	39.8
Approach			1248	5.0	1248	5.0	0.849	35.1	LOS C	25.5	186.1	0.98	0.99	1.13	38.1
North: Ripley Road (north)															
8	T1	All MCs	163	5.0	163	5.0	0.125	4.5	LOS A	2.1	15.6	0.36	0.30	0.36	55.9
9	R2	All MCs	163	5.0	163	5.0	0.405	34.8	LOS C	5.6	40.8	0.90	0.79	0.90	37.2
Approach			326	5.0	326	5.0	0.405	19.7	LOS B	5.6	40.8	0.63	0.55	0.63	44.6
West: Watsons Road															
10	L2	All MCs	654	5.0	654	5.0	* 0.810	42.7	LOS D	13.6	99.3	1.00	0.93	1.19	34.3
12	R2	All MCs	11	5.0	11	5.0	* 0.036	36.5	LOS C	0.4	2.6	0.87	0.67	0.87	36.6
Approach			664	5.0	664	5.0	0.810	42.6	LOS D	13.6	99.3	1.00	0.93	1.18	34.4
All Vehicles			2239	5.0	2239	5.0	0.849	35.1	LOS C	25.5	186.1	0.93	0.91	1.07	37.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: Ripley Road (north)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: Watsons Road												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	158	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

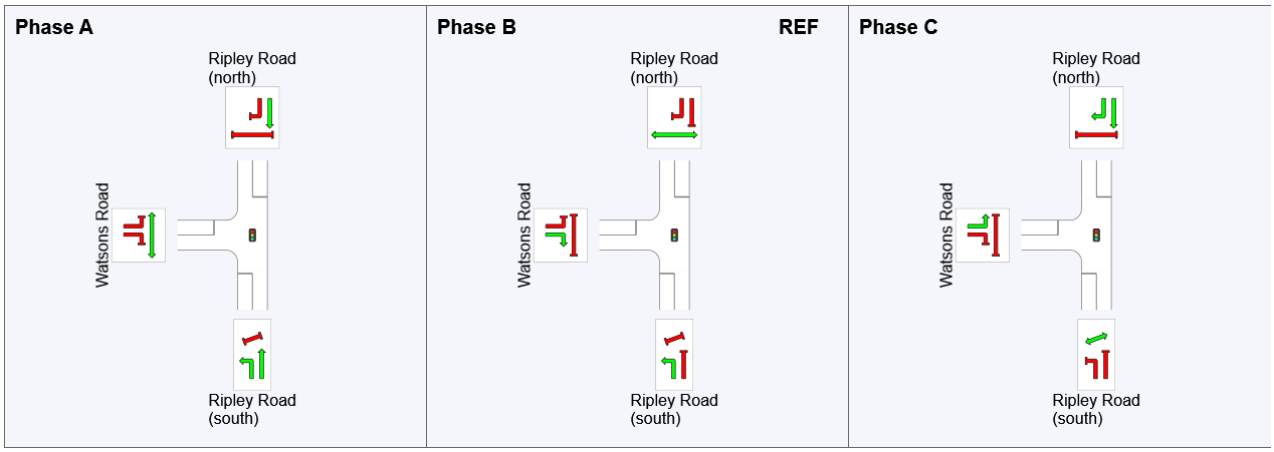
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

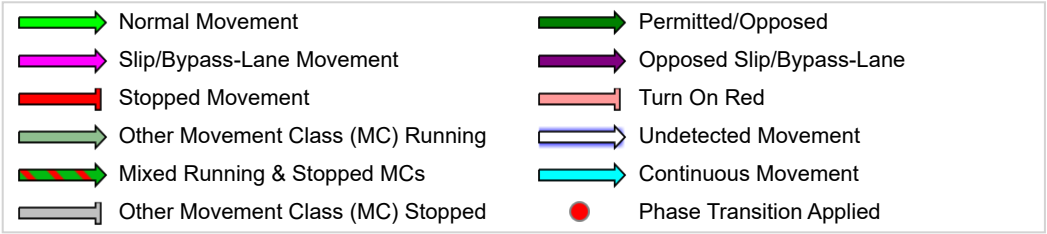
Phase	A	B	C
Phase Change Time (sec)	43	0	19
Green Time (sec)	31	13	18
Phase Time (sec)	37	19	24
Phase Split	46%	24%	30%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.013	16.7	LOS B	0.2	1.4	0.56	0.63	0.56	45.8
2	T1	All MCs	523	5.0	523	5.0	* 0.746	32.3	LOS C	9.3	67.6	1.00	0.91	1.14	39.2
Approach			534	5.0	534	5.0	0.746	32.0	LOS C	9.3	67.6	0.99	0.90	1.13	39.3
North: Ripley Road (north)															
8	T1	All MCs	494	5.0	494	5.0	0.407	6.5	LOS A	8.1	59.4	0.52	0.46	0.52	54.2
9	R2	All MCs	548	5.0	548	5.0	* 0.822	32.5	LOS C	19.4	141.9	0.97	0.94	1.13	38.1
Approach			1042	5.0	1042	5.0	0.822	20.2	LOS B	19.4	141.9	0.76	0.71	0.84	44.3
West: Watsons Road															
10	L2	All MCs	270	5.0	270	5.0	0.202	21.8	LOS B	3.2	23.1	0.72	0.74	0.72	42.7
12	R2	All MCs	11	5.0	11	5.0	* 0.032	31.2	LOS C	0.3	2.2	0.84	0.67	0.84	38.7
Approach			280	5.0	280	5.0	0.202	22.2	LOS B	3.2	23.1	0.72	0.74	0.72	42.5
All Vehicles			1856	5.0	1856	5.0	0.822	23.9	LOS B	19.4	141.9	0.82	0.77	0.91	42.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
North: Ripley Road (north)												
P3	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
West: Watsons Road												
P4	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
All Pedestrians		50	158	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

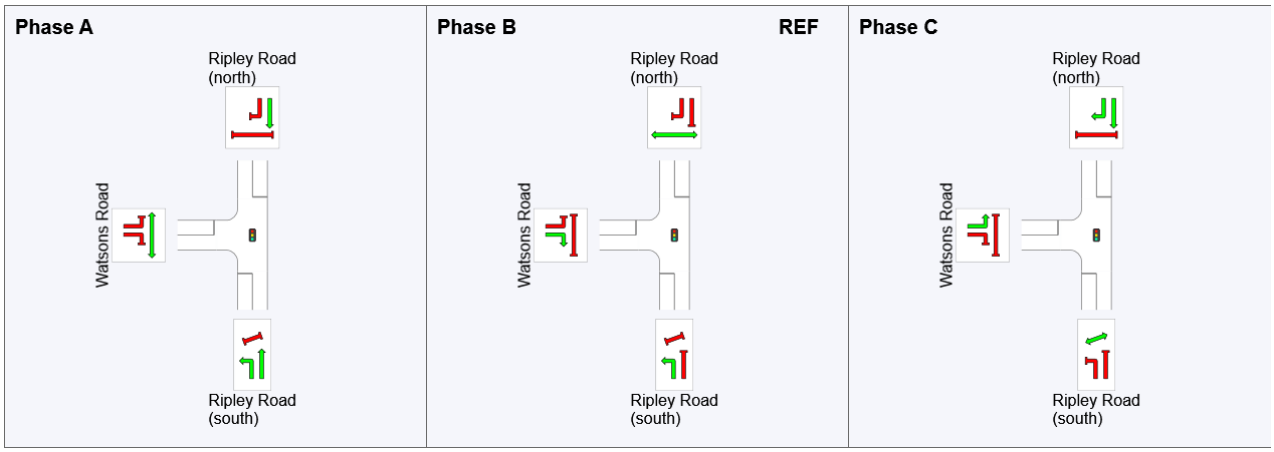
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

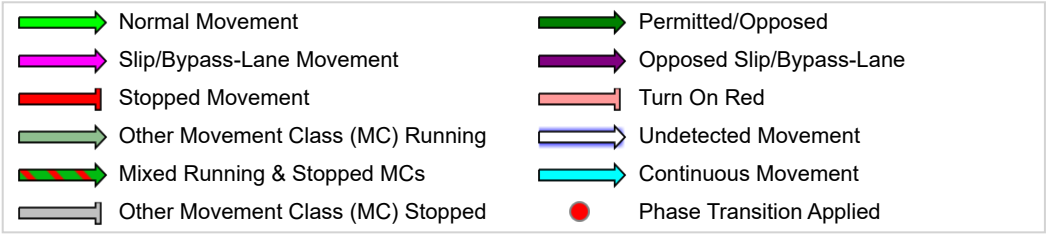
Phase	A	B	C
Phase Change Time (sec)	51	0	19
Green Time (sec)	13	13	26
Phase Time (sec)	19	19	32
Phase Split	27%	27%	46%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.010	38.7	LOS C	0.3	1.9	0.45	0.62	0.45	45.3
2	T1	All MCs	1305	5.0	1305	5.0	* 0.887	56.8	LOS E	40.5	295.5	1.00	1.01	1.13	34.1
Approach			1315	5.0	1315	5.0	0.887	56.6	LOS E	40.5	295.5	1.00	1.01	1.13	31.1
North: Ripley Road (north)															
8	T1	All MCs	169	5.0	169	5.0	0.115	3.5	LOS A	2.4	17.3	0.26	0.22	0.26	56.8
9	R2	All MCs	270	5.0	270	5.0	0.451	39.3	LOS C	12.4	90.2	0.84	0.81	0.84	35.5
Approach			438	5.0	438	5.0	0.451	25.5	LOS B	12.4	90.2	0.61	0.58	0.61	41.5
West: Watsons Road															
10	L2	All MCs	1078	5.0	1078	5.0	* 0.903	62.5	LOS E	35.4	258.6	1.00	0.99	1.20	29.5
12	R2	All MCs	11	5.0	11	5.0	* 0.047	60.4	LOS E	0.5	4.0	0.91	0.68	0.91	30.7
Approach			1089	5.0	1089	5.0	0.903	62.5	LOS E	35.4	258.6	1.00	0.99	1.20	29.0
All Vehicles			2842	5.0	2842	5.0	0.903	54.1	LOS D	40.5	295.5	0.94	0.93	1.07	31.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
North: Ripley Road (north)												
P3	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
West: Watsons Road												
P4	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96
All Pedestrians		50	158	54.3	LOS E	0.2	0.2	0.95	0.95	208.1	200.0	0.96

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

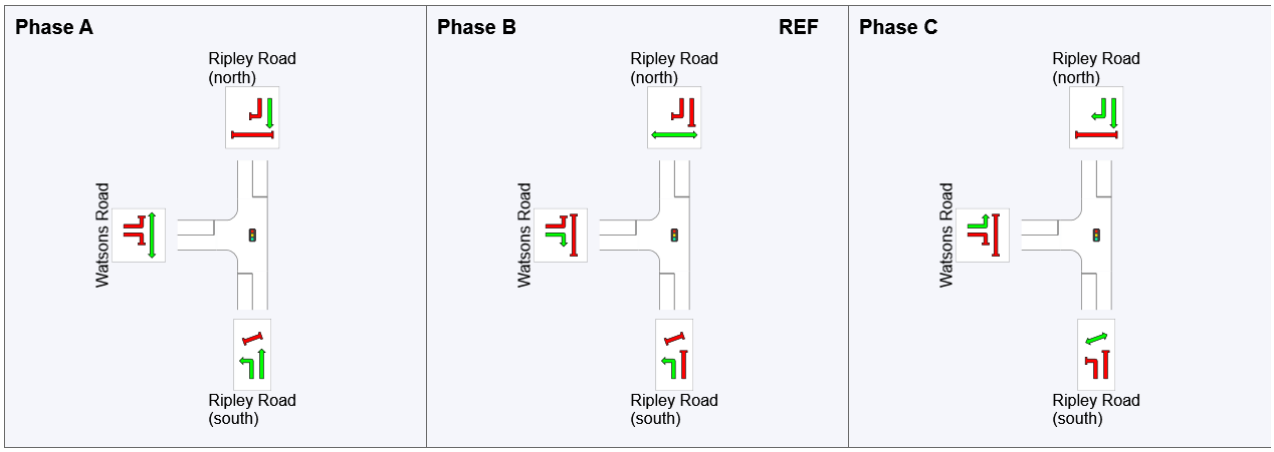
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

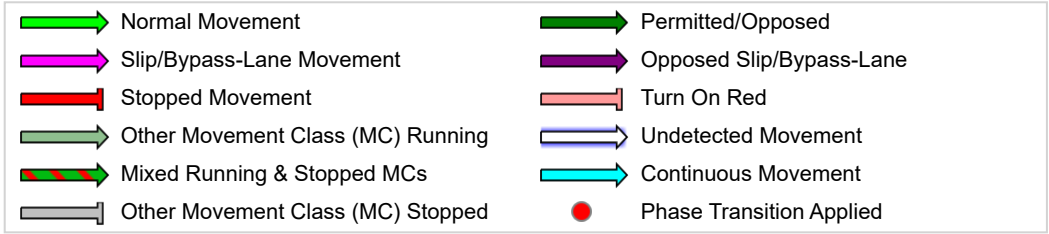
Phase	A	B	C
Phase Change Time (sec)	67	0	21
Green Time (sec)	47	15	40
Phase Time (sec)	53	21	46
Phase Split	44%	18%	38%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	11	5.0	11	5.0	0.020	67.6	LOS E	0.5	3.9	0.74	0.66	0.74	33.5
2	T1	All MCs	551	5.0	551	5.0	* 1.001	123.9	LOS F	27.0	197.2	1.00	1.22	1.50	21.0
Approach			561	5.0	561	5.0	1.001	122.8	LOS F	27.0	197.2	1.00	1.21	1.49	19.9
North: Ripley Road (north)															
8	T1	All MCs	514	5.0	514	5.0	0.332	12.0	LOS A	9.0	65.9	0.27	0.24	0.27	56.8
9	R2	All MCs	903	5.0	903	5.0	* 1.005	93.8	LOS F	89.8	655.7	1.00	1.14	1.32	24.6
Approach			1417	5.0	1417	5.0	1.005	64.1	LOS E	89.8	655.7	0.73	0.81	0.94	28.9
West: Watsons Road															
10	L2	All MCs	445	5.0	445	5.0	0.196	17.7	LOS B	6.6	48.4	0.45	0.70	0.45	44.9
12	R2	All MCs	11	5.0	11	5.0	* 0.059	72.1	LOS F	0.7	5.1	0.93	0.68	0.93	27.0
Approach			455	5.0	455	5.0	0.196	18.9	LOS B	6.6	48.4	0.46	0.70	0.46	44.2
All Vehicles			2434	5.0	2434	5.0	1.005	69.2	LOS E	89.8	655.7	0.74	0.88	0.98	27.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

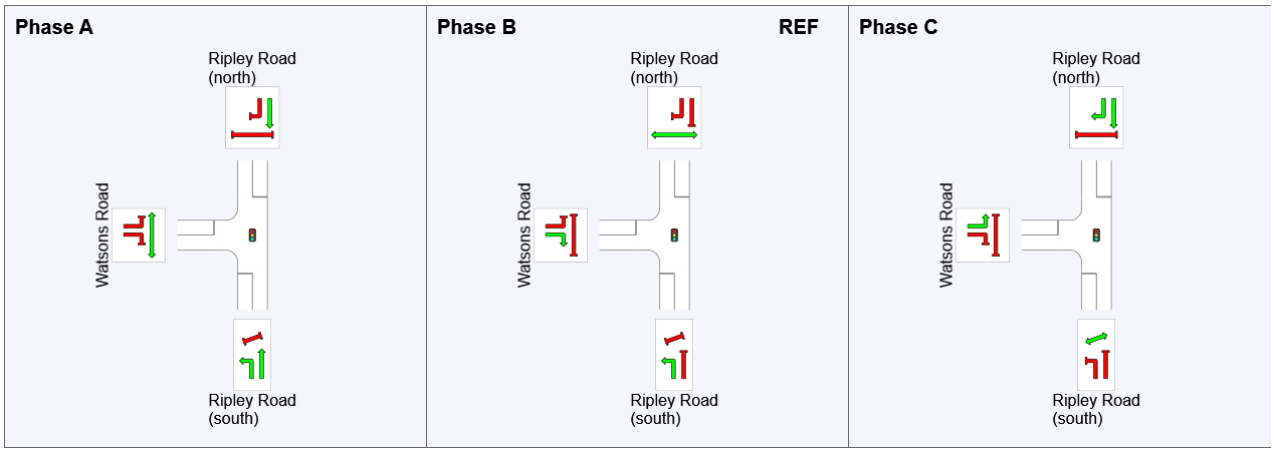
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

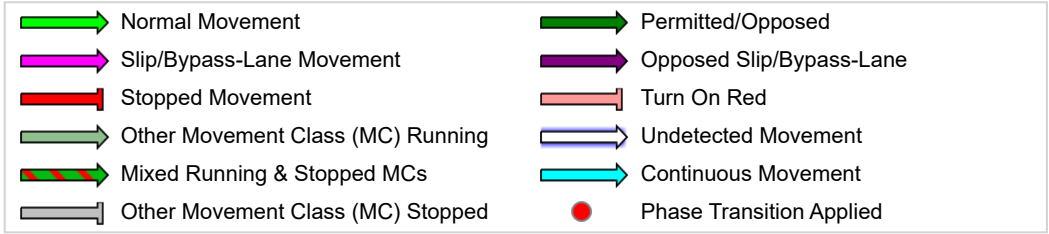
Phase	A	B	C
Phase Change Time (sec)	122	0	21
Green Time (sec)	22	15	95
Phase Time (sec)	28	21	101
Phase Split	19%	14%	67%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	22	5.0	22	5.0	0.024	56.9	LOS E	0.8	5.6	0.51	0.65	0.51	42.0
2	T1	All MCs	1372	5.0	1372	5.0	* 0.968	94.5	LOS F	62.0	452.9	1.00	1.16	1.25	26.3
Approach			1394	5.0	1394	5.0	0.968	93.9	LOS F	62.0	452.9	0.99	1.15	1.24	23.6
North: Ripley Road (north)															
8	T1	All MCs	175	5.0	175	5.0	0.113	2.8	LOS A	2.4	17.9	0.21	0.18	0.21	57.4
9	R2	All MCs	417	5.0	417	5.0	0.582	43.0	LOS D	23.6	172.3	0.84	0.83	0.84	34.3
Approach			592	5.0	592	5.0	0.582	31.2	LOS C	23.6	172.3	0.65	0.64	0.65	38.9
West: Watsons Road															
10	L2	All MCs	1373	5.0	1373	5.0	* 0.962	90.3	LOS F	60.9	444.9	1.00	1.06	1.24	25.4
12	R2	All MCs	15	5.0	15	5.0	* 0.083	92.4	LOS F	1.0	7.3	0.94	0.69	0.94	26.9
Approach			1388	5.0	1388	5.0	0.962	90.3	LOS F	60.9	444.9	1.00	1.05	1.23	23.7
All Vehicles			3375	5.0	3375	5.0	0.968	81.4	LOS F	62.0	452.9	0.94	1.02	1.13	25.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

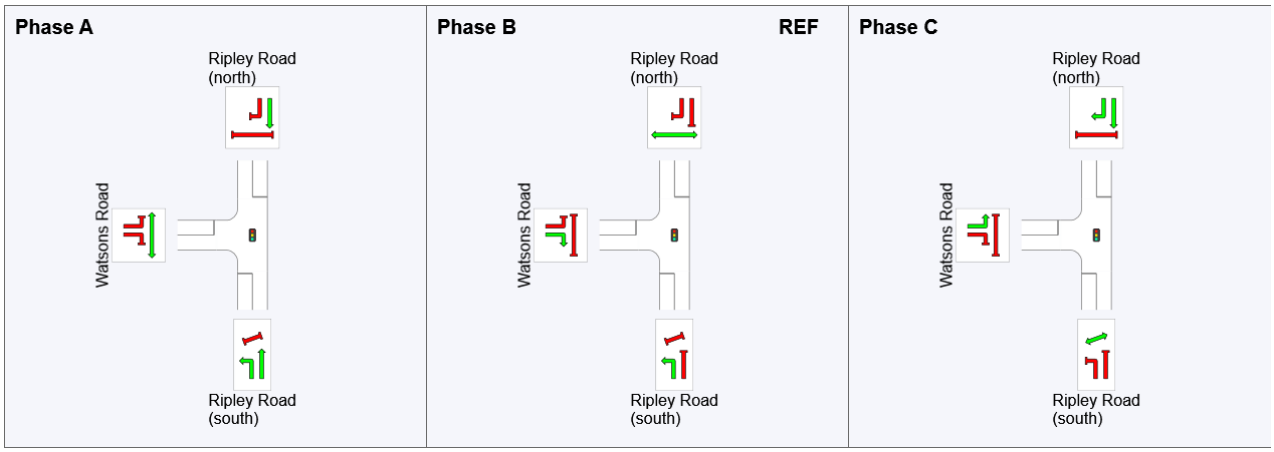
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

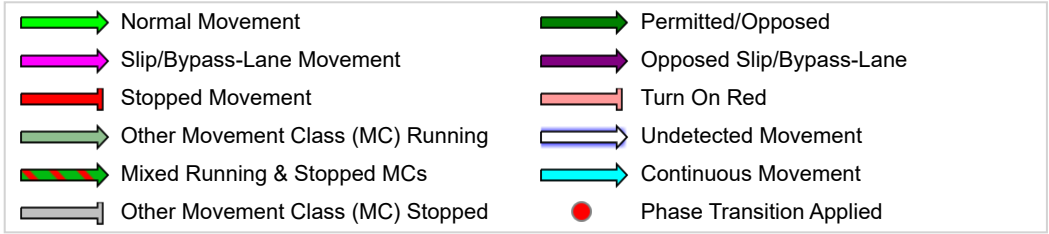
Phase	A	B	C
Phase Change Time (sec)	87	0	21
Green Time (sec)	57	15	60
Phase Time (sec)	63	21	66
Phase Split	42%	14%	44%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	12	5.0	12	5.0	0.024	72.7	LOS F	0.6	4.6	0.76	0.67	0.76	33.0
2	T1	All MCs	579	5.0	579	5.0	* 1.156	238.6	LOS F	37.1	270.6	1.00	1.54	2.03	12.7
Approach			591	5.0	591	5.0	1.156	235.3	LOS F	37.1	270.6	1.00	1.52	2.01	12.4
North: Ripley Road (north)															
8	T1	All MCs	534	5.0	534	5.0	0.345	19.2	LOS B	9.5	69.4	0.27	0.25	0.27	56.7
9	R2	All MCs	1148	5.0	1148	5.0	* 1.215	258.8	LOS F	161.4	1178.5	1.00	1.48	2.13	11.9
Approach			1682	5.0	1682	5.0	1.215	182.8	LOS F	161.4	1178.5	0.77	1.09	1.54	14.9
West: Watsons Road															
10	L2	All MCs	614	5.0	614	5.0	0.265	17.4	LOS B	9.3	68.1	0.46	0.71	0.46	45.0
12	R2	All MCs	18	5.0	18	5.0	* 0.100	72.7	LOS F	1.2	8.8	0.94	0.70	0.94	26.9
Approach			632	5.0	632	5.0	0.265	19.0	LOS B	9.3	68.1	0.47	0.71	0.47	44.2
All Vehicles			2905	5.0	2905	5.0	1.215	157.8	LOS F	161.4	1178.5	0.75	1.10	1.40	16.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

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

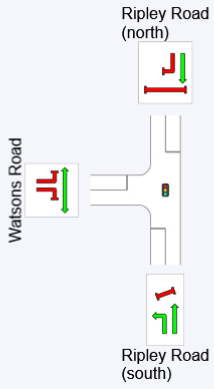
Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	124	0	21
Green Time (sec)	20	15	97
Phase Time (sec)	26	21	103
Phase Split	17%	14%	69%
Phase Frequency (%)	100.0	100.0	100.0

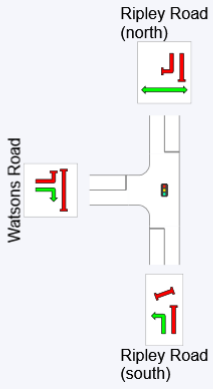
See the Timing Analysis report for more detailed information including input values of Yellow Time and All-Red Time, and information on any adjustments to Intergreen Time, Phase Time and Green Time values in cases of Pedestrian Actuation, Minor Phase Actuation and Phase Frequency values (user-specified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

Output Phase Sequence

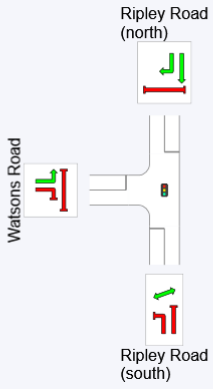
Phase A



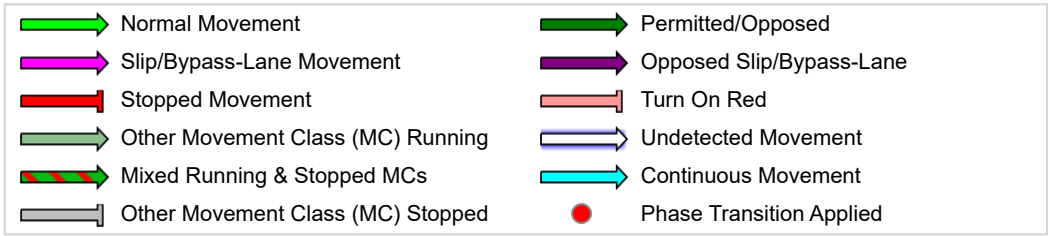
Phase B **REF**



Phase C



REF: Reference Phase
VAR: Variable Phase



MOVEMENT SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	44	5.0	44	5.0	0.050	62.7	LOS E	1.6	12.0	0.54	0.67	0.54	40.9
2	T1	All MCs	1440	5.0	1440	5.0	* 1.104	185.1	LOS F	86.2	629.2	1.00	1.56	1.74	16.0
Approach			1484	5.0	1484	5.0	1.104	181.4	LOS F	86.2	629.2	0.99	1.53	1.70	15.1
North: Ripley Road (north)															
8	T1	All MCs	180	5.0	180	5.0	0.117	3.8	LOS A	2.5	18.5	0.21	0.18	0.21	57.4
9	R2	All MCs	565	5.0	565	5.0	0.749	45.1	LOS D	34.4	251.4	0.91	0.87	0.91	34.0
Approach			746	5.0	746	5.0	0.749	35.1	LOS C	34.4	251.4	0.74	0.70	0.74	37.3
West: Watsons Road															
10	L2	All MCs	1668	5.0	1668	5.0	* 1.100	177.2	LOS F	98.1	716.3	1.00	1.28	1.70	16.0
12	R2	All MCs	30	5.0	30	5.0	* 0.165	98.7	LOS F	2.0	14.8	0.95	0.72	0.95	26.8
Approach			1698	5.0	1698	5.0	1.100	175.8	LOS F	98.1	716.3	1.00	1.27	1.69	15.3
All Vehicles			3928	5.0	3928	5.0	1.104	151.2	LOS F	98.1	716.3	0.95	1.26	1.51	17.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

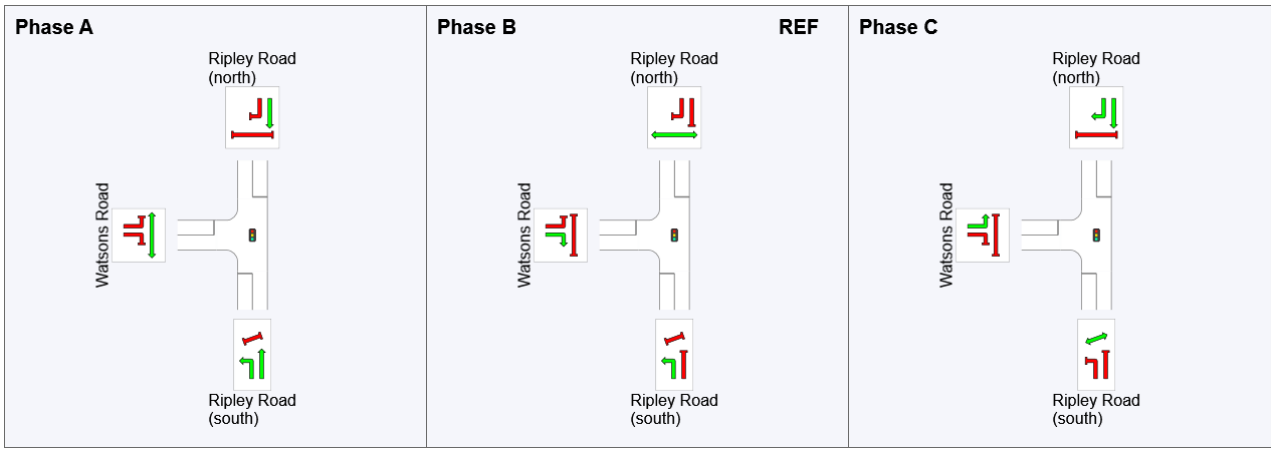
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

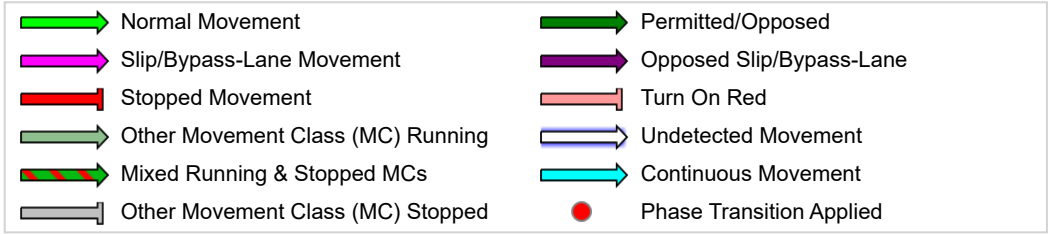
Phase	A	B	C
Phase Change Time (sec)	91	0	21
Green Time (sec)	53	15	64
Phase Time (sec)	59	21	70
Phase Split	39%	14%	47%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	24	5.0	24	5.0	0.051	77.8	LOS F	1.3	9.4	0.78	0.70	0.78	32.4
2	T1	All MCs	607	5.0	607	5.0	* 1.349	408.5	LOS F	50.4	367.7	1.00	1.88	2.67	8.0
Approach			630	5.0	630	5.0	1.349	396.0	LOS F	50.4	367.7	0.99	1.84	2.60	8.0
North: Ripley Road (north)															
8	T1	All MCs	554	5.0	554	5.0	0.357	23.6	LOS B	10.0	73.1	0.28	0.25	0.28	56.7
9	R2	All MCs	1394	5.0	1394	5.0	* 1.414	435.8	LOS F	244.8	1787.1	1.00	1.77	2.79	7.6
Approach			1947	5.0	1947	5.0	1.414	318.6	LOS F	244.8	1787.1	0.79	1.34	2.08	9.6
West: Watsons Road															
10	L2	All MCs	783	5.0	783	5.0	0.331	17.2	LOS B	12.1	88.6	0.47	0.72	0.47	45.1
12	R2	All MCs	36	5.0	36	5.0	* 0.200	73.8	LOS F	2.5	18.0	0.95	0.73	0.95	26.7
Approach			819	5.0	819	5.0	0.331	19.7	LOS B	12.1	88.6	0.49	0.72	0.49	43.8
All Vehicles			3396	5.0	3396	5.0	1.414	260.9	LOS F	244.8	1787.1	0.76	1.28	1.79	11.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

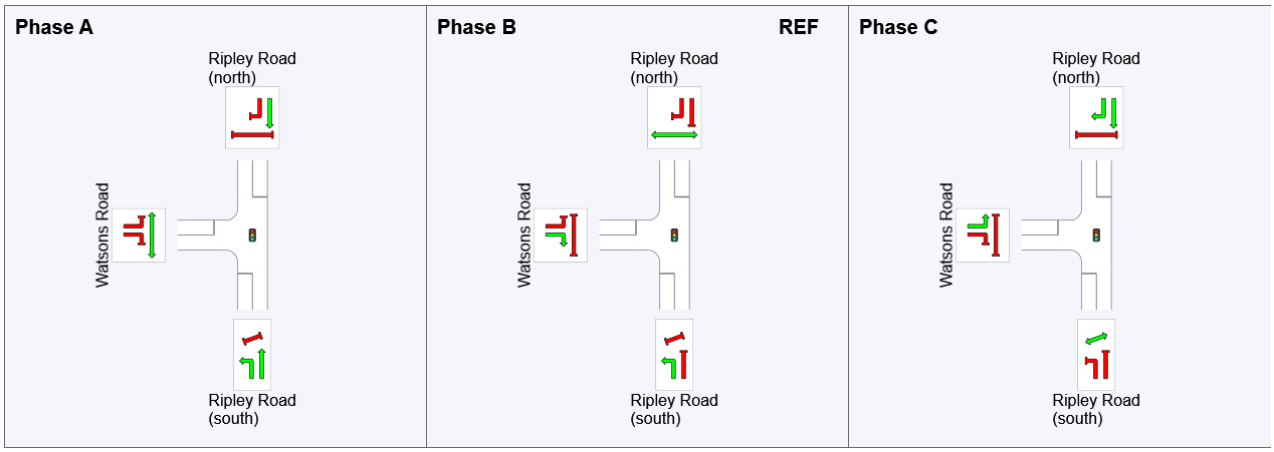
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

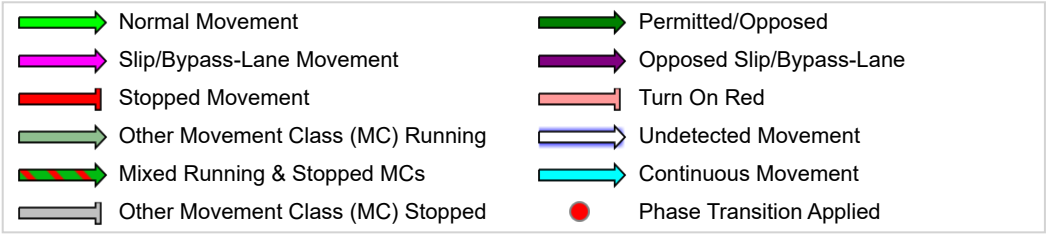
Phase	A	B	C
Phase Change Time (sec)	126	0	21
Green Time (sec)	18	15	99
Phase Time (sec)	24	21	105
Phase Split	16%	14%	70%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	67	5.0	67	5.0	0.079	66.9	LOS E	2.6	19.0	0.58	0.69	0.58	40.0
2	T1	All MCs	1507	5.0	1507	5.0	* 1.236	297.6	LOS F	112.0	817.5	1.00	1.95	2.24	10.8
Approach			1574	5.0	1574	5.0	1.236	287.8	LOS F	112.0	817.5	0.98	1.90	2.17	10.5
North: Ripley Road (north)															
8	T1	All MCs	186	5.0	186	5.0	0.120	14.9	LOS B	2.6	19.2	0.21	0.18	0.21	57.4
9	R2	All MCs	713	5.0	713	5.0	0.973	94.5	LOS F	65.0	474.7	1.00	1.08	1.26	25.1
Approach			899	5.0	899	5.0	0.973	78.0	LOS F	65.0	474.7	0.84	0.89	1.04	26.0
West: Watsons Road															
10	L2	All MCs	1963	5.0	1963	5.0	* 1.241	298.1	LOS F	144.1	1052.0	1.00	1.50	2.24	10.6
12	R2	All MCs	44	5.0	44	5.0	* 0.248	102.9	LOS F	3.1	22.4	0.96	0.74	0.96	26.6
Approach			2008	5.0	2008	5.0	1.241	293.8	LOS F	144.1	1052.0	1.00	1.49	2.21	10.2
All Vehicles			4481	5.0	4481	5.0	1.241	248.3	LOS F	144.1	1052.0	0.96	1.51	1.96	11.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

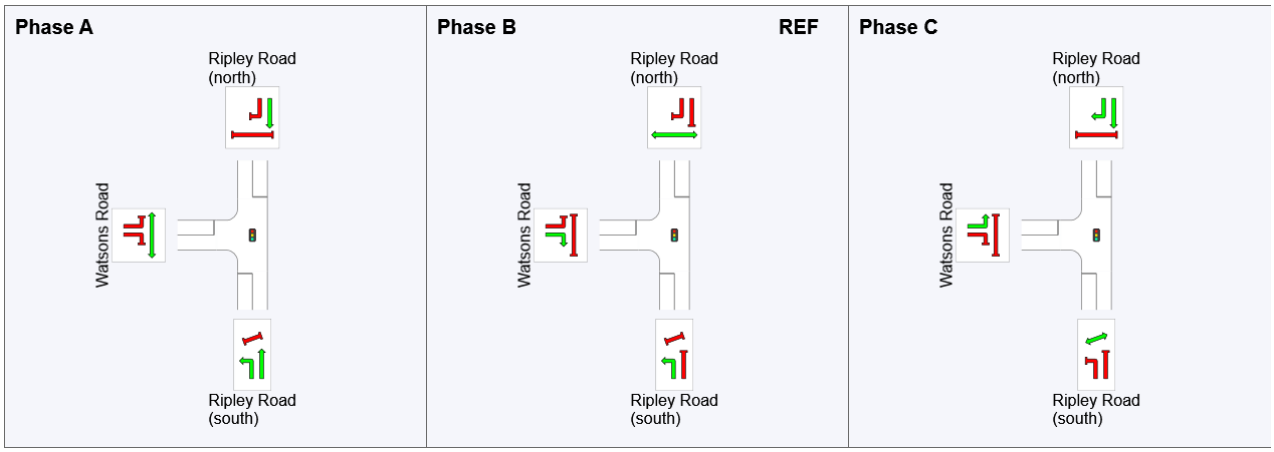
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

Phase	A	B	C
Phase Change Time (sec)	94	0	21
Green Time (sec)	50	15	67
Phase Time (sec)	56	21	73
Phase Split	37%	14%	49%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	36	5.0	36	5.0	0.081	83.0	LOS F	2.0	14.6	0.80	0.71	0.80	31.8
2	T1	All MCs	634	5.0	634	5.0	* 1.583	620.0	LOS F	63.8	465.7	1.00	2.17	3.28	5.5
Approach			670	5.0	670	5.0	1.583	591.2	LOS F	63.8	465.7	0.99	2.10	3.15	5.6
North: Ripley Road (north)															
8	T1	All MCs	573	5.0	573	5.0	0.370	26.3	LOS B	10.5	76.8	0.28	0.26	0.28	56.6
9	R2	All MCs	1639	5.0	1639	5.0	* 1.605	606.8	LOS F	331.5	2420.0	1.00	1.98	3.28	5.7
Approach			2212	5.0	2212	5.0	1.605	456.4	LOS F	331.5	2420.0	0.81	1.53	2.50	7.1
West: Watsons Road															
10	L2	All MCs	952	5.0	952	5.0	0.394	17.0	LOS B	15.1	110.2	0.48	0.73	0.48	45.2
12	R2	All MCs	54	5.0	54	5.0	* 0.300	74.7	LOS F	3.7	27.3	0.97	0.75	0.97	26.5
Approach			1006	5.0	1006	5.0	0.394	20.1	LOS B	15.1	110.2	0.51	0.73	0.51	43.6
All Vehicles			3888	5.0	3888	5.0	1.605	366.8	LOS F	331.5	2420.0	0.76	1.42	2.10	8.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

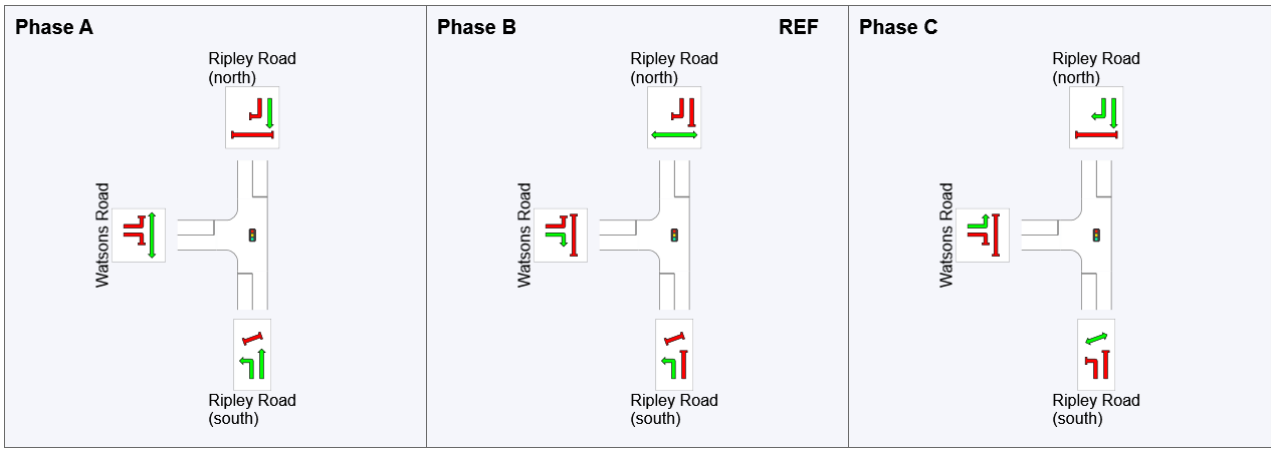
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

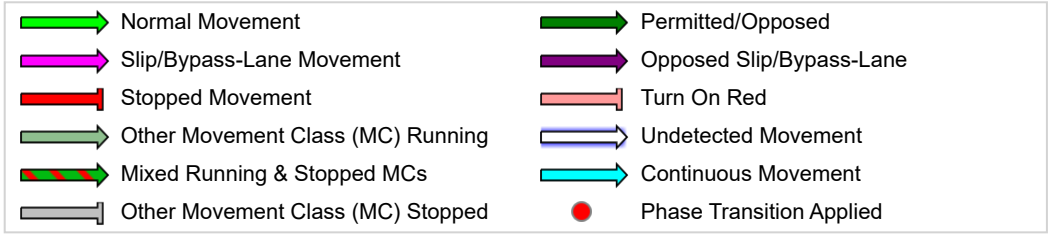
Phase	A	B	C
Phase Change Time (sec)	128	0	21
Green Time (sec)	16	15	101
Phase Time (sec)	22	21	107
Phase Split	15%	14%	71%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	280	5.0	280	5.0	0.279	11.9	LOS A	3.6	26.3	0.55	0.71	0.55	48.6
2	T1	All MCs	400	5.0	400	5.0	* 0.481	19.3	LOS B	4.5	32.7	0.92	0.75	0.92	45.6
Approach			680	5.0	680	5.0	0.481	16.2	LOS B	4.5	32.7	0.77	0.73	0.77	46.8
North: Ripley Road (north)															
8	T1	All MCs	223	5.0	223	5.0	0.219	6.5	LOS A	2.9	20.9	0.55	0.46	0.55	54.2
9	R2	All MCs	189	5.0	189	5.0	* 0.528	26.1	LOS B	4.4	32.1	0.94	0.80	0.94	40.8
Approach			413	5.0	413	5.0	0.528	15.5	LOS B	4.4	32.1	0.73	0.62	0.73	47.1
West: Watsons Road															
10	L2	All MCs	147	5.0	147	5.0	0.205	24.5	LOS B	1.6	11.5	0.87	0.74	0.87	41.4
12	R2	All MCs	131	5.0	131	5.0	* 0.331	24.2	LOS B	2.8	20.6	0.88	0.77	0.88	41.7
Approach			278	5.0	278	5.0	0.331	24.3	LOS B	2.8	20.6	0.88	0.75	0.88	41.6
All Vehicles			1371	5.0	1371	5.0	0.528	17.7	LOS B	4.5	32.7	0.78	0.70	0.78	45.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
North: Ripley Road (north)												
P3	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
West: Watsons Road												
P4	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15
All Pedestrians		50	158	19.4	LOS B	0.1	0.1	0.88	0.88	173.2	200.0	1.15

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

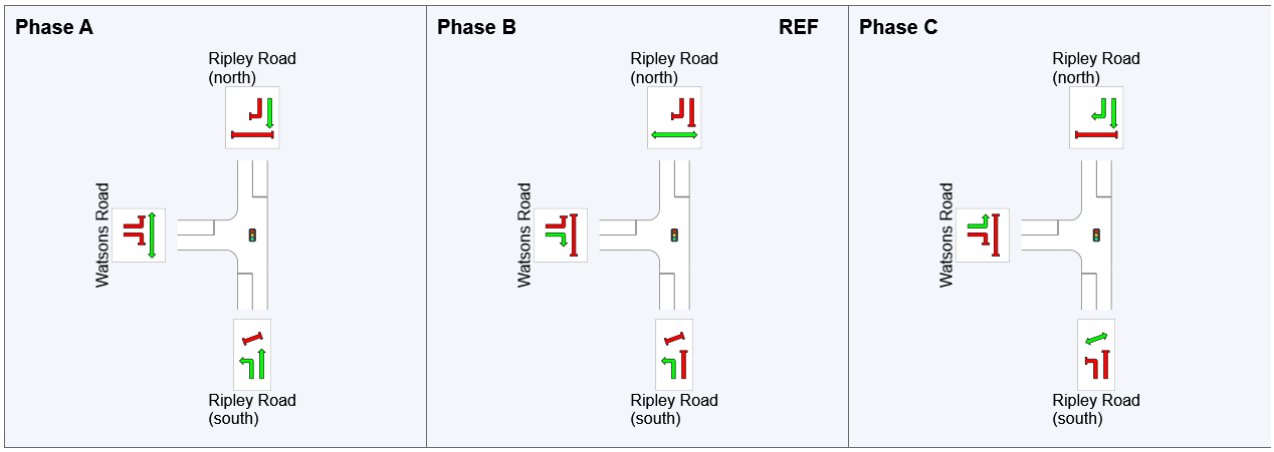
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

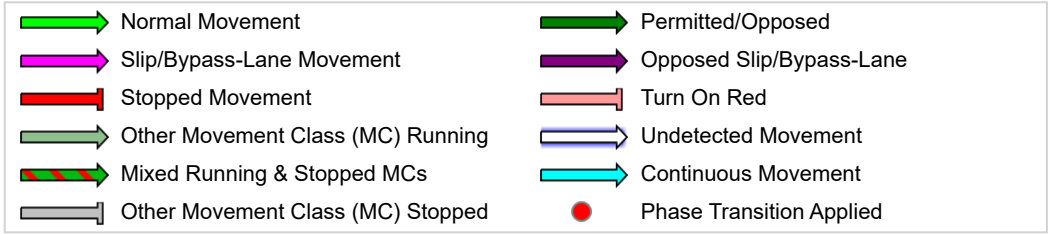
Phase	A	B	C
Phase Change Time (sec)	33	0	17
Green Time (sec)	11	11	10
Phase Time (sec)	17	17	16
Phase Split	34%	34%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	112	5.0	112	5.0	0.124	14.3	LOS A	1.7	12.7	0.56	0.69	0.56	47.2
2	T1	All MCs	202	5.0	202	5.0	* 0.268	22.7	LOS B	2.6	19.0	0.88	0.69	0.88	43.7
Approach			314	5.0	314	5.0	0.268	19.7	LOS B	2.6	19.0	0.77	0.69	0.77	44.9
North: Ripley Road (north)															
8	T1	All MCs	493	5.0	493	5.0	0.435	7.0	LOS A	7.8	57.2	0.58	0.51	0.58	53.8
9	R2	All MCs	356	5.0	356	5.0	* 0.661	26.5	LOS B	9.6	69.8	0.93	0.85	0.96	40.6
Approach			848	5.0	848	5.0	0.661	15.2	LOS B	9.6	69.8	0.73	0.65	0.74	47.3
West: Watsons Road															
10	L2	All MCs	341	5.0	341	5.0	0.317	23.6	LOS B	4.0	29.0	0.82	0.77	0.82	41.9
12	R2	All MCs	103	5.0	103	5.0	* 0.288	28.5	LOS C	2.7	19.5	0.89	0.76	0.89	39.8
Approach			444	5.0	444	5.0	0.317	24.7	LOS B	4.0	29.0	0.83	0.77	0.83	41.3
All Vehicles			1606	5.0	1606	5.0	0.661	18.7	LOS B	9.6	69.8	0.76	0.69	0.77	45.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Road (north)												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: Watsons Road												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		50	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

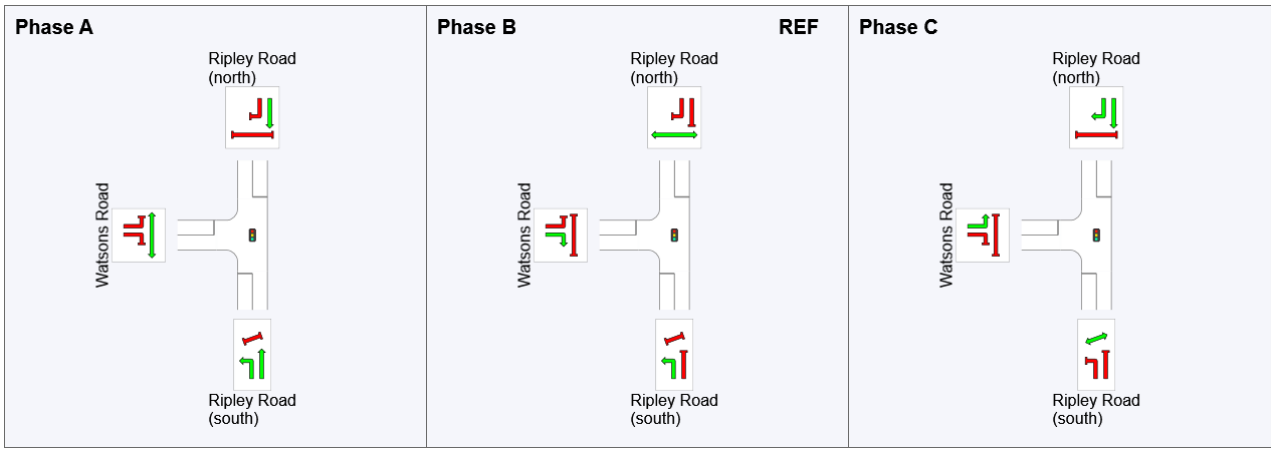
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

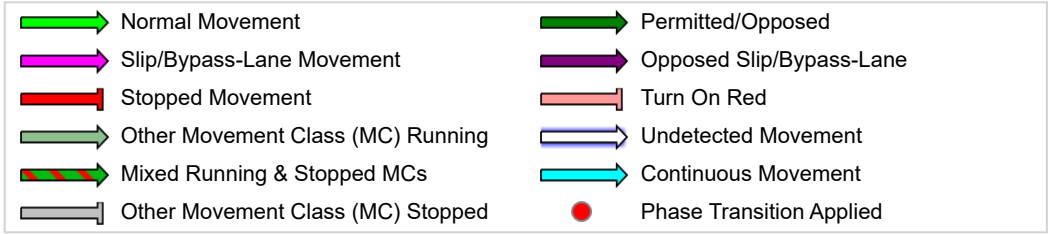
Phase	A	B	C
Phase Change Time (sec)	42	0	18
Green Time (sec)	12	12	18
Phase Time (sec)	18	18	24
Phase Split	30%	30%	40%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	429	5.0	429	5.0	0.464	15.7	LOS B	8.1	59.0	0.68	0.77	0.68	46.3
2	T1	All MCs	505	5.0	505	5.0	* 0.617	24.1	LOS B	7.0	51.4	0.96	0.80	0.98	43.0
Approach			935	5.0	935	5.0	0.617	20.2	LOS B	8.1	59.0	0.83	0.79	0.84	44.5
North: Ripley Road (north)															
8	T1	All MCs	404	5.0	404	5.0	0.357	6.6	LOS A	6.0	44.1	0.54	0.47	0.54	54.2
9	R2	All MCs	337	5.0	337	5.0	* 0.663	27.3	LOS B	9.2	67.1	0.94	0.85	0.98	40.2
Approach			741	5.0	741	5.0	0.663	16.0	LOS B	9.2	67.1	0.72	0.64	0.74	46.8
West: Watsons Road															
10	L2	All MCs	314	5.0	314	5.0	0.309	24.3	LOS B	3.7	27.1	0.83	0.77	0.83	41.5
12	R2	All MCs	236	5.0	236	5.0	* 0.657	31.4	LOS C	6.8	49.9	0.97	0.85	1.04	38.6
Approach			549	5.0	549	5.0	0.657	27.3	LOS B	6.8	49.9	0.89	0.80	0.92	40.2
All Vehicles			2225	5.0	2225	5.0	0.663	20.6	LOS B	9.2	67.1	0.81	0.74	0.83	44.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Road (north)												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: Watsons Road												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		50	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

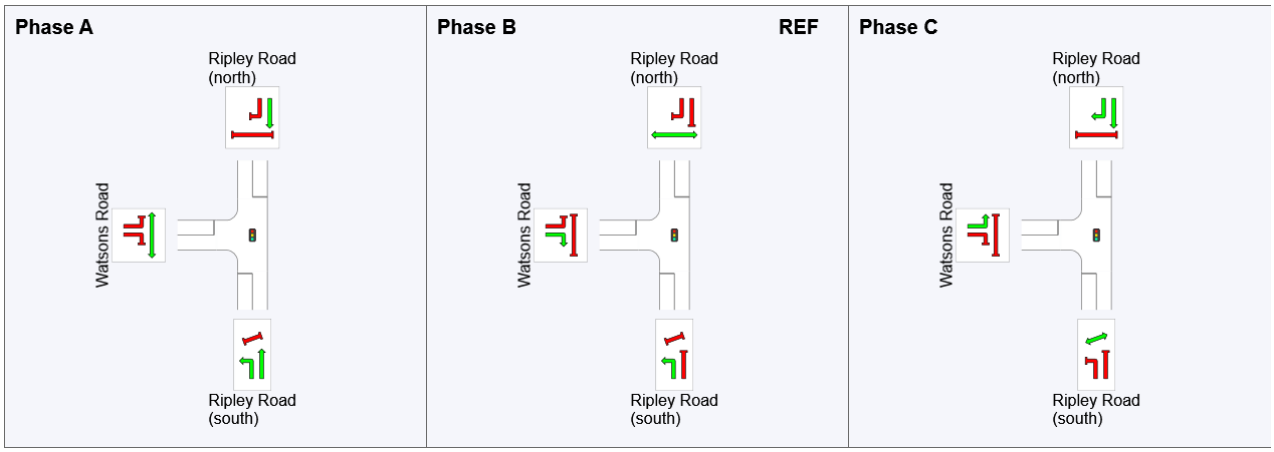
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

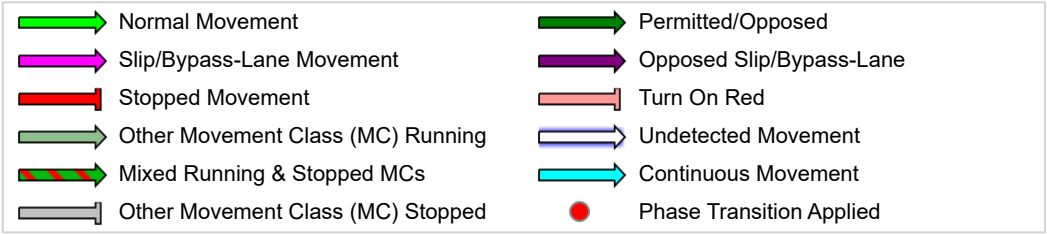
Phase	A	B	C
Phase Change Time (sec)	41	0	18
Green Time (sec)	13	12	17
Phase Time (sec)	19	18	23
Phase Split	32%	30%	38%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	267	5.0	267	5.0	0.314	19.6	LOS B	6.4	47.0	0.66	0.75	0.66	44.1
2	T1	All MCs	211	5.0	211	5.0	* 0.343	33.1	LOS C	3.8	27.6	0.93	0.73	0.93	38.9
Approach			478	5.0	478	5.0	0.343	25.6	LOS B	6.4	47.0	0.78	0.74	0.78	41.7
North: Ripley Road (north)															
8	T1	All MCs	912	5.0	912	5.0	0.788	13.4	LOS A	27.4	199.7	0.81	0.76	0.83	49.2
9	R2	All MCs	600	5.0	600	5.0	* 0.892	43.2	LOS D	27.4	200.0	1.00	1.01	1.26	34.3
Approach			1512	5.0	1512	5.0	0.892	25.2	LOS B	27.4	200.0	0.89	0.86	1.00	41.9
West: Watsons Road															
10	L2	All MCs	238	5.0	238	5.0	0.177	23.7	LOS B	3.1	22.7	0.71	0.74	0.71	41.8
12	R2	All MCs	362	5.0	362	5.0	* 0.850	44.9	LOS D	15.8	115.0	1.00	0.98	1.25	33.8
Approach			600	5.0	600	5.0	0.850	36.5	LOS C	15.8	115.0	0.88	0.88	1.04	36.5
All Vehicles			2589	5.0	2589	5.0	0.892	27.9	LOS B	27.4	200.0	0.87	0.84	0.97	40.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: Ripley Road (north)												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: Watsons Road												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		50	158	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

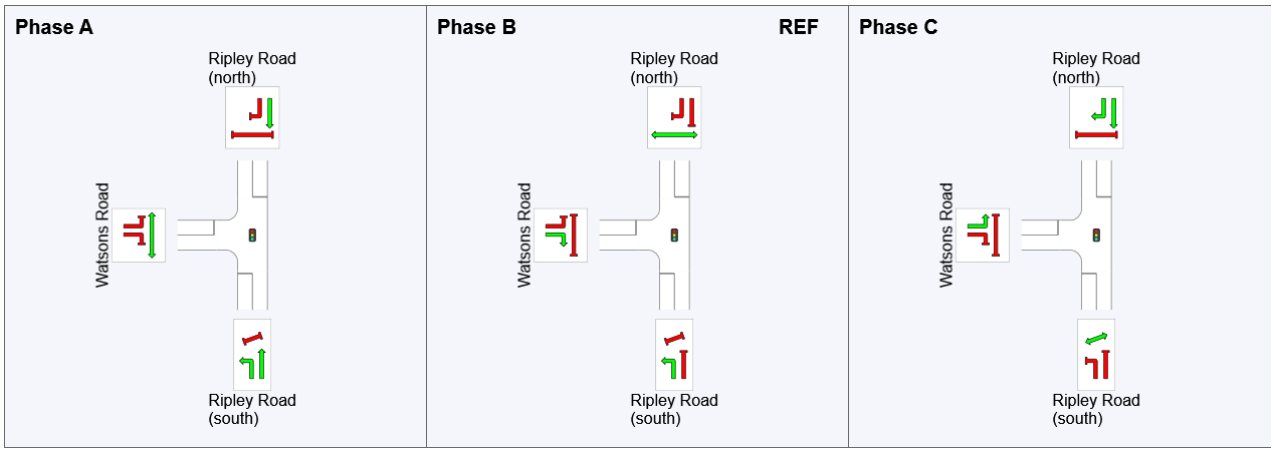
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

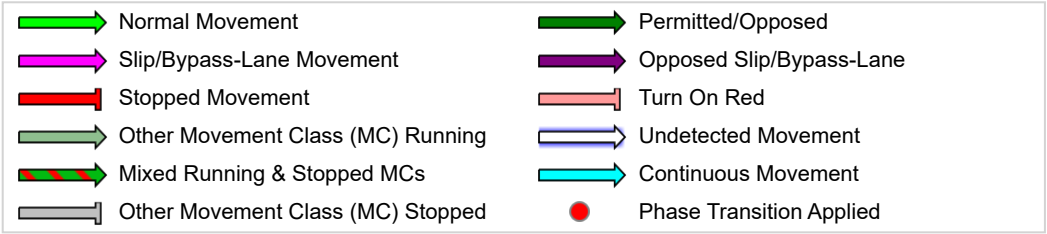
Phase	A	B	C
Phase Change Time (sec)	61	0	25
Green Time (sec)	13	19	30
Phase Time (sec)	19	25	36
Phase Split	24%	31%	45%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	661	5.0	661	5.0	0.759	23.1	LOS B	19.5	142.3	0.88	0.87	0.92	42.4
2	T1	All MCs	646	5.0	646	5.0	* 0.856	37.0	LOS C	12.6	92.1	1.00	1.04	1.32	37.3
Approach			1307	5.0	1307	5.0	0.856	30.0	LOS C	19.5	142.3	0.94	0.95	1.12	39.7
North: Ripley Road (north)															
8	T1	All MCs	501	5.0	501	5.0	0.422	7.1	LOS A	8.6	63.0	0.54	0.48	0.54	53.8
9	R2	All MCs	522	5.0	522	5.0	* 0.849	36.1	LOS C	19.7	143.5	0.99	0.97	1.21	36.7
Approach			1023	5.0	1023	5.0	0.849	21.9	LOS B	19.7	143.5	0.77	0.73	0.88	43.4
West: Watsons Road															
10	L2	All MCs	505	5.0	505	5.0	0.411	24.9	LOS B	6.7	49.0	0.81	0.79	0.81	41.2
12	R2	All MCs	299	5.0	299	5.0	* 0.834	41.4	LOS C	11.4	83.4	1.00	0.98	1.28	34.9
Approach			804	5.0	804	5.0	0.834	31.0	LOS C	11.4	83.4	0.88	0.86	0.99	38.6
All Vehicles			3135	5.0	3135	5.0	0.856	27.6	LOS B	19.7	143.5	0.87	0.86	1.01	40.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
North: Ripley Road (north)												
P3	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
West: Watsons Road												
P4	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
All Pedestrians		50	158	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

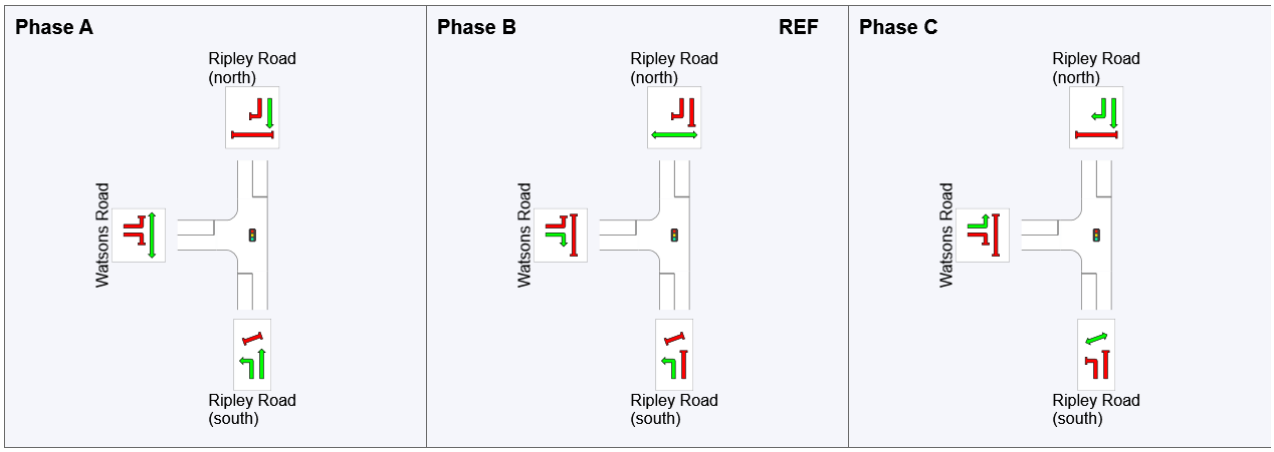
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

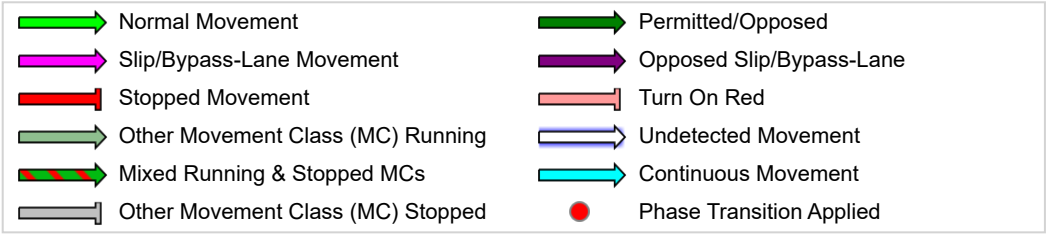
Phase	A	B	C
Phase Change Time (sec)	50	0	20
Green Time (sec)	14	14	24
Phase Time (sec)	20	20	30
Phase Split	29%	29%	43%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Int3 - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Road (south)															
1	L2	All MCs	312	5.0	312	5.0	0.435	42.7	LOS D	15.8	115.4	0.75	0.79	0.75	36.3
2	T1	All MCs	356	5.0	356	5.0	0.942	95.8	LOS F	15.4	112.3	1.00	1.07	1.40	23.7
Approach			667	5.0	667	5.0	0.942	71.0	LOS F	15.8	115.4	0.88	0.94	1.10	27.5
North: Ripley Road (north)															
8	T1	All MCs	1183	5.0	1183	5.0	* 1.355	379.0	LOS F	197.0	1438.2	1.00	2.28	2.62	8.7
9	R2	All MCs	878	5.0	878	5.0	1.358	399.8	LOS F	147.2	1074.7	1.00	1.70	2.64	8.2
Approach			2061	5.0	2061	5.0	1.358	387.9	LOS F	197.0	1438.2	1.00	2.04	2.63	8.1
West: Watsons Road															
10	L2	All MCs	366	5.0	366	5.0	0.207	41.7	LOS C	7.4	54.0	0.60	0.74	0.60	39.8
12	R2	All MCs	653	5.0	653	5.0	* 1.358	422.9	LOS F	108.8	794.4	1.00	1.68	2.66	8.0
Approach			1019	5.0	1019	5.0	1.358	285.9	LOS F	108.8	794.4	0.86	1.34	1.92	10.5
All Vehicles			3747	5.0	3747	5.0	1.358	303.7	LOS F	197.0	1438.2	0.94	1.65	2.16	10.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Road (south)												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Road (north)												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: Watsons Road												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		50	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Int3 - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Prepared by: DC
Checked by:
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

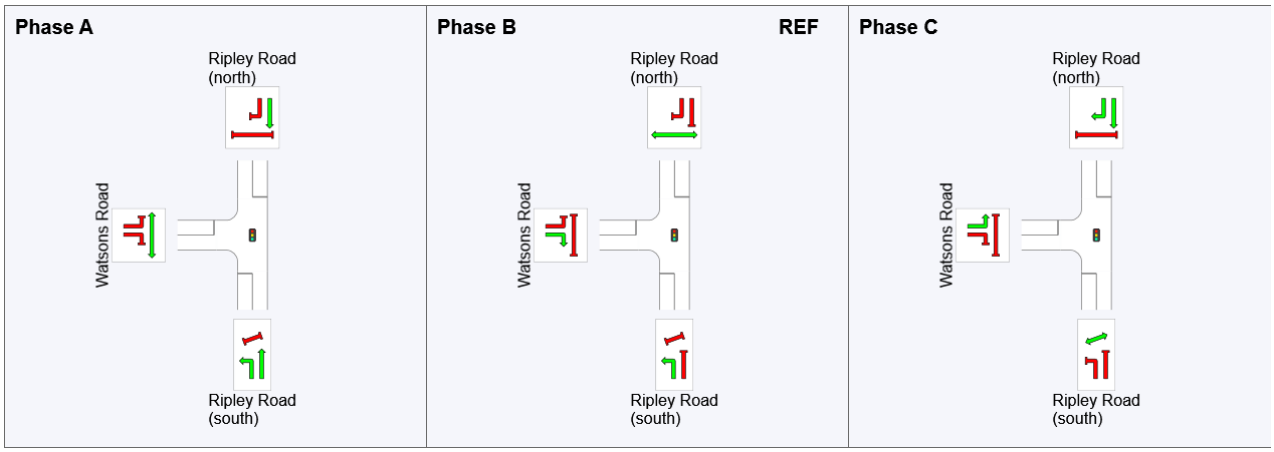
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Convert Function Default
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase B

Phase Timing Summary

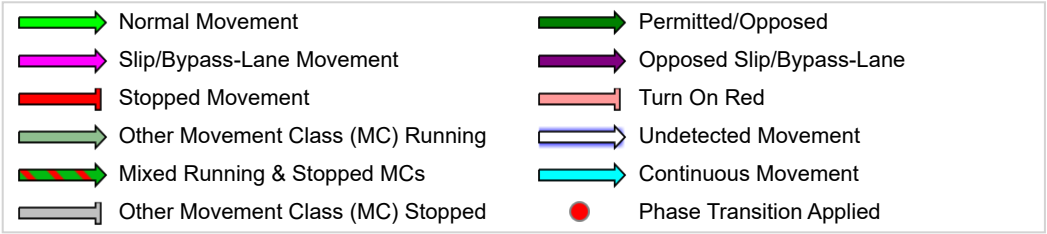
Phase	A	B	C
Phase Change Time (sec)	129	0	49
Green Time (sec)	15	43	74
Phase Time (sec)	21	49	80
Phase Split	14%	33%	53%
Phase Frequency (%)	100.0	100.0	100.0

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

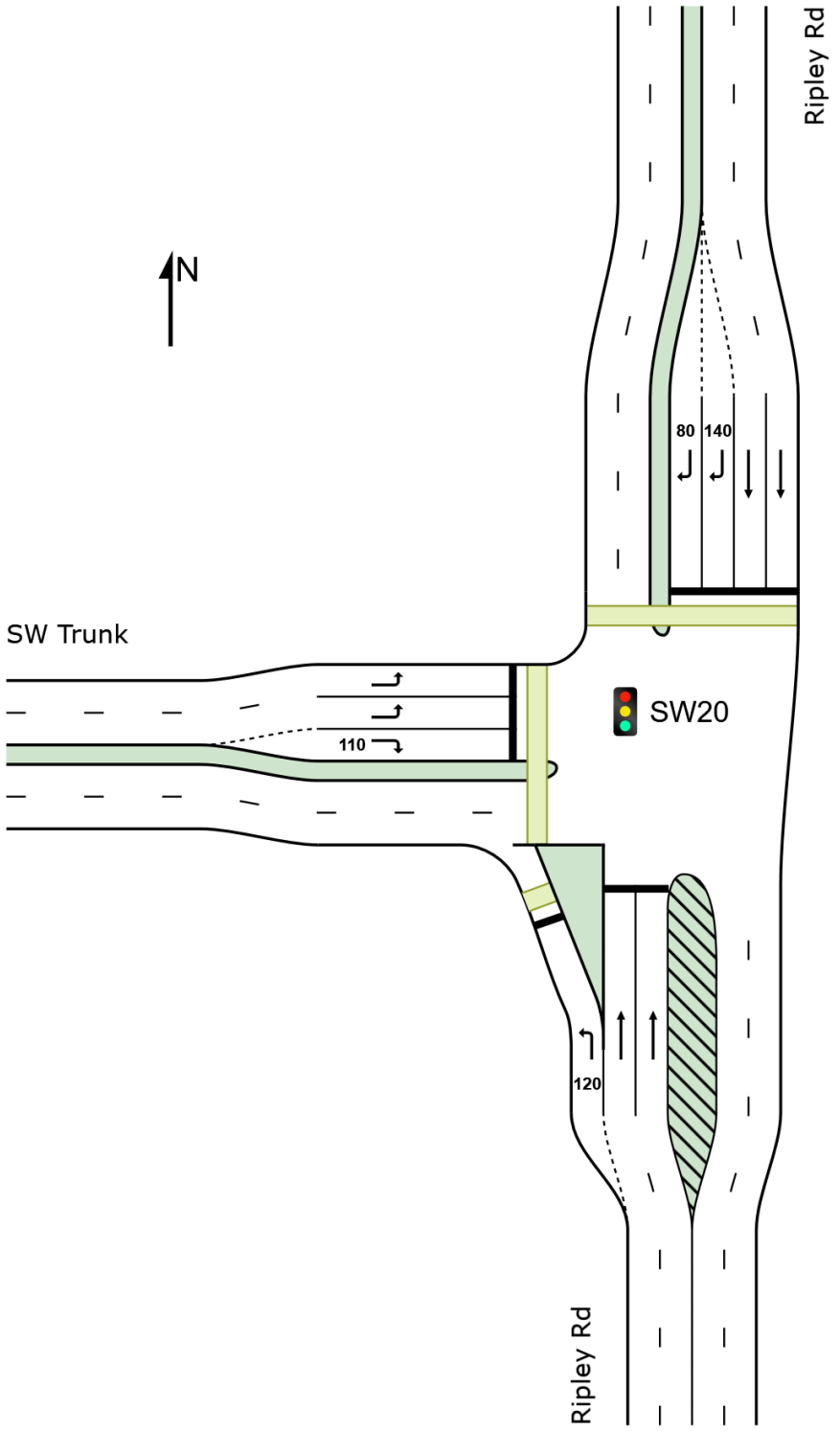


SITE LAYOUT

Site: SW20 [I2 (SW20) Ult - 2029 No WR - AM (Site Folder: General)]

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



MOVEMENT SUMMARY

Site: SW20 [I2 (SW20) Ult - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.9	LOS A	0.1	0.8	0.38	0.61	0.38	49.9
2	T1	All MCs	575	5.0	575	5.0	* 0.435	16.4	LOS B	6.6	48.1	0.81	0.69	0.81	47.3
Approach			585	5.0	585	5.0	0.435	16.3	LOS B	6.6	48.1	0.81	0.68	0.81	47.4
North: Ripley Rd															
8	T1	All MCs	84	5.0	84	5.0	0.038	5.7	LOS A	0.5	3.8	0.44	0.34	0.44	54.9
9	R2	All MCs	25	5.0	25	5.0	* 0.053	31.1	LOS C	0.3	2.5	0.90	0.67	0.90	38.7
Approach			109	5.0	109	5.0	0.053	11.5	LOS B	0.5	3.8	0.55	0.42	0.55	50.1
West: SW Trunk															
10	L2	All MCs	101	5.0	101	5.0	0.067	16.9	LOS B	0.9	6.5	0.63	0.69	0.63	45.3
12	R2	All MCs	11	5.0	11	5.0	* 0.027	25.9	LOS C	0.2	1.8	0.81	0.66	0.81	41.1
Approach			111	5.0	111	5.0	0.067	17.8	LOS B	0.9	6.5	0.64	0.69	0.64	44.8
All Vehicles			806	5.0	806	5.0	0.435	15.9	LOS B	6.6	48.1	0.75	0.65	0.75	47.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2029 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

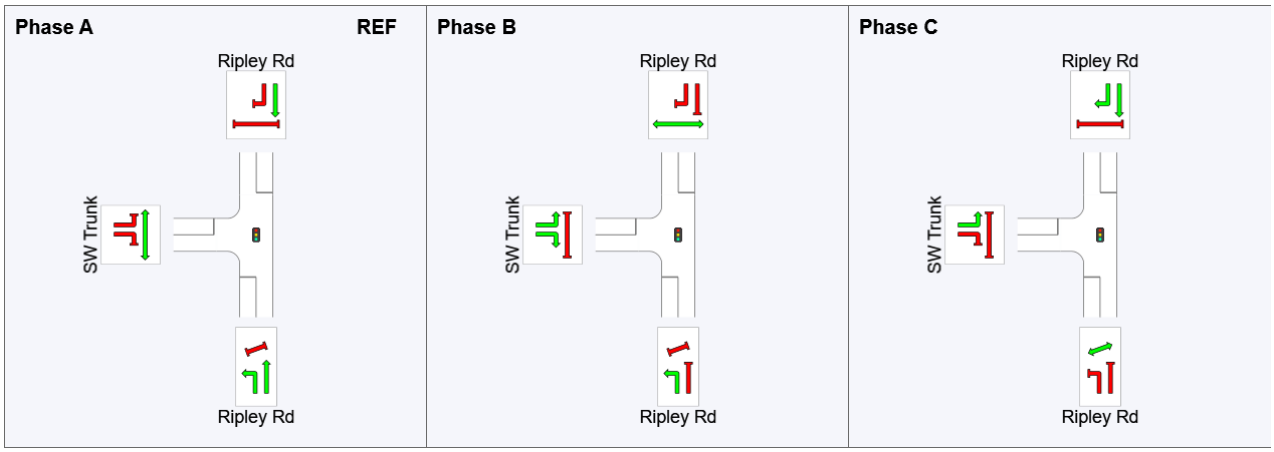
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

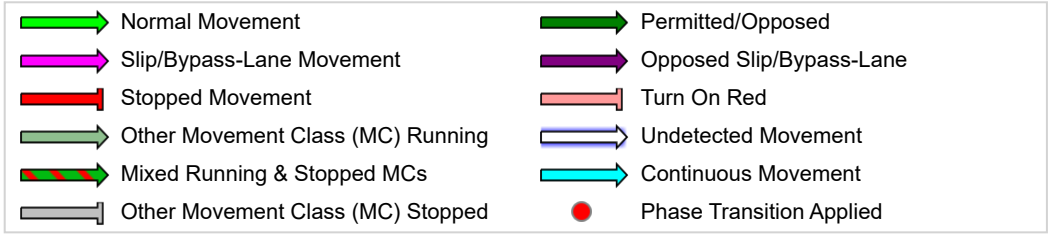
Phase	A	B	C
Phase Change Time (sec)	0	27	46
Green Time (sec)	21	13	8
Phase Time (sec)	27	19	14
Phase Split	45%	32%	23%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.9	LOS A	0.1	0.8	0.38	0.61	0.38	49.9
2	T1	All MCs	243	5.0	243	5.0	* 0.184	14.8	LOS B	2.5	18.3	0.73	0.59	0.73	48.3
Approach			254	5.0	254	5.0	0.184	14.6	LOS B	2.5	18.3	0.72	0.59	0.72	48.4
North: Ripley Rd															
8	T1	All MCs	257	5.0	257	5.0	0.117	6.0	LOS A	1.7	12.2	0.47	0.38	0.47	54.7
9	R2	All MCs	84	5.0	84	5.0	* 0.177	31.9	LOS C	1.2	8.5	0.92	0.72	0.92	38.4
Approach			342	5.0	342	5.0	0.177	12.4	LOS B	1.7	12.2	0.58	0.47	0.58	49.5
West: SW Trunk															
10	L2	All MCs	42	5.0	42	5.0	0.028	16.7	LOS B	0.4	2.6	0.61	0.67	0.61	45.4
12	R2	All MCs	11	5.0	11	5.0	* 0.027	25.9	LOS C	0.2	1.8	0.81	0.66	0.81	41.1
Approach			52	5.0	52	5.0	0.028	18.5	LOS B	0.4	2.6	0.65	0.67	0.65	44.5
All Vehicles			648	5.0	648	5.0	0.184	13.7	LOS B	2.5	18.3	0.64	0.53	0.64	48.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2029 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

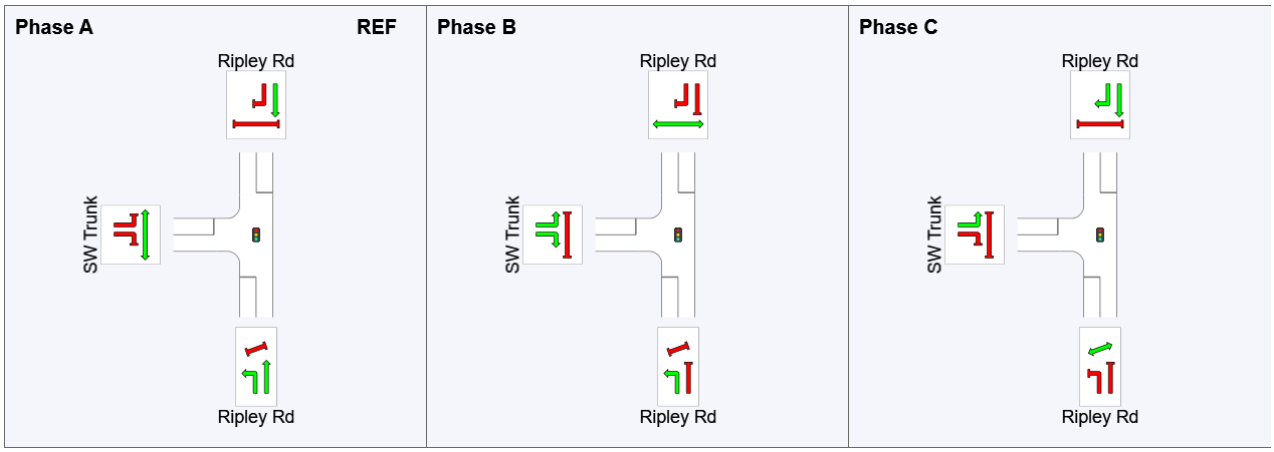
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

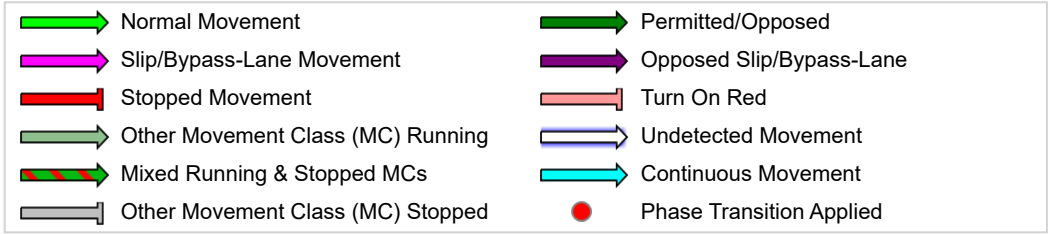
Phase	A	B	C
Phase Change Time (sec)	0	27	46
Green Time (sec)	21	13	8
Phase Time (sec)	27	19	14
Phase Split	45%	32%	23%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.9	LOS A	0.1	0.8	0.38	0.61	0.38	49.9
2	T1	All MCs	878	5.0	878	5.0	* 0.664	18.4	LOS B	11.3	82.1	0.90	0.79	0.92	46.1
Approach			888	5.0	888	5.0	0.664	18.3	LOS B	11.3	82.1	0.90	0.79	0.91	46.2
North: Ripley Rd															
8	T1	All MCs	117	5.0	117	5.0	0.053	5.7	LOS A	0.7	5.3	0.45	0.35	0.45	54.9
9	R2	All MCs	66	5.0	66	5.0	* 0.138	31.7	LOS C	0.9	6.5	0.91	0.71	0.91	38.5
Approach			183	5.0	183	5.0	0.138	15.0	LOS B	0.9	6.5	0.62	0.48	0.62	47.6
West: SW Trunk															
10	L2	All MCs	263	5.0	263	5.0	0.176	17.6	LOS B	2.4	17.9	0.66	0.73	0.66	44.9
12	R2	All MCs	11	5.0	11	5.0	* 0.027	25.9	LOS C	0.2	1.8	0.81	0.66	0.81	41.1
Approach			274	5.0	274	5.0	0.176	17.9	LOS B	2.4	17.9	0.67	0.73	0.67	44.8
All Vehicles			1345	5.0	1345	5.0	0.664	17.8	LOS B	11.3	82.1	0.81	0.73	0.82	46.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2030 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

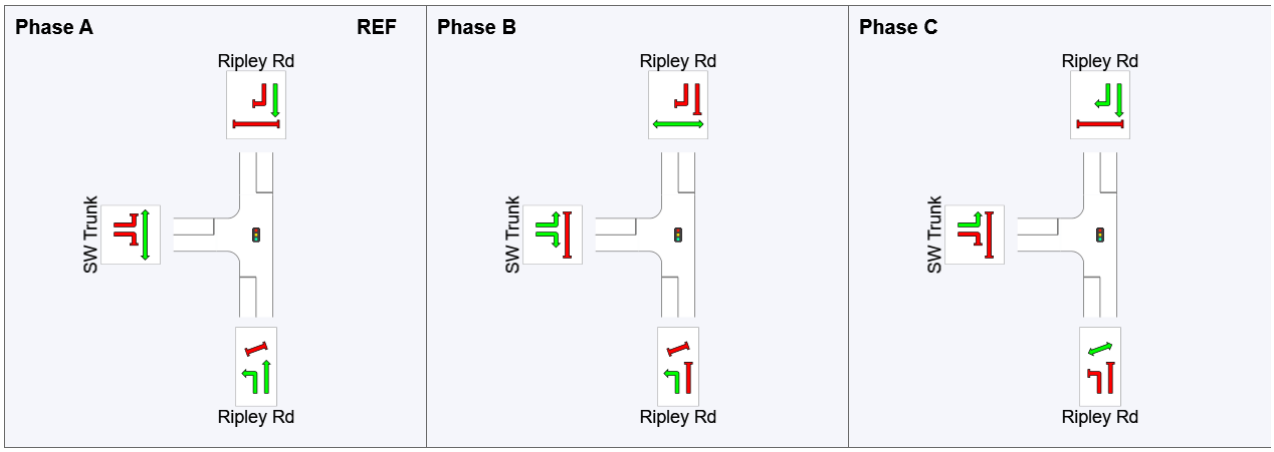
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

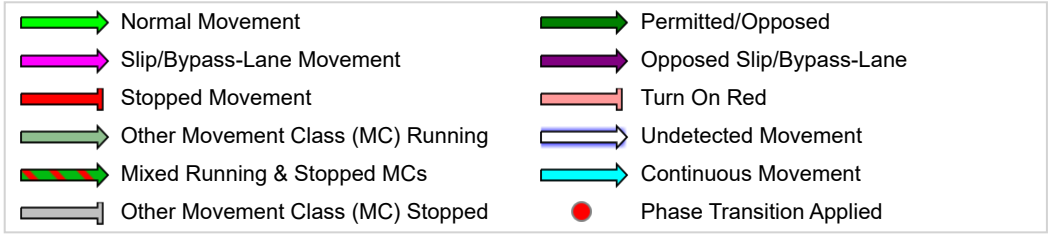
Phase	A	B	C
Phase Change Time (sec)	0	27	46
Green Time (sec)	21	13	8
Phase Time (sec)	27	19	14
Phase Split	45%	32%	23%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.010	11.2	LOS B	0.1	0.9	0.43	0.61	0.43	49.1
2	T1	All MCs	370	5.0	370	5.0	* 0.327	18.0	LOS B	4.3	31.5	0.82	0.67	0.82	46.4
Approach			381	5.0	381	5.0	0.327	17.8	LOS B	4.3	31.5	0.81	0.67	0.81	46.5
North: Ripley Rd															
8	T1	All MCs	360	5.0	360	5.0	0.164	6.2	LOS A	2.4	17.7	0.49	0.40	0.49	54.5
9	R2	All MCs	220	5.0	220	5.0	* 0.335	29.7	LOS C	2.9	21.5	0.91	0.77	0.91	39.3
Approach			581	5.0	581	5.0	0.335	15.1	LOS B	2.9	21.5	0.65	0.54	0.65	47.5
West: SW Trunk															
10	L2	All MCs	109	5.0	109	5.0	0.065	15.1	LOS B	0.9	6.4	0.57	0.69	0.57	46.4
12	R2	All MCs	11	5.0	11	5.0	* 0.027	25.9	LOS C	0.2	1.8	0.81	0.66	0.81	41.1
Approach			119	5.0	119	5.0	0.065	16.0	LOS B	0.9	6.4	0.60	0.68	0.60	45.8
All Vehicles			1081	5.0	1081	5.0	0.335	16.2	LOS B	4.3	31.5	0.70	0.60	0.70	47.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2030 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

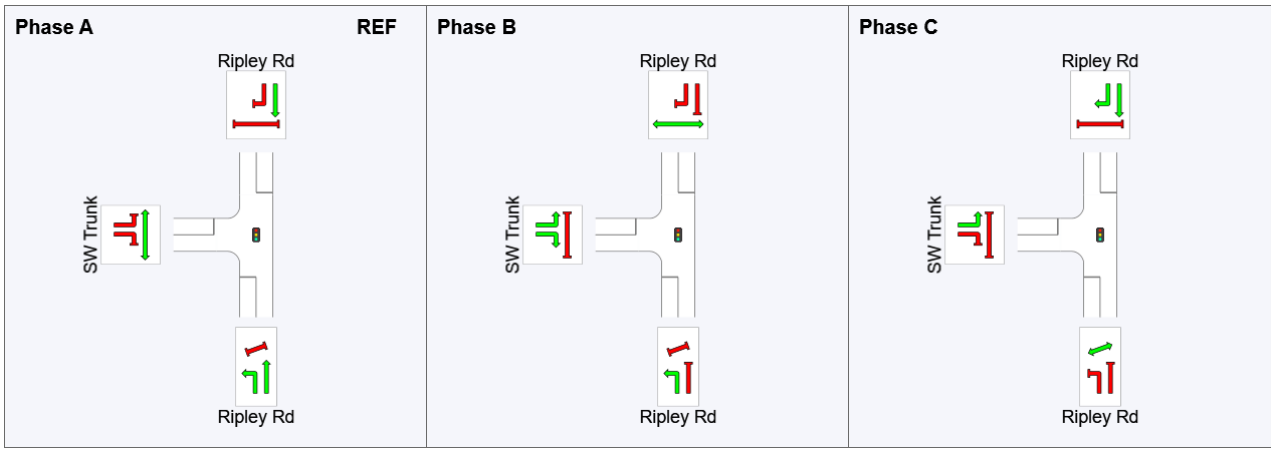
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

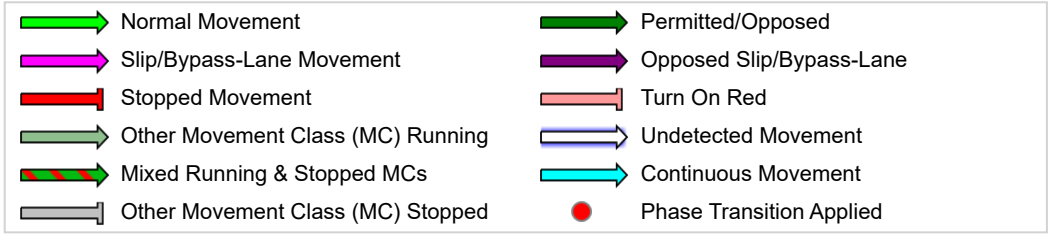
Phase	A	B	C
Phase Change Time (sec)	0	24	43
Green Time (sec)	18	13	11
Phase Time (sec)	24	19	17
Phase Split	40%	32%	28%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.9	LOS A	0.1	0.8	0.38	0.61	0.38	49.9
2	T1	All MCs	1058	5.0	1058	5.0	* 0.800	23.2	LOS C	15.9	116.3	0.97	0.94	1.12	43.5
Approach			1068	5.0	1068	5.0	0.800	23.1	LOS C	15.9	116.3	0.96	0.94	1.11	43.6
North: Ripley Rd															
8	T1	All MCs	140	5.0	140	5.0	0.064	5.8	LOS A	0.9	6.4	0.45	0.36	0.45	54.8
9	R2	All MCs	116	5.0	116	5.0	* 0.243	32.3	LOS C	1.6	11.8	0.93	0.74	0.93	38.3
Approach			256	5.0	256	5.0	0.243	17.8	LOS B	1.6	11.8	0.67	0.53	0.67	45.8
West: SW Trunk															
10	L2	All MCs	465	5.0	465	5.0	0.311	18.4	LOS B	4.6	33.8	0.71	0.76	0.71	44.5
12	R2	All MCs	11	5.0	11	5.0	* 0.027	25.9	LOS C	0.2	1.8	0.81	0.66	0.81	41.1
Approach			476	5.0	476	5.0	0.311	18.6	LOS B	4.6	33.8	0.71	0.76	0.71	44.4
All Vehicles			1800	5.0	1800	5.0	0.800	21.1	LOS C	15.9	116.3	0.85	0.83	0.94	44.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2031 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

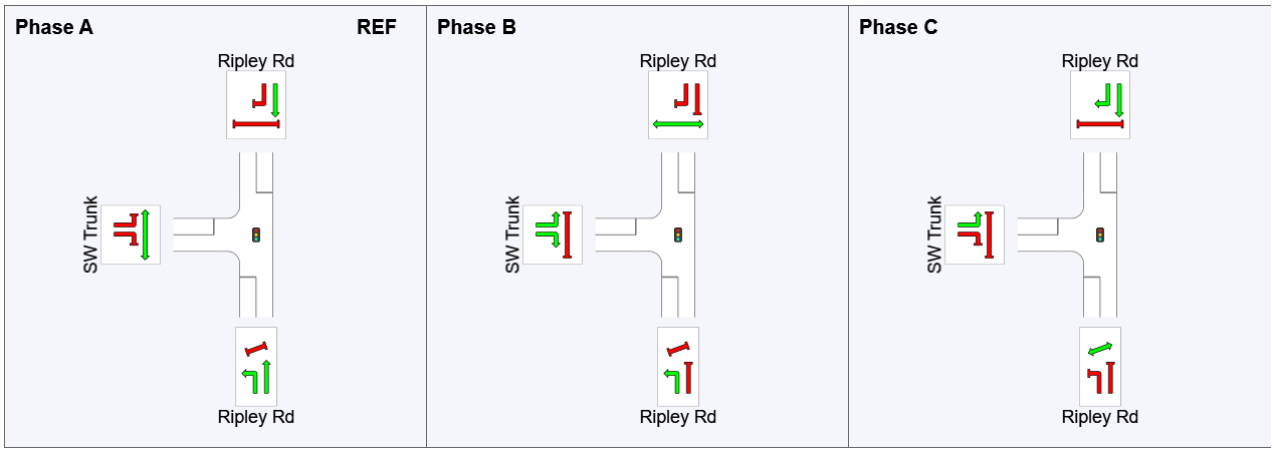
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

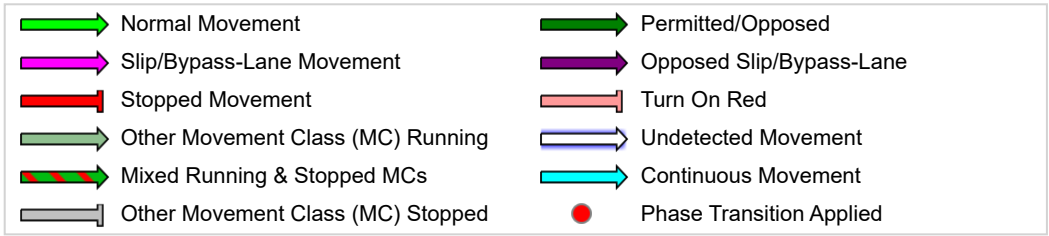
Phase	A	B	C
Phase Change Time (sec)	0	27	46
Green Time (sec)	21	13	8
Phase Time (sec)	27	19	14
Phase Split	45%	32%	23%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.011	12.6	LOS B	0.1	1.0	0.48	0.62	0.48	48.2
2	T1	All MCs	447	5.0	447	5.0	* 0.473	21.3	LOS C	5.8	42.1	0.90	0.74	0.90	44.5
Approach			457	5.0	457	5.0	0.473	21.1	LOS C	5.8	42.1	0.89	0.74	0.89	44.6
North: Ripley Rd															
8	T1	All MCs	427	5.0	427	5.0	0.194	6.3	LOS A	2.9	21.4	0.50	0.42	0.50	54.4
9	R2	All MCs	390	5.0	390	5.0	* 0.466	27.8	LOS C	5.1	37.3	0.91	0.79	0.91	40.1
Approach			817	5.0	817	5.0	0.466	16.6	LOS B	5.1	37.3	0.69	0.60	0.69	46.5
West: SW Trunk															
10	L2	All MCs	192	5.0	192	5.0	0.104	13.6	LOS B	1.4	10.5	0.54	0.69	0.54	47.3
12	R2	All MCs	11	5.0	11	5.0	* 0.027	25.9	LOS C	0.2	1.8	0.81	0.66	0.81	41.1
Approach			202	5.0	202	5.0	0.104	14.2	LOS B	1.4	10.5	0.55	0.69	0.55	46.9
All Vehicles			1477	5.0	1477	5.0	0.473	17.7	LOS B	5.8	42.1	0.73	0.65	0.73	45.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2031 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

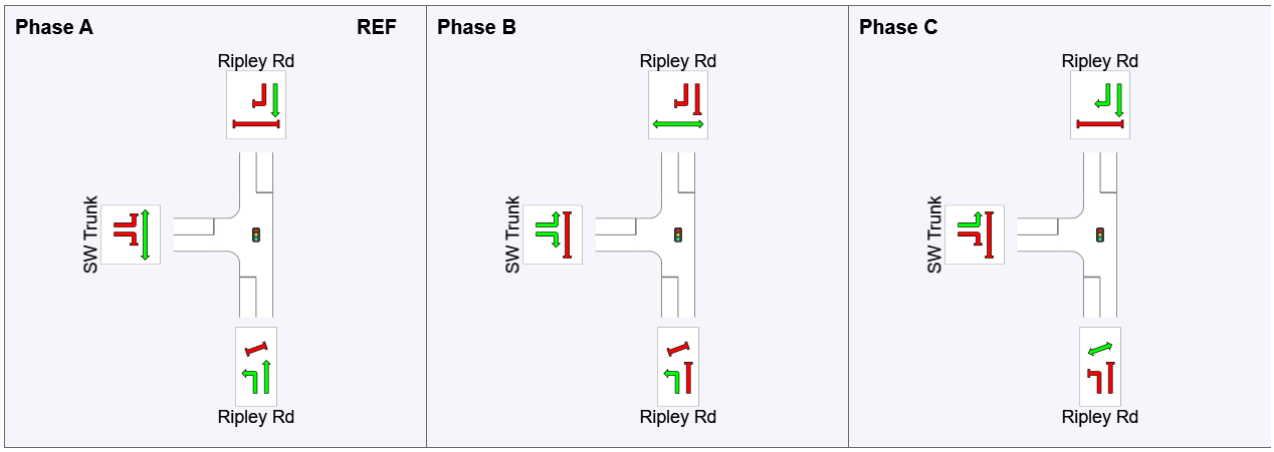
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

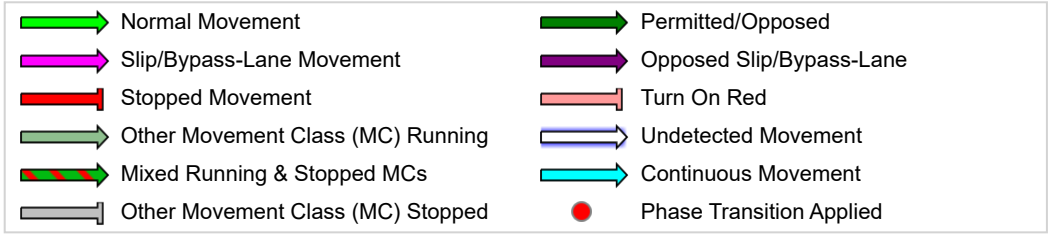
Phase	A	B	C
Phase Change Time (sec)	0	21	40
Green Time (sec)	15	13	14
Phase Time (sec)	21	19	20
Phase Split	35%	32%	33%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.3	LOS A	0.1	0.8	0.33	0.60	0.33	50.4
2	T1	All MCs	1238	5.0	1238	5.0	* 0.740	18.6	LOS B	18.3	133.3	0.89	0.82	0.92	46.1
Approach			1248	5.0	1248	5.0	0.740	18.5	LOS B	18.3	133.3	0.89	0.81	0.92	46.1
North: Ripley Rd															
8	T1	All MCs	163	5.0	163	5.0	0.067	4.9	LOS A	1.0	7.5	0.39	0.31	0.39	55.5
9	R2	All MCs	163	5.0	163	5.0	* 0.399	38.7	LOS D	2.8	20.2	0.97	0.76	0.97	35.9
Approach			326	5.0	326	5.0	0.399	21.8	LOS C	2.8	20.2	0.68	0.54	0.68	43.6
West: SW Trunk															
10	L2	All MCs	654	5.0	654	5.0	0.510	25.0	LOS C	8.9	65.2	0.84	0.81	0.84	41.2
12	R2	All MCs	11	5.0	11	5.0	* 0.032	31.2	LOS C	0.3	2.2	0.84	0.66	0.84	38.8
Approach			664	5.0	664	5.0	0.510	25.1	LOS C	8.9	65.2	0.84	0.81	0.84	41.1
All Vehicles			2239	5.0	2239	5.0	0.740	20.9	LOS C	18.3	133.3	0.84	0.77	0.86	44.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
North: Ripley Rd												
P3	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
West: SW Trunk												
P4	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
All Pedestrians		150	158	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2032 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

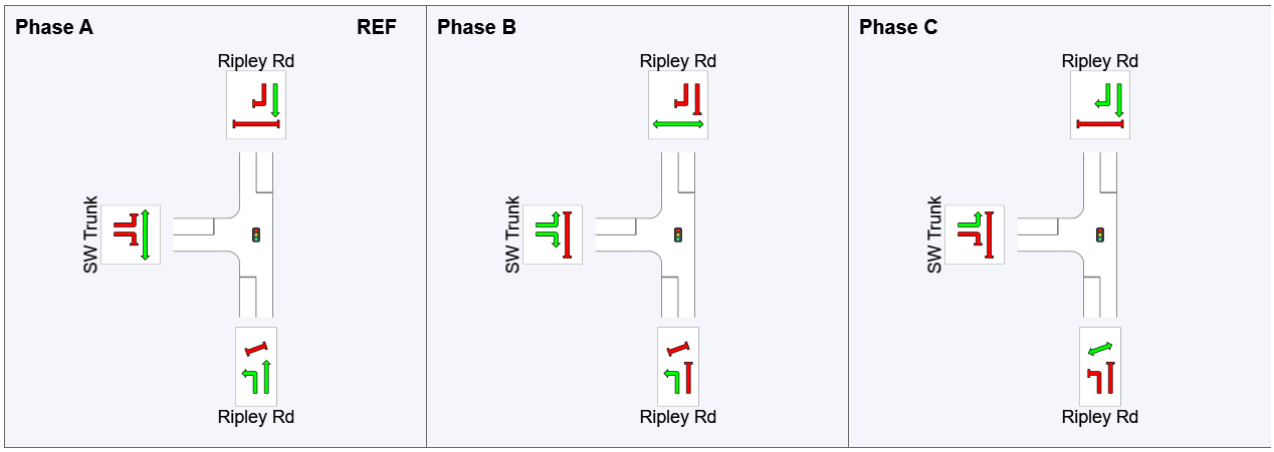
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

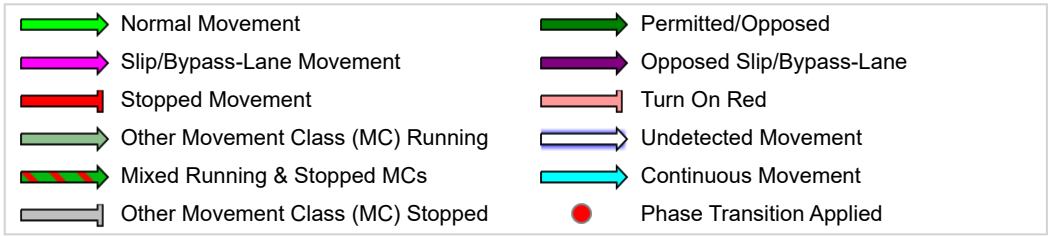
Phase	A	B	C
Phase Change Time (sec)	0	37	56
Green Time (sec)	31	13	8
Phase Time (sec)	37	19	14
Phase Split	53%	27%	20%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.011	13.1	LOS B	0.1	1.1	0.50	0.62	0.50	47.9
2	T1	All MCs	523	5.0	523	5.0	* 0.594	22.9	LOS C	7.1	51.8	0.94	0.78	0.94	43.7
Approach			534	5.0	534	5.0	0.594	22.8	LOS C	7.1	51.8	0.93	0.78	0.93	43.7
North: Ripley Rd															
8	T1	All MCs	494	5.0	494	5.0	0.224	6.4	LOS A	3.5	25.3	0.51	0.43	0.51	54.3
9	R2	All MCs	548	5.0	548	5.0	* 0.611	28.1	LOS C	7.4	54.1	0.94	0.82	0.95	40.0
Approach			1042	5.0	1042	5.0	0.611	17.8	LOS B	7.4	54.1	0.73	0.64	0.74	45.7
West: SW Trunk															
10	L2	All MCs	270	5.0	270	5.0	0.141	13.2	LOS B	2.0	14.6	0.53	0.70	0.53	47.5
12	R2	All MCs	11	5.0	11	5.0	* 0.027	25.9	LOS C	0.2	1.8	0.81	0.66	0.81	41.1
Approach			280	5.0	280	5.0	0.141	13.7	LOS B	2.0	14.6	0.54	0.70	0.54	47.2
All Vehicles			1856	5.0	1856	5.0	0.611	18.6	LOS B	7.4	54.1	0.76	0.69	0.77	45.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2032 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

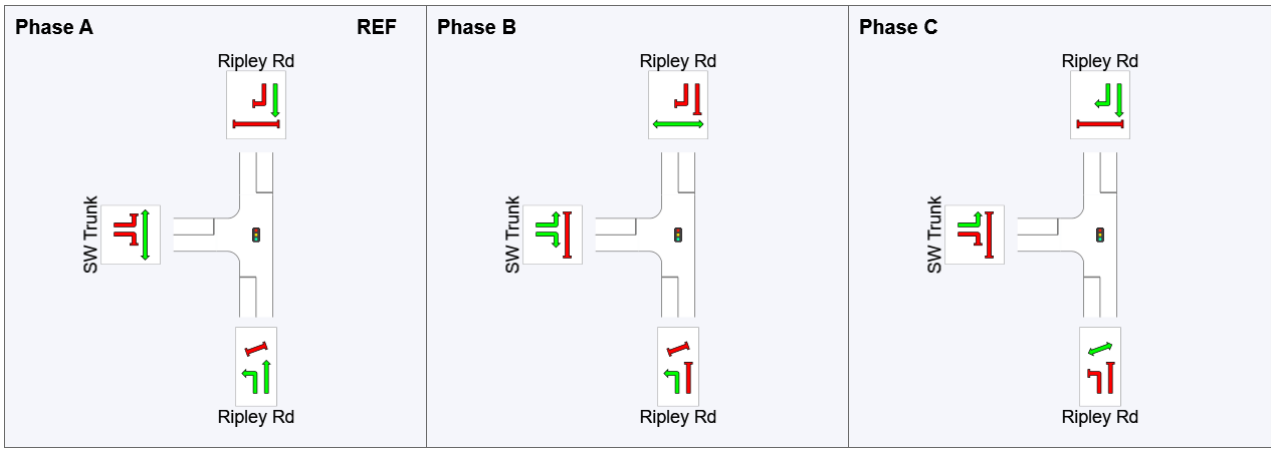
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

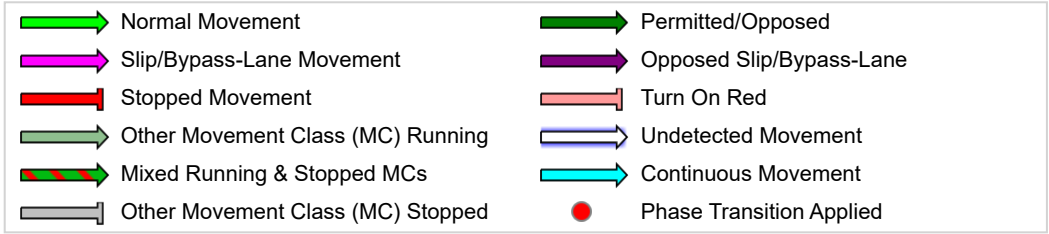
Phase	A	B	C
Phase Change Time (sec)	0	20	39
Green Time (sec)	14	13	15
Phase Time (sec)	20	19	21
Phase Split	33%	32%	35%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.009	9.3	LOS A	0.1	0.8	0.33	0.60	0.33	50.4
2	T1	All MCs	1305	5.0	1305	5.0	* 0.806	22.7	LOS C	21.7	158.2	0.94	0.92	1.04	43.8
Approach			1315	5.0	1315	5.0	0.806	22.6	LOS C	21.7	158.2	0.93	0.91	1.04	43.8
North: Ripley Rd															
8	T1	All MCs	169	5.0	169	5.0	0.071	5.4	LOS A	1.1	8.1	0.41	0.33	0.41	55.2
9	R2	All MCs	270	5.0	270	5.0	* 0.658	40.7	LOS D	4.8	35.2	1.00	0.84	1.11	35.2
Approach			438	5.0	438	5.0	0.658	27.1	LOS C	4.8	35.2	0.77	0.64	0.84	40.9
West: SW Trunk															
10	L2	All MCs	1078	5.0	1078	5.0	0.809	31.6	LOS C	18.7	136.8	0.96	0.93	1.10	38.3
12	R2	All MCs	11	5.0	11	5.0	* 0.029	30.2	LOS C	0.3	2.1	0.83	0.66	0.83	39.2
Approach			1089	5.0	1089	5.0	0.809	31.6	LOS C	18.7	136.8	0.96	0.92	1.10	38.3
All Vehicles			2842	5.0	2842	5.0	0.809	26.7	LOS C	21.7	158.2	0.92	0.88	1.03	41.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
North: Ripley Rd												
P3	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
West: SW Trunk												
P4	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
All Pedestrians		150	158	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2033 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

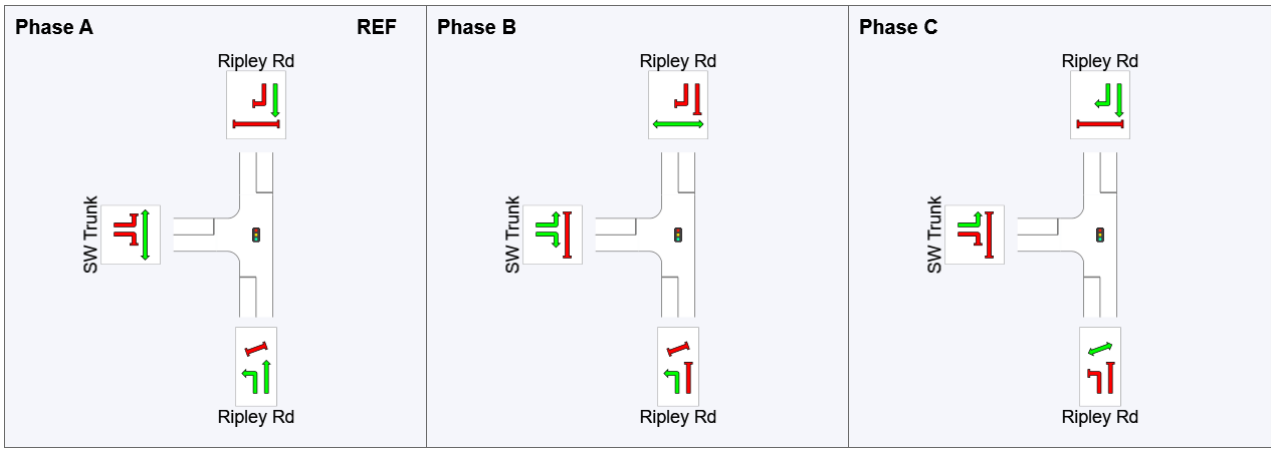
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

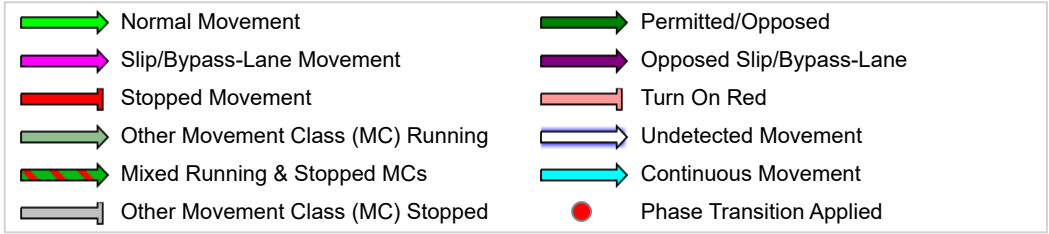
Phase	A	B	C
Phase Change Time (sec)	0	36	56
Green Time (sec)	30	14	8
Phase Time (sec)	36	20	14
Phase Split	51%	29%	20%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	11	5.0	11	5.0	0.013	17.3	LOS B	0.2	1.4	0.58	0.63	0.58	45.4
2	T1	All MCs	551	5.0	551	5.0	* 0.729	31.1	LOS C	9.6	69.8	0.99	0.89	1.11	39.8
Approach			561	5.0	561	5.0	0.729	30.8	LOS C	9.6	69.8	0.98	0.88	1.10	39.9
North: Ripley Rd															
8	T1	All MCs	514	5.0	514	5.0	0.212	5.5	LOS A	3.6	26.3	0.44	0.37	0.44	55.0
9	R2	All MCs	903	5.0	903	5.0	* 0.705	27.6	LOS C	13.8	101.0	0.92	0.86	0.95	40.2
Approach			1417	5.0	1417	5.0	0.705	19.6	LOS B	13.8	101.0	0.74	0.68	0.77	44.6
West: SW Trunk															
10	L2	All MCs	445	5.0	445	5.0	0.207	12.4	LOS B	3.5	25.2	0.49	0.71	0.49	48.0
12	R2	All MCs	11	5.0	11	5.0	* 0.032	31.2	LOS C	0.3	2.2	0.84	0.66	0.84	38.8
Approach			455	5.0	455	5.0	0.207	12.9	LOS B	3.5	25.2	0.49	0.70	0.49	47.7
All Vehicles			2434	5.0	2434	5.0	0.729	20.9	LOS C	13.8	101.0	0.75	0.73	0.79	43.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
North: Ripley Rd												
P3	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
West: SW Trunk												
P4	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09
All Pedestrians		150	158	29.3	LOS C	0.1	0.1	0.92	0.92	183.2	200.0	1.09

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2033 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

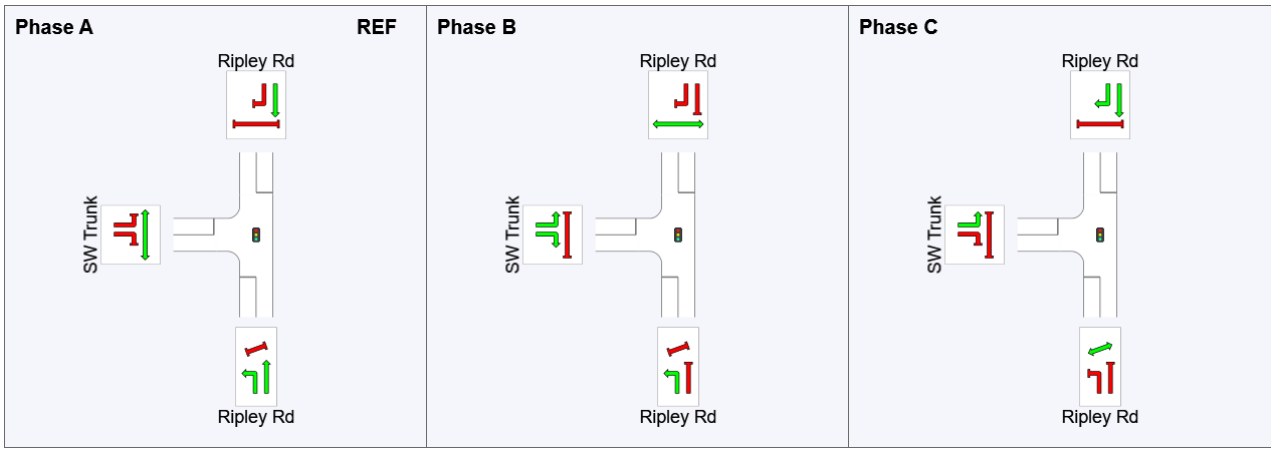
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

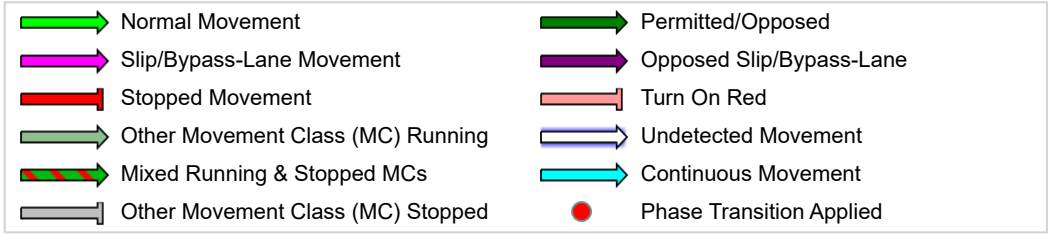
Phase	A	B	C
Phase Change Time (sec)	0	20	39
Green Time (sec)	14	13	25
Phase Time (sec)	20	19	31
Phase Split	29%	27%	44%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	22	5.0	22	5.0	0.021	16.4	LOS B	0.4	3.2	0.43	0.63	0.43	47.0
2	T1	All MCs	1372	5.0	1372	5.0	* 0.887	40.7	LOS D	36.4	265.6	1.00	1.03	1.16	36.4
Approach			1394	5.0	1394	5.0	0.887	40.3	LOS D	36.4	265.6	0.99	1.03	1.15	36.2
North: Ripley Rd															
8	T1	All MCs	175	5.0	175	5.0	0.063	4.0	LOS A	1.2	8.6	0.30	0.24	0.30	56.3
9	R2	All MCs	417	5.0	417	5.0	0.448	39.4	LOS D	8.6	63.0	0.89	0.80	0.89	35.6
Approach			592	5.0	592	5.0	0.448	29.0	LOS C	8.6	63.0	0.71	0.64	0.71	39.9
West: SW Trunk															
10	L2	All MCs	1373	5.0	1373	5.0	* 0.871	43.1	LOS D	35.0	255.6	0.98	0.95	1.12	34.7
12	R2	All MCs	15	5.0	15	5.0	0.055	48.6	LOS D	0.6	4.6	0.89	0.68	0.89	33.7
Approach			1388	5.0	1388	5.0	0.871	43.2	LOS D	35.0	255.6	0.98	0.95	1.11	34.2
All Vehicles			3375	5.0	3375	5.0	0.887	39.5	LOS D	36.4	265.6	0.94	0.93	1.06	35.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
North: Ripley Rd												
P3	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
West: SW Trunk												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01
All Pedestrians		150	158	44.3	LOS E	0.1	0.1	0.94	0.94	198.1	200.0	1.01

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2034 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Practical Cycle Time)

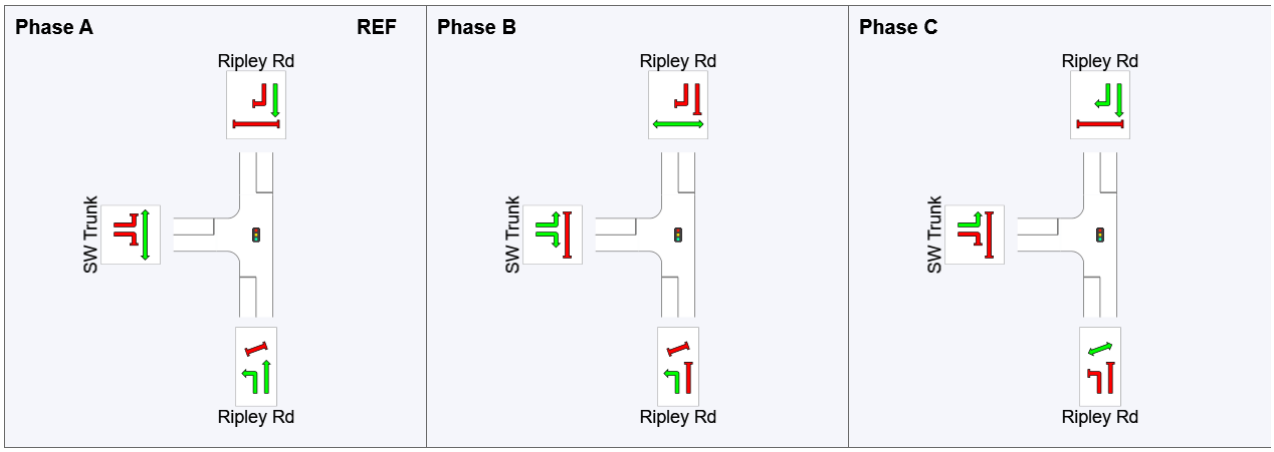
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

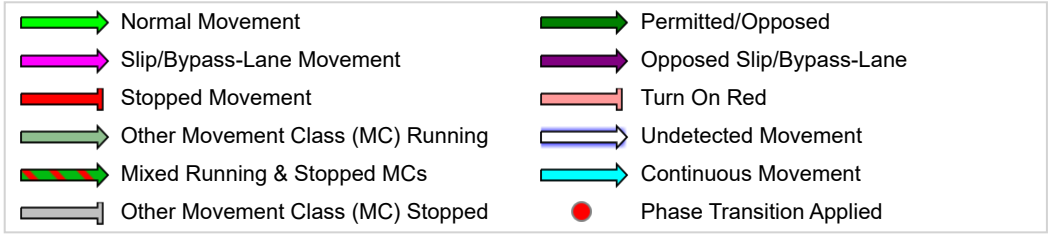
Phase	A	B	C
Phase Change Time (sec)	0	47	68
Green Time (sec)	41	15	26
Phase Time (sec)	47	21	32
Phase Split	47%	21%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	12	5.0	12	5.0	0.016	19.8	LOS B	0.3	1.9	0.60	0.64	0.60	44.1
2	T1	All MCs	579	5.0	579	5.0	* 0.766	36.2	LOS D	11.6	85.0	1.00	0.92	1.14	37.7
Approach			591	5.0	591	5.0	0.766	35.9	LOS D	11.6	85.0	0.99	0.91	1.13	37.8
North: Ripley Rd															
8	T1	All MCs	534	5.0	534	5.0	0.209	5.2	LOS A	3.9	28.4	0.40	0.35	0.40	55.3
9	R2	All MCs	1148	5.0	1148	5.0	* 0.840	36.3	LOS D	23.4	170.7	0.97	0.95	1.13	36.9
Approach			1682	5.0	1682	5.0	0.840	26.4	LOS C	23.4	170.7	0.79	0.76	0.90	41.1
West: SW Trunk															
10	L2	All MCs	614	5.0	614	5.0	0.274	12.8	LOS B	5.4	39.2	0.48	0.71	0.48	47.7
12	R2	All MCs	18	5.0	18	5.0	* 0.057	35.8	LOS D	0.6	4.3	0.86	0.69	0.86	37.0
Approach			632	5.0	632	5.0	0.274	13.5	LOS B	5.4	39.2	0.49	0.71	0.49	47.3
All Vehicles			2905	5.0	2905	5.0	0.840	25.5	LOS C	23.4	170.7	0.77	0.78	0.86	41.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
North: Ripley Rd												
P3	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
West: SW Trunk												
P4	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06
All Pedestrians		150	158	34.3	LOS D	0.1	0.1	0.93	0.93	188.1	200.0	1.06

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2034 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

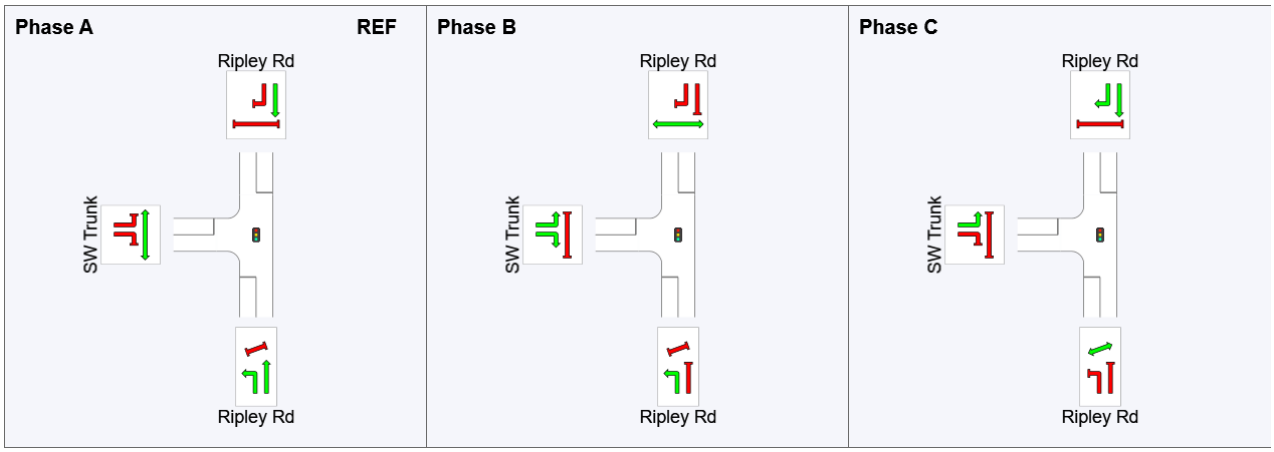
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

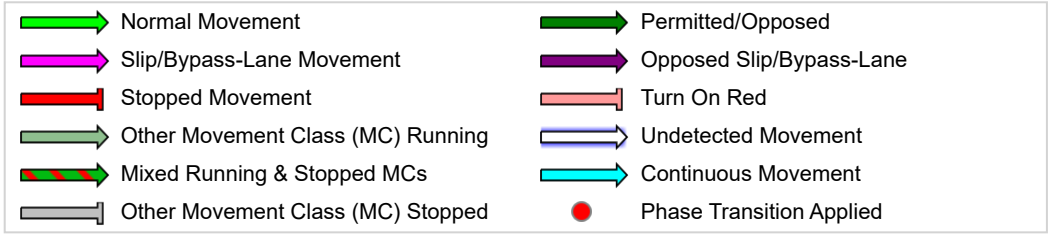
Phase	A	B	C
Phase Change Time (sec)	0	22	42
Green Time (sec)	16	14	32
Phase Time (sec)	22	20	38
Phase Split	28%	25%	48%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	44	5.0	44	5.0	0.046	41.0	LOS D	1.5	11.0	0.50	0.66	0.50	42.4
2	T1	All MCs	1440	5.0	1440	5.0	* 0.950	77.4	LOS E	61.9	451.8	1.00	1.11	1.20	28.3
Approach			1484	5.0	1484	5.0	0.950	76.3	LOS E	61.9	451.8	0.99	1.10	1.18	26.7
North: Ripley Rd															
8	T1	All MCs	180	5.0	180	5.0	0.059	2.8	LOS A	1.2	9.1	0.21	0.17	0.21	57.3
9	R2	All MCs	565	5.0	565	5.0	0.430	43.6	LOS D	15.4	112.2	0.80	0.80	0.80	34.2
Approach			746	5.0	746	5.0	0.430	33.8	LOS C	15.4	112.2	0.66	0.65	0.66	37.9
West: SW Trunk															
10	L2	All MCs	1668	5.0	1668	5.0	* 0.952	76.4	LOS E	70.4	514.3	1.00	1.03	1.17	28.0
12	R2	All MCs	30	5.0	30	5.0	0.155	91.6	LOS F	2.0	14.6	0.94	0.72	0.94	27.1
Approach			1698	5.0	1698	5.0	0.952	76.6	LOS E	70.4	514.3	1.00	1.02	1.17	26.0
All Vehicles			3928	5.0	3928	5.0	0.952	68.4	LOS E	70.4	514.3	0.93	0.98	1.08	28.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Rd												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: SW Trunk												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		150	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2035 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

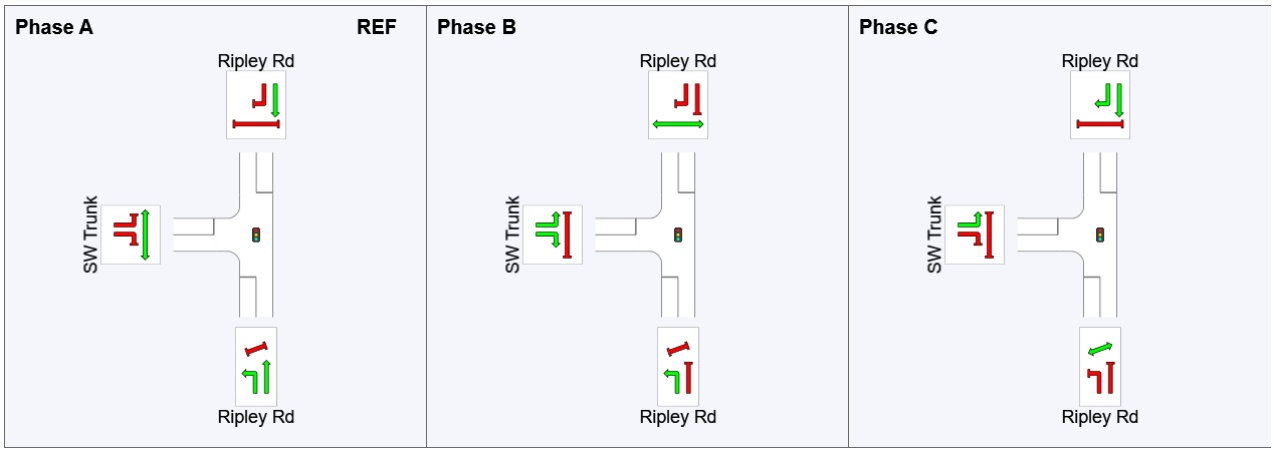
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

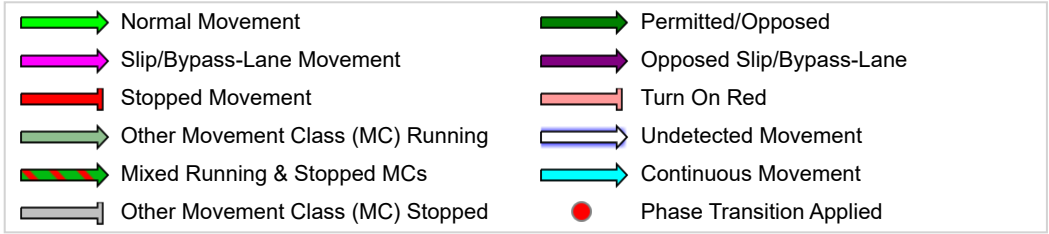
Phase	A	B	C
Phase Change Time (sec)	0	67	89
Green Time (sec)	61	16	55
Phase Time (sec)	67	22	61
Phase Split	45%	15%	41%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	24	5.0	24	5.0	0.047	46.5	LOS D	1.2	9.1	0.75	0.69	0.75	33.4
2	T1	All MCs	607	5.0	607	5.0	* 1.004	113.4	LOS F	29.7	216.8	1.00	1.24	1.49	21.1
Approach			630	5.0	630	5.0	1.004	110.9	LOS F	29.7	216.8	0.99	1.22	1.46	21.4
North: Ripley Rd															
8	T1	All MCs	554	5.0	554	5.0	0.180	3.2	LOS A	4.3	31.3	0.23	0.20	0.23	57.0
9	R2	All MCs	1394	5.0	1394	5.0	* 1.023	116.7	LOS F	74.1	540.7	1.00	1.20	1.44	21.8
Approach			1947	5.0	1947	5.0	1.023	84.4	LOS F	74.1	540.7	0.78	0.92	1.10	24.9
West: SW Trunk															
10	L2	All MCs	783	5.0	783	5.0	0.295	12.4	LOS B	9.3	67.6	0.36	0.69	0.36	48.0
12	R2	All MCs	36	5.0	36	5.0	* 0.188	72.6	LOS E	2.4	17.8	0.95	0.73	0.95	27.0
Approach			819	5.0	819	5.0	0.295	15.0	LOS B	9.3	67.6	0.38	0.69	0.38	46.4
All Vehicles			3396	5.0	3396	5.0	1.023	72.6	LOS E	74.1	540.7	0.73	0.92	0.99	27.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Rd												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: SW Trunk												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		150	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2035 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

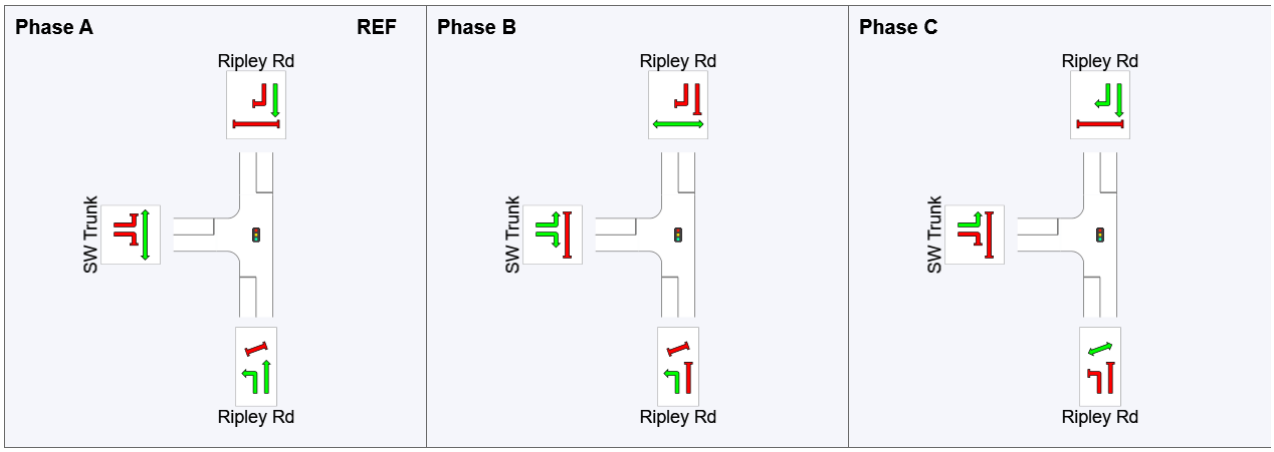
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

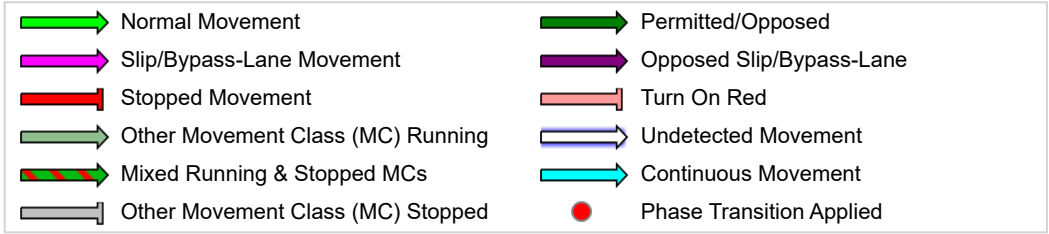
Phase	A	B	C
Phase Change Time (sec)	0	30	52
Green Time (sec)	24	16	92
Phase Time (sec)	30	22	98
Phase Split	20%	15%	65%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	67	5.0	67	5.0	0.073	47.6	LOS D	2.4	17.8	0.54	0.68	0.54	41.2
2	T1	All MCs	1507	5.0	1507	5.0	* 1.071	150.7	LOS F	84.7	618.1	1.00	1.46	1.60	18.3
Approach			1574	5.0	1574	5.0	1.071	146.3	LOS F	84.7	618.1	0.98	1.43	1.55	17.7
North: Ripley Rd															
8	T1	All MCs	186	5.0	186	5.0	0.061	2.9	LOS A	1.3	9.4	0.21	0.17	0.21	57.3
9	R2	All MCs	713	5.0	713	5.0	0.523	43.5	LOS D	19.7	143.7	0.82	0.82	0.82	34.6
Approach			899	5.0	899	5.0	0.523	35.1	LOS D	19.7	143.7	0.69	0.68	0.69	37.4
West: SW Trunk															
10	L2	All MCs	1963	5.0	1963	5.0	* 1.067	142.3	LOS F	108.5	791.9	1.00	1.22	1.55	18.8
12	R2	All MCs	44	5.0	44	5.0	0.232	96.2	LOS F	3.0	22.2	0.95	0.74	0.95	26.9
Approach			2008	5.0	2008	5.0	1.067	141.3	LOS F	108.5	791.9	1.00	1.21	1.53	17.8
All Vehicles			4481	5.0	4481	5.0	1.071	121.8	LOS F	108.5	791.9	0.93	1.18	1.37	19.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Rd												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: SW Trunk												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		150	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2036 No WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

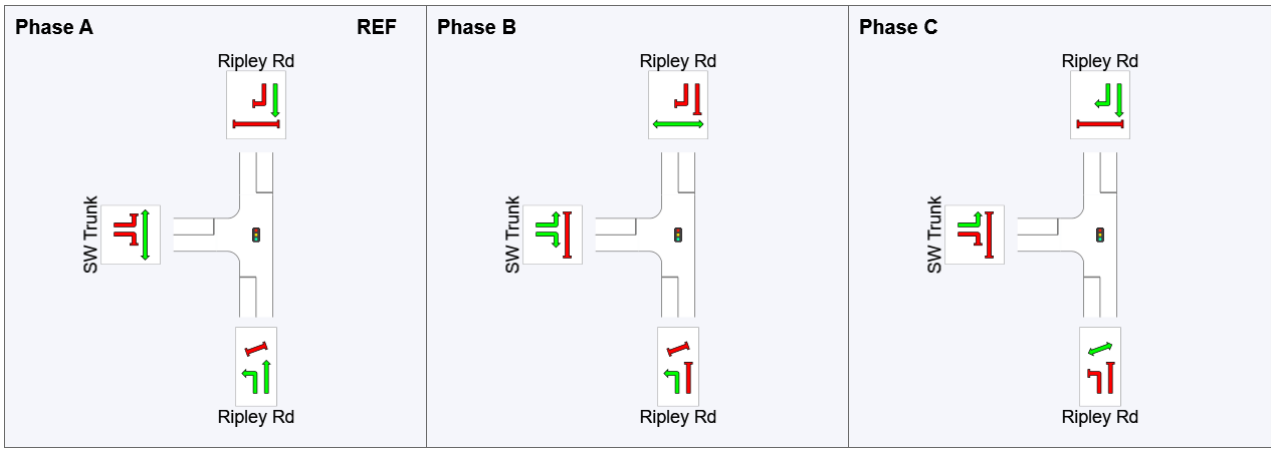
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

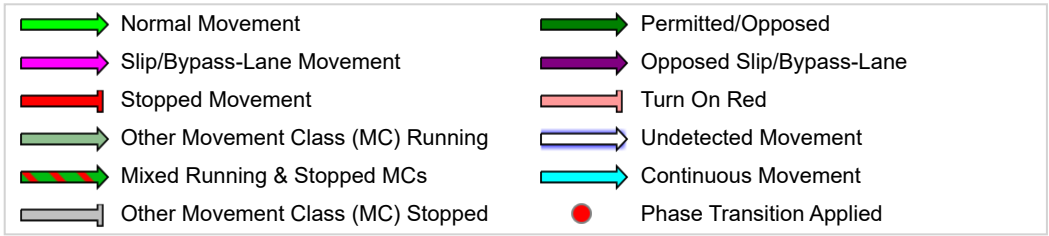
Phase	A	B	C
Phase Change Time (sec)	0	63	85
Green Time (sec)	57	16	59
Phase Time (sec)	63	22	65
Phase Split	42%	15%	43%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	36	5.0	36	5.0	0.073	48.5	LOS D	1.9	14.0	0.77	0.71	0.77	32.8
2	T1	All MCs	634	5.0	634	5.0	* 1.145	216.1	LOS F	39.7	289.7	1.00	1.54	1.98	13.3
Approach			670	5.0	670	5.0	1.145	207.1	LOS F	39.7	289.7	0.99	1.49	1.92	13.7
North: Ripley Rd															
8	T1	All MCs	573	5.0	573	5.0	0.187	3.2	LOS A	4.5	32.6	0.24	0.21	0.24	57.0
9	R2	All MCs	1639	5.0	1639	5.0	* 1.182	237.7	LOS F	112.1	818.4	1.00	1.47	2.04	12.8
Approach			2212	5.0	2212	5.0	1.182	176.9	LOS F	112.1	818.4	0.80	1.14	1.57	15.3
West: SW Trunk															
10	L2	All MCs	952	5.0	952	5.0	0.352	12.1	LOS B	11.4	83.0	0.36	0.69	0.36	48.2
12	R2	All MCs	54	5.0	54	5.0	* 0.281	73.5	LOS E	3.7	27.1	0.96	0.75	0.96	26.8
Approach			1006	5.0	1006	5.0	0.352	15.4	LOS B	11.4	83.0	0.39	0.70	0.39	46.2
All Vehicles			3888	5.0	3888	5.0	1.182	140.3	LOS F	112.1	818.4	0.73	1.09	1.33	18.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Rd												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: SW Trunk												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		150	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2036 No WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

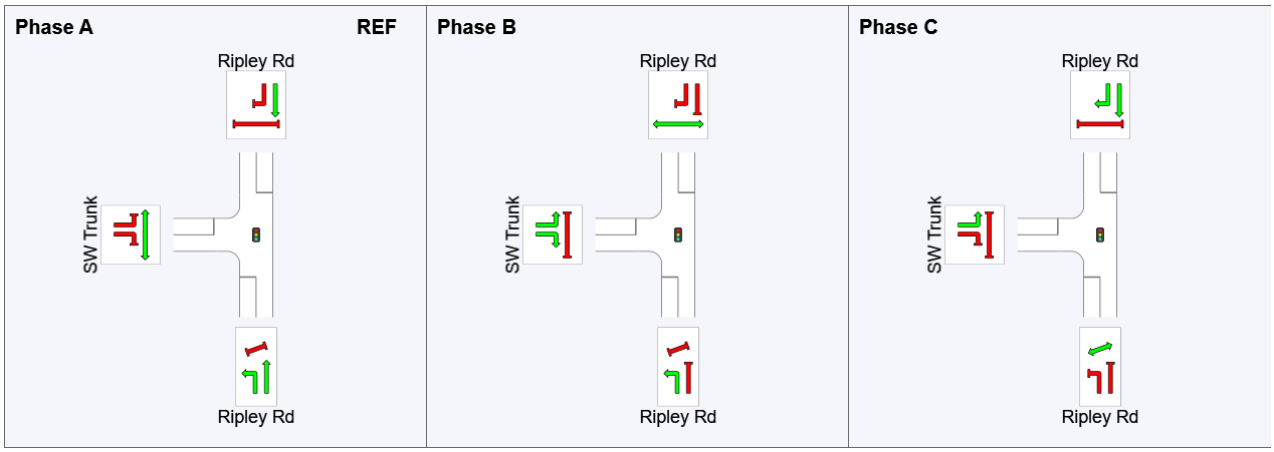
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

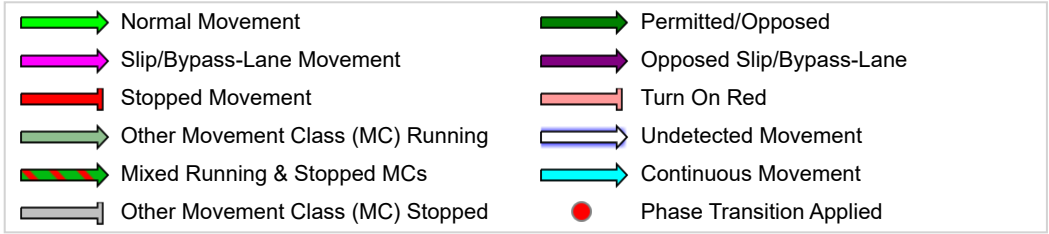
Phase	A	B	C
Phase Change Time (sec)	0	28	50
Green Time (sec)	22	16	94
Phase Time (sec)	28	22	100
Phase Split	19%	15%	67%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	280	5.0	280	5.0	0.260	11.8	LOS B	3.9	28.4	0.50	0.70	0.50	48.7
2	T1	All MCs	400	5.0	400	5.0	* 0.334	17.3	LOS B	4.6	33.4	0.81	0.66	0.81	46.8
Approach			680	5.0	680	5.0	0.334	15.0	LOS B	4.6	33.4	0.68	0.68	0.68	47.6
North: Ripley Rd															
8	T1	All MCs	223	5.0	223	5.0	0.101	5.9	LOS A	1.4	10.5	0.47	0.38	0.47	54.7
9	R2	All MCs	189	5.0	189	5.0	* 0.317	30.6	LOS C	2.6	18.8	0.92	0.76	0.92	38.9
Approach			413	5.0	413	5.0	0.317	17.2	LOS B	2.6	18.8	0.67	0.55	0.67	46.1
West: SW Trunk															
10	L2	All MCs	147	5.0	147	5.0	0.091	15.8	LOS B	1.2	9.1	0.60	0.70	0.60	45.9
12	R2	All MCs	131	5.0	131	5.0	* 0.336	27.9	LOS C	3.4	24.5	0.89	0.77	0.89	40.2
Approach			278	5.0	278	5.0	0.336	21.5	LOS C	3.4	24.5	0.74	0.73	0.74	43.0
All Vehicles			1371	5.0	1371	5.0	0.336	17.0	LOS B	4.6	33.4	0.69	0.65	0.69	46.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2031 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

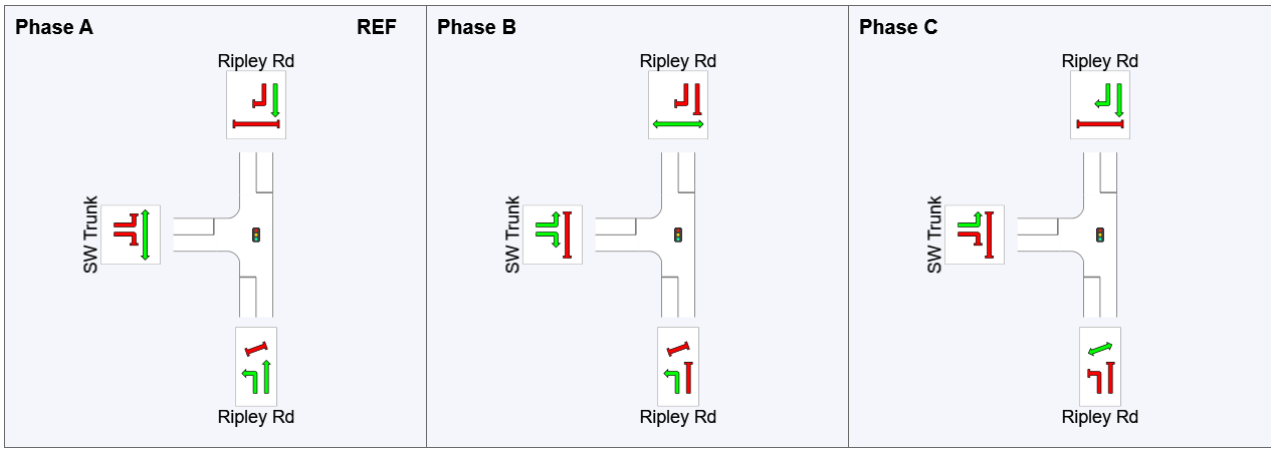
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

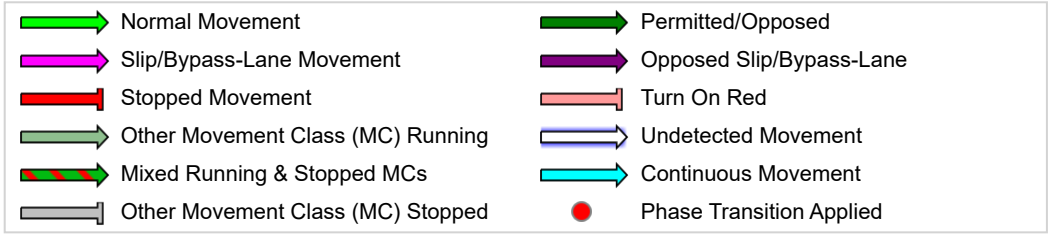
Phase	A	B	C
Phase Change Time (sec)	0	25	44
Green Time (sec)	19	13	10
Phase Time (sec)	25	19	16
Phase Split	42%	32%	27%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	112	5.0	112	5.0	0.120	13.7	LOS B	1.7	12.3	0.54	0.69	0.54	47.5
2	T1	All MCs	202	5.0	202	5.0	* 0.229	20.7	LOS C	2.5	18.0	0.85	0.67	0.85	44.9
Approach			314	5.0	314	5.0	0.229	18.2	LOS B	2.5	18.0	0.74	0.67	0.74	45.8
North: Ripley Rd															
8	T1	All MCs	493	5.0	493	5.0	0.224	6.4	LOS A	3.5	25.2	0.51	0.43	0.51	54.3
9	R2	All MCs	356	5.0	356	5.0	* 0.397	26.6	LOS C	4.5	32.8	0.88	0.78	0.88	40.7
Approach			848	5.0	848	5.0	0.397	14.9	LOS B	4.5	32.8	0.66	0.58	0.66	47.6
West: SW Trunk															
10	L2	All MCs	341	5.0	341	5.0	0.178	13.4	LOS B	2.6	18.8	0.55	0.71	0.55	47.4
12	R2	All MCs	103	5.0	103	5.0	* 0.266	27.5	LOS C	2.6	19.0	0.87	0.76	0.87	40.3
Approach			444	5.0	444	5.0	0.266	16.7	LOS B	2.6	19.0	0.62	0.72	0.62	45.5
All Vehicles			1606	5.0	1606	5.0	0.397	16.0	LOS B	4.5	32.8	0.67	0.64	0.67	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2031 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

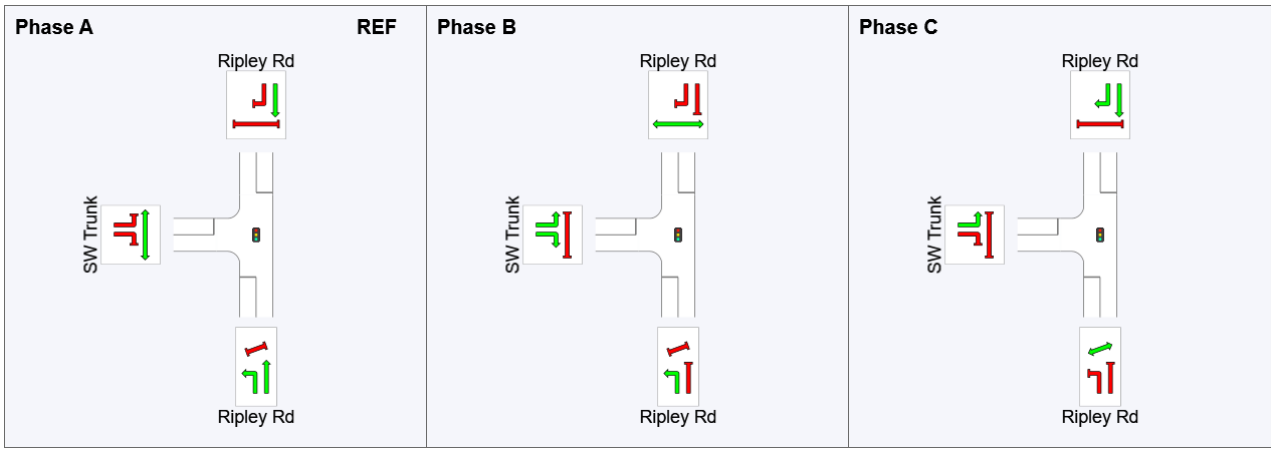
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

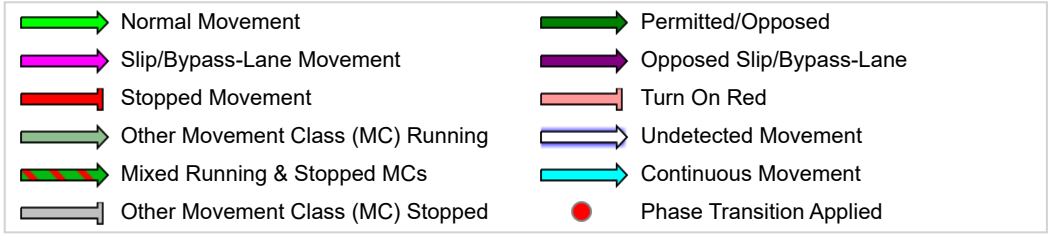
Phase	A	B	C
Phase Change Time (sec)	0	20	39
Green Time (sec)	14	13	15
Phase Time (sec)	20	19	21
Phase Split	33%	32%	35%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	429	5.0	429	5.0	0.411	13.1	LOS B	6.9	50.6	0.59	0.74	0.59	47.9
2	T1	All MCs	505	5.0	505	5.0	* 0.502	20.7	LOS C	6.5	47.3	0.90	0.75	0.90	44.8
Approach			935	5.0	935	5.0	0.502	17.2	LOS B	6.9	50.6	0.75	0.74	0.75	46.2
North: Ripley Rd															
8	T1	All MCs	404	5.0	404	5.0	0.195	7.3	LOS A	3.0	21.8	0.53	0.44	0.53	53.6
9	R2	All MCs	337	5.0	337	5.0	* 0.512	30.7	LOS C	4.7	34.2	0.95	0.79	0.95	38.9
Approach			741	5.0	741	5.0	0.512	18.0	LOS B	4.7	34.2	0.72	0.60	0.72	45.7
West: SW Trunk															
10	L2	All MCs	314	5.0	314	5.0	0.175	14.5	LOS B	2.5	18.4	0.58	0.72	0.58	46.7
12	R2	All MCs	236	5.0	236	5.0	* 0.526	27.4	LOS C	6.2	45.3	0.91	0.80	0.91	40.4
Approach			549	5.0	549	5.0	0.526	20.0	LOS C	6.2	45.3	0.72	0.75	0.72	43.8
All Vehicles			2225	5.0	2225	5.0	0.526	18.2	LOS B	6.9	50.6	0.74	0.70	0.74	45.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2041 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

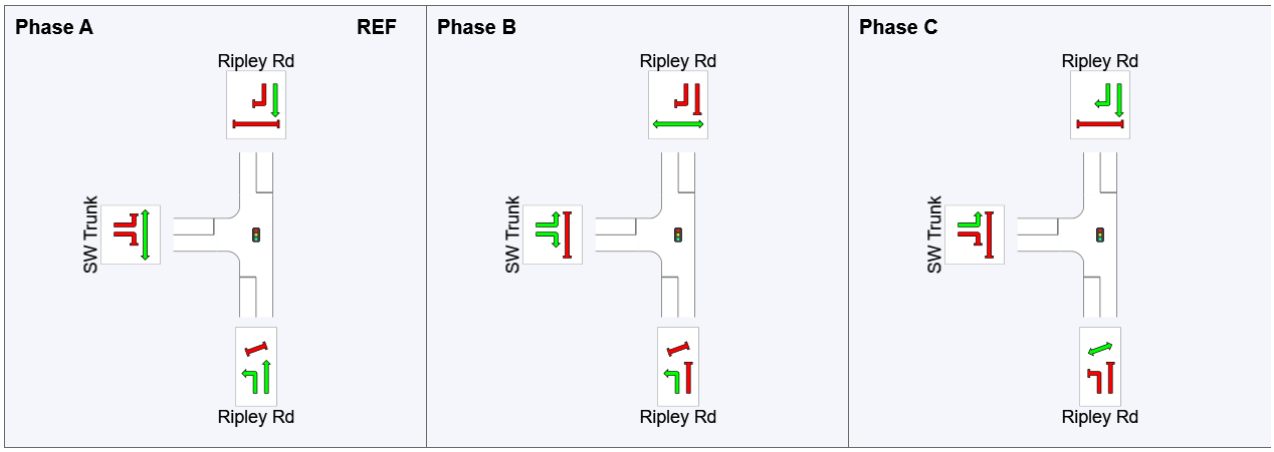
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

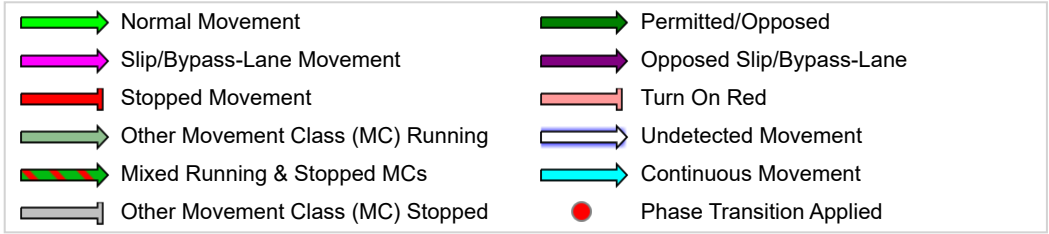
Phase	A	B	C
Phase Change Time (sec)	0	22	43
Green Time (sec)	16	15	11
Phase Time (sec)	22	21	17
Phase Split	37%	35%	28%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	267	5.0	267	5.0	0.271	13.4	LOS B	4.2	30.4	0.56	0.72	0.56	47.7
2	T1	All MCs	211	5.0	211	5.0	* 0.239	20.7	LOS C	2.6	18.8	0.85	0.67	0.85	44.8
Approach			478	5.0	478	5.0	0.271	16.6	LOS B	4.2	30.4	0.69	0.70	0.69	46.4
North: Ripley Rd															
8	T1	All MCs	912	5.0	912	5.0	0.439	8.7	LOS A	8.0	58.2	0.63	0.56	0.63	52.6
9	R2	All MCs	600	5.0	600	5.0	* 0.772	33.5	LOS C	9.3	68.1	1.00	0.93	1.19	37.8
Approach			1512	5.0	1512	5.0	0.772	18.5	LOS B	9.3	68.1	0.78	0.70	0.86	45.5
West: SW Trunk															
10	L2	All MCs	238	5.0	238	5.0	0.124	13.1	LOS B	1.7	12.7	0.53	0.70	0.53	47.5
12	R2	All MCs	362	5.0	362	5.0	* 0.808	33.6	LOS C	11.5	84.3	1.00	0.96	1.23	37.8
Approach			600	5.0	600	5.0	0.808	25.5	LOS C	11.5	84.3	0.81	0.86	0.95	41.1
All Vehicles			2589	5.0	2589	5.0	0.808	19.8	LOS B	11.5	84.3	0.77	0.74	0.85	44.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2041 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

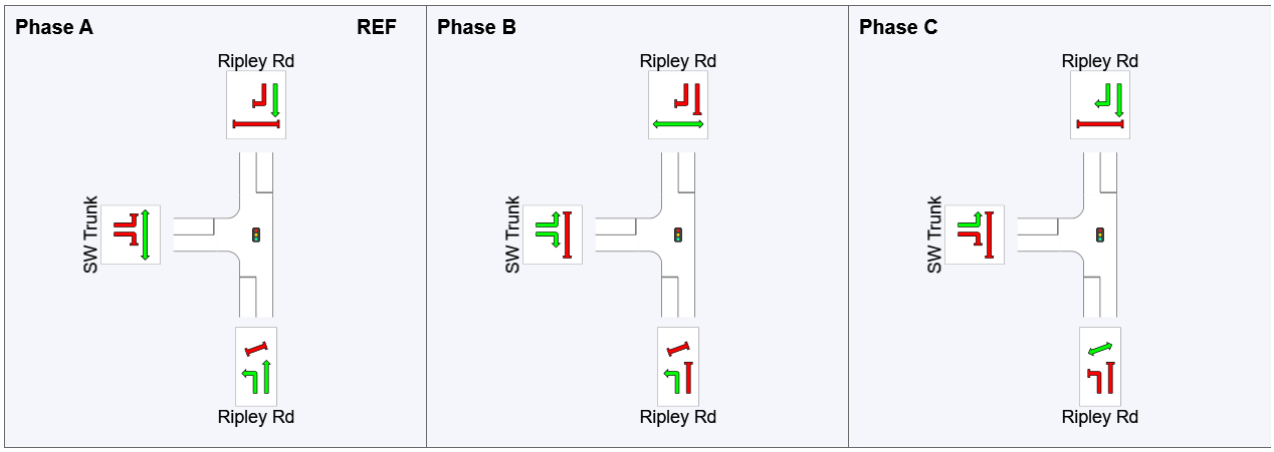
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

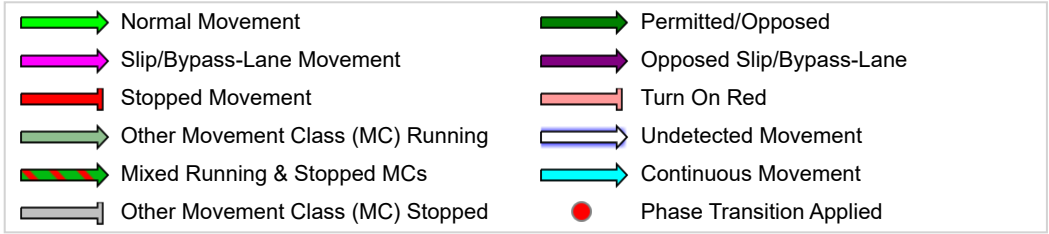
Phase	A	B	C
Phase Change Time (sec)	0	20	41
Green Time (sec)	14	15	13
Phase Time (sec)	20	21	19
Phase Split	33%	35%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	661	5.0	661	5.0	0.670	16.1	LOS B	14.0	101.9	0.77	0.82	0.77	46.1
2	T1	All MCs	646	5.0	646	5.0	* 0.684	23.6	LOS C	9.1	66.8	0.96	0.85	1.02	43.3
Approach			1307	5.0	1307	5.0	0.684	19.8	LOS B	14.0	101.9	0.86	0.83	0.89	44.7
North: Ripley Rd															
8	T1	All MCs	501	5.0	501	5.0	0.234	7.0	LOS A	3.7	26.8	0.53	0.45	0.53	53.9
9	R2	All MCs	522	5.0	522	5.0	* 0.672	30.8	LOS C	7.5	55.1	0.97	0.86	1.05	38.9
Approach			1023	5.0	1023	5.0	0.672	19.1	LOS B	7.5	55.1	0.75	0.66	0.79	45.0
West: SW Trunk															
10	L2	All MCs	505	5.0	505	5.0	0.273	14.4	LOS B	4.2	30.6	0.60	0.74	0.60	46.7
12	R2	All MCs	299	5.0	299	5.0	* 0.714	31.0	LOS C	8.8	64.2	0.97	0.88	1.09	38.9
Approach			804	5.0	804	5.0	0.714	20.6	LOS C	8.8	64.2	0.74	0.79	0.78	43.5
All Vehicles			3135	5.0	3135	5.0	0.714	19.8	LOS B	14.0	101.9	0.80	0.76	0.83	44.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
North: Ripley Rd												
P3	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
West: SW Trunk												
P4	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12
All Pedestrians		150	158	24.4	LOS C	0.1	0.1	0.90	0.90	178.2	200.0	1.12

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2046 WR - AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Practical Cycle Time)

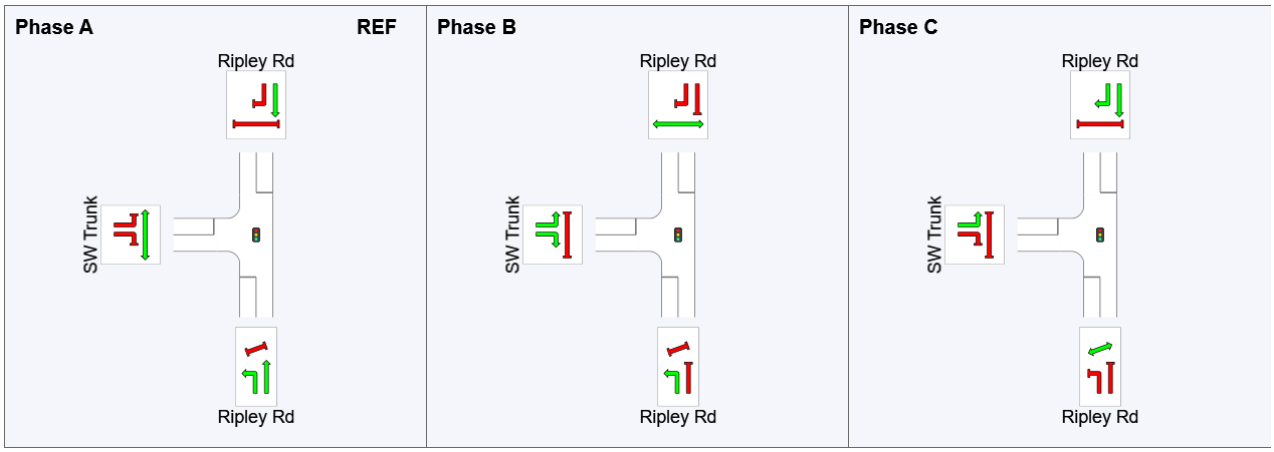
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

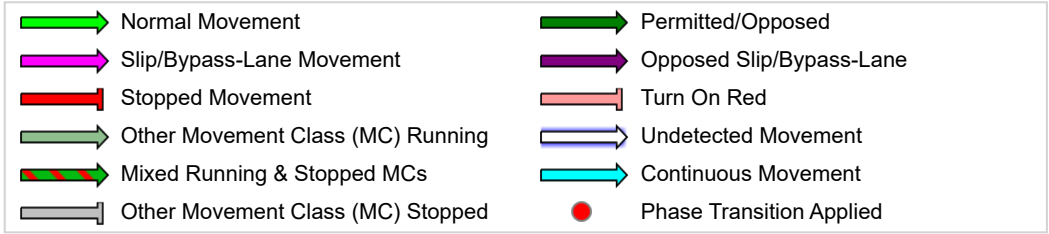
Phase	A	B	C
Phase Change Time (sec)	0	21	41
Green Time (sec)	15	14	13
Phase Time (sec)	21	20	19
Phase Split	35%	33%	32%
Phase Frequency (%)	100.0	100.0	100.0

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: SW20 [I2 (SW20) Ult - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Ripley Rd															
1	L2	All MCs	312	5.0	312	5.0	0.314	24.7	LOS C	12.1	88.0	0.58	0.74	0.58	41.6
2	T1	All MCs	356	5.0	356	5.0	* 0.785	73.8	LOS E	13.4	97.9	1.00	0.91	1.12	27.2
Approach			667	5.0	667	5.0	0.785	50.9	LOS D	13.4	97.9	0.80	0.83	0.87	32.5
North: Ripley Rd															
8	T1	All MCs	1183	5.0	1183	5.0	0.618	28.1	LOS C	30.5	222.8	0.78	0.70	0.78	41.2
9	R2	All MCs	878	5.0	878	5.0	* 0.986	118.2	LOS F	43.0	314.2	1.00	1.12	1.39	22.0
Approach			2061	5.0	2061	5.0	0.986	66.5	LOS E	43.0	314.2	0.87	0.88	1.04	28.5
West: SW Trunk															
10	L2	All MCs	366	5.0	366	5.0	0.131	18.5	LOS B	3.2	23.2	0.26	0.65	0.26	49.7
12	R2	All MCs	653	5.0	653	5.0	* 0.992	113.4	LOS F	63.3	462.2	1.00	1.13	1.34	23.1
Approach			1019	5.0	1019	5.0	0.992	79.3	LOS E	63.3	462.2	0.73	0.96	0.95	25.7
All Vehicles			3747	5.0	3747	5.0	0.992	67.2	LOS E	63.3	462.2	0.82	0.89	0.98	28.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Ripley Rd												
P1B	Slip/ Bypass	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
North: Ripley Rd												
P3	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
West: SW Trunk												
P4	Full	50	53	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90
All Pedestrians		150	158	69.3	LOS F	0.2	0.2	0.96	0.96	223.1	200.0	0.90

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.

PHASING SUMMARY

Site: SW20 [I2 (SW20) Ult - 2046 WR - PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Ripley Rd / SW Trunk
Prepared by: NN
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)

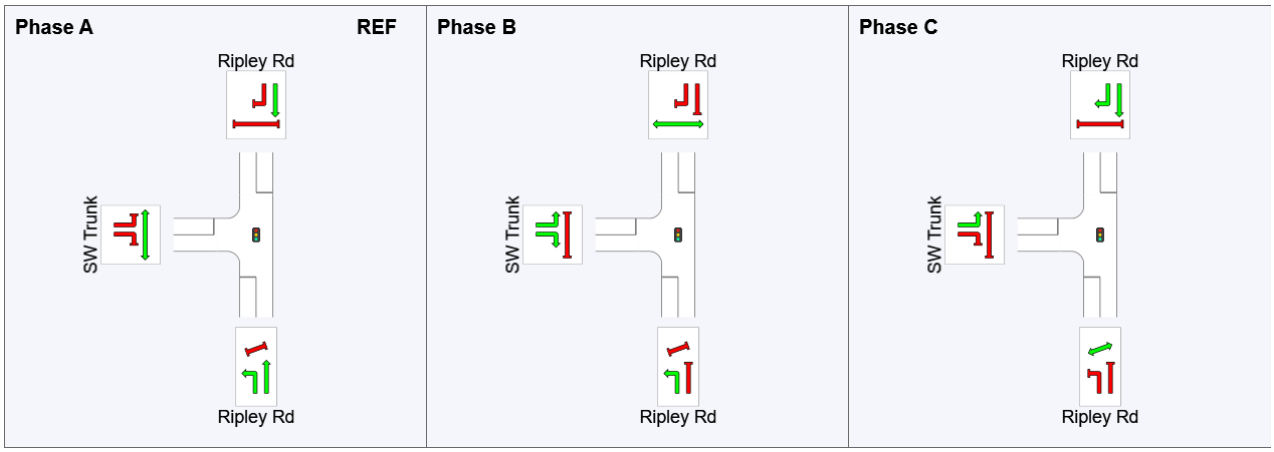
Timings based on settings in the Site Phasing & Timing dialog
Phase Times determined by the program
Phase Sequence: Four-Phase Leading Right Turns
Input Phase Sequence: A, B, C
Output Phase Sequence: A, B, C
Reference Phase: Phase A

Phase Timing Summary

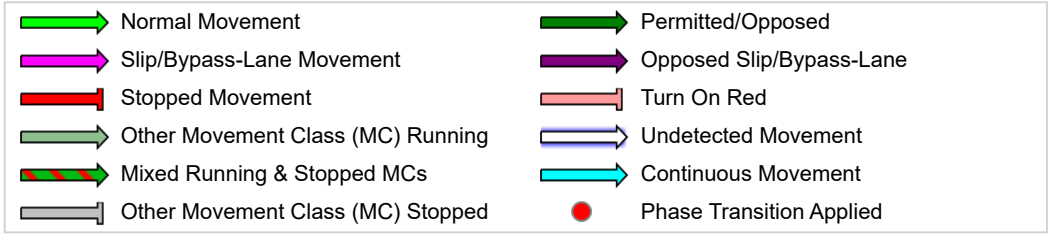
Phase	A	B	C
Phase Change Time (sec)	0	24	92
Green Time (sec)	18	62	52
Phase Time (sec)	24	68	58
Phase Split	16%	45%	39%
Phase Frequency (%)	100.0	100.0	100.0

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



Appendix F Lot Threshold Calculations

Providence West ROL 2, 817 Ripley Road

Traffic Impact Assessment

Stockland

SLR Project No.: 620.30351.02004

13 March 2026

Providence West ROL2 (and Lacebark) - LOT THRESHOLD Calculations

TABLE 1 **Providence West ROL1 (Lacebark)** (Note - each Duplex = 2 lots)

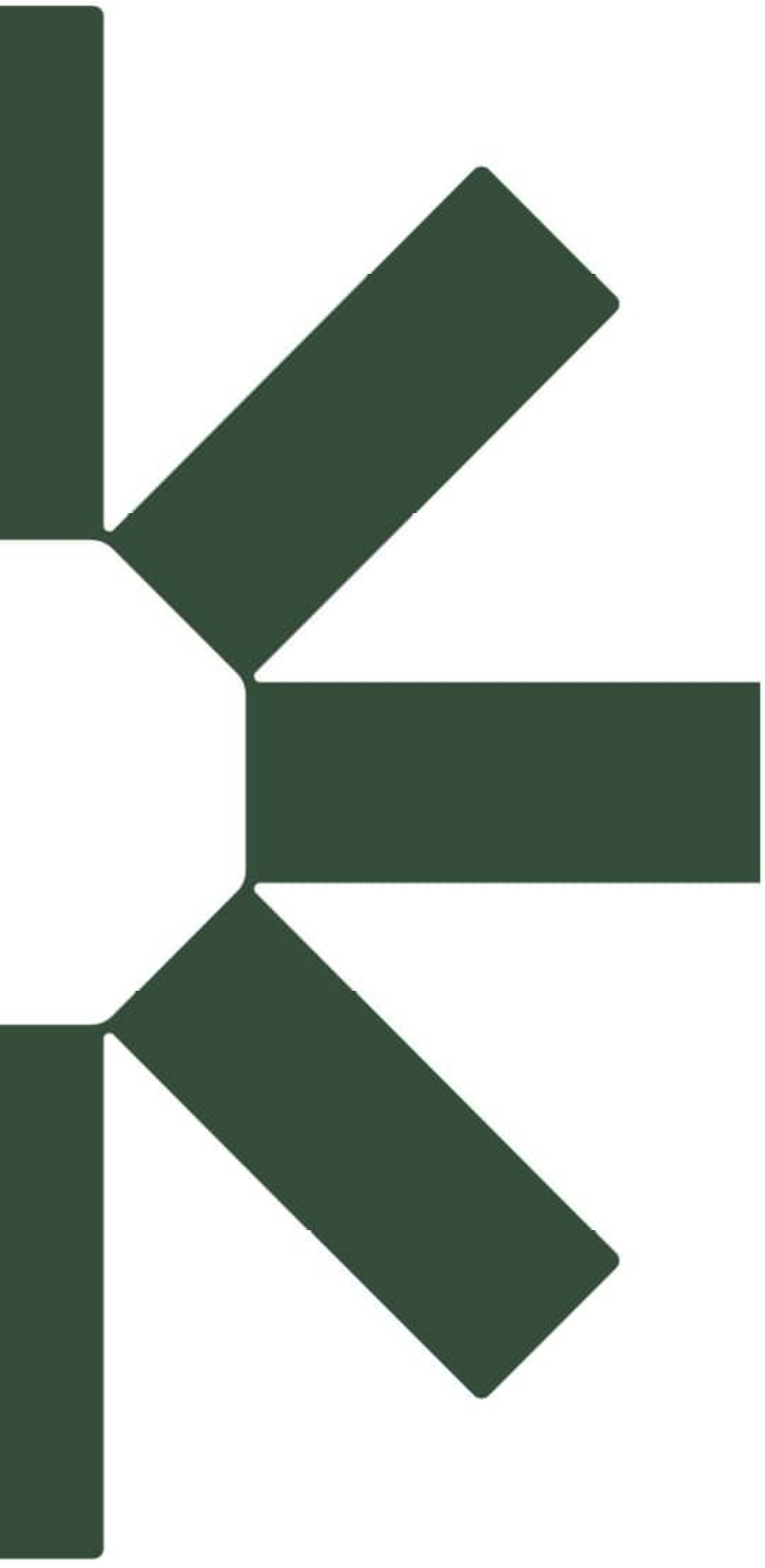
DATE	NEW LOTS SEALED / SOLD		TOTAL LOTS SEALED / SOLD (cumulative)	NEW DWELLINGS CONSTRUCTED	NEW DWELLINGS CONSTRUCTED (cumulative)	Daily Volume 8.0 vpd per dwelling	
01-Jun-26			0	0	0	0	
01-Jul-26	20	stage 14A	20	0	0	0	
01-Aug-26	19	stage 14A	40	0	0	0	
	1	stage 14B					
01-Sep-26	20	stage 14B	60	0	0	0	
01-Oct-26	7	stage 14B	80	0	0	0	
	13	stage 15					
01-Nov-26	6	stage 15	100	0	0	0	
	14	stage 16					
01-Dec-26	20	stage 16	120	0	0	0	
01-Jan-27	20	stage 16	140	20	20	160	
01-Feb-27	18	stage 17	160	20	40	320	
	2	stage 18A					
01-Mar-27	20	stage 18A	180	20	60	480	
01-Apr-27	20	stage 18B	200	20	80	640	
01-May-27	10	stage 18B	220	20	100	800	
	4	stage 18C					
	6	stage 19A					
01-Jun-27	20	stage 19A	240	20	120	960	
01-Jul-27	20	stage 19A	260	20	140	1,120	27 dwellings on ROAD 07 Lacebark
01-Aug-27	19	stage 19A	280	20	160	1,280	
	1	stage 19B					
01-Sep-27	7	stage 19B	287	20	180	1,440	
01-Oct-27			287	20	200	1,600	
01-Nov-27			287	20	220	1,760	
01-Dec-27			287	20	240	1,920	
01-Jan-28			287	20	260	2,080	
01-Feb-28			287	20	280	2,240	
01-Mar-28			287	7	**287**	2,296	
01-Apr-28			287	0	287	2,296	
01-May-28			287	0	287	2,296	
01-Jun-28			287	0	287	2,296	
01-Jul-28			287	0	287	2,296	300 lots
01-Aug-28			287	0	287	2,296	
01-Sep-28			287	0	287	2,296	
01-Oct-28			287	0	287	2,296	
01-Nov-28			287	0	287	2,296	
01-Dec-28			287	0	287	2,296	
01-Jan-29			287	0	287	2,296	300 dwellings
01-Feb-29			287	0	287	2,296	
01-Mar-29			287	0	287	2,296	
01-Apr-29			287	0	287	2,296	
01-May-29			287	0	287	2,296	3,000vpd
01-Jun-29			287	0	287	2,296	
01-Jul-29			287	0	287	2,296	
01-Aug-29			287	0	287	2,296	
01-Sep-29			287	0	287	2,296	
01-Oct-29			287	0	287	2,296	
01-Nov-29			287	0	287	2,296	
01-Dec-29			287	0	287	2,296	
01-Jan-30			287	0	287	2,296	
01-Feb-30			287	0	287	2,296	
01-Mar-30			287	0	287	2,296	
01-Apr-30			287	0	287	2,296	
01-May-30			287	0	287	2,296	
01-Jun-30			287	0	287	2,296	
01-Jul-30			287	0	287	2,296	
01-Aug-30			287	0	287	2,296	
01-Sep-30			287	0	287	2,296	
01-Oct-30			287	0	287	2,296	
01-Nov-30			287	0	287	2,296	
01-Dec-30			287	0	287	2,296	
01-Jan-31			287	0	287	2,296	
01-Feb-31			287	0	287	2,296	
01-Mar-31			287	0	287	2,296	
01-Apr-31			287	0	287	2,296	
01-May-31			287	0	287	2,296	
01-Jun-31			287	0	287	2,296	
01-Jul-31			287	0	287	2,296	
01-Aug-31			287	0	287	2,296	
01-Sep-31			287	0	287	2,296	
01-Oct-31			287	0	287	2,296	
01-Nov-31			287	0	287	2,296	
01-Dec-31			287	0	287	2,296	
01-Jan-32			287	0	287	2,296	
01-Feb-32			287	0	287	2,296	
01-Mar-32			287	0	287	2,296	

TABLE 2 **Providence West ROL2** 4.0 vpd per Retirement Living dwelling

DATE	NEW LOTS SEALED / SOLD		TOTAL LOTS SEALED / SOLD (cumulative)	NEW DWELLINGS CONSTRUCTED	NEW DWELLINGS CONSTRUCTED (cumulative)	Daily Volume 8.0 vpd per dwelling
01-Jun-26			0	0	0	0
01-Jul-26			0	0	0	0
01-Aug-26			0	0	0	0
01-Sep-26			0	0	0	0
01-Oct-26			0	0	0	0
01-Nov-26			0	0	0	0
01-Dec-26			0	0	0	0
01-Jan-27			0	0	0	0
01-Feb-27			0	0	0	0
01-Mar-27			0	0	0	0
01-Apr-27			0	0	0	0
01-May-27			0	0	0	0
01-Jun-27			0	0	0	0
01-Jul-27			0	0	0	0
01-Aug-27			0	0	0	0
01-Sep-27			0	0	0	0
01-Oct-27			0	0	0	0
01-Nov-27			0	0	0	0
01-Dec-27			0	0	0	0
01-Jan-28			0	0	0	0
01-Feb-28			0	0	0	0
01-Mar-28			0	0	0	0
01-Apr-28			0	0	0	0
01-May-28			0	0	0	0
01-Jun-28			0	0	0	0
01-Jul-28	0		0	0	0	0
01-Aug-28	0		0	0	0	0
01-Sep-28	0		0	0	0	0
01-Oct-28	0		0	0	0	0
01-Nov-28	0		0	0	0	0
01-Dec-28	0		0	0	0	0
01-Jan-29	0		0	0	0	0
01-Feb-29	0		0	0	0	0
01-Mar-29	0		0	0	0	0
01-Apr-29	0		0	0	0	0
01-May-29	0		0	0	0	0
01-Jun-29	0		0	0	0	0
01-Jul-29	20	stage 4	20	0	0	0
01-Aug-29	20	stage 4	40	0	0	0
01-Sep-29	20	stage 4	60	0	0	0
01-Oct-29	16	stage 4	80	0	0	0
	4	stage 1A				
01-Nov-29	3	stage 1A	100	0	0	0
	16	stage 1B				
	1	stage 1C				
01-Dec-29	8	stage 1C	120	0	0	0
	9	stage 1D				
	3	stage 3				
01-Jan-30	20	stage 3	140	20	20	160
01-Feb-30	20	stage 3	160	20	40	320
01-Mar-30	20	stage 3	180	20	60	480
01-Apr-30	13	stage 3	200	20	80	640
	7	stage 2A				
01-May-30	20	stage 2A	220	20	100	800
01-Jun-30	20	stage 2A	240	20	120	960
01-Jul-30	20	stage 2A	260	20	140	1,120
01-Aug-30	17	stage 2A	280	20	160	1,280
	3	stage 2B				
01-Sep-30	20	Stage 2B	300	20	180	1,440
01-Oct-30	16	Stage 2B	321	20	200	1,600
	5	duplex				
01-Nov-30	50	Retirement	371	20	220	1,760
01-Dec-30	50	Retirement	421	20	240	1,920
01-Jan-31	50	Retirement	471	20	260	2,080
01-Feb-31	50	Retirement	521	20	280	2,240
01-Mar-31	50	Retirement	571	20	300	2,400
01-Apr-31			571	21	**321**	2,568
01-May-31			571	50	371	2,768
01-Jun-31			571	50	421	3,168
01-Jul-31			571	50	471	3,568
01-Aug-31			571	50	521	3,968
01-Sep-31			571	50	**571**	4,368
01-Oct-31			571	0	571	*4,368*
01-Nov-31			571	0	571	*4,368*
01-Dec-31			571	0	571	*4,368*
01-Jan-32			571	0	571	*4,368*
01-Feb-32			571	0	571	*4,368*
01-Mar-32			571	0	571	*4,368*

TABLE 3 **TOTAL Daily Volume (VPD)**

max. volume threshold	*7,500*	*3,000*	*3,000*
DATE	Lacebark ROAD 01 (east of ROL1) (eastern end)	Lacebark ROAD 07 (south of Road 01) (northern end)	ROL2 ROAD 07 (south of ROL1) (northern end)
01-Jun-26	0	0	0
01-Jul-26	0	0	0
01-Aug-26	0	0	0
01-Sep-26	0	0	0
01-Oct-26	0	0	0
01-Nov-26	0	0	0
01-Dec-26	0	0	0
01-Jan-27	160	0	0
01-Feb-27	320	0	0
01-Mar-27	480	0	0
01-Apr-27	640	0	0
01-May-27	800	0	0
01-Jun-27	960	0	0
01-Jul-27	1,120	216	0
01-Aug-27	1,280	216	0
01-Sep-27	1,440	216	0
01-Oct-27	1,600	216	0
01-Nov-27	1,760	216	0
01-Dec-27	1,920	216	0
01-Jan-28	2,080	216	0
01-Feb-28	2,240	216	0
01-Mar-28	2,296	216	0
01-Apr-28	2,296	216	0
01-May-28	2,296	216	0
01-Jun-28	2,296	216	0
01-Jul-28	2,296	216	0
01-Aug-28	2,296	216	0
01-Sep-28	2,296	216	0
01-Oct-28	2,296	216	0
01-Nov-28	2,296	216	0
01-Dec-28	2,296	216	0
01-Jan-29	2,296	216	0
01-Feb-29	2,296	216	0
01-Mar-29	2,296	216	0
01-Apr-29	2,296	216	0
01-May-29	2,296	216	0
01-Jun-29	2,296	216	0
01-Jul-29	2,296	216	0
01-Aug-29	2,296	216	0
01-Sep-29	2,296	216	0
01-Oct-29	2,296	216	0
01-Nov-29	2,296	216	0
01-Dec-29	2,296	216	0
01-Jan-30	2,456	376	160
01-Feb-30	2,616	536	320
01-Mar-30	2,776	696	480
01-Apr-30	2,936	856	640
01-May-30	3,096	1,016	800
01-Jun-30	3,256	1,176	960
01-Jul-30	3,416	1,336	1,120
01-Aug-30	3,576	1,496	1,280
01-Sep-30	3,736	1,656	1,440
01-Oct-30	3,896	1,816	1,600
01-Nov-30	4,056	1,976	1,760
01-Dec-30	4,216	2,136	1,920
01-Jan-31	4,376	2,296	2,080
01-Feb-31	4,536	2,456	2,240
01-Mar-31	4,696	2,616	2,400
01-Apr-31	4,864	2,784	2,568
01-May-31	5,064	2,984	2,768
01-Jun-31	5,464	3,384	3,168
01-Jul-31	5,864	3,784	3,568
01-Aug-31	6,264	4,184	3,968
01-Sep-31	**6,664**	**4,584**	**4,368**
01-Oct-31	6,664	4,584	4,368
01-Nov-31	6,664	4,584	4,368
01-Dec-31	6,664	4,584	4,368
01-Jan-32	6,664	4,584	4,368
01-Feb-32	6,664	4,584	4,368
01-Mar-32	6,664	4,584	4,368



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