**17 July 2023**

**P2368 – Mamre Road Precinct – LOG East – Revised 2026 Modelling**

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| **FROM** | Arun Mohan (Transport Modeller); Ason Group | |
| **CC** | Edmund Cheung (Principal Lead); Ason Group | |
| **SUBJECT** | Mamre Road Precinct – Revised Aldington Road Corridor Modelling and Warrants Assessment | |

Dear Peter,

Ason Group have now completed the analysis of the road network conditions assuming the removal of the Southern Link Road (SLR) and the internal road network and demands which form part of the current SSDA applications relating to the broader Land Owners Group (LOG).

The analysis responds to the meeting held with Transport for NSW on 8 March and the subsequent agreed scoping study dated 15 March 2022. The analysis also considers and responds to the Request for information (RFI) received from the Department of Planning and Environment dated 7 June 2022.

TfNSW has reviewed the SIDRA modelling and Mamre Road Precinct – 2026 revised modelling report (Version 2) prepared by Ason Group dated 11 August 2022. Ason Group have remodelled the SIDRA model based on the comments received from TfNSW and the results are presented in technical memorandum *P1815m03_v4 MRP Log East 2026 Revised Modelling*. The model was approved by TfNSW on 5 October 2022.

The 2026 interim arrangement has been changed specifically for the Aldington Road intersections and Mamre Road / Abbotts Road only. We have considered all modifications related to pedestrian crossings and lane configurations based on the latest AT&L plan. A SIDRA analysis has been conducted and the corresponding report has been updated to reflect these changes.

## Background

The Mamre Road Precinct Land Owners Group previously submitted Aimsun modelling to TfNSW in June 2021 for 2026 interim modelling and 2036 ultimate road network.

The 2036 modelling was endorsed by TfNSW and informed the adopted Mamre Road DCP Road Network. TfNSW was requested to undertake a sensitivity analysis and remove the inclusion of the Southern Link Road from the 2026 road network assumptions.

A scoping study was issued to TfNSW for review and comment on the 15 March 2022 and generally agreed with the following additions:

- Option testing should be provided to understand the intersection thresholds.
- The 75% LOG GFA assumptions to be modelled under the revised scenario and adjusted, if required.
- Mamre Road (south of Erskine Park Road) lane assumptions are to be consistent with the existing (and approved) lane arrangements.
- An intersection warrant analysis is to be included for the key intersections along Aldington Road.

## Modelling Inputs Assumptions

For the purpose of this revised modelling, we adopted the previously agreed inputs documented in the TfNSW Mamre Road Modelling Outcomes memo, which forms the basis of all previous modelling completed for the precinct, including the June 2022 models submitted to TfNSW. A summary of the key input data and assumptions are listed below:

- Trip generation:
  - AM Peak: 0.23 trips per 100m$^2$
  - PM Peak: 0.24 trips per 100m$^2$
  - Daily: 2.91 trips per 100m$^2$
- Model time periods:
  - AM – 06:00 – 10:00
  - PM – 15:00 – 19:00
- Traffic demand and distribution:
  - Background growth per STFM LU19
  - Internal travel zones (WSEA) per TfNSW approved disaggregation
  - Mamre Road travel zones per trip generation profile based on approved Ason Group LUD Model
  - The traffic flows on Compass Drive and SLR diverted to Mamre Road in conjunction with the latest STFM data.
  - For each pedestrian crossing, a total of 10 pedestrians are assumed. This aligns with the findings from site inspections and surveys conducted in the Western Sydney Employment Area.

The location of the relevant sites forming part of the Land Owners Group are shown in **Figure 1**. The figure also demonstrates the extent of the road network (particularly internal road network) that forms part of the relevant applications currently under consideration by the Department of Planning and Environment (DPE).


**Figure 1: Road Network Extents and LOG Ownership**

**Figure 2** shows the modelled Aimsun network with all key intersections in the precinct along Mamre Road and Aldington Road. As agreed with TfNSW and Project Team, the SLR connection was removed between Compass Drive and Aldington Road. The road network assumed includes all proposed or approved intersection layouts and the internal road network that can be delivered by the Land Owners Group as part of their current SSDA's.

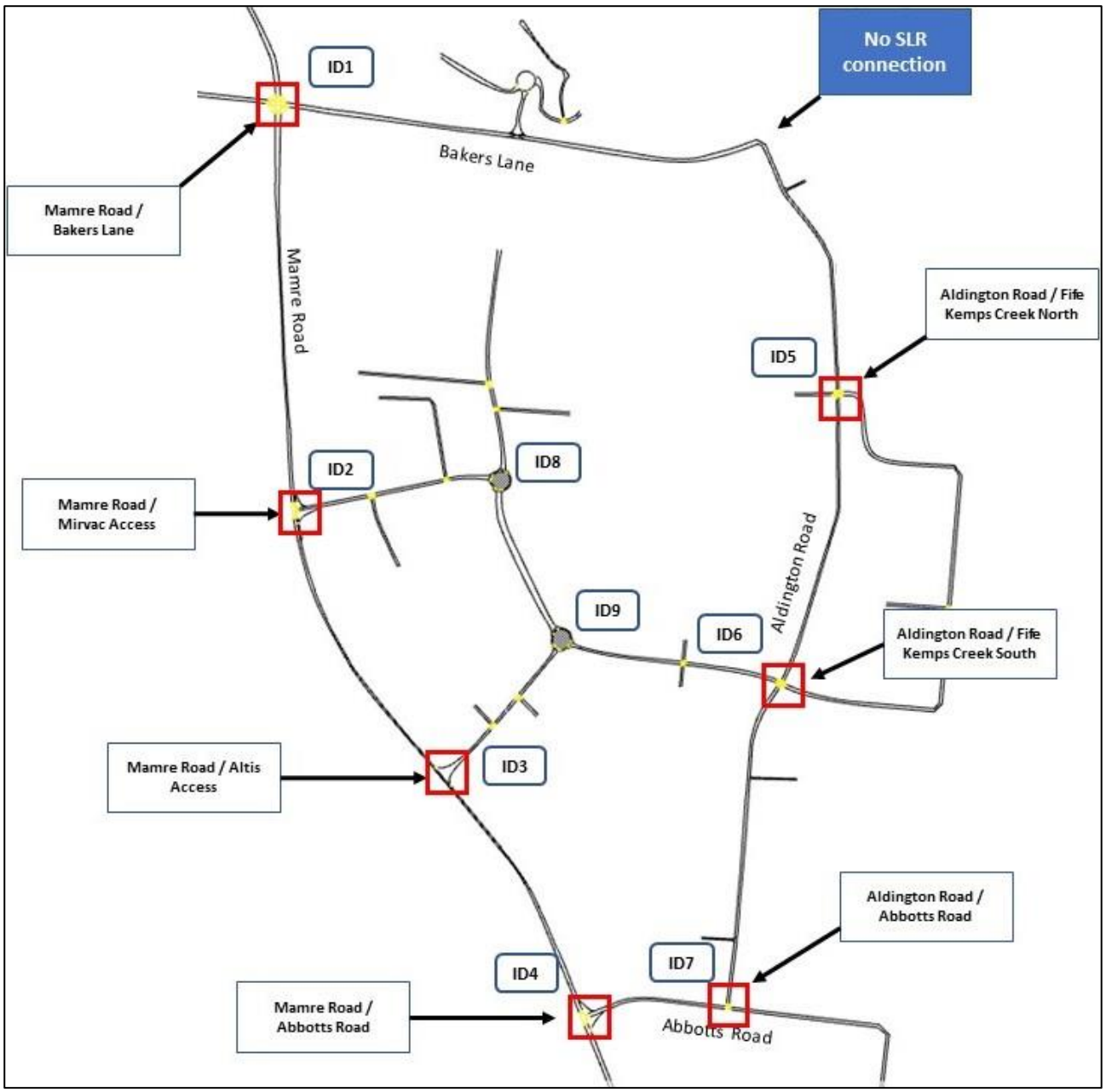



**Figure 2: Aimsun network with key intersections**

## Adopted Intersection Layouts

### Mamre Road / Bakers Lane

The adopted layout for the intersection of Mamre Road with Bakers Lane is shown in **Figure 3** below. The intersection reflects that currently under construction by Altis / Frasers JV as part of the relevant conditions of consent relating to SSDA 9522.

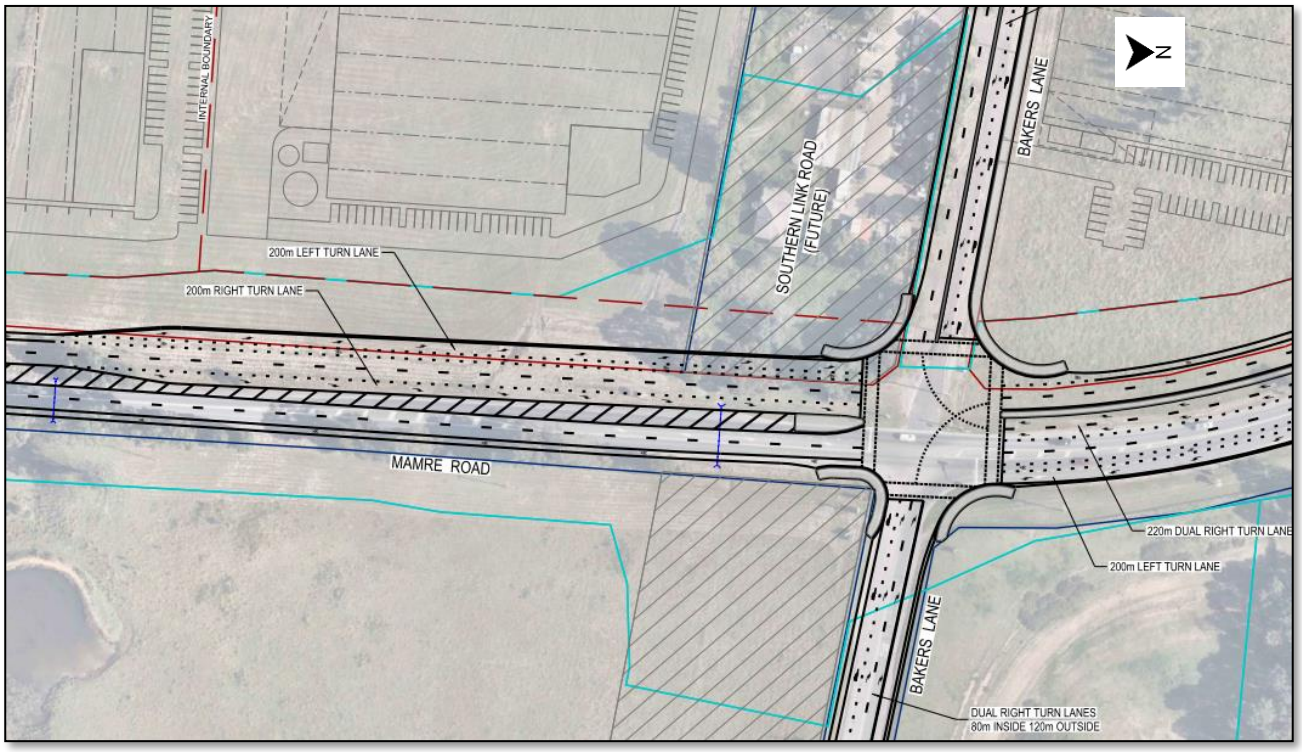



**Figure 3: Mamre Road / Bakers Lane** *Source: Altis*

### Mamre Road / New Road (Mirvac Access)

The adopted layout for the intersection of Mamre Road with the new connection to the Mirvac Access Road is shown in **Figure 4**. This layout is consistent with that required as part of approved SSD 10448.

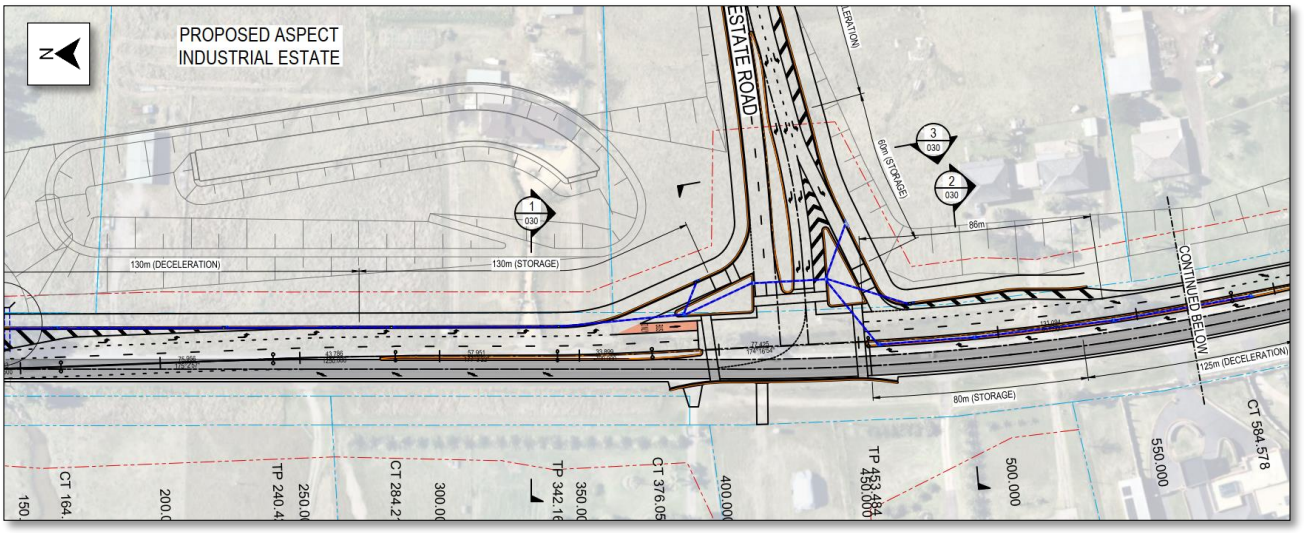



**Figure 4: Mamre Road / MIRVAC** *Source: MIRVAC Drawing No. 2021_19_SKJ0009*

### Mamre Road / Altis Left in Left out

The intersection providing access to the Altis development is shown in **Figure 5**. This access is consistent with the requirements of the recently endorsed DCP Road Network and forms part of the current application SSD 17647189 being assessed by DPE.

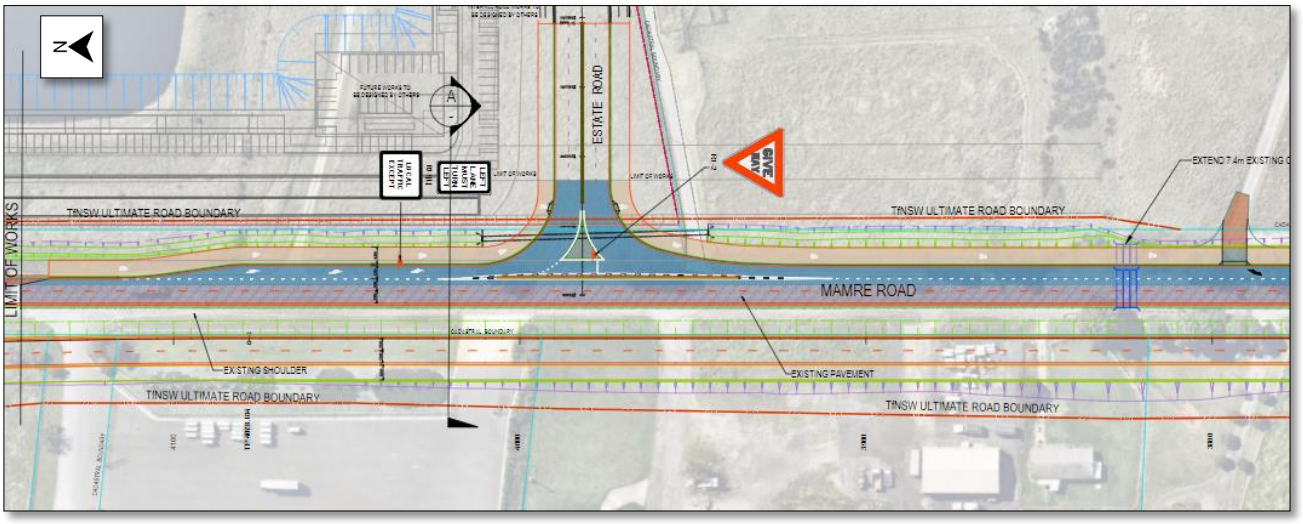



**Figure 5: Mamre Road / Altis Left in Left Out** *Source: Altis*

### Mamre Road / Abbotts Road

The layout adopted for the Mamre Road with Abbotts Road intersection is consistent with the VPA Letter of Offer and design previously presented to TfNSW.

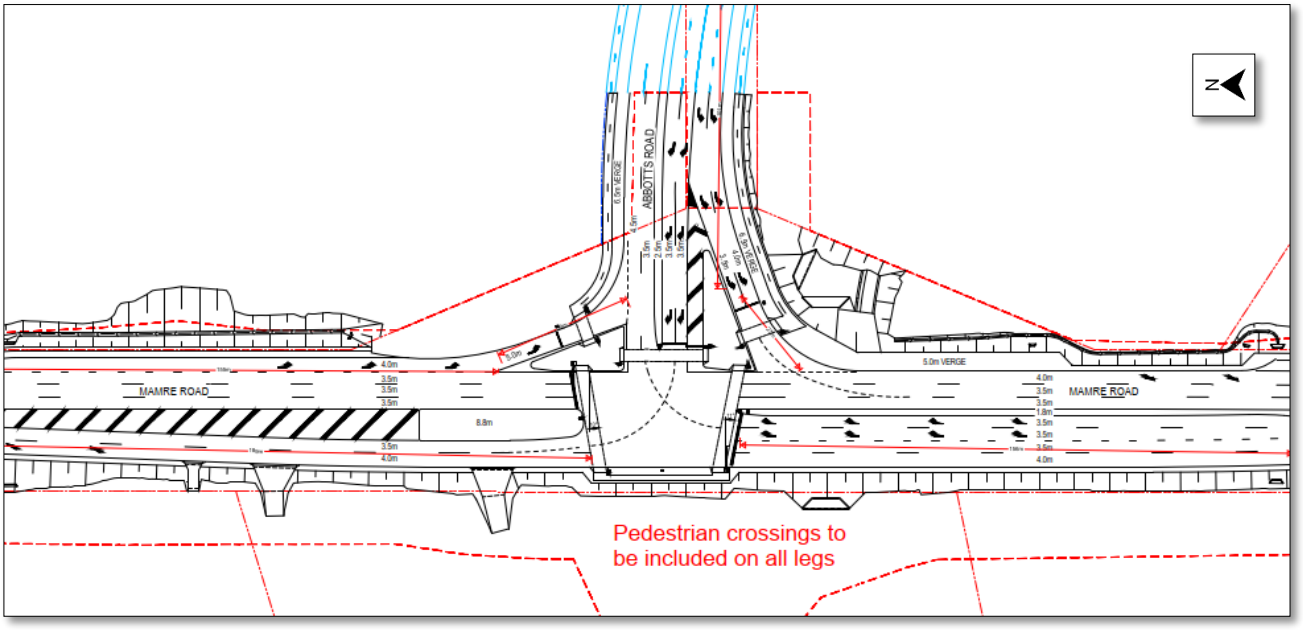



**Figure 6: Mamre Road / Abbotts Road** Source: AT&T Drawing No. 21-843-SKC159

### Aldington Road Corridor

The intersections along Aldington Road have been modelled as signalised intersections consistent with the endorsed DCP Road network. Three signalised junctions were included in the modelling including:

- Aldington Road / New Road (north) – providing access to Fife Kemps Creek (North) and Frasers North developments.
- Aldington Road / New Road (south) – similarly providing access to the southern extent of the Fife Kemps Creek (south) development and Frasers South development.
- Aldington Road / Abbotts Road.

The detailed layout of all intersections is shown in **Figure 8** to **Figure 10**.

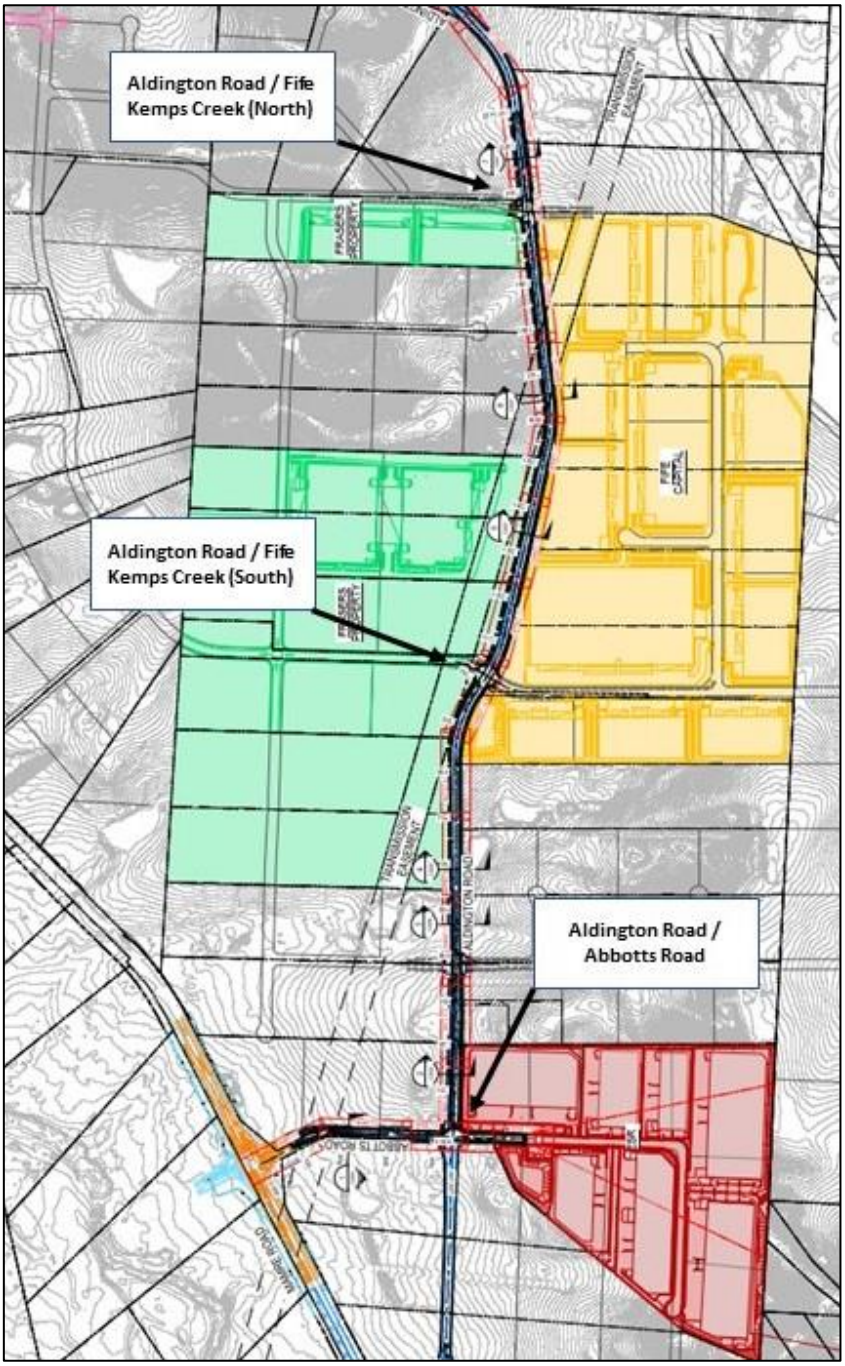



**Figure 7: Intersections along Aldington Road** *Source: AT&L Drawing No. 21-843-C502*

The detailed layout of each intersection is provided below. All layouts are consistent with the current VPA Offer proposed by the Land Owners Group. The layouts have also been generally endorsed by Penrith Council, subject to confirmation through modelling.

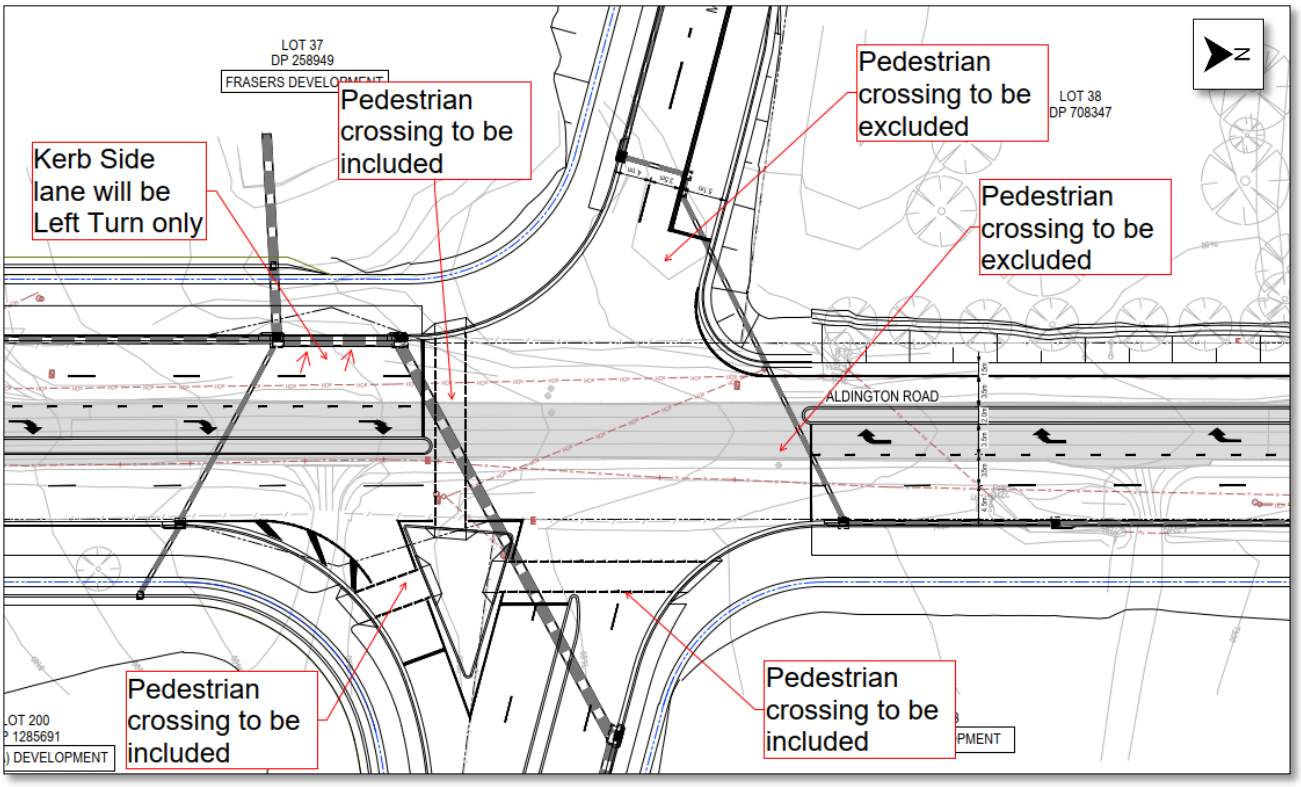



**Figure 8: Aldington Road / Fife Kemps Creek (north)** *Source: AT&L Drawing No. 21-843-SKC200*

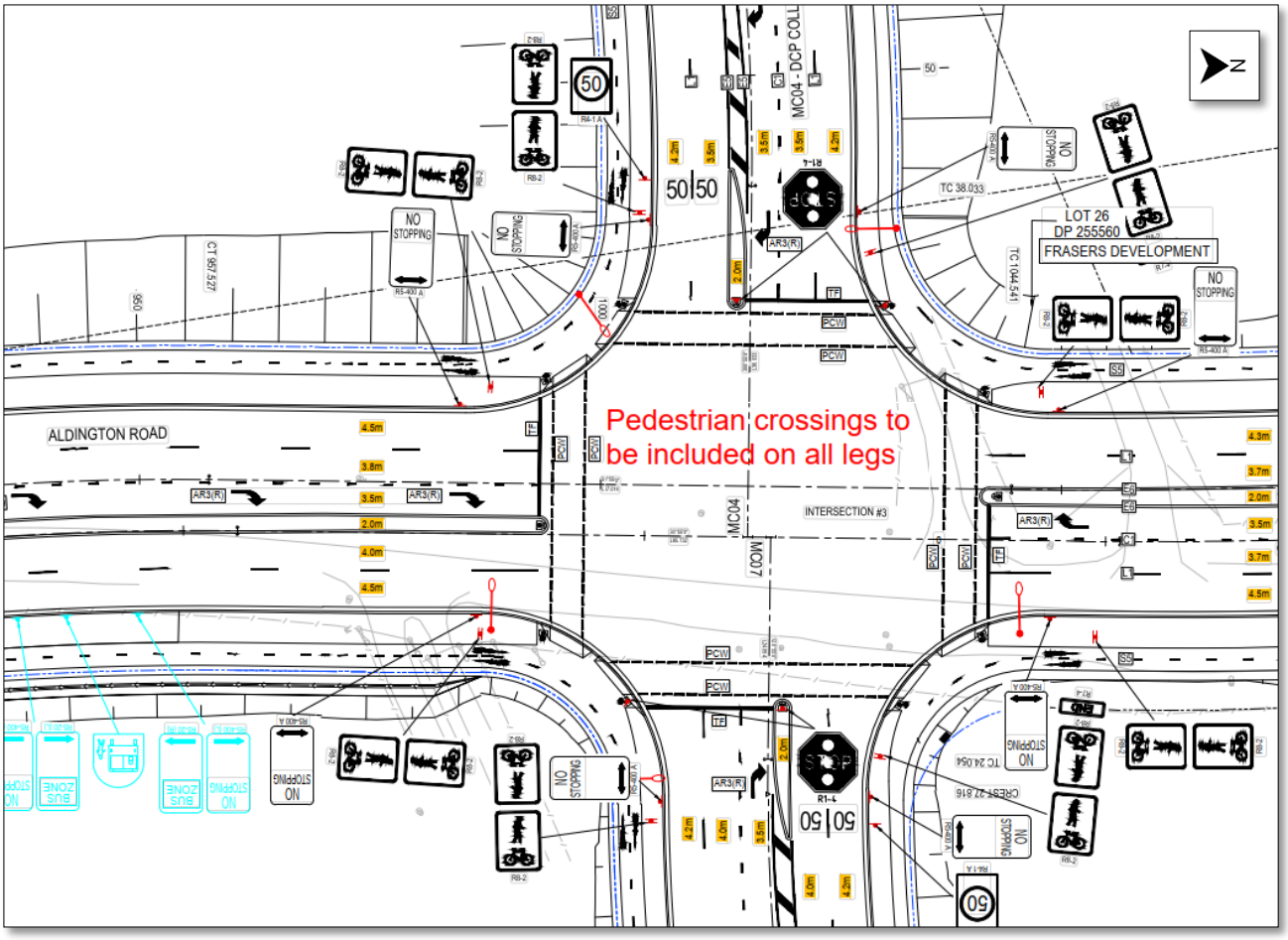



**Figure 9: Aldington Road / Fife Kemps Creek (south)** *Source: AT&L Drawing No. 21-843-C1309*

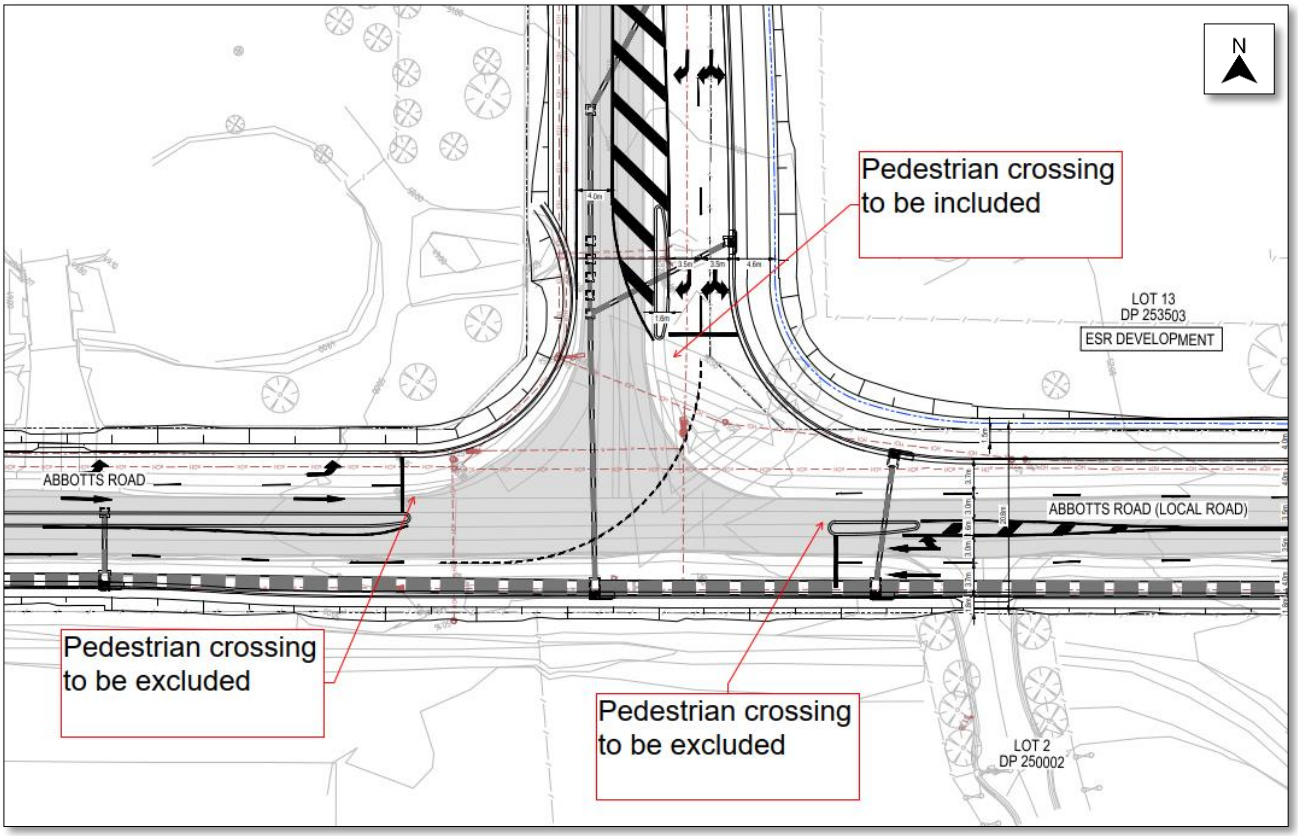



**Figure 10: Aldington Road / Abbotts Road (Interim Layout)** *Source: AT&L Drawing No. 21-843-SKC173*

## Scenario 1

An initial modelling assumption of 57.5% of the total GFA was adopted to identify the operation of the network. The scenario included:

- Approximately 990,215m$^2$ of the total GFA.
- The road network as currently proposed. That is, completely consistent with either the current SSDA applications, approved intersection layouts or current VPA offers.
- Internal road network assumed to be delivered by 2026.

The road network and intersection layouts are shown in **Figure 11.** The local road network, including Aldington Road and Abbotts Road (shown as Purple in the figure), will be delivered by developers and form part of the current SSD application under assessment by the department. For clarity, all purple roads can be delivered by 2026 via estate delivery or Works-in-Kind Agreements.

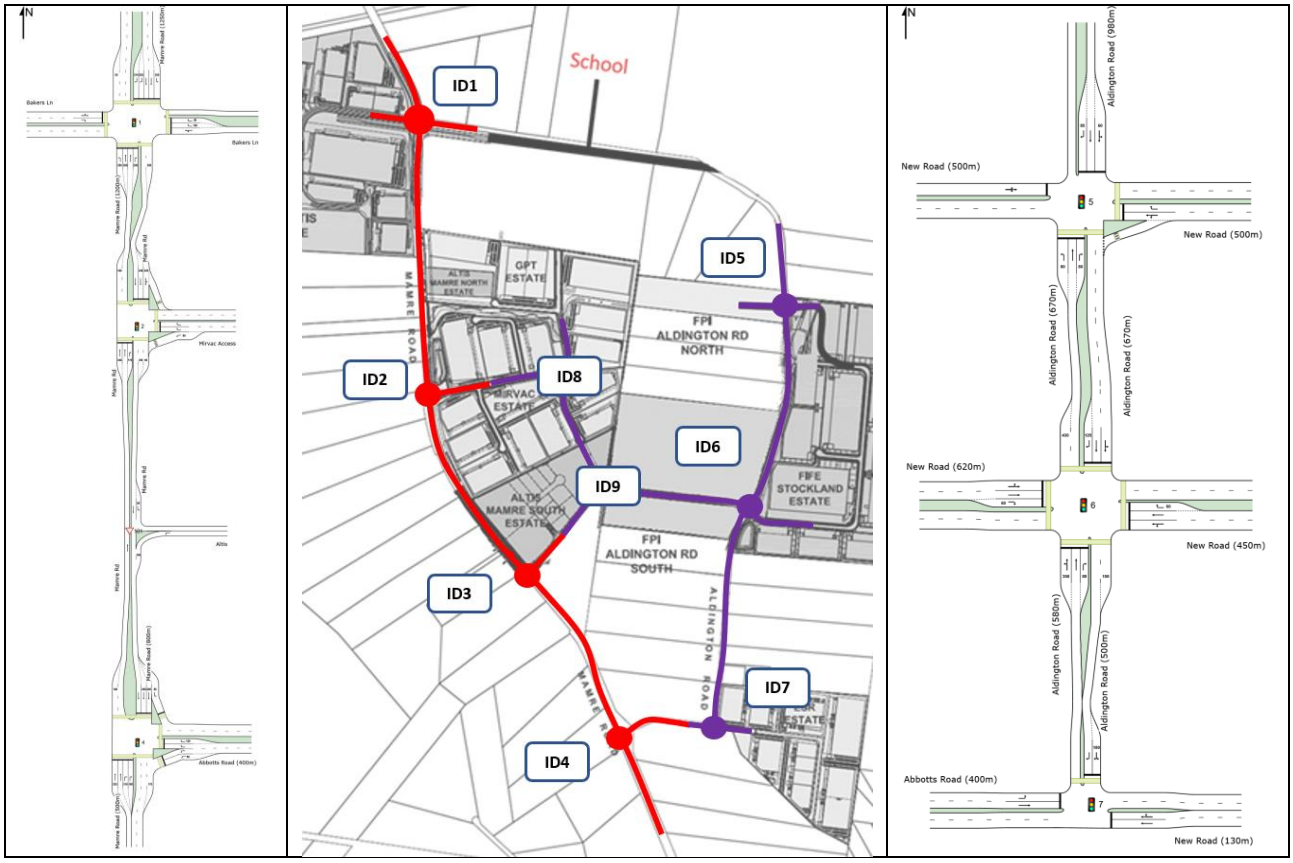



**Figure 11: Precinct Key Intersection under Scenario 1**

**Table 2** summarises the SIDRA results for Scenario 1 and indicates that the assumed layout in both Mamre Road and Aldington Road corridors complied with the revised TfNSW threshold. A detailed SIDRA summary of all intersections is shown in **Attachment 1**.

**TABLE 1 SCENARIO 1 – SIDRA RESULTS**

| ID | Intersection | Control | Approach | AM | | | TfNSW Guidelines Compliance | PM | | | TfNSW Guidelines Compliance |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DOS | LOS | Queue | | DOS | LOS | Queue | |
| 1 | Mamre Road / Bakers Lane | Signal | S | 0.73 | A | 175 | ✓ | 0.83 | B | 257 | ✓ |
| | | | E | 0.41 | E | 33 | x | 0.87 | F | 110 | x |
| | | | N | 0.81 | E | 199 | x | 0.87 | D | 315 | ✓ |
| | | | W | 0.57 | E | 64 | x | 0.69 | E | 77 | x |
| | | | **Overall** | **0.81** | **D** | **199** | ✓ | **0.87** | **D** | **315** | ✓ |
| 2 | Mamre Road / Mirvac Access | Signal | S | 0.50 | B | 132 | ✓ | 0.81 | B | 136 | ✓ |
| | | | E | 0.61 | D | 95 | ✓ | 0.68 | D | 113 | ✓ |
| | | | N | 0.70 | B | 213 | ✓ | 0.90 | D | 390 | ✓ |
| | | | **Overall** | **0.70** | **B** | **213** | ✓ | **0.90** | **C** | **390** | ✓ |
| 3 | Mamre Road / Altis Access | Priority (Left In Left Out) | S | 0.70 | A | 0 | ✓ | 0.76 | A | 0 | ✓ |
| | | | E | 0.10 | A | 0 | ✓ | 0.19 | A | 0 | ✓ |
| | | | N | 0.62 | A | 0 | ✓ | 0.92 | A | 0 | ✓ |
| | | | **Overall** | **0.70** | **A** | **0** | ✓ | 0.92 | A | 0 | ✓ |
| 4 | Mamre Road / Abbotts Road | Signal | S | 0.39 | A | 22 | ✓ | 0.63 | A | 70 | ✓ |
| | | | E | 0.19 | D | 14 | ✓ | 0.31 | D | 21 | ✓ |
| | | | N | 0.34 | A | 37 | ✓ | 0.60 | A | 95 | ✓ |
| | | | **Overall** | **0.39** | **A** | **37** | ✓ | 0.63 | A | 95 | ✓ |
| 5 | Aldington Road / Fife Kemps Creek (North) | Signal | S | 0.06 | C | 10 | ✓ | 0.11 | D | 12 | ✓ |
| | | | E | 0.13 | C | 20 | ✓ | 0.22 | C | 36 | ✓ |
| | | | N | 0.24 | B | 32 | ✓ | 0.12 | C | 13 | ✓ |
| | | | W | 0.17 | D | 20 | ✓ | 0.07 | D | 8 | ✓ |
| | | | **Overall** | **0.24** | **B** | **32** | ✓ | 0.22 | C | 36 | ✓ |
| 6 | Aldington Road / Fife Kemps Creek (South) | Signal | S | 0.15 | D | 17 | ✓ | 0.28 | D | 47 | ✓ |
| | | | E | 0.14 | C | 29 | ✓ | 0.28 | C | 54 | ✓ |
| | | | N | 0.06 | D | 7 | ✓ | 0.09 | C | 14 | ✓ |
| | | | W | 0.14 | C | 24 | ✓ | 0.15 | D | 1\3 | ✓ |
| | | | **Overall** | **0.15** | **C** | **29** | ✓ | **0.28** | **C** | **54** | ✓ |
| 7 | Aldington Road / Abbotts Road | Signal | E | 0.04 | A | 7 | ✓ | 0.07 | A | 13 | ✓ |
| | | | N | 0.03 | D | 3 | ✓ | 0.05 | D | 6 | ✓ |
| | | | W | 0.14 | A | 27 | ✓ | 0.27 | B | 58 | ✓ |
| | | | **Overall** | **0.14** | **B** | **27** | ✓ | **0.27** | **B** | **58** | ✓ |
| 8 | Internal Roundabout (Mirvac) | Roundabout | S | 0.12 | A | 10 | ✓ | 0.22 | A | 12 | ✓ |
| | | | N | 0.11 | A | 6 | ✓ | 0.06 | A | 4 | ✓ |
| | | | W | 0.03 | A | 2 | ✓ | 0.06 | A | 3 | ✓ |
| | | | **Overall** | **0.12** | **A** | **10** | ✓ | **0.22** | **A** | **12** | ✓ |
| 9 | Internal Roundabout (Altis) | Roundabout | S | 0.14 | A | 6 | ✓ | 0.22 | A | 7 | ✓ |
| | | | N | 0.05 | A | 2 | ✓ | 0.03 | A | 1 | ✓ |
| | | | W | 0.19 | A | 5 | ✓ | 0.08 | A | 2 | ✓ |
| | | | **Overall** | **0.19** | **A** | **6** | ✓ | 0.22 | A | 7 | ✓ |

The modelling demonstrates that all intersections and movements operate within the thresholds set by TfNSW. All legs of all intersections comply with the original thresholds set by TfNSW in 2020, with the exception of the eastern approach to the Mamre Road / Bakers Lane intersection which operate with LoS of

E and F and with delays of 63.3 and 72.7sec in the morning and evening peak period respectively. This minor non-compliance is acceptable noting that this intersection will likely be further upgraded in the short to medium term and that its overall LoS still meets the RMS thresholds for signalised intersections.

The modelling demonstrates that subject to the delivery of the nominated infrastructure, including the internal road networks (which from part of the current SSDA's) and the upgrades as proposed to the Mamre Road corridor (including those currently under construction or proposed as part of the relevant VPA Offer), the network can accommodate approximately 990,215m$^2$ of development.

## Scenario 2

A second modelling scenario assuming 75% of the total GFA was modelled to identify the additional road network upgrades required. The scenario included:

- 1,291,584m$^2$ of total GFA within the Precinct.
- The road network as adopted for Scenario 1 with the following additional upgrades:
  - Widening of Mamre Road to four lanes (2 northbound and 2 southbound) between Bakers Lane and the Mirvac access intersection.
  - Upgrade to Mamre Road / Bakers Lane
    - North Approach – additional short through lane and dedicated left slip lane
    - East Approach – Dedicated left slip lane
    - West approach – Dedicated left slip lane
    - South approach – additional short through lane, dedicated left slip lane and additional departure lane

**Figure 12** below shows the assumed Mamre Road and Aldington Road corridor, the required upgrades are listed below and highlighted blue in the figure.

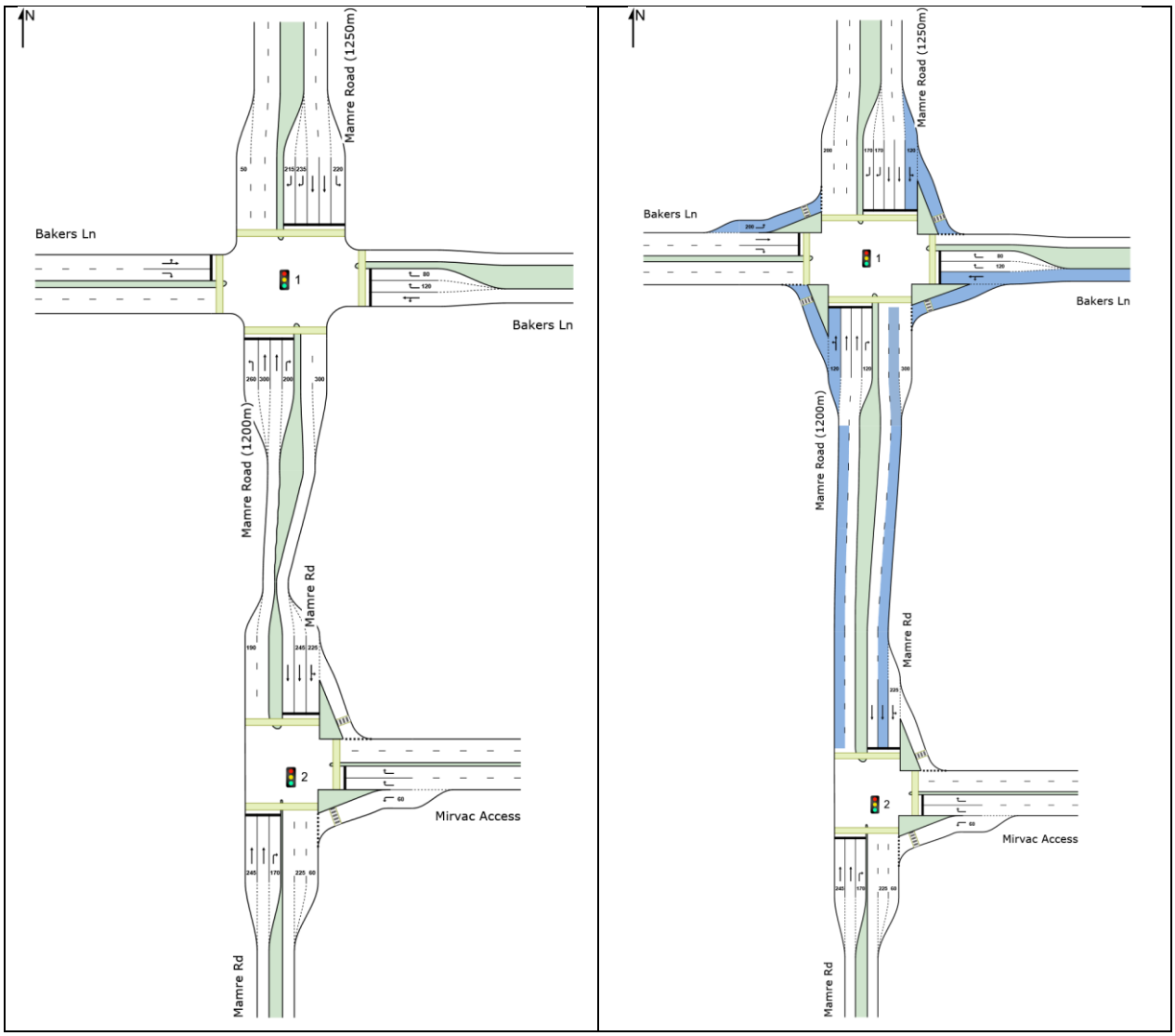



**Figure 12: Additional Upgrades under Scenario 2**

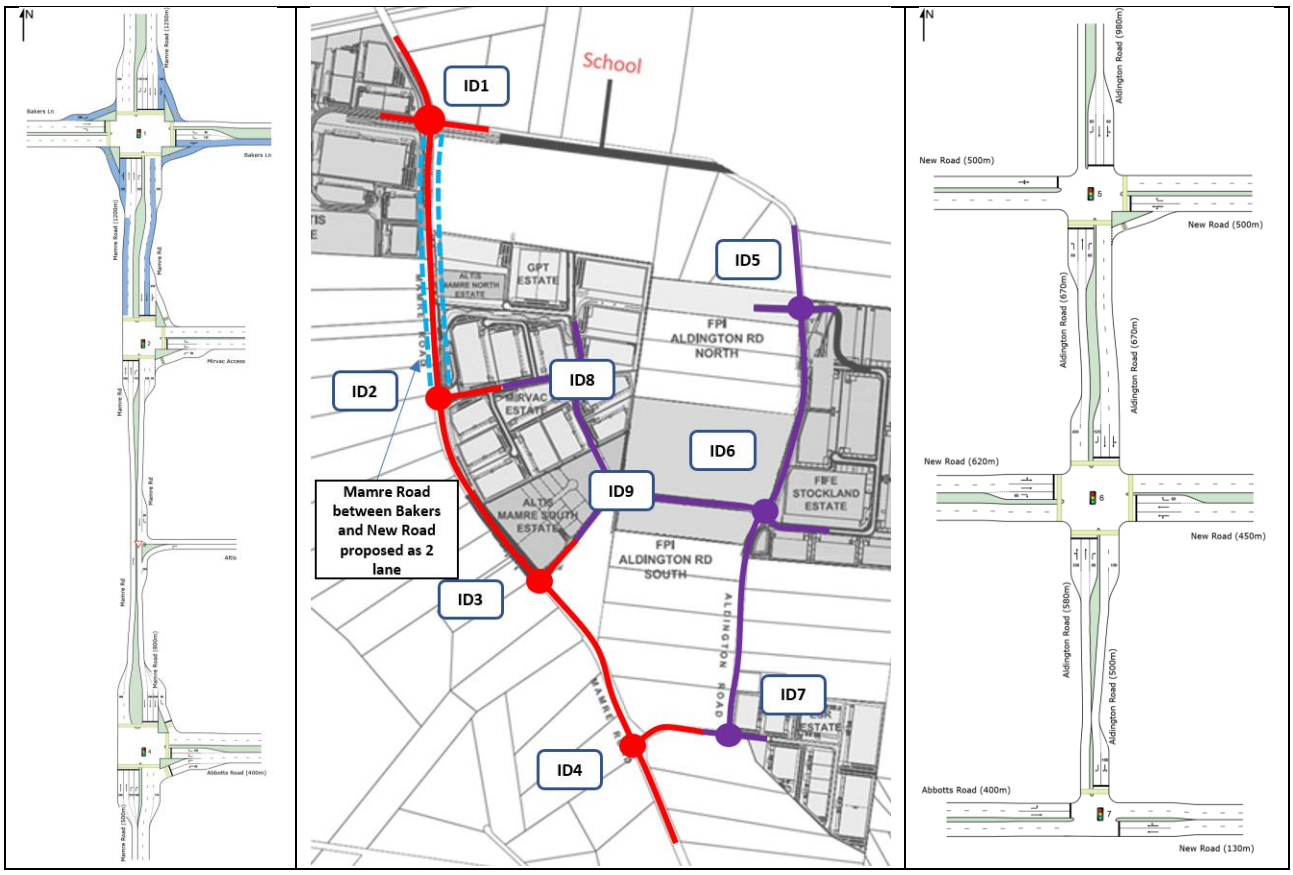



**Figure 13: Precinct Key Intersection under Scenario 2**

The results of the modelling are provided in **Table 3** with detailed SIDRA movement/layout summary included at **Attachment 2.** The modelling demonstrates:

- Generally improved network operation with reduced queues and delays at Bakers Lane with Mamre Road.
- All intersections and individual legs operate with delays and degree of saturation within the limits set by TfNSW exception of southern approach to the Mamre Road / Mirvac Access which operates at DOS 1.09. The SIDRA results show the south approach right turn reaches to the capacity, however the right turn queue length is under the assumed 170m storage bay and the south approach through movement performs at LOS A. This minor non-compliance is acceptable noting that Mamre road will likely further upgraded in the short to medium term and the overall LOS still meets the RMS thresholds for signalised intersection.
- Spare capacity at all intersections to enable further development above the 1,291,584m$^2$ modelled.

The additional upgrades identified can therefore accommodate at least the 1,291,584m$^2$ GFA of the relevant Land Owners Group. Additional capacity would also be available for smaller applications within the precinct that would unlikely result in any further degradation below the acceptable thresholds nominated by TfNSW.

It is noted that additional capacity may also be available within the network having consideration to the trip rates required for adoption. The rates, which are significantly higher than those established through surveys or inherent within the RMS Guide to Traffic Generating Developments, in our view overestimate the future transport demands and therefore reflect a worst-case analysis.

## TABLE 2 SCENARIO 2 – SIDRA RESULTS

| ID | Intersection | Control | Approach | AM | | | TfNSW Guidelines Compliance | PM | | | TfNSW Guidelines Compliance |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DOS | LOS | Queue | | DOS | LOS | Queue | |
| 1 | Mamre Road / Bakers Lane | Signal | S | 0.89 | D | 310 | ✓ | 0.88 | C | 315 | ✓ |
| | | | E | 0.30 | D | 31 | ✓ | 0.74 | D | 118 | ✓ |
| | | | N | 0.85 | B | 284 | ✓ | 0.84 | B | 271 | ✓ |
| | | | W | 0.29 | C | 41 | ✓ | 0.47 | D | 86 | ✓ |
| | | | **Overall** | **0.89** | **C** | **310** | ✓ | **0.88** | **C** | **315** | ✓ |
| 2 | Mamre Road / Mirvac Access | Signal | S | 0.61 | B | 146 | ✓ | 1.09 | C | 181 | x |
| | | | E | 0.71 | D | 136 | ✓ | 0.77 | D | 148 | ✓ |
| | | | N | 0.63 | B | 186 | ✓ | 0.93 | D | 452 | ✓ |
| | | | **Overall** | **0.71** | **B** | **186** | ✓ | **1.09** | **C** | **452** | x |
| 3 | Mamre Road / Altis Access | Priority (Left In Left Out) | S | 0.71 | A | 0 | ✓ | 0.86 | A | 0 | ✓ |
| | | | E | 0.13 | A | 0 | ✓ | 0.32 | C | 0 | ✓ |
| | | | N | 0.61 | A | 0 | ✓ | 0.93 | C | 0 | ✓ |
| | | | **Overall** | **0.71** | **A** | **0** | ✓ | **0.93** | **C** | **0** | ✓ |
| 4 | Mamre Road / Abbotts Road | Signal | S | 0.51 | A | 31 | ✓ | 0.84 | B | 105 | ✓ |
| | | | E | 0.07 | D | 8 | ✓ | 0.53 | D | 38 | ✓ |
| | | | N | 0.36 | A | 51 | ✓ | 0.64 | A | 110 | ✓ |
| | | | **Overall** | **0.51** | **A** | **51** | ✓ | **0.84** | **B** | **110** | ✓ |
| 5 | Aldington Road / Fife Kemps Creek (North) | Signal | S | 0.05 | C | 9 | ✓ | 0.20 | C | 33 | ✓ |
| | | | E | 0.20 | D | 29 | ✓ | 0.25 | C | 42 | ✓ |
| | | | N | 0.28 | B | 40 | ✓ | 0.09 | B | 15 | ✓ |
| | | | W | 0.10 | D | 11 | ✓ | 0.11 | D | 15 | ✓ |
| | | | **Overall** | **0.28** | **B** | **40** | ✓ | **0.25** | **C** | **42** | ✓ |
| 6 | Aldington Road / Fife Kemps Creek (South) | Signal | S | 0.21 | D | 35 | ✓ | 0.40 | D | 74 | ✓ |
| | | | E | 0.23 | C | 39 | ✓ | 0.41 | C | 76 | ✓ |
| | | | N | 0.03 | C | 5 | ✓ | 0.18 | C | 29 | ✓ |
| | | | W | 0.12 | D | 18 | ✓ | 0.24 | D | 36 | ✓ |
| | | | **Overall** | **0.23** | **C** | **39** | ✓ | **0.41** | **C** | **76** | ✓ |
| 7 | Aldington Road / Abbotts Road | Signal | E | 0.04 | A | 7 | ✓ | 0.10 | A | 18 | ✓ |
| | | | N | 0.04 | D | 3 | ✓ | 0.19 | D | 23 | ✓ |
| | | | W | 0.17 | B | 36 | ✓ | 0.47 | B | 115 | ✓ |
| | | | **Overall** | **0.17** | **B** | **36** | ✓ | **0.47** | **B** | **115** | ✓ |
| 8 | Internal Roundabout (Mirvac) | Roundabout | S | 0.21 | A | 16 | ✓ | 0.30 | A | 18 | ✓ |
| | | | N | 0.07 | A | 4 | ✓ | 0.09 | A | 4 | ✓ |
| | | | W | 0.19 | A | 10 | ✓ | 0.15 | A | 9 | ✓ |
| | | | **Overall** | **0.21** | **A** | **16** | ✓ | **0.30** | **A** | **18** | ✓ |
| 9 | Internal Roundabout (Altis South) | Roundabout | S | 0.14 | A | 10 | ✓ | 0.28 | A | 16 | ✓ |
| | | | N | 0.13 | A | 8 | ✓ | 0.12 | A | 9 | ✓ |
| | | | W | 0.11 | A | 5 | ✓ | 0.10 | A | 4 | ✓ |
| | | | **Overall** | **0.14** | **A** | **10** | ✓ | 0.28 | A | 16 | ✓ |

## Ultimate Precinct Delivery

Based on the modelling completed for the corridor the following additional works must be considered to release further capacity in the network to enable further development within the precinct:

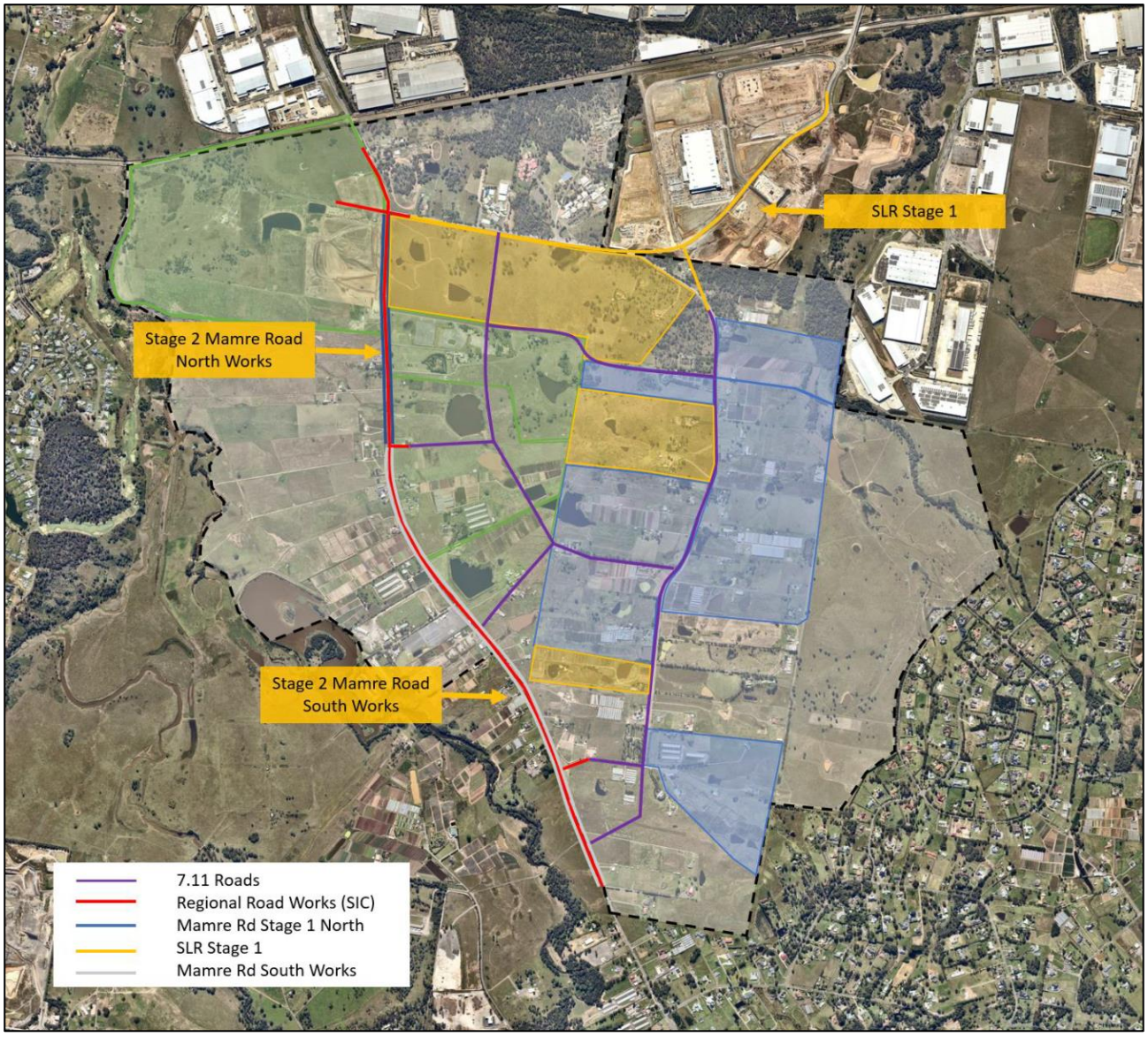



**Figure 13: Additional Road Network Upgrades**

The main constraint within the network is the lack of north-south capacity. The logical next stage of works is the delivery of the SLR Stage 1, which would provide a connection between Mamre Road and Compass Drive (including a new connection with Aldington Road). This connection would provide direct access to Lenore Drive, reducing the reliance on Erskine Park Road and Mamre Road and providing an alternate route to the Westlink M7 and M4 Motorway.

Additional localised capacity can also be achieved through the further widening of Mamre Road, between Mirvac Site Access to Kerrs Road (see **Figure 13**). This widening would provide additional north-south capacity.

The delivery of SLR combined with regional network upgrades assumed in the Governments Strategic Modelling and Works Programs will support the delivery of the Precinct. These upgrades are to be programmed and coordinated by TfNSW.

## Traffic Signal Warrant

At the request of TfNSW a traffic warrant assessment has been completed for the design horizon year of 2026 (Scenario 2) and 2036 under full development of the precinct. It is noted that whilst this assessment has been completed, the need for signals should be considered across multiple criteria and not just the warrants in isolation, particularly for Greenfield developments.

The RMS Traffic Signal Design – Section 2 stipulates:

*"traffic signals are sometimes installed due to public pressure or an administrative directive irrespective of the general warrants".*

In the case of the Aldington Road intersections the Mamre Road Precinct DCP can be seen as an administrative directive, that identifies where signalised intersections are to be located. The Penrith City Council has also made it clear that they prefer signals in part due to the delivery of what is viewed at the ultimate solution for the intersections, which has cost and delivery implications.

Notwithstanding this, a traffic warrant assessment was conducted in accordance with the guidelines set forth by the RTA in the *Traffic Signal Design Section 2 – Warrants,* the traffic flow warrants are listed below:

- Traffic Demand:
  - The major road flow exceeds 600 vehicles/hour in each direction, and
  - The minor road flow exceeds 200 vehicles/hours in one direction.
- Continuous Traffic:
  - The major road flow exceeds 900 vehicles/hour in each direction, and
  - The minor road flow exceeds 100 vehicles/hour in one direction.

**Table 3** below summarizes the traffic signal warrant for intersections along Mamre Road and Aldington Road corridor for the 2026 and 2036 scenarios. A detailed analysis of each movement and approach is also provided in **Attachment 3**.

**TABLE 4 TRAFFIC SIGNAL WARRANT**

| # | Key Intersections | Traffic Signal Warrant Satisfied – 2026 (Scenario 2) | | Traffic Signal Warrant Satisfied – 2036 | |
|---|---|---|---|---|---|
| | | AM | PM | AM | PM |
| 1 | Mamre Road / Bakers Lane | ✓ | ✓ | ✓ | ✓ |
| 2 | Mamre Road / Mirvac Access | ✓ | ✓ | ✓ | ✓ |
| 3 | Mamre Road / Abbotts Road | ✓ | ✓ | ✓ | ✓ |
| 4 | Aldington Road / Fife Kemps Creek (North) | x | x | ✓ | ✓ |
| 5 | Aldington Road / Fife Kemps Creek (south) | x | x | ✓ | ✓ |
| 6 | Aldington Road / Abbotts Road | x | x | ✓ | ✓ |

The warrant assessment demonstrates compliance with all proposed signalised intersections by 2036.

Whilst technical traffic flow warrants are not met under the 2026 Scenario, further considerations must be considered as noted in the RMS Traffic Signal Design strategic direction. The relevant qualitative merits considered under the Guide are outlined in **Table 5**.

**TABLE 5 CONSIDERATIONS IN SIGNALISATION OF ALDINGTON ROAD**

| Factors for Consideration | Application to Aldington Road |
|---|---|
| **Traffic flows** | The 2026 modelling does not meet the traffic flows criterion in the guide. However, the 2026 scenario only assumes development on the Mamre Road Precinct Landowner Group sites.<br><br>The 2036 modelling of the precinct, which is the ultimate scenario, does meet the traffic flow warrant criterion.<br><br>Given the current demand for zoned industrial land, it is noted there are more development applications along this corridor other than the Mamre Road Precinct Landowners Group. These sites will contribute to overall traffic generation as the Precinct is delivered. |
| **Traffic conflicts** | The relationship and interaction between trucks, light vehicles and pedestrians is a significant criterion for assessment of warrants. The strategic planning for Mamre Road Precinct identified the need to create an employment precinct which contributes toward all forms of transport, including cycling and walking.<br><br>The delivery of signalised intersections enables safe crossings along the corridor for pedestrians and cyclists. Given the nature of trucks entering and exiting this corridor and their restricted visibility compared to light vehicles, traffic signals are required to minimise traffic conflict and enable a pedestrian safe environment along the corridor. |
| **Traffic accident statistics** | The statistics on traffic accidents is unknown for the upgraded corridor. It is viewed that the delivery of signalised intersections along the corridor will be a preventative measure to minimise risk associated with this criterion |
| **Pedestrian requirements** | Pedestrian access is being encouraged with a requirement for Green Travel Plans, bus routes. Crossing facilities must be provided within the corridor to facilitate safe pedestrian movements |
| **Access to major roads** | Aldington Road and Abbotts Road are designated as Distributor Industrial roads under the Mamre Road Precinct DCP.<br><br>As the precinct road network is delivered, Abbotts Road and Aldington Road will become a major thoroughfare connecting Mamre Road to the future Southern Link Road. The precinct-wide modelling identifies a significant increase of traffic flows along this corridor once Southern Link Road is delivered, as it provides the most direct link route from Erskine Park to Elizabeth Drive. |
| **Cost of installation** | The cost of installation of signals along Abbotts and Aldington Roads is factored into the Mamre Road Precinct Section 7.11 Contribution Plan and will be funded by developer contributions.<br><br>Future costs and redundant works have no source of funding.<br><br>The cost to deliver signalised intersection in today's dollars will be significantly cheaper compared to future augmentation. Therefore, it is the Government's best value for money to deliver the signals today versus future as money and levy mechanism is identified and developers are wiling to assist in delivering the ultimate in line with their forecasted delivery programs. This is not guaranteed in the future if signalised intersections are not delivered with the proposed planning agreement with Council |
| **Availability of funds** | The funds to deliver signalised intersections and the upgrade of Abbotts and Aldington Roads are available now via developers (under Section 7.11 |

| | |
|---|---|
| | contributions and works-in-kind). Further, Penrith City Council has been awarded funding by NSW Government to deliver the ultimate corridor including signalised intersections. This funding has been awarded on the basis the ultimate corridor can be delivered in line with delivery of industrial estates, which is occurring now and not in the future. |
| **Maintenance Costs** | Maintenance of signals, in the short term, can be facilitated via developers through either the planning agreement or contribution to ensure no additional costs are incurred in lieu of required traffic flows. |
| **Practicality** | The delivery of the ultimate outcome would simplify land acquisition and delivery of infrastructure. It significantly reduces the risk to fund future upgrades and minimises redundant works by developers or Council. |
| **Feasibility** | Traffic signals have been developed in the concept design and costing of the Section 7.11 contribution plan.<br><br>This concept design has been endorsed by Council and DPE- Strategic Planning teams. It is understood a housekeeping amendment is currently being drafted based on the ultimate alignment. It does not consider any intersection treatments outside of signalised intersections as per the DCP. |
| **Signposted speed limit is not more than 80km/hr** | Signposted speed limit expected to be 60km/hr. |

Noting the above, there is sufficient justification for TfNSW to approve signals along Aldington Road, consistent with he recently endorsed Mamre Road DCP. The construction of signals will improve traffic and road user safety with minimal, if any, impact to TfNSW. Furthermore, there is sufficient risk that funding for future signalisation of the subject intersections would not be available in the future.

## Summary

Based on the analysis and set of assumptions outlined above the following conclusion have been reached:

### Scenario 1

- The road network currently proposed or under construction by Land Owners Group members can deliver up to 990,215 $m^2$.
- All intersections along Aldington Road corridor complied with the TfNSW threshold for both delays and practical capacity. At Mamre Road / Bakers Lane intersection, the eastern approach operates with LoS E and F in the AM and PM peak period respectively. However, this minor non-compliance is acceptable as the intersection will likely to be upgraded in the short to medium term and the overall intersection LoS still meets the RMS guidelines.

### Scenario 2

- To support the additional GFA (up to 1,291,584$m^2$) some upgrades to the road network would be required to retain the operating thresholds set by TfNSW.
- These upgrades would include:
  - Widening of Mamre Road to four lanes (2 northbound and 2 southbound) between Bakers Lane and the Mirvac access intersection.
  - Upgrade to Mamre Road / Bakers Lane.
- The modelling demonstrates that with the aforementioned upgrades all intersection along Mamre Road and Aldington corridor operates at LoS C or better.

### Ultimate Precinct Delivery

- Additional capacity can be delivered within the precinct through additional road network upgrades.
- These upgrades have not been considered as part of this analysis however would include:
  - Delivery of SLR Stage 1.
  - Duplication of Mamre Road through lanes, south of the Mirvac Access Road.
  - Regional road network upgrades previously identified by TfNSW and included in the current strategic modelling for WSEA and broader Aerotropolis.

### Traffic Signal Warrant

- Under the modelled scenarios, the traffic signal warrants on Aldington Road are not met in the short and medium term. However, the 2036 modelling confirms Aldington Road corridor requires signalised intersection.
- Traffic signal warrants are not the only criteria that should be considered in TfNSW's assessment and consideration of all road users and the recently endorsed DCP must also be considered.

Based on the above, we see no impediment to the approval of the current SSDA applications that form the Land Owners Group East. Additionally, the modelling demonstrates that the proposed road network meets all of TfNSW requirements.

Yours sincerely,

**Arun Mohan**

***Transport Modeller***

**E** arun.mohan@asongroup.com.au

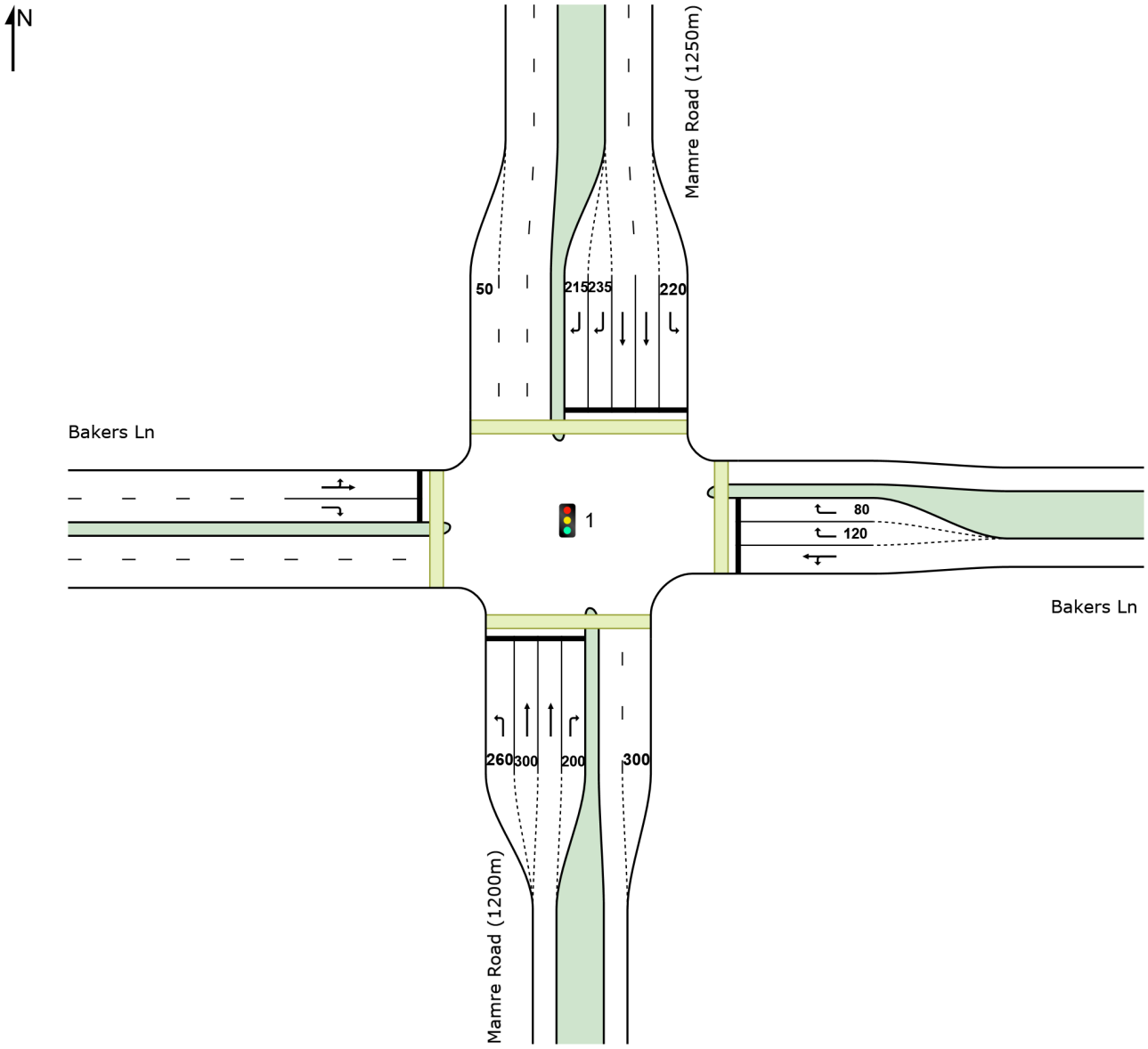
# Attachment 1 – Scenario 1 SIDRA Results

# SITE LAYOUT

## Site: 1 [[ID: 1] (AM) Bakers Lane / Mamre Road - AM (Site Folder: 2026 - AM Scenario 1)]

Bakers Lane / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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





Organisation: ASON GROUP PTY LTD | Licence: NETWORK / 1PC | Created: Sunday, 16 July 2023 7:31:19 PM
Project: C:\Users\Arun Mohan\Desktop\Ason Group\P2368 - Aldington road Sidra ped crossing\SIDRA - Amend\P2368_LOGE_2026_Scenario 1.sip9

# MOVEMENT SUMMARY

## Site: 1 [[ID: 1] (AM) Bakers Lane / Mamre Road - AM (Site Folder: 2026 - AM Scenario 1)]

Bakers Lane / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (1200m) | | | | | | | | | | | | | | |
| 1 | L2 | 21 | 15 | 22 | 70.3 | 0.032 | 13.0 | LOS A | 0.3 | 4.8 | 0.29 | 0.67 | 0.29 | 60.2 |
| 2 | T1 | 1242 | 245 | 1307 | 19.7 | 0.727 | 11.8 | LOS A | 19.4 | 174.7 | 0.55 | 0.51 | 0.55 | 72.3 |
| 3 | R2 | 45 | 7 | 47 | 15.6 | * 0.589 | 73.2 | LOS F | 3.0 | 23.6 | 1.00 | 0.77 | 1.08 | 40.3 |
| Approach | | 1308 | 267 | 1377 | 20.4 | 0.727 | 14.0 | LOS A | 19.4 | 174.7 | 0.57 | 0.52 | 0.57 | 70.6 |
| East: Bakers Ln | | | | | | | | | | | | | | |
| 4 | L2 | 2 | 1 | 2 | 50.0 | 0.034 | 210.1 | LOS F | 0.2 | 1.6 | 0.95 | 0.63 | 0.95 | 41.2 |
| 5 | T1 | 1 | 0 | 1 | 0.0 | 0.034 | 57.9 | LOS E | 0.2 | 1.6 | 0.95 | 0.63 | 0.95 | 34.6 |
| 6 | R2 | 149 | 9 | 157 | 6.0 | * 0.411 | 61.4 | LOS E | 4.4 | 32.7 | 0.98 | 0.77 | 0.98 | 43.3 |
| Approach | | 152 | 10 | 160 | 6.6 | 0.411 | 63.3 | LOS E | 4.4 | 32.7 | 0.97 | 0.77 | 0.97 | 43.2 |
| North: Mamre Road (1250m) | | | | | | | | | | | | | | |
| 7 | L2 | 362 | 0 | 381 | 0.0 | 0.248 | 10.3 | LOS A | 5.6 | 39.4 | 0.28 | 0.70 | 0.28 | 63.8 |
| 8 | T1 | 1633 | 230 | 1719 | 14.1 | * 0.814 | 81.0 | LOS F | 23.6 | 198.7 | 0.52 | 0.48 | 0.52 | 74.7 |
| 9 | R2 | 227 | 34 | 239 | 14.9 | 0.715 | 67.8 | LOS E | 7.3 | 61.4 | 1.00 | 0.85 | 1.13 | 41.8 |
| Approach | | 2222 | 264 | 2339 | 11.9 | 0.814 | 68.1 | LOS E | 23.6 | 198.7 | 0.53 | 0.55 | 0.54 | 68.5 |
| West: Bakers Ln | | | | | | | | | | | | | | |
| 10 | L2 | 101 | 30 | 106 | 29.7 | 0.566 | 60.8 | LOS E | 6.1 | 64.0 | 0.97 | 0.80 | 0.97 | 42.5 |
| 11 | T1 | 1 | 0 | 1 | 0.0 | * 0.566 | 52.5 | LOS D | 6.1 | 64.0 | 0.97 | 0.80 | 0.97 | 35.1 |
| 12 | R2 | 33 | 10 | 35 | 30.3 | 0.259 | 61.6 | LOS E | 2.0 | 20.9 | 0.95 | 0.74 | 0.95 | 41.4 |
| Approach | | 135 | 40 | 142 | 29.6 | 0.566 | 60.9 | LOS E | 6.1 | 64.0 | 0.97 | 0.79 | 0.97 | 42.2 |
| All Vehicles | | 3817 | 581 | 4018 | 15.2 | 0.814 | 49.1 | LOS D | 23.6 | 198.7 | 0.57 | 0.56 | 0.58 | 66.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (1200m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 242.8 | 226.4 | 0.93 |
| East: Bakers Ln | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.4 | 218.7 | 0.93 |
| North: Mamre Road (1250m) | | | | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P3 Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 249.3 | 234.1 | 0.94 |
| West: Bakers Ln | | | | | | | | | | | |
| P4 Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 237.0 | 219.4 | 0.93 |
| All Pedestrians | 40 | 42 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 241.4 | 224.7 | 0.93 |

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.

# MOVEMENT SUMMARY

## Site: 1 [[ID: 1] Bakers Lane / Mamre Road - PM (Site Folder: 2026 - PM Scenario 1)]

Bakers Lane / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (1200m) | | | | | | | | | | | | | | |
| 1 | L2 | 92 | 18 | 97 | 19.6 | 0.085 | 11.8 | LOS A | 1.5 | 13.3 | 0.29 | 0.69 | 0.29 | 62.1 |
| 2 | T1 | 1424 | 209 | 1499 | 14.7 | 0.826 | 18.1 | LOS B | 30.8 | 257.3 | 0.73 | 0.69 | 0.76 | 68.8 |
| 3 | R2 | 5 | 0 | 5 | 0.0 | 0.056 | 68.3 | LOS E | 0.3 | 2.1 | 0.98 | 0.65 | 0.98 | 41.6 |
| Approach | | 1521 | 227 | 1601 | 14.9 | 0.826 | 17.9 | LOS B | 30.8 | 257.3 | 0.71 | 0.69 | 0.73 | 68.3 |
| East: Bakers Ln | | | | | | | | | | | | | | |
| 4 | L2 | 33 | 0 | 35 | 0.0 | 0.134 | 122.5 | LOS F | 1.8 | 12.9 | 0.90 | 0.73 | 0.90 | 44.8 |
| 5 | T1 | 1 | 0 | 1 | 0.0 | 0.134 | 48.3 | LOS D | 1.8 | 12.9 | 0.90 | 0.73 | 0.90 | 36.3 |
| 6 | R2 | 453 | 9 | 477 | 2.0 | *0.865 | 69.1 | LOS E | 15.4 | 109.9 | 1.00 | 0.96 | 1.28 | 41.5 |
| Approach | | 487 | 9 | 513 | 1.8 | 0.865 | 72.7 | LOS F | 15.4 | 109.9 | 0.99 | 0.95 | 1.25 | 41.6 |
| North: Mamre Road (1250m) | | | | | | | | | | | | | | |
| 7 | L2 | 145 | 2 | 153 | 1.6 | 0.108 | 11.5 | LOS A | 2.4 | 17.3 | 0.30 | 0.69 | 0.30 | 63.0 |
| 8 | T1 | 1436 | 259 | 1512 | 18.0 | *0.868 | 57.4 | LOS E | 36.1 | 314.5 | 0.80 | 0.79 | 0.86 | 66.3 |
| 9 | R2 | 56 | 39 | 59 | 69.6 | *0.619 | 77.8 | LOS F | 1.9 | 25.9 | 1.00 | 0.79 | 1.18 | 38.9 |
| Approach | | 1637 | 300 | 1723 | 18.3 | 0.868 | 54.0 | LOS D | 36.1 | 314.5 | 0.76 | 0.78 | 0.82 | 64.8 |
| West: Bakers Ln | | | | | | | | | | | | | | |
| 10 | L2 | 149 | 22 | 157 | 14.8 | 0.692 | 65.2 | LOS E | 9.3 | 76.7 | 1.00 | 0.85 | 1.07 | 42.5 |
| 11 | T1 | 1 | 0 | 1 | 0.0 | *0.692 | 55.2 | LOS D | 9.3 | 76.7 | 1.00 | 0.85 | 1.07 | 34.5 |
| 12 | R2 | 117 | 22 | 123 | 18.8 | 0.559 | 58.6 | LOS E | 6.9 | 61.3 | 0.98 | 0.80 | 0.98 | 42.7 |
| Approach | | 267 | 44 | 281 | 16.5 | 0.692 | 62.2 | LOS E | 9.3 | 76.7 | 0.99 | 0.83 | 1.03 | 42.5 |
| All Vehicles | | 3912 | 580 | 4118 | 14.8 | 0.868 | 42.9 | LOS D | 36.1 | 314.5 | 0.78 | 0.77 | 0.85 | 60.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (1200m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 242.8 | 226.4 | 0.93 |
| East: Bakers Ln | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.4 | 218.7 | 0.93 |
| North: Mamre Road (1250m) | | | | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P3 Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 249.3 | 234.1 | 0.94 |
| West: Bakers Ln | | | | | | | | | | | |
| P4 Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 237.0 | 219.4 | 0.93 |
| All Pedestrians | 40 | 42 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 241.4 | 224.7 | 0.93 |

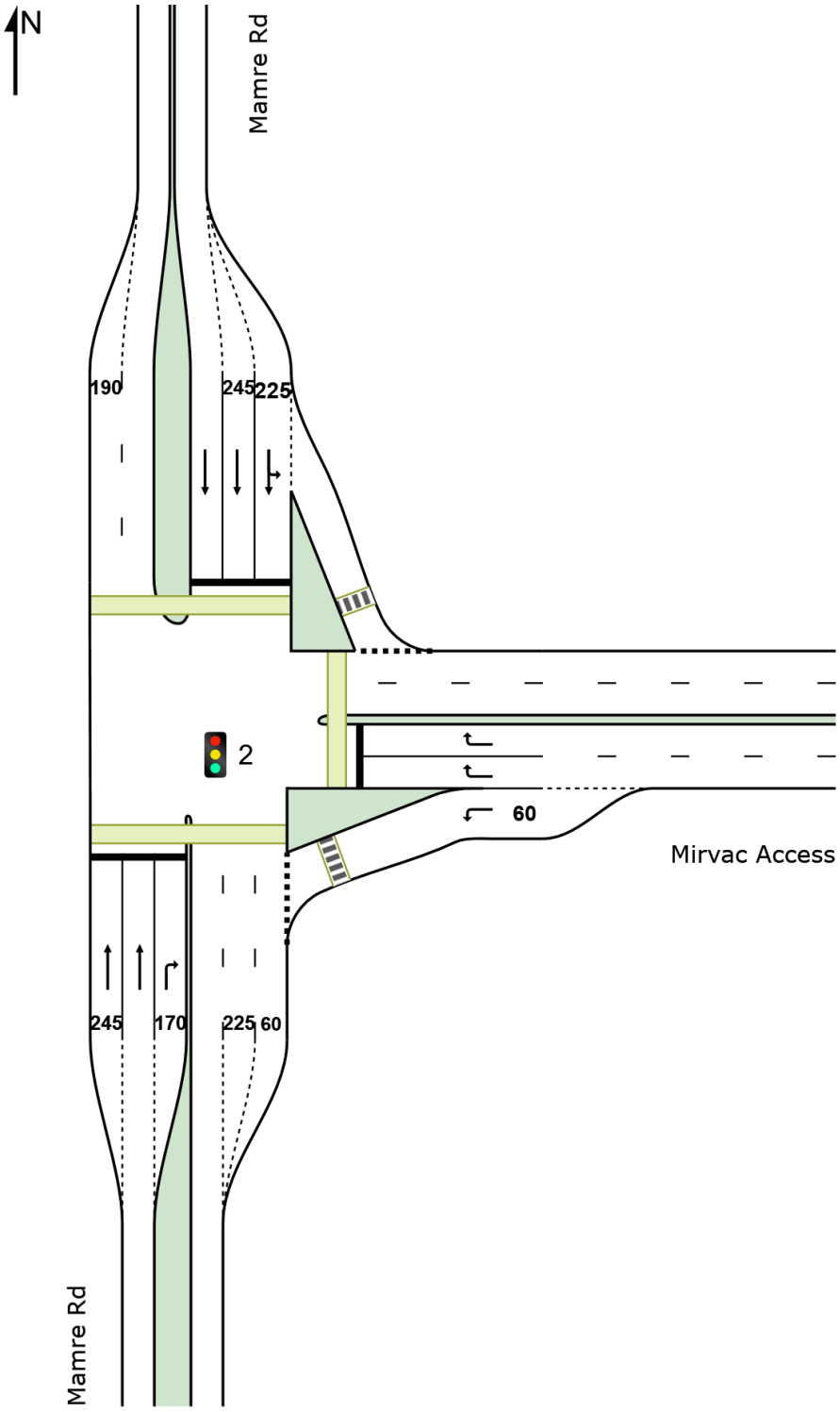
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 2 [[ID: 2] (AM) Mamre x Mirvac Access - AM (Site Folder: 2026 - AM Scenario 1)]

Mamre Road x Mirvac Access
Site Category: Proposed Interim
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



# MOVEMENT SUMMARY

## Site: 2 [[ID: 2] (AM) Mamre x Mirvac Access - AM (Site Folder: 2026 - AM Scenario 1)]

Mamre Road x Mirvac Access
Site Category: Proposed Interim
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | | | |
| 2 | T1 | 1062 | 128 | 1118 | 12.1 | 0.498 | 13.8 | LOS A | 16.4 | 132.1 | 0.55 | 0.50 | 0.55 | 70.0 |
| 3 | R2 | 37 | 16 | 39 | 43.2 | * 0.303 | 63.4 | LOS E | 2.2 | 26.2 | 0.95 | 0.75 | 0.95 | 30.8 |
| Approach | | 1099 | 144 | 1157 | 13.1 | 0.498 | 15.5 | LOS B | 16.4 | 132.1 | 0.56 | 0.51 | 0.56 | 68.3 |
| East: Mirvac Access | | | | | | | | | | | | | | |
| 4 | L2 | 22 | 6 | 23 | 27.3 | 0.037 | 17.1 | LOS B | 0.4 | 4.6 | 0.40 | 0.63 | 0.40 | 47.5 |
| 6 | R2 | 264 | 135 | 278 | 51.1 | * 0.614 | 56.7 | LOS E | 7.7 | 95.3 | 0.96 | 0.82 | 0.97 | 41.5 |
| Approach | | 286 | 141 | 301 | 49.3 | 0.614 | 53.7 | LOS D | 7.7 | 95.3 | 0.91 | 0.81 | 0.92 | 41.7 |
| North: Mamre Rd | | | | | | | | | | | | | | |
| 7 | L2 | 590 | 137 | 621 | 23.2 | 0.524 | 9.0 | LOS A | 6.1 | 56.9 | 0.27 | 0.68 | 0.27 | 64.7 |
| 8 | T1 | 1098 | 129 | 1156 | 11.7 | * 0.702 | 27.3 | LOS B | 26.2 | 212.9 | 0.84 | 0.76 | 0.84 | 60.0 |
| Approach | | 1688 | 266 | 1777 | 15.8 | 0.702 | 20.9 | LOS B | 26.2 | 212.9 | 0.64 | 0.73 | 0.64 | 61.6 |
| All Vehicles | | 3073 | 551 | 3235 | 17.9 | 0.702 | 22.0 | LOS B | 26.2 | 212.9 | 0.64 | 0.66 | 0.64 | 61.1 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 50.4 | LOS E | 0.0 | 0.0 | 0.92 | 0.92 | 236.7 | 223.5 | 0.94 |
| East: Mirvac Access | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 22.8 | LOS C | 0.0 | 0.0 | 0.62 | 0.62 | 203.7 | 217.0 | 1.07 |
| North: Mamre Rd | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 50.4 | LOS E | 0.0 | 0.0 | 0.92 | 0.92 | 237.1 | 224.0 | 0.94 |
| All Pedestrians | | 30 | 32 | 41.2 | LOS E | 0.0 | 0.0 | 0.82 | 0.82 | 225.8 | 221.5 | 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.

# MOVEMENT SUMMARY

## Site: 2 [[ID: 2] Mamre x Mirvac Access - PM (Site Folder: 2026 - PM Scenario 1)]

Mamre Road x Mirvac Access
Site Category: Proposed Interim
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | | | |
| 2 | T1 | 1102 | 114 | 1160 | 10.3 | 0.508 | 16.7 | LOS B | 17.1 | 136.2 | 0.55 | 0.50 | 0.55 | 70.0 |
| 3 | R2 | 132 | 24 | 139 | 18.2 | * 0.807 | 71.0 | LOS F | 8.8 | 77.9 | 1.00 | 0.90 | 1.25 | 29.2 |
| Approach | | 1234 | 138 | 1299 | 11.2 | 0.807 | 22.5 | LOS B | 17.1 | 136.2 | 0.60 | 0.55 | 0.63 | 64.0 |
| East: Mirvac Access | | | | | | | | | | | | | | |
| 4 | L2 | 45 | 5 | 47 | 11.1 | 0.066 | 29.2 | LOS C | 1.3 | 10.3 | 0.54 | 0.67 | 0.54 | 46.4 |
| 6 | R2 | 404 | 112 | 425 | 27.7 | * 0.677 | 58.3 | LOS E | 11.8 | 112.5 | 0.97 | 0.85 | 0.99 | 42.8 |
| Approach | | 449 | 117 | 473 | 26.1 | 0.677 | 55.4 | LOS D | 11.8 | 112.5 | 0.92 | 0.83 | 0.95 | 43.0 |
| North: Mamre Rd | | | | | | | | | | | | | | |
| 7 | L2 | 145 | 90 | 153 | 62.1 | 0.175 | 10.2 | LOS A | 1.5 | 19.9 | 0.23 | 0.64 | 0.23 | 63.1 |
| 8 | T1 | 1408 | 190 | 1482 | 13.5 | * 0.901 | 47.4 | LOS D | 47.3 | 390.1 | 0.99 | 1.03 | 1.15 | 51.2 |
| Approach | | 1553 | 280 | 1635 | 18.0 | 0.901 | 43.9 | LOS D | 47.3 | 390.1 | 0.92 | 0.99 | 1.06 | 52.1 |
| All Vehicles | | 3236 | 535 | 3406 | 16.5 | 0.901 | 37.4 | LOS C | 47.3 | 390.1 | 0.80 | 0.80 | 0.88 | 54.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 48.6 | LOS E | 0.0 | 0.0 | 0.90 | 0.90 | 234.9 | 223.5 | 0.95 |
| East: Mirvac Access | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 22.2 | LOS C | 0.0 | 0.0 | 0.61 | 0.61 | 203.0 | 217.0 | 1.07 |
| North: Mamre Rd | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 48.6 | LOS E | 0.0 | 0.0 | 0.90 | 0.90 | 235.3 | 224.0 | 0.95 |
| All Pedestrians | | 30 | 32 | 39.8 | LOS D | 0.0 | 0.0 | 0.80 | 0.80 | 224.4 | 221.5 | 0.99 |

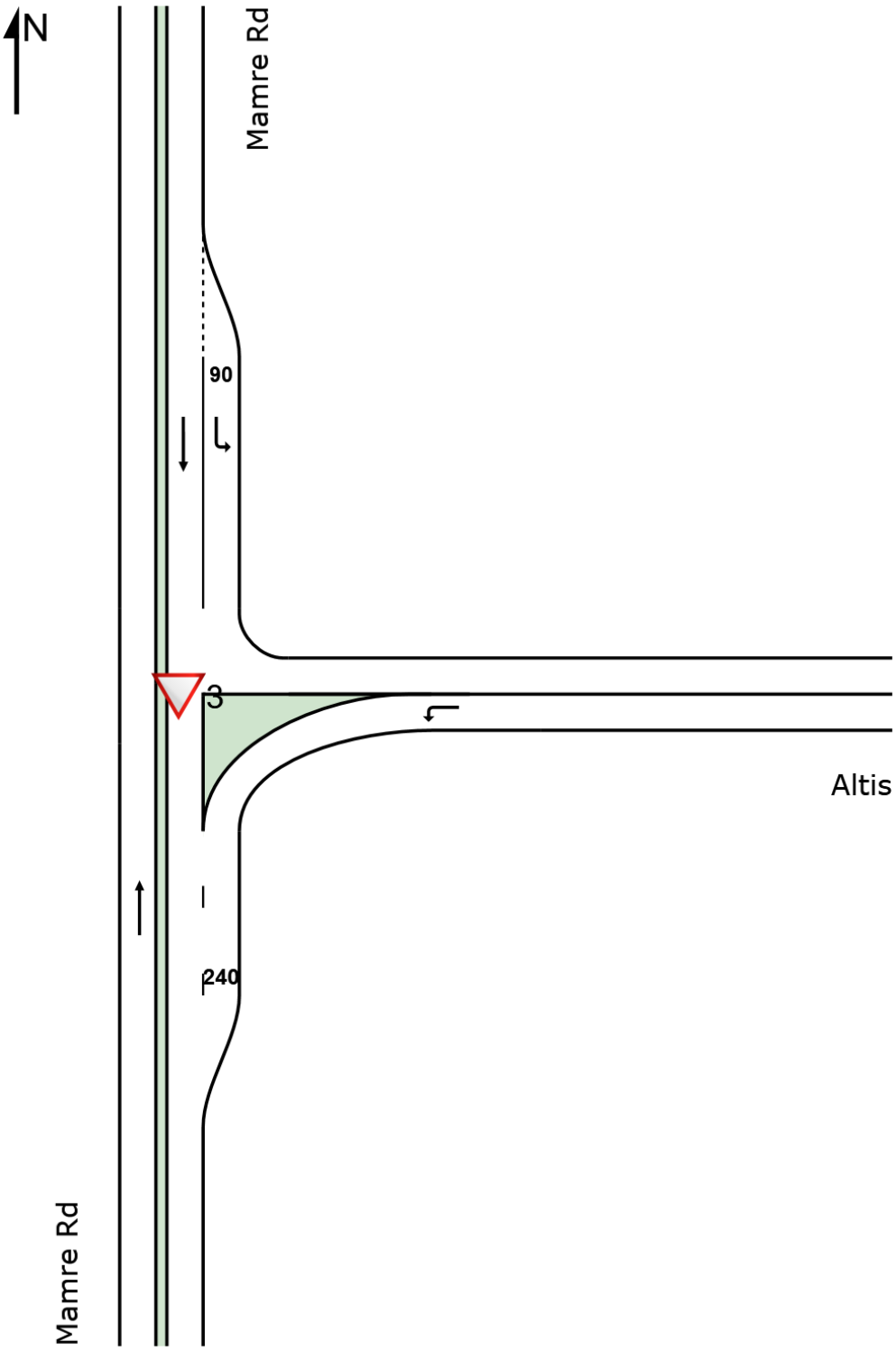
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 3 [[ID: 3] (AM) Mamre Rd x Altis Access - AM (Site Folder: 2026 - AM Scenario 1)]

Mamre Road x Altis Access
Site Category: (None)
Give-Way (Two-Way)

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



# MOVEMENT SUMMARY

## Site: 3 [[ID: 3] (AM) Mamre Rd x Altis Access - AM (Site Folder: 2026 - AM Scenario 1)]

Mamre Road x Altis Access
Site Category: (None)
Give-Way (Two-Way)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | | | |
| 2 | T1 | 1098 | 149 | 1156 | 13.6 | 0.700 | 0.6 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 78.7 |
| Approach | | 1098 | 149 | 1156 | 13.6 | 0.700 | 0.6 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 78.7 |
| East: Altis | | | | | | | | | | | | | | |
| 4 | L2 | 106 | 44 | 112 | 41.5 | 0.097 | 7.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.51 | 0.00 | 54.6 |
| Approach | | 106 | 44 | 112 | 41.5 | 0.097 | 7.0 | NA | 0.0 | 0.0 | 0.00 | 0.51 | 0.00 | 54.6 |
| North: Mamre Rd | | | | | | | | | | | | | | |
| 7 | L2 | 110 | 15 | 116 | 13.6 | 0.075 | 5.7 | LOS A | 0.0 | 0.0 | 0.00 | 0.57 | 0.00 | 52.9 |
| 8 | T1 | 988 | 119 | 1040 | 12.0 | 0.622 | 0.3 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 79.1 |
| Approach | | 1098 | 134 | 1156 | 12.2 | 0.622 | 0.9 | NA | 0.0 | 0.0 | 0.00 | 0.06 | 0.00 | 76.1 |
| All Vehicles | | 2302 | 327 | 2423 | 14.2 | 0.700 | 1.0 | NA | 0.0 | 0.0 | 0.00 | 0.05 | 0.00 | 75.9 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

## Site: 101 [[ID: 3] Mamre Rd x Altis Access - PM (Site Folder: 2026 - PM Scenario 1)]

Mamre Road x Altis Road
Site Category: (None)
Give-Way (Two-Way)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | | | |
| 2 | T1 | 1225 | 134 | 1289 | 10.9 | 0.758 | 0.8 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 78.3 |
| Approach | | 1225 | 134 | 1289 | 10.9 | 0.758 | 0.8 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 78.3 |
| East: Altis | | | | | | | | | | | | | | |
| 4 | L2 | 279 | 45 | 294 | 16.0 | 0.194 | 11.4 | LOS A | 0.0 | 0.0 | 0.00 | 0.52 | 0.00 | 55.4 |
| Approach | | 279 | 45 | 294 | 16.0 | 0.194 | 11.4 | NA | 0.0 | 0.0 | 0.00 | 0.52 | 0.00 | 55.4 |
| North: Mamre Rd | | | | | | | | | | | | | | |
| 7 | L2 | 26 | 13 | 27 | 50.0 | 0.024 | 7.9 | LOS A | 0.0 | 0.0 | 0.00 | 0.63 | 0.00 | 51.4 |
| 8 | T1 | 1457 | 191 | 1534 | 13.1 | 0.925 | 2.3 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 73.9 |
| Approach | | 1483 | 204 | 1561 | 13.8 | 0.925 | 2.4 | NA | 0.0 | 0.0 | 0.00 | 0.01 | 0.00 | 73.5 |
| All Vehicles | | 2987 | 383 | 3144 | 12.8 | 0.925 | 2.6 | NA | 0.0 | 0.0 | 0.00 | 0.05 | 0.00 | 73.1 |

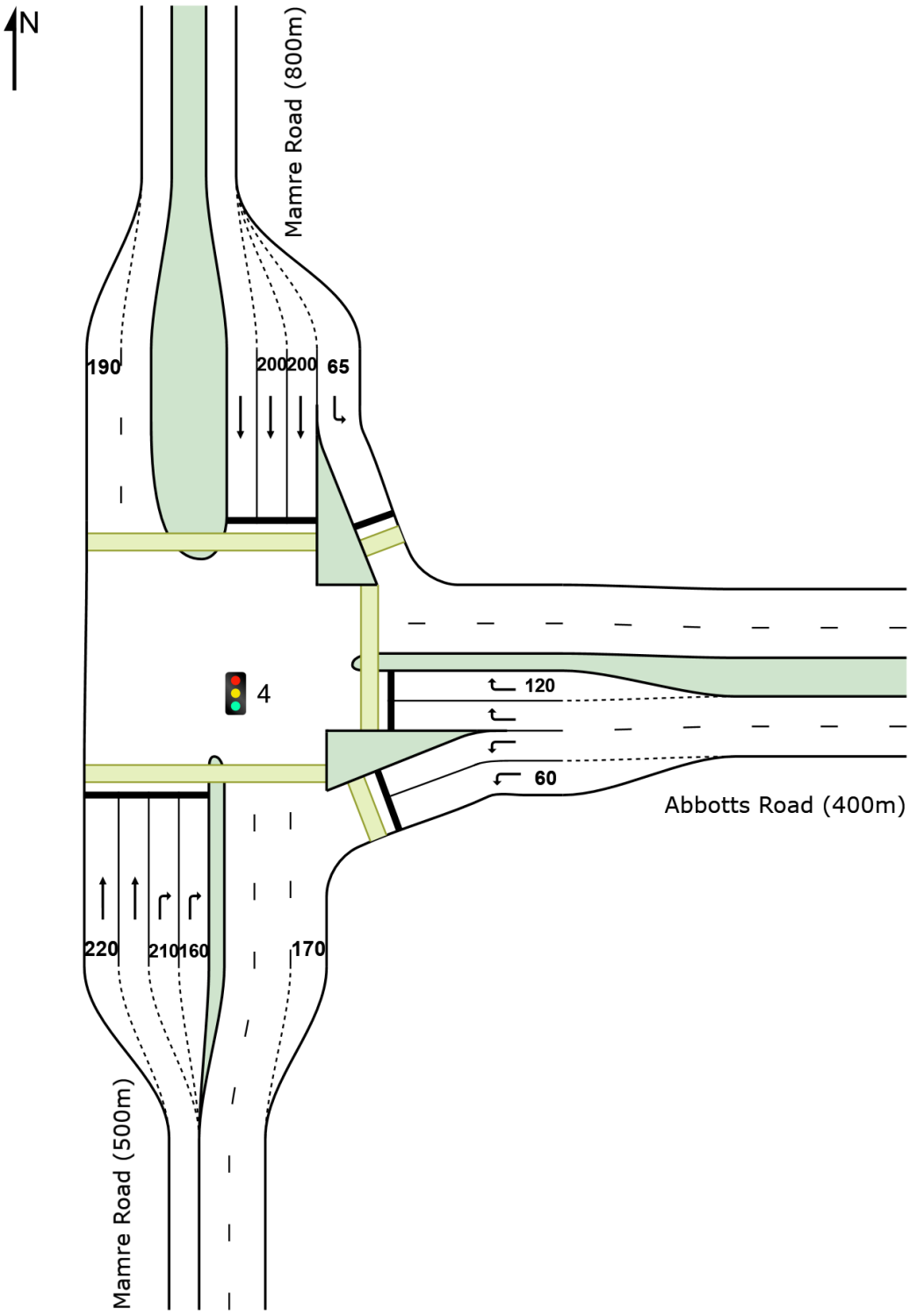
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# SITE LAYOUT

## Site: 4 [[ID: 4] Abbotts Road / Mamre Road - AM (Site Folder: 2026 - AM Scenario 1)]

Abbotts Road / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



# MOVEMENT SUMMARY

## Site: 4 [[ID: 4] Abbotts Road / Mamre Road - AM (Site Folder: 2026 - AM Scenario 1)]

Abbotts Road / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (500m) | | | | | | | | | | | | | | |
| 2 | T1 | 1067 | 131 | 1123 | 12.3 | 0.389 | 1.8 | LOS A | 1.1 | 8.6 | 0.03 | 0.03 | 0.03 | 79.5 |
| 3 | R2 | 88 | 35 | 93 | 39.8 | * 0.348 | 47.0 | LOS D | 2.1 | 22.2 | 0.96 | 0.75 | 0.96 | 34.6 |
| Approach | | 1155 | 166 | 1216 | 14.4 | 0.389 | 5.2 | LOS A | 2.1 | 22.2 | 0.11 | 0.09 | 0.11 | 74.3 |
| East: Abbotts Road (400m) | | | | | | | | | | | | | | |
| 4 | L2 | 20 | 5 | 21 | 25.0 | 0.027 | 38.8 | LOS C | 0.4 | 4.3 | 0.74 | 0.66 | 0.74 | 34.6 |
| 6 | R2 | 41 | 19 | 43 | 46.3 | * 0.193 | 64.1 | LOS E | 1.2 | 14.2 | 0.95 | 0.72 | 0.95 | 30.1 |
| Approach | | 61 | 24 | 64 | 39.3 | 0.193 | 55.8 | LOS D | 1.2 | 14.2 | 0.88 | 0.70 | 0.88 | 31.2 |
| North: Mamre Road (800m) | | | | | | | | | | | | | | |
| 7 | L2 | 105 | 17 | 111 | 16.2 | 0.108 | 16.7 | LOS B | 2.5 | 21.5 | 0.42 | 0.70 | 0.42 | 55.6 |
| 8 | T1 | 997 | 146 | 1049 | 14.6 | * 0.339 | 5.6 | LOS A | 4.4 | 37.3 | 0.23 | 0.21 | 0.23 | 73.5 |
| Approach | | 1102 | 163 | 1160 | 14.8 | 0.339 | 6.7 | LOS A | 4.4 | 37.3 | 0.25 | 0.25 | 0.25 | 71.4 |
| All Vehicles | | 2318 | 353 | 2440 | 15.2 | 0.389 | 7.2 | LOS A | 4.4 | 37.3 | 0.20 | 0.18 | 0.20 | 70.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (500m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 246.0 | 230.2 | 0.94 |
| East: Abbotts Road (400m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.7 | 219.0 | 0.93 |
| P2B | Slip/ Bypass | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 227.9 | 208.5 | 0.91 |
| North: Mamre Road (800m) | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 244.8 | 228.8 | 0.93 |
| P3B | Slip/ Bypass | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 225.8 | 206.0 | 0.91 |
| All Pedestrians | | 50 | 53 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.3 | 218.5 | 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.

# MOVEMENT SUMMARY

## Site: 4 [[ID: 4] Abbotts Road / Mamre Road - PM. (Site Folder: 2026 - PM Scenario 1)]

Abbotts Road / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (500m) | | | | | | | | | | | | | | |
| 2 | T1 | 1137 | 122 | 1197 | 10.7 | 0.411 | 2.2 | LOS A | 1.2 | 9.3 | 0.04 | 0.03 | 0.04 | 79.5 |
| 3 | R2 | 281 | 35 | 296 | 12.5 | * 0.626 | 61.1 | LOS E | 8.4 | 70.0 | 0.99 | 0.82 | 1.00 | 30.4 |
| Approach | | 1418 | 157 | 1493 | 11.1 | 0.626 | 13.9 | LOS A | 8.4 | 70.0 | 0.22 | 0.19 | 0.23 | 64.2 |
| East: Abbotts Road (400m) | | | | | | | | | | | | | | |
| 4 | L2 | 69 | 14 | 73 | 20.3 | 0.084 | 40.2 | LOS C | 1.5 | 13.6 | 0.75 | 0.71 | 0.75 | 35.2 |
| 6 | R2 | 82 | 12 | 86 | 14.6 | * 0.306 | 65.1 | LOS E | 2.5 | 21.0 | 0.97 | 0.74 | 0.97 | 33.0 |
| Approach | | 151 | 26 | 159 | 17.2 | 0.306 | 53.7 | LOS D | 2.5 | 21.0 | 0.87 | 0.73 | 0.87 | 33.8 |
| North: Mamre Road (800m) | | | | | | | | | | | | | | |
| 7 | L2 | 22 | 17 | 23 | 77.3 | 0.039 | 17.5 | LOS B | 0.5 | 7.5 | 0.39 | 0.66 | 0.39 | 53.3 |
| 8 | T1 | 1799 | 234 | 1894 | 13.0 | * 0.597 | 8.1 | LOS A | 11.5 | 94.5 | 0.34 | 0.31 | 0.34 | 71.9 |
| Approach | | 1821 | 251 | 1917 | 13.8 | 0.597 | 8.2 | LOS A | 11.5 | 94.5 | 0.34 | 0.31 | 0.34 | 71.7 |
| All Vehicles | | 3390 | 434 | 3568 | 12.8 | 0.626 | 12.6 | LOS A | 11.5 | 94.5 | 0.31 | 0.28 | 0.32 | 65.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (500m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 246.0 | 230.2 | 0.94 |
| East: Abbotts Road (400m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.7 | 219.0 | 0.93 |
| P2B | Slip/ Bypass | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 227.9 | 208.5 | 0.91 |
| North: Mamre Road (800m) | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 244.8 | 228.8 | 0.93 |
| P3B | Slip/ Bypass | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 225.8 | 206.0 | 0.91 |
| All Pedestrians | | 50 | 53 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.3 | 218.5 | 0.92 |

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

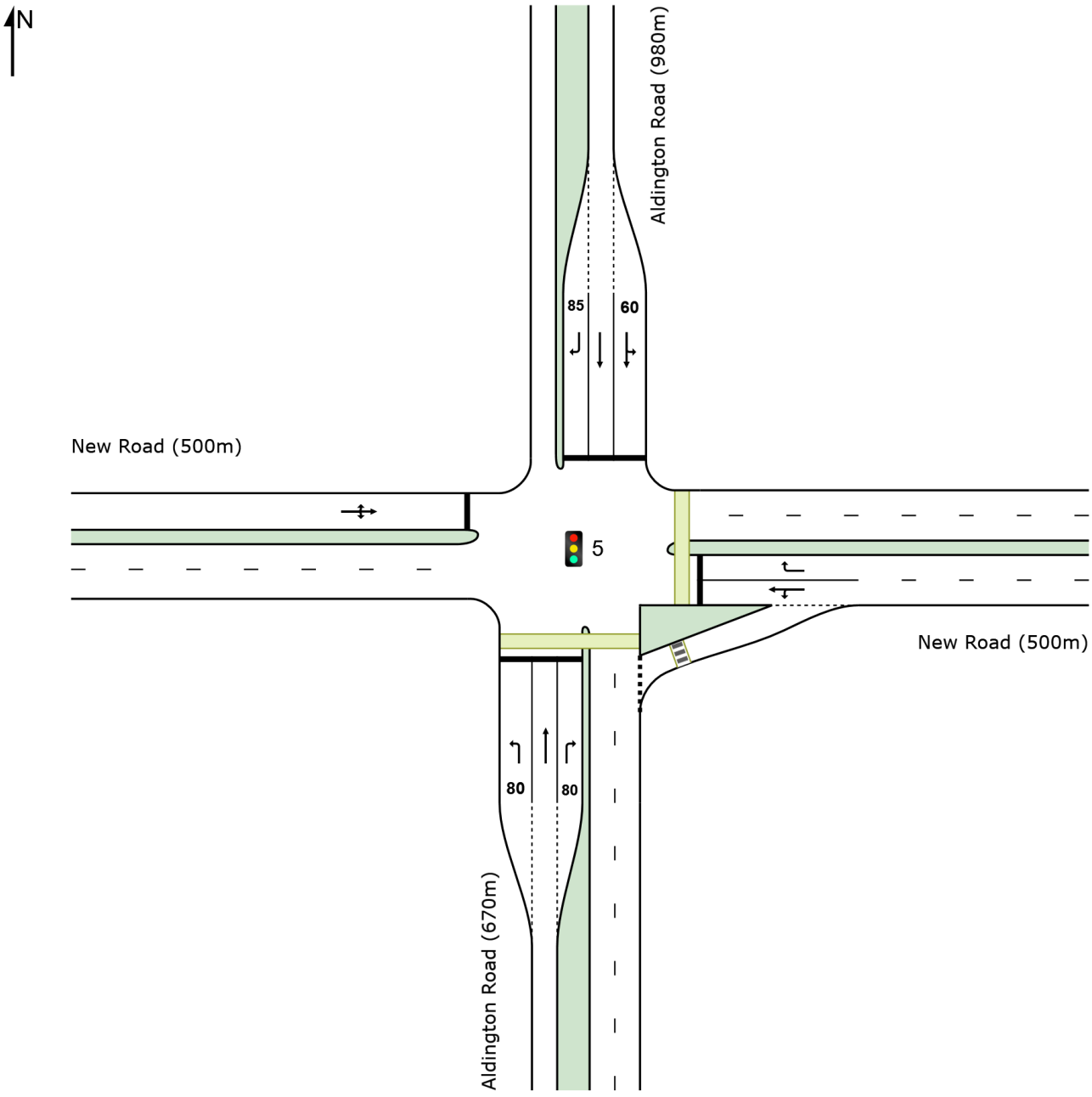
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 5 [[ID: 5] Aldington Road /Bakers Lane / Fife Kemps Creek (North) - AM (Site Folder: 2026 - AM Scenario 1)]

Aldington Road /Bakers Lane / Fife Kemps Creek (North)
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: 5 [[ID: 5] Aldington Road /Bakers Lane / Fife Kemps Creek (North) - AM (Site Folder: 2026 - AM Scenario 1)]

Aldington Road /Bakers Lane / Fife Kemps Creek (North)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (670m) | | | | | | | | | | | | | | |
| 1 | L2 | 7 | 6 | 7 | 85.7 | 0.020 | 23.6 | LOS B | 0.2 | 4.2 | 0.53 | 0.65 | 0.53 | 41.3 |
| 2 | T1 | 33 | 0 | 35 | 0.0 | 0.060 | 32.5 | LOS C | 1.4 | 10.1 | 0.75 | 0.56 | 0.75 | 45.3 |
| 3 | R2 | 2 | 1 | 2 | 50.0 | 0.023 | 63.8 | LOS E | 0.1 | 1.2 | 0.95 | 0.62 | 0.95 | 30.0 |
| Approach | | 42 | 7 | 44 | 16.7 | 0.060 | 32.5 | LOS C | 1.4 | 10.1 | 0.72 | 0.58 | 0.72 | 43.9 |
| East: New Road (500m) | | | | | | | | | | | | | | |
| 4 | L2 | 1 | 0 | 1 | 0.0 | 0.004 | 22.6 | LOS B | 0.1 | 0.4 | 0.68 | 0.51 | 0.68 | 43.4 |
| 5 | T1 | 1 | 0 | 1 | 0.0 | 0.004 | 18.1 | LOS B | 0.1 | 0.4 | 0.68 | 0.51 | 0.68 | 39.2 |
| 6 | R2 | 64 | 0 | 67 | 0.0 | 0.127 | 38.7 | LOS C | 2.9 | 20.4 | 0.78 | 0.72 | 0.78 | 39.7 |
| Approach | | 66 | 0 | 69 | 0.0 | 0.127 | 38.1 | LOS C | 2.9 | 20.4 | 0.78 | 0.71 | 0.78 | 39.7 |
| North: Aldington Road (980m) | | | | | | | | | | | | | | |
| 7 | L2 | 259 | 0 | 273 | 0.0 | *0.244 | 12.7 | LOS A | 4.6 | 32.4 | 0.53 | 0.72 | 0.53 | 49.3 |
| 8 | T1 | 1 | 0 | 1 | 0.0 | 0.002 | 31.4 | LOS C | 0.0 | 0.3 | 0.72 | 0.44 | 0.72 | 45.7 |
| 9 | R2 | 31 | 0 | 33 | 0.0 | *0.232 | 64.2 | LOS E | 1.9 | 13.1 | 0.98 | 0.72 | 0.98 | 33.4 |
| Approach | | 291 | 0 | 306 | 0.0 | 0.244 | 18.3 | LOS B | 4.6 | 32.4 | 0.58 | 0.72 | 0.58 | 46.9 |
| West: New Road (500m) | | | | | | | | | | | | | | |
| 10 | L2 | 12 | 3 | 13 | 25.0 | 0.167 | 54.8 | LOS D | 1.3 | 19.5 | 0.91 | 0.72 | 0.91 | 35.1 |
| 11 | T1 | 1 | 0 | 1 | 0.0 | *0.167 | 49.9 | LOS D | 1.3 | 19.5 | 0.91 | 0.72 | 0.91 | 28.8 |
| 12 | R2 | 11 | 9 | 12 | 81.8 | 0.167 | 55.3 | LOS D | 1.3 | 19.5 | 0.91 | 0.72 | 0.91 | 30.9 |
| Approach | | 24 | 12 | 25 | 50.0 | 0.167 | 54.8 | LOS D | 1.3 | 19.5 | 0.91 | 0.72 | 0.91 | 33.0 |
| All Vehicles | | 423 | 19 | 445 | 4.5 | 0.244 | 24.9 | LOS B | 4.6 | 32.4 | 0.64 | 0.71 | 0.64 | 44.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (670m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 238.8 | 221.5 | 0.93 |
| East: New Road (500m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 235.8 | 218.0 | 0.92 |
| All | | 0 | 21 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 237.3 | 219.8 | 0.93 |

## Pedestrians

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.

# MOVEMENT SUMMARY

## Site: 5 [[ID: 5] Aldington Road /Bakers Lane / Fife Kemps Creek (North) - PM. (Site Folder: 2026 - PM Scenario 1)]

Aldington Road /Bakers Lane / Fife Kemps Creek (North)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (670m) | | | | | | | | | | | | | | |
| 1 | L2 | 23 | 6 | 24 | 26.1 | 0.044 | 31.2 | LOS C | 0.9 | 8.1 | 0.66 | 0.69 | 0.66 | 39.0 |
| 2 | T1 | 32 | 0 | 34 | 0.0 | 0.114 | 47.8 | LOS D | 1.7 | 12.0 | 0.90 | 0.66 | 0.90 | 40.6 |
| 3 | R2 | 3 | 0 | 3 | 0.0 | 0.009 | 47.2 | LOS D | 0.1 | 1.0 | 0.83 | 0.63 | 0.83 | 34.2 |
| Approach | | 58 | 6 | 61 | 10.3 | 0.114 | 41.2 | LOS C | 1.7 | 12.0 | 0.80 | 0.67 | 0.80 | 39.7 |
| East: New Road (500m) | | | | | | | | | | | | | | |
| 4 | L2 | 4 | 3 | 4 | 75.0 | 0.010 | 13.4 | LOS A | 0.1 | 1.2 | 0.51 | 0.53 | 0.51 | 45.9 |
| 5 | T1 | 1 | 0 | 1 | 0.0 | 0.010 | 8.2 | LOS A | 0.1 | 1.2 | 0.51 | 0.53 | 0.51 | 43.8 |
| 6 | R2 | 110 | 0 | 116 | 0.0 | *0.218 | 39.7 | LOS C | 5.2 | 36.1 | 0.80 | 0.75 | 0.80 | 39.4 |
| Approach | | 115 | 3 | 121 | 2.6 | 0.218 | 38.5 | LOS C | 5.2 | 36.1 | 0.79 | 0.74 | 0.79 | 39.6 |
| North: Aldington Road (980m) | | | | | | | | | | | | | | |
| 7 | L2 | 34 | 0 | 36 | 0.0 | 0.122 | 29.4 | LOS C | 1.5 | 10.5 | 0.85 | 0.70 | 0.85 | 43.2 |
| 8 | T1 | 43 | 2 | 45 | 4.7 | *0.122 | 42.2 | LOS C | 1.8 | 12.8 | 0.89 | 0.68 | 0.89 | 41.9 |
| 9 | R2 | 4 | 0 | 4 | 0.0 | *0.012 | 47.3 | LOS D | 0.2 | 1.4 | 0.83 | 0.64 | 0.83 | 37.3 |
| Approach | | 81 | 2 | 85 | 2.5 | 0.122 | 37.1 | LOS C | 1.8 | 12.8 | 0.87 | 0.69 | 0.87 | 42.2 |
| West: New Road (500m) | | | | | | | | | | | | | | |
| 10 | L2 | 12 | 0 | 13 | 0.0 | 0.065 | 48.9 | LOS D | 1.1 | 7.9 | 0.87 | 0.69 | 0.87 | 36.8 |
| 11 | T1 | 1 | 0 | 1 | 0.0 | *0.065 | 44.4 | LOS D | 1.1 | 7.9 | 0.87 | 0.69 | 0.87 | 30.0 |
| 12 | R2 | 9 | 0 | 9 | 0.0 | 0.065 | 48.9 | LOS D | 1.1 | 7.9 | 0.87 | 0.69 | 0.87 | 33.6 |
| Approach | | 22 | 0 | 23 | 0.0 | 0.065 | 48.7 | LOS D | 1.1 | 7.9 | 0.87 | 0.69 | 0.87 | 35.3 |
| All Vehicles | | 276 | 11 | 291 | 4.0 | 0.218 | 39.5 | LOS C | 5.2 | 36.1 | 0.82 | 0.71 | 0.82 | 40.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (670m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 238.8 | 221.5 | 0.93 |
| East: New Road (500m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 235.8 | 218.0 | 0.92 |
| All | | 0 | 21 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 237.3 | 219.8 | 0.93 |

## Pedestrians

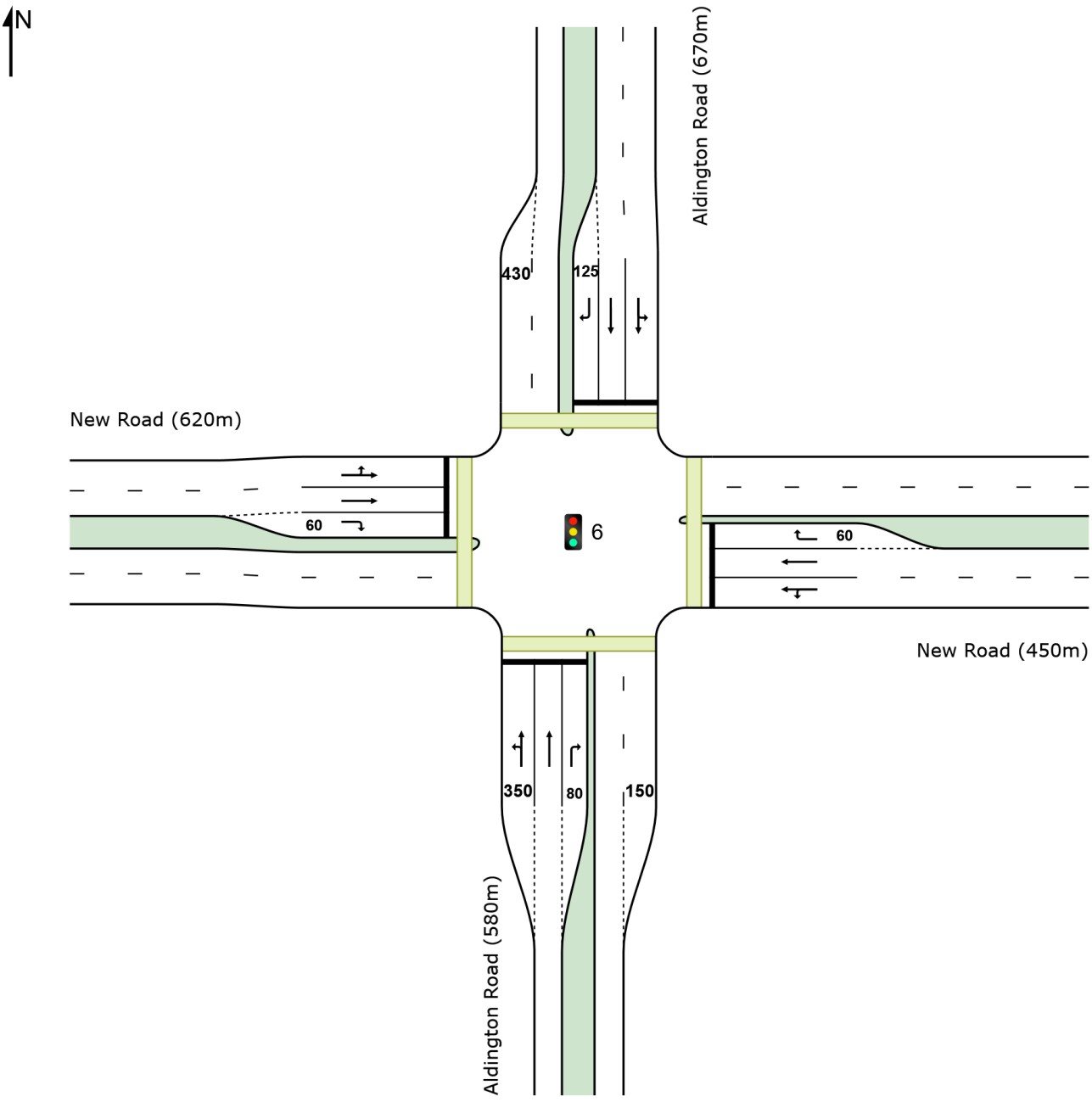
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 6 [[ID: 6] Aldington Road /Bakers Lane / Fife Kemps Creek (South) - AM (Site Folder: 2026 - AM Scenario 1)]

Aldington Road /Bakers Lane / Fife Kemps Creek (South)
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: 6 [[ID: 6] Aldington Road /Bakers Lane / Fife Kemps Creek (South) - AM (Site Folder: 2026 - AM Scenario 1)]

Aldington Road /Bakers Lane / Fife Kemps Creek (South)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (580m) | | | | | | | | | | | | | | |
| 1 | L2 | 35 | 17 | 37 | 48.6 | 0.091 | 35.1 | LOS C | 1.5 | 16.6 | 0.71 | 0.71 | 0.71 | 37.4 |
| 2 | T1 | 5 | 3 | 5 | 60.0 | * 0.066 | 58.1 | LOS E | 0.3 | 4.7 | 0.95 | 0.64 | 0.95 | 34.1 |
| 3 | R2 | 32 | 11 | 34 | 34.4 | * 0.148 | 53.0 | LOS D | 1.7 | 15.6 | 0.89 | 0.73 | 0.89 | 31.1 |
| Approach | | 72 | 31 | 76 | 43.1 | 0.148 | 44.6 | LOS D | 1.7 | 16.6 | 0.81 | 0.71 | 0.81 | 34.3 |
| East: New Road (450m) | | | | | | | | | | | | | | |
| 4 | L2 | 7 | 0 | 7 | 0.0 | 0.144 | 35.0 | LOS C | 2.1 | 28.8 | 0.73 | 0.60 | 0.73 | 36.9 |
| 5 | T1 | 85 | 61 | 89 | 71.8 | * 0.144 | 30.5 | LOS C | 2.1 | 28.8 | 0.73 | 0.59 | 0.73 | 35.8 |
| 6 | R2 | 33 | 0 | 35 | 0.0 | 0.056 | 33.3 | LOS C | 1.4 | 9.5 | 0.71 | 0.68 | 0.71 | 37.9 |
| Approach | | 125 | 61 | 132 | 48.8 | 0.144 | 31.5 | LOS C | 2.1 | 28.9 | 0.73 | 0.61 | 0.73 | 36.4 |
| North: Aldington Road (670m) | | | | | | | | | | | | | | |
| 7 | L2 | 1 | 0 | 1 | 0.0 | 0.028 | 36.5 | LOS C | 0.1 | 1.5 | 0.92 | 0.61 | 0.92 | 37.5 |
| 8 | T1 | 4 | 3 | 4 | 75.0 | 0.033 | 45.8 | LOS D | 0.1 | 2.3 | 0.93 | 0.61 | 0.93 | 37.0 |
| 9 | R2 | 7 | 6 | 7 | 85.7 | 0.062 | 54.2 | LOS D | 0.4 | 7.2 | 0.87 | 0.68 | 0.87 | 33.3 |
| Approach | | 12 | 9 | 13 | 75.0 | 0.062 | 50.0 | LOS D | 0.4 | 7.2 | 0.89 | 0.65 | 0.89 | 34.7 |
| West: New Road (620m) | | | | | | | | | | | | | | |
| 10 | L2 | 7 | 6 | 7 | 85.7 | 0.143 | 44.3 | LOS D | 1.4 | 23.7 | 0.81 | 0.65 | 0.81 | 34.7 |
| 11 | T1 | 51 | 50 | 54 | 98.0 | * 0.143 | 38.8 | LOS C | 1.4 | 23.0 | 0.81 | 0.63 | 0.81 | 33.1 |
| 12 | R2 | 2 | 1 | 2 | 50.0 | 0.007 | 41.0 | LOS C | 0.1 | 0.9 | 0.77 | 0.61 | 0.77 | 35.2 |
| Approach | | 60 | 57 | 63 | 95.0 | 0.143 | 39.5 | LOS C | 1.4 | 23.7 | 0.81 | 0.63 | 0.81 | 33.4 |
| All Vehicles | | 269 | 158 | 283 | 58.7 | 0.148 | 37.6 | LOS C | 2.1 | 28.9 | 0.77 | 0.65 | 0.77 | 35.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (580m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.3 | 223.3 | 0.93 |
| East: New Road (450m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 239.9 | 222.9 | 0.93 |
| North: Aldington Road (670m) | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.6 | 223.7 | 0.93 |
| West: New Road (620m) | | | | | | | | | | | | |
| P4 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 239.9 | 222.9 | 0.93 |
| All Pedestrians | | 0 | 42 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.2 | 223.2 | 0.93 |

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.

# MOVEMENT SUMMARY

## Site: 6 [[ID: 6] Aldington Road /Bakers Lane / Fife Kemps Creek (South) - PM. (Site Folder: 2026 - PM Scenario 1)]

Aldington Road /Bakers Lane / Fife Kemps Creek (South)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (580m) | | | | | | | | | | | | | | |
| 1 | L2 | 116 | 16 | 122 | 13.8 | 0.252 | 40.0 | LOS C | 5.4 | 46.3 | 0.80 | 0.77 | 0.80 | 36.1 |
| 2 | T1 | 22 | 2 | 23 | 9.1 | * 0.089 | 48.7 | LOS D | 1.2 | 9.0 | 0.90 | 0.65 | 0.90 | 36.6 |
| 3 | R2 | 113 | 12 | 119 | 10.6 | * 0.282 | 44.2 | LOS D | 5.6 | 44.6 | 0.84 | 0.77 | 0.84 | 33.6 |
| Approach | | 251 | 30 | 264 | 12.0 | 0.282 | 42.7 | LOS D | 5.6 | 46.3 | 0.83 | 0.76 | 0.83 | 35.1 |
| East: New Road (450m) | | | | | | | | | | | | | | |
| 4 | L2 | 12 | 5 | 13 | 41.7 | 0.282 | 39.8 | LOS C | 5.3 | 54.3 | 0.81 | 0.67 | 0.81 | 34.9 |
| 5 | T1 | 216 | 65 | 227 | 30.1 | * 0.282 | 34.8 | LOS C | 5.5 | 53.8 | 0.81 | 0.67 | 0.81 | 34.6 |
| 6 | R2 | 28 | 0 | 29 | 0.0 | 0.052 | 36.2 | LOS C | 1.2 | 8.5 | 0.74 | 0.68 | 0.74 | 36.9 |
| Approach | | 256 | 70 | 269 | 27.3 | 0.282 | 35.2 | LOS C | 5.5 | 54.3 | 0.80 | 0.67 | 0.80 | 34.9 |
| North: Aldington Road (670m) | | | | | | | | | | | | | | |
| 7 | L2 | 3 | 2 | 3 | 66.7 | 0.024 | 34.3 | LOS C | 0.2 | 2.0 | 0.84 | 0.62 | 0.84 | 38.6 |
| 8 | T1 | 8 | 1 | 8 | 12.5 | 0.028 | 42.9 | LOS D | 0.3 | 2.9 | 0.87 | 0.60 | 0.87 | 38.3 |
| 9 | R2 | 41 | 1 | 43 | 2.4 | 0.091 | 41.8 | LOS C | 1.9 | 13.6 | 0.79 | 0.72 | 0.79 | 36.9 |
| Approach | | 52 | 4 | 55 | 7.7 | 0.091 | 41.5 | LOS C | 1.9 | 13.6 | 0.81 | 0.69 | 0.81 | 37.2 |
| West: New Road (620m) | | | | | | | | | | | | | | |
| 10 | L2 | 9 | 5 | 9 | 55.6 | 0.148 | 58.0 | LOS E | 1.1 | 13.0 | 0.92 | 0.69 | 0.92 | 31.8 |
| 11 | T1 | 27 | 26 | 28 | 96.3 | * 0.148 | 52.9 | LOS D | 1.1 | 13.0 | 0.92 | 0.68 | 0.92 | 29.6 |
| 12 | R2 | 1 | 0 | 1 | 0.0 | 0.004 | 53.6 | LOS D | 0.1 | 0.4 | 0.89 | 0.59 | 0.89 | 32.5 |
| Approach | | 37 | 31 | 39 | 83.8 | 0.148 | 54.1 | LOS D | 1.1 | 13.0 | 0.92 | 0.68 | 0.92 | 30.2 |
| All Vehicles | | 596 | 135 | 627 | 22.7 | 0.282 | 40.1 | LOS C | 5.6 | 54.3 | 0.82 | 0.71 | 0.82 | 34.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (580m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.3 | 223.3 | 0.93 |
| East: New Road (450m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 239.9 | 222.9 | 0.93 |
| North: Aldington Road (670m) | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.6 | 223.7 | 0.93 |
| West: New Road (620m) | | | | | | | | | | | | |
| P4 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 239.9 | 222.9 | 0.93 |
| All Pedestrians | | 0 | 42 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.2 | 223.2 | 0.93 |

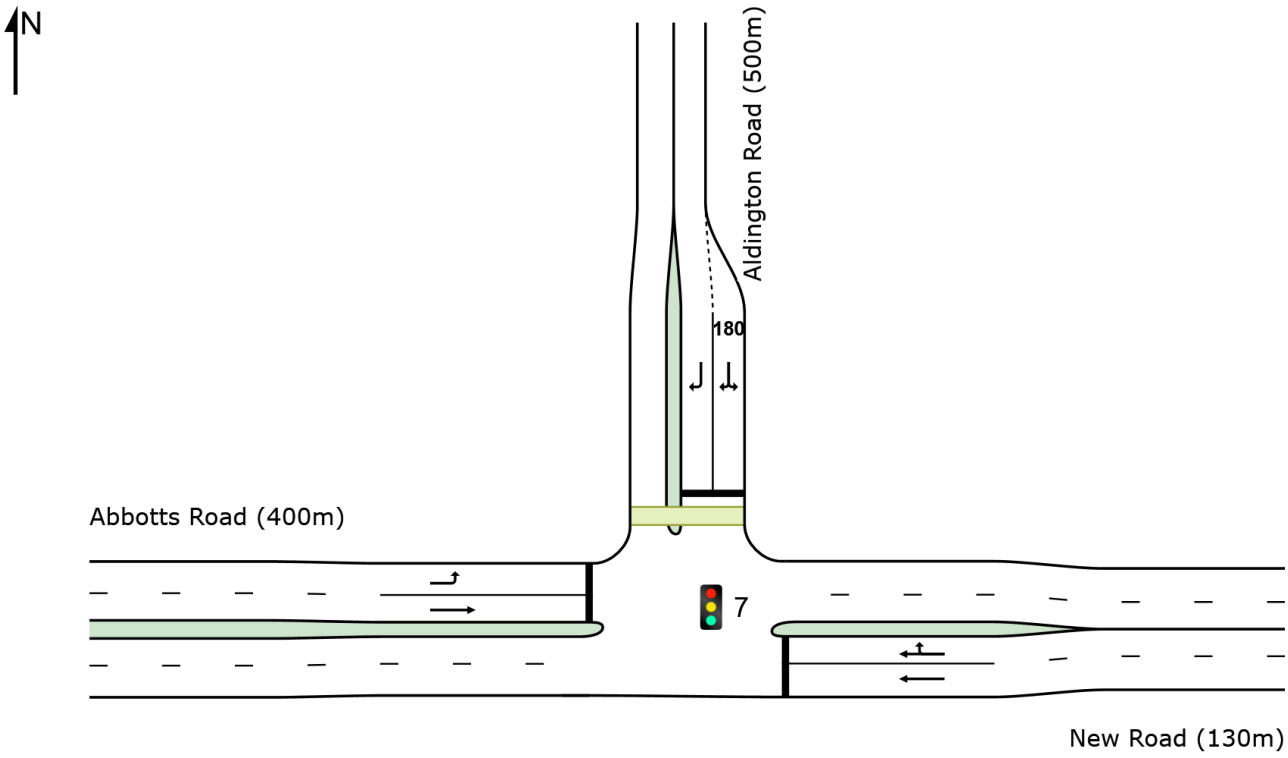
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 7 [[ID: 7] Aldington Road / Abbotts Road - AM (Site Folder: 2026 - AM Scenario 1)]

Aldington Road / Abbotts Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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





Organisation: ASON GROUP PTY LTD | Licence: NETWORK / 1PC | Created: Sunday, 16 July 2023 7:32:03 PM
Project: C:\Users\Arun Mohan\Desktop\Ason Group\P2368 - Aldington road Sidra ped crossing\SIDRA - Amend\P2368_LOGE_2026_Scenario 1.sip9

# MOVEMENT SUMMARY

## Site: 7 [[ID: 7] Aldington Road / Abbotts Road - AM (Site Folder: 2026 - AM Scenario 1)]

Aldington Road / Abbotts Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| East: New Road (130m) | | | | | | | | | | | | | | |
| 5 | T1 | 51 | 21 | 54 | 41.2 | 0.040 | 11.6 | LOS A | 0.7 | 7.1 | 0.42 | 0.32 | 0.42 | 42.8 |
| 6 | R2 | 1 | 0 | 1 | 0.0 | * 0.040 | 30.0 | LOS C | 0.7 | 7.1 | 0.66 | 0.50 | 0.66 | 35.9 |
| Approach | | 52 | 21 | 55 | 40.4 | 0.040 | 12.0 | LOS A | 0.7 | 7.1 | 0.42 | 0.32 | 0.42 | 42.6 |
| North: Aldington Road (500m) | | | | | | | | | | | | | | |
| 7 | L2 | 1 | 0 | 1 | 0.0 | 0.028 | 48.3 | LOS D | 0.3 | 3.4 | 0.84 | 0.67 | 0.84 | 27.7 |
| 9 | R2 | 11 | 4 | 12 | 36.4 | * 0.028 | 49.3 | LOS D | 0.3 | 3.4 | 0.84 | 0.67 | 0.84 | 31.7 |
| Approach | | 12 | 4 | 13 | 33.3 | 0.028 | 49.3 | LOS D | 0.3 | 3.4 | 0.84 | 0.67 | 0.84 | 31.4 |
| West: Abbotts Road (400m) | | | | | | | | | | | | | | |
| 10 | L2 | 71 | 30 | 75 | 42.3 | 0.102 | 16.5 | LOS B | 1.8 | 19.0 | 0.44 | 0.68 | 0.44 | 44.8 |
| 11 | T1 | 122 | 22 | 128 | 18.0 | * 0.136 | 11.3 | LOS A | 3.1 | 27.1 | 0.44 | 0.48 | 0.44 | 43.1 |
| Approach | | 193 | 52 | 203 | 26.9 | 0.136 | 13.2 | LOS A | 3.1 | 27.1 | 0.44 | 0.55 | 0.44 | 43.9 |
| All Vehicles | | 257 | 77 | 271 | 30.0 | 0.136 | 14.7 | LOS B | 3.1 | 27.1 | 0.46 | 0.51 | 0.46 | 42.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| North: Aldington Road (500m) | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 233.0 | 214.6 | 0.92 |
| All Pedestrians | | 0 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 233.0 | 214.6 | 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.

# MOVEMENT SUMMARY

## Site: 7 [[ID: 7] Aldington Road / Abbotts Road - PM. (Site Folder: 2026 - PM Scenario 1)]

Aldington Road / Abbotts Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| East: New Road (130m) | | | | | | | | | | | | | | |
| 5 | T1 | 131 | 20 | 138 | 15.3 | 0.067 | 9.0 | LOS A | 1.6 | 13.2 | 0.39 | 0.32 | 0.39 | 45.7 |
| 6 | R2 | 1 | 0 | 1 | 0.0 | * 0.067 | 18.8 | LOS B | 1.6 | 13.2 | 0.51 | 0.41 | 0.51 | 42.7 |
| Approach | | 132 | 20 | 139 | 15.2 | 0.067 | 9.1 | LOS A | 1.6 | 13.2 | 0.40 | 0.32 | 0.40 | 45.7 |
| North: Aldington Road (500m) | | | | | | | | | | | | | | |
| 7 | L2 | 1 | 0 | 1 | 0.0 | 0.053 | 48.8 | LOS D | 0.6 | 6.4 | 0.84 | 0.69 | 0.84 | 27.6 |
| 9 | R2 | 21 | 6 | 22 | 28.6 | * 0.053 | 49.7 | LOS D | 0.6 | 6.4 | 0.85 | 0.69 | 0.85 | 31.7 |
| Approach | | 22 | 6 | 23 | 27.3 | 0.053 | 49.7 | LOS D | 0.6 | 6.4 | 0.85 | 0.69 | 0.85 | 31.5 |
| West: Abbotts Road (400m) | | | | | | | | | | | | | | |
| 10 | L2 | 248 | 29 | 261 | 11.7 | * 0.269 | 17.3 | LOS B | 7.0 | 57.6 | 0.50 | 0.72 | 0.50 | 45.1 |
| 11 | T1 | 65 | 23 | 68 | 35.4 | 0.088 | 11.1 | LOS A | 1.6 | 17.2 | 0.43 | 0.45 | 0.43 | 43.3 |
| Approach | | 313 | 52 | 329 | 16.6 | 0.269 | 16.1 | LOS B | 7.0 | 57.6 | 0.49 | 0.66 | 0.49 | 44.9 |
| All Vehicles | | 467 | 78 | 492 | 16.7 | 0.269 | 15.7 | LOS B | 7.0 | 57.6 | 0.48 | 0.57 | 0.48 | 44.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| North: Aldington Road (500m) | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 233.0 | 214.6 | 0.92 |
| All Pedestrians | | 0 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 233.0 | 214.6 | 0.92 |

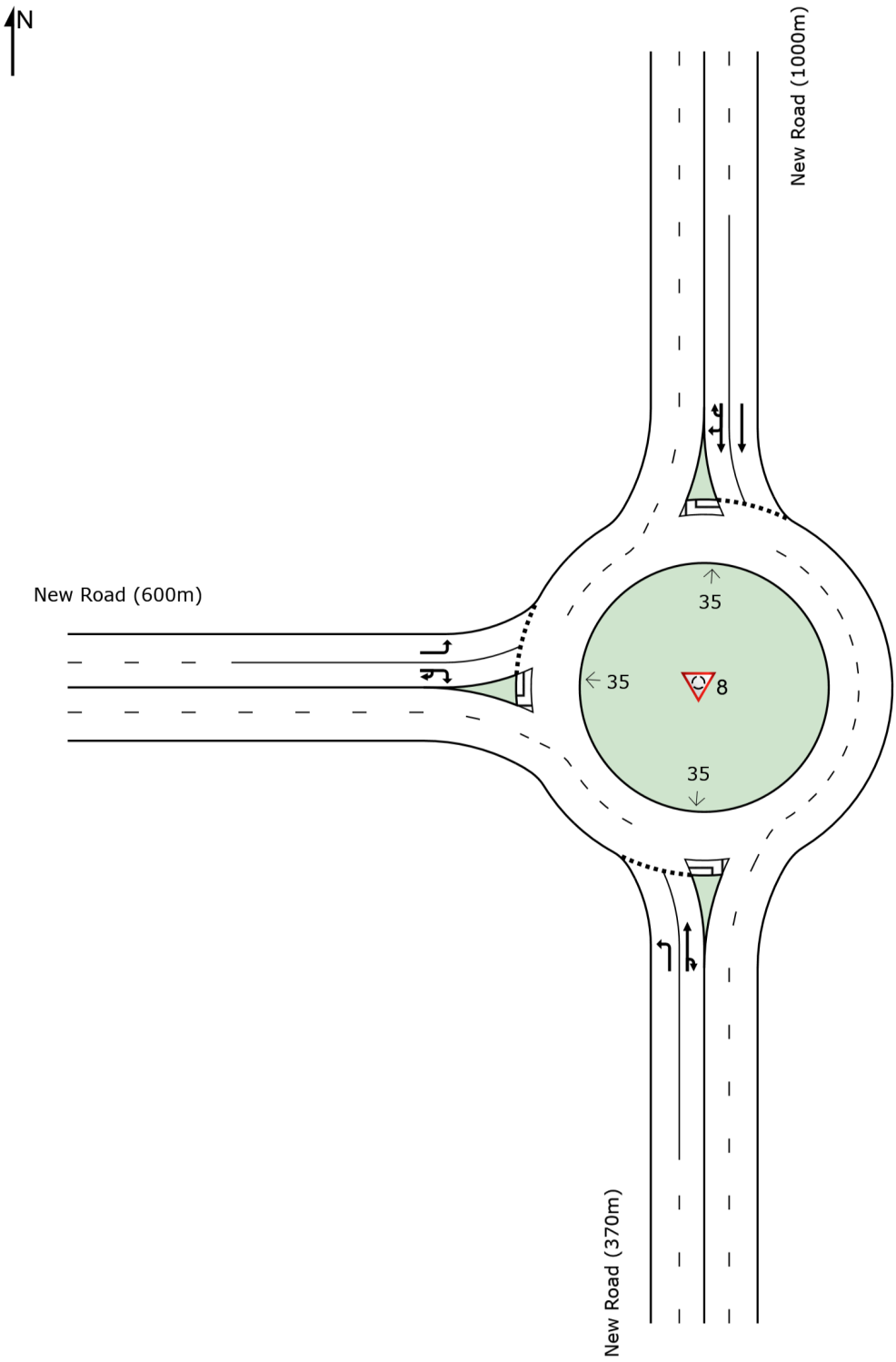
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 8 [[ID: 8] Internal Road Roundabout (Mirvac) - AM (Site Folder: 2026 - AM Scenario 1)]

Internal Road Roundabout (Mirvac)
Site Category: (None)
Roundabout

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



# MOVEMENT SUMMARY

## Site: 8 [[ID: 8] Internal Road Roundabout (Mirvac) - AM (Site Folder: 2026 - AM Scenario 1)]

Internal Road Roundabout (Mirvac)
Site Category: (None)
Roundabout

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: New Road (370m) | | | | | | | | | | | | | | |
| 1 | L2 | 81 | 36 | 85 | 44.4 | 0.078 | 2.7 | LOS A | 0.4 | 4.4 | 0.18 | 0.31 | 0.18 | 48.3 |
| 2 | T1 | 124 | 85 | 131 | 68.5 | 0.122 | 2.1 | LOS A | 0.7 | 9.8 | 0.19 | 0.22 | 0.19 | 50.1 |
| 3u | U | 1 | 0 | 1 | 0.0 | 0.122 | 9.7 | LOS A | 0.7 | 9.8 | 0.19 | 0.22 | 0.19 | 54.1 |
| Approach | | 206 | 121 | 217 | 58.7 | 0.122 | 2.4 | LOS A | 0.7 | 9.8 | 0.18 | 0.26 | 0.18 | 49.6 |
| North: New Road (1000m) | | | | | | | | | | | | | | |
| 8 | T1 | 238 | 77 | 251 | 32.4 | 0.110 | 2.0 | LOS A | 0.6 | 6.3 | 0.20 | 0.25 | 0.20 | 50.1 |
| 9 | R2 | 26 | 13 | 27 | 50.0 | 0.110 | 8.3 | LOS A | 0.6 | 6.4 | 0.21 | 0.31 | 0.21 | 50.0 |
| 9u | U | 1 | 0 | 1 | 0.0 | 0.110 | 9.7 | LOS A | 0.6 | 6.4 | 0.21 | 0.31 | 0.21 | 51.2 |
| Approach | | 265 | 90 | 279 | 34.0 | 0.110 | 2.6 | LOS A | 0.6 | 6.4 | 0.20 | 0.26 | 0.20 | 50.1 |
| West: New Road (600m) | | | | | | | | | | | | | | |
| 10 | L2 | 24 | 10 | 25 | 41.7 | 0.029 | 3.9 | LOS A | 0.1 | 1.5 | 0.41 | 0.41 | 0.41 | 48.5 |
| 12 | R2 | 41 | 6 | 43 | 14.6 | 0.032 | 8.4 | LOS A | 0.2 | 1.5 | 0.36 | 0.55 | 0.36 | 47.1 |
| 12u | U | 1 | 0 | 1 | 0.0 | 0.032 | 10.1 | LOS A | 0.2 | 1.5 | 0.36 | 0.55 | 0.36 | 49.0 |
| Approach | | 66 | 16 | 69 | 24.2 | 0.032 | 6.8 | LOS A | 0.2 | 1.5 | 0.38 | 0.50 | 0.38 | 47.8 |
| All Vehicles | | 537 | 227 | 565 | 42.3 | 0.122 | 3.1 | LOS A | 0.7 | 9.8 | 0.21 | 0.29 | 0.21 | 49.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

## Site: 8 [[ID: 8] Internal Road Roundabout Mirvac - PM (Site Folder: 2026 - PM Scenario 1)]

Internal Road Roundabout (Mirvac)
Site Category: (None)
Roundabout

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: New Road (370m) | | | | | | | | | | | | | | |
| 1 | L2 | 284 | 44 | 299 | 15.5 | 0.190 | 2.5 | LOS A | 1.1 | 9.2 | 0.20 | 0.33 | 0.20 | 48.4 |
| 2 | T1 | 253 | 74 | 266 | 29.2 | 0.221 | 2.1 | LOS A | 1.3 | 12.2 | 0.24 | 0.24 | 0.24 | 50.1 |
| 3u | U | 1 | 0 | 1 | 0.0 | 0.221 | 9.8 | LOS A | 1.3 | 12.2 | 0.24 | 0.24 | 0.24 | 53.8 |
| Approach | | 538 | 118 | 566 | 21.9 | 0.221 | 2.4 | LOS A | 1.3 | 12.2 | 0.22 | 0.29 | 0.22 | 49.3 |
| North: New Road (1000m) | | | | | | | | | | | | | | |
| 8 | T1 | 82 | 58 | 86 | 70.7 | 0.057 | 1.9 | LOS A | 0.3 | 3.2 | 0.06 | 0.27 | 0.06 | 49.9 |
| 9 | R2 | 54 | 8 | 57 | 14.8 | 0.057 | 7.6 | LOS A | 0.3 | 3.2 | 0.05 | 0.47 | 0.05 | 49.1 |
| 9u | U | 1 | 0 | 1 | 0.0 | 0.057 | 9.5 | LOS A | 0.3 | 3.2 | 0.05 | 0.47 | 0.05 | 50.2 |
| Approach | | 137 | 66 | 144 | 48.2 | 0.057 | 4.2 | LOS A | 0.3 | 4.0 | 0.06 | 0.35 | 0.06 | 49.5 |
| West: New Road (600m) | | | | | | | | | | | | | | |
| 10 | L2 | 67 | 11 | 71 | 16.4 | 0.058 | 3.6 | LOS A | 0.3 | 2.9 | 0.46 | 0.45 | 0.46 | 48.5 |
| 12 | R2 | 3 | 2 | 3 | 66.7 | 0.005 | 10.4 | LOS A | 0.0 | 0.3 | 0.49 | 0.55 | 0.49 | 45.8 |
| 12u | U | 1 | 0 | 1 | 0.0 | 0.005 | 11.0 | LOS A | 0.0 | 0.3 | 0.49 | 0.55 | 0.49 | 48.1 |
| Approach | | 71 | 13 | 75 | 18.3 | 0.058 | 4.0 | LOS A | 0.3 | 2.9 | 0.46 | 0.45 | 0.46 | 48.4 |
| All Vehicles | | 746 | 197 | 785 | 26.4 | 0.221 | 2.9 | LOS A | 1.3 | 12.2 | 0.21 | 0.31 | 0.21 | 49.3 |

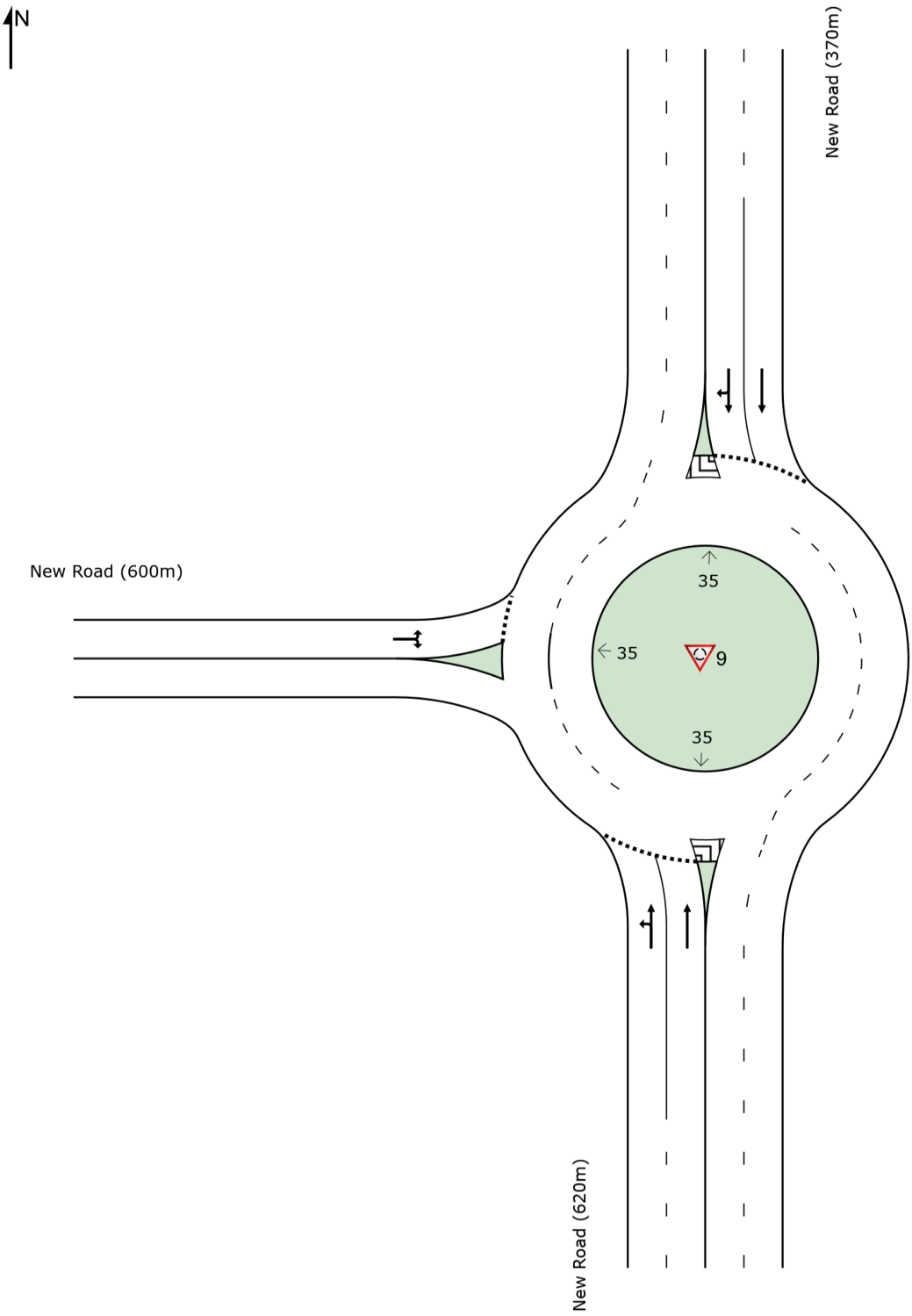
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# SITE LAYOUT

## Site: 9 [[ID: 9] Internal Road Roundabout (Altis)- AM (Site Folder: 2026 - AM Scenario 1)]

Internal Road Roundabout (Altis)
Site Category: (None)
Roundabout

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



# MOVEMENT SUMMARY

## Site: 9 [[ID: 9] Internal Road Roundabout (Altis)- AM (Site Folder: 2026 - AM Scenario 1)]

Internal Road Roundabout (Altis)
Site Category: (None)
Roundabout

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: New Road (620m) | | | | | | | | | | | | | | |
| 1 | L2 | 150 | 94 | 158 | 62.7 | 0.142 | 3.1 | LOS A | 0.4 | 6.2 | 0.16 | 0.35 | 0.16 | 48.3 |
| 2 | T1 | 1 | 0 | 1 | 0.0 | 0.001 | 1.8 | LOS A | 0.0 | 0.0 | 0.13 | 0.20 | 0.13 | 50.7 |
| Approach | | 151 | 94 | 159 | 62.3 | 0.142 | 3.1 | LOS A | 0.4 | 6.2 | 0.16 | 0.35 | 0.16 | 48.3 |
| North: New Road (370m) | | | | | | | | | | | | | | |
| 8 | T1 | 26 | 12 | 27 | 46.2 | 0.030 | 2.8 | LOS A | 0.1 | 1.0 | 0.29 | 0.31 | 0.29 | 49.9 |
| 9 | R2 | 58 | 23 | 61 | 39.7 | 0.051 | 8.5 | LOS A | 0.2 | 1.7 | 0.27 | 0.57 | 0.27 | 47.1 |
| Approach | | 84 | 35 | 88 | 41.7 | 0.051 | 6.7 | LOS A | 0.2 | 1.7 | 0.27 | 0.49 | 0.27 | 47.9 |
| West: New Road (600m) | | | | | | | | | | | | | | |
| 10 | L2 | 1 | 0 | 1 | 0.0 | 0.188 | 2.1 | LOS A | 0.4 | 4.5 | 0.01 | 0.55 | 0.01 | 46.1 |
| 12 | R2 | 242 | 78 | 255 | 32.2 | 0.188 | 7.7 | LOS A | 0.4 | 4.5 | 0.01 | 0.55 | 0.01 | 48.4 |
| Approach | | 243 | 78 | 256 | 32.1 | 0.188 | 7.7 | LOS A | 0.4 | 4.5 | 0.01 | 0.55 | 0.01 | 48.3 |
| All Vehicles | | 478 | 207 | 503 | 43.3 | 0.188 | 6.1 | LOS A | 0.4 | 6.2 | 0.10 | 0.48 | 0.10 | 48.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

## Site: 9 [[ID: 9] Internal Road Roundabout Altis - PM (Site Folder: 2026 - PM Scenario 1)]

Internal Road Roundabout Altis
Site Category: (None)
Roundabout

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: New Road (620m) | | | | | | | | | | | | | | |
| 1 | L2 | 325 | 89 | 342 | 27.4 | 0.221 | 2.6 | LOS A | 0.7 | 7.2 | 0.07 | 0.33 | 0.07 | 48.8 |
| 2 | T1 | 1 | 0 | 1 | 0.0 | 0.001 | 1.7 | LOS A | 0.0 | 0.0 | 0.06 | 0.19 | 0.06 | 51.1 |
| Approach | | 326 | 89 | 343 | 27.3 | 0.221 | 2.6 | LOS A | 0.7 | 7.2 | 0.07 | 0.33 | 0.07 | 48.8 |
| North: New Road (370m) | | | | | | | | | | | | | | |
| 8 | T1 | 52 | 5 | 55 | 9.6 | 0.032 | 1.8 | LOS A | 0.1 | 0.6 | 0.14 | 0.22 | 0.14 | 50.3 |
| 9 | R2 | 8 | 8 | 8 | 100.0 | 0.015 | 9.3 | LOS A | 0.0 | 0.9 | 0.22 | 0.48 | 0.22 | 45.7 |
| Approach | | 60 | 13 | 63 | 21.7 | 0.032 | 2.8 | LOS A | 0.1 | 0.9 | 0.15 | 0.25 | 0.15 | 49.6 |
| West: New Road (600m) | | | | | | | | | | | | | | |
| 10 | L2 | 1 | 0 | 1 | 0.0 | 0.083 | 2.1 | LOS A | 0.2 | 2.3 | 0.01 | 0.52 | 0.01 | 46.2 |
| 12 | R2 | 86 | 62 | 91 | 72.1 | 0.083 | 8.0 | LOS A | 0.2 | 2.3 | 0.01 | 0.52 | 0.01 | 48.1 |
| Approach | | 87 | 62 | 92 | 71.3 | 0.083 | 7.9 | LOS A | 0.2 | 2.3 | 0.01 | 0.52 | 0.01 | 48.0 |
| All Vehicles | | 473 | 164 | 498 | 34.7 | 0.221 | 3.6 | LOS A | 0.7 | 7.2 | 0.07 | 0.35 | 0.07 | 48.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

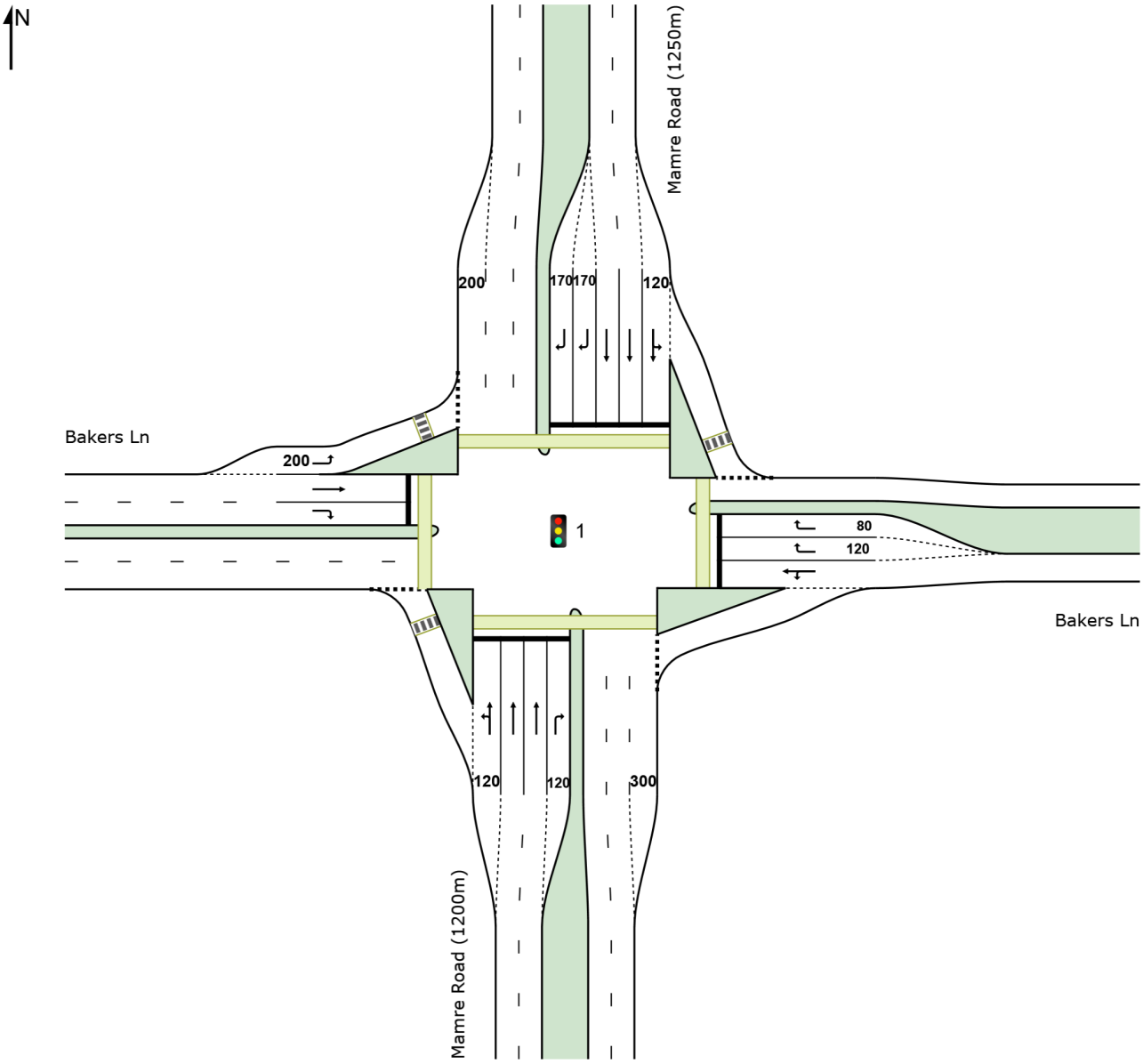
# Attachment 2 – Scenario 2 SIDRA Results

# SITE LAYOUT

## Site: 1 [ID [1]. Mamre Road / Bakers Lane - PM (Site Folder: 2026 - PM - Scenario 2)]

Mamre Road / Bakers Lane
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



# MOVEMENT SUMMARY

## Site: 1 [ID [1]. Mamre Road / Bakers Lane - AM (Site Folder: 2026 - AM - Scenario 2)]

Mamre Road / Bakers Lane
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (1200m) | | | | | | | | | | | | | | |
| 1 | L2 | 44 | 25 | 46 | 56.8 | 0.892 | 50.6 | LOS D | 19.1 | 185.4 | 0.73 | 0.90 | 1.01 | 47.8 |
| 2 | T1 | 1343 | 276 | 1414 | 20.6 | 0.892 | 42.4 | LOS C | 34.0 | 310.0 | 0.90 | 0.95 | 1.07 | 58.1 |
| 3 | R2 | 28 | 6 | 29 | 21.4 | * 0.129 | 56.2 | LOS D | 1.5 | 12.6 | 0.90 | 0.73 | 0.90 | 44.7 |
| Approach | | 1415 | 307 | 1489 | 21.7 | 0.892 | 42.9 | LOS D | 34.0 | 310.0 | 0.89 | 0.94 | 1.07 | 57.6 |
| East: Bakers Ln | | | | | | | | | | | | | | |
| 4 | L2 | 7 | 6 | 7 | 85.7 | 0.024 | 24.6 | LOS B | 0.2 | 2.8 | 0.54 | 0.59 | 0.54 | 53.7 |
| 5 | T1 | 1 | 0 | 1 | 0.0 | * 0.024 | 15.5 | LOS B | 0.2 | 2.8 | 0.54 | 0.59 | 0.54 | 49.1 |
| 6 | R2 | 156 | 4 | 164 | 2.6 | * 0.300 | 55.4 | LOS D | 4.4 | 31.2 | 0.93 | 0.76 | 0.93 | 45.0 |
| Approach | | 164 | 10 | 173 | 6.1 | 0.300 | 53.9 | LOS D | 4.4 | 31.2 | 0.91 | 0.76 | 0.91 | 45.3 |
| North: Mamre Road (1250m) | | | | | | | | | | | | | | |
| 7 | L2 | 367 | 0 | 386 | 0.0 | 0.847 | 20.1 | LOS B | 17.5 | 135.1 | 0.46 | 0.68 | 0.53 | 60.6 |
| 8 | T1 | 1575 | 248 | 1658 | 15.7 | * 0.847 | 23.6 | LOS B | 33.1 | 283.8 | 0.74 | 0.76 | 0.80 | 65.8 |
| 9 | R2 | 275 | 39 | 289 | 14.2 | 0.399 | 50.0 | LOS D | 7.3 | 60.8 | 0.89 | 0.80 | 0.89 | 46.9 |
| Approach | | 2217 | 287 | 2334 | 12.9 | 0.847 | 26.3 | LOS B | 33.1 | 283.8 | 0.71 | 0.75 | 0.77 | 62.5 |
| West: Bakers Ln | | | | | | | | | | | | | | |
| 10 | L2 | 106 | 40 | 112 | 37.7 | 0.211 | 25.7 | LOS B | 3.6 | 41.0 | 0.61 | 0.71 | 0.61 | 54.3 |
| 11 | T1 | 1 | 0 | 1 | 0.0 | 0.012 | 61.3 | LOS E | 0.1 | 0.4 | 0.98 | 0.57 | 0.98 | 34.5 |
| 12 | R2 | 43 | 21 | 45 | 48.8 | 0.292 | 57.4 | LOS E | 2.5 | 31.4 | 0.93 | 0.75 | 0.93 | 41.9 |
| Approach | | 150 | 61 | 158 | 40.7 | 0.292 | 35.0 | LOS C | 3.6 | 41.0 | 0.71 | 0.72 | 0.71 | 50.0 |
| All Vehicles | | 3946 | 665 | 4154 | 16.9 | 0.892 | 33.7 | LOS C | 34.0 | 310.0 | 0.78 | 0.82 | 0.88 | 59.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (1200m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 245.8 | 229.9 | 0.94 |
| East: Bakers Ln | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.4 | 218.7 | 0.93 |
| North: Mamre Road (1250m) | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 234.3 | 234.1 | 1.00 |
| West: Bakers Ln | | | | | | | | | | | | |
| P4 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 237.0 | 219.4 | 0.93 |
| All Pedestrians | | 40 | 42 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 238.4 | 225.5 | 0.95 |

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.

# MOVEMENT SUMMARY

## Site: 1 [ID [1]. Mamre Road / Bakers Lane - PM (Site Folder: 2026 - PM - Scenario 2)]

Mamre Road / Bakers Lane
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (1200m) | | | | | | | | | | | | | | |
| 1 | L2 | 150 | 25 | 158 | 16.7 | 0.876 | 37.8 | LOS C | 24.9 | 217.4 | 0.72 | 0.89 | 0.88 | 52.6 |
| 2 | T1 | 1614 | 292 | 1699 | 18.1 | * 0.876 | 33.4 | LOS C | 36.3 | 315.3 | 0.85 | 0.88 | 0.96 | 62.3 |
| 3 | R2 | 10 | 0 | 11 | 0.0 | 0.067 | 63.3 | LOS E | 0.6 | 4.1 | 0.95 | 0.68 | 0.95 | 43.0 |
| Approach | | 1774 | 317 | 1867 | 17.9 | 0.876 | 33.9 | LOS C | 36.3 | 315.3 | 0.84 | 0.88 | 0.95 | 61.4 |
| East: Bakers Ln | | | | | | | | | | | | | | |
| 4 | L2 | 12 | 0 | 13 | 0.0 | 0.028 | 19.4 | LOS B | 0.4 | 2.9 | 0.56 | 0.61 | 0.56 | 59.3 |
| 5 | T1 | 3 | 2 | 3 | 66.7 | * 0.028 | 11.5 | LOS A | 0.4 | 2.9 | 0.56 | 0.61 | 0.56 | 49.9 |
| 6 | R2 | 558 | 9 | 587 | 1.6 | * 0.735 | 54.7 | LOS D | 16.6 | 117.7 | 0.99 | 0.87 | 1.04 | 45.2 |
| Approach | | 573 | 11 | 603 | 1.9 | 0.735 | 53.8 | LOS D | 16.6 | 117.7 | 0.98 | 0.86 | 1.02 | 45.5 |
| North: Mamre Road (1250m) | | | | | | | | | | | | | | |
| 7 | L2 | 187 | 31 | 197 | 16.6 | 0.838 | 25.8 | LOS B | 15.4 | 143.3 | 0.49 | 0.69 | 0.59 | 58.1 |
| 8 | T1 | 1454 | 305 | 1531 | 21.0 | 0.838 | 25.6 | LOS B | 30.5 | 271.3 | 0.75 | 0.76 | 0.82 | 65.0 |
| 9 | R2 | 62 | 37 | 65 | 59.7 | * 0.376 | 69.1 | LOS E | 2.0 | 23.8 | 0.98 | 0.74 | 0.98 | 41.2 |
| Approach | | 1703 | 373 | 1793 | 21.9 | 0.838 | 27.2 | LOS B | 30.5 | 271.3 | 0.73 | 0.76 | 0.80 | 63.2 |
| West: Bakers Ln | | | | | | | | | | | | | | |
| 10 | L2 | 208 | 46 | 219 | 22.1 | 0.472 | 40.1 | LOS C | 9.2 | 85.9 | 0.80 | 0.80 | 0.80 | 52.6 |
| 11 | T1 | 1 | 0 | 1 | 0.0 | 0.009 | 58.2 | LOS E | 0.1 | 0.4 | 0.96 | 0.56 | 0.96 | 35.3 |
| 12 | R2 | 144 | 27 | 152 | 18.8 | 0.474 | 50.9 | LOS D | 7.9 | 69.5 | 0.92 | 0.80 | 0.92 | 44.9 |
| Approach | | 353 | 73 | 372 | 20.7 | 0.474 | 44.5 | LOS D | 9.2 | 85.9 | 0.85 | 0.80 | 0.85 | 49.1 |
| All Vehicles | | 4403 | 774 | 4635 | 17.6 | 0.876 | 34.7 | LOS C | 36.3 | 315.3 | 0.81 | 0.82 | 0.89 | 58.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (1200m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 245.8 | 229.9 | 0.94 |
| East: Bakers Ln | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.4 | 218.7 | 0.93 |
| North: Mamre Road (1250m) | | | | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P3 Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 234.3 | 234.1 | 1.00 |
| West: Bakers Ln | | | | | | | | | | | |
| P4 Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 237.0 | 219.4 | 0.93 |
| All Pedestrians | 40 | 42 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 238.4 | 225.5 | 0.95 |

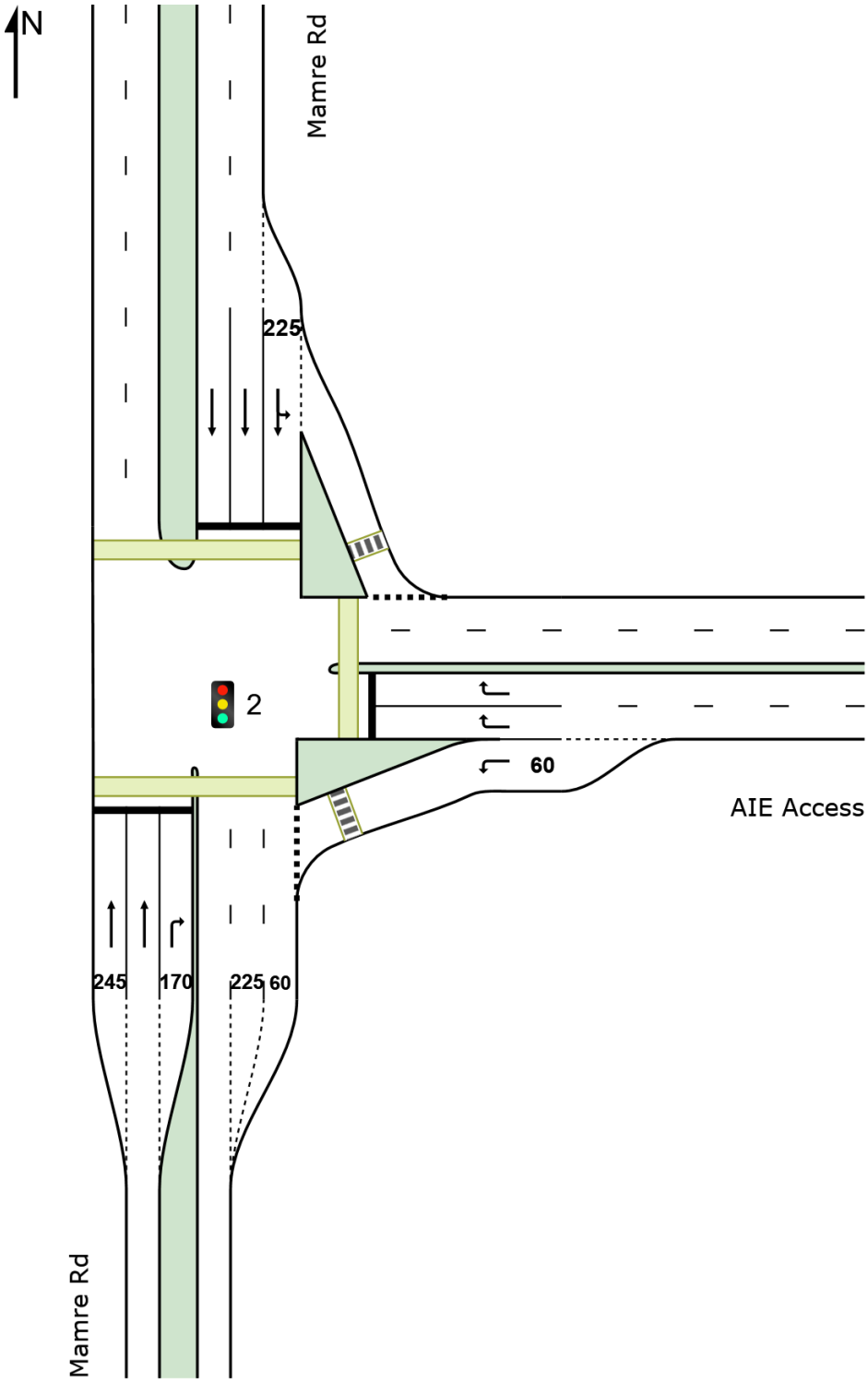
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 2 [ID [2]. Mamre Road / Mirvac Access - PM (Site Folder: 2026 - PM - Scenario 2)]

Mamre Road x Mirvac Access
Site Category: Proposed Interim
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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



# MOVEMENT SUMMARY

## Site: 2 [ID [2]. Mamre Road / Mirvac Access - AM (Site Folder: 2026 - AM - Scenario 2)]

Mamre Road x Mirvac Access
Site Category: Proposed Interim
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | | | |
| 2 | T1 | 1053 | 138 | 1108 | 13.1 | 0.526 | 12.8 | LOS A | 17.6 | 146.3 | 0.59 | 0.54 | 0.59 | 68.6 |
| 3 | R2 | 48 | 16 | 51 | 33.3 | * 0.612 | 72.6 | LOS F | 3.2 | 33.3 | 1.00 | 0.79 | 1.11 | 28.7 |
| Approach | | 1101 | 154 | 1159 | 14.0 | 0.612 | 15.4 | LOS B | 17.6 | 146.3 | 0.61 | 0.55 | 0.62 | 66.2 |
| East: Mirvac Access | | | | | | | | | | | | | | |
| 4 | L2 | 34 | 16 | 36 | 47.1 | 0.068 | 15.5 | LOS B | 0.6 | 8.3 | 0.36 | 0.63 | 0.36 | 44.8 |
| 6 | R2 | 376 | 175 | 396 | 46.5 | * 0.714 | 53.2 | LOS D | 11.4 | 136.4 | 0.96 | 0.87 | 1.04 | 41.9 |
| Approach | | 410 | 191 | 432 | 46.6 | 0.714 | 50.1 | LOS D | 11.4 | 136.4 | 0.91 | 0.85 | 0.98 | 42.0 |
| North: Mamre Rd | | | | | | | | | | | | | | |
| 7 | L2 | 586 | 95 | 617 | 16.2 | 0.463 | 8.7 | LOS A | 5.5 | 47.8 | 0.24 | 0.67 | 0.24 | 65.1 |
| 8 | T1 | 1009 | 145 | 1062 | 14.4 | * 0.627 | 23.3 | LOS B | 22.0 | 186.4 | 0.77 | 0.69 | 0.77 | 62.3 |
| Approach | | 1595 | 240 | 1679 | 15.0 | 0.627 | 17.9 | LOS B | 22.0 | 186.4 | 0.57 | 0.68 | 0.57 | 63.3 |
| All Vehicles | | 3106 | 585 | 3269 | 18.8 | 0.714 | 21.3 | LOS B | 22.0 | 186.4 | 0.63 | 0.66 | 0.64 | 60.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 46.0 | LOS E | 0.0 | 0.0 | 0.88 | 0.88 | 217.9 | 223.5 | 1.03 |
| East: Mirvac Access | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 20.4 | LOS C | 0.0 | 0.0 | 0.58 | 0.58 | 187.3 | 217.0 | 1.16 |
| North: Mamre Rd | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 46.0 | LOS E | 0.0 | 0.0 | 0.88 | 0.88 | 218.3 | 224.0 | 1.03 |
| All Pedestrians | | 30 | 32 | 37.4 | LOS D | 0.0 | 0.0 | 0.78 | 0.78 | 207.8 | 221.5 | 1.07 |

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.

# MOVEMENT SUMMARY

## Site: 2 [ID [2]. Mamre Road / Mirvac Access - PM (Site Folder: 2026 - PM - Scenario 2)]

Mamre Road x Mirvac Access
Site Category: Proposed Interim
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | | | |
| 2 | T1 | 1228 | 155 | 1293 | 12.6 | 0.603 | 13.3 | LOS A | 21.8 | 180.6 | 0.63 | 0.58 | 0.63 | 68.3 |
| 3 | R2 | 150 | 19 | 158 | 12.7 | * 1.096 | 171.8 | LOS F | 17.1 | 142.5 | 1.00 | 1.26 | 2.23 | 15.9 |
| Approach | | 1378 | 174 | 1451 | 12.6 | 1.096 | 30.6 | LOS C | 21.8 | 180.6 | 0.67 | 0.65 | 0.81 | 55.8 |
| East: AIE Access | | | | | | | | | | | | | | |
| 4 | L2 | 23 | 6 | 24 | 26.1 | 0.041 | 21.8 | LOS B | 0.7 | 7.2 | 0.57 | 0.65 | 0.57 | 42.8 |
| 6 | R2 | 493 | 142 | 519 | 28.8 | * 0.778 | 56.1 | LOS D | 15.5 | 147.7 | 0.99 | 0.90 | 1.11 | 41.8 |
| Approach | | 516 | 148 | 543 | 28.7 | 0.778 | 54.5 | LOS D | 15.5 | 147.7 | 0.97 | 0.89 | 1.08 | 41.9 |
| North: Mamre Rd | | | | | | | | | | | | | | |
| 7 | L2 | 181 | 135 | 191 | 74.6 | 0.230 | 10.5 | LOS A | 2.0 | 27.8 | 0.24 | 0.65 | 0.24 | 62.6 |
| 8 | T1 | 1482 | 205 | 1560 | 13.8 | * 0.932 | 52.4 | LOS D | 54.9 | 452.6 | 1.00 | 1.10 | 1.23 | 47.7 |
| Approach | | 1663 | 340 | 1751 | 20.4 | 0.932 | 47.8 | LOS D | 54.9 | 452.6 | 0.92 | 1.05 | 1.12 | 49.0 |
| All Vehicles | | 3557 | 662 | 3744 | 18.6 | 1.096 | 42.1 | LOS C | 54.9 | 452.6 | 0.83 | 0.87 | 0.99 | 50.1 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 46.8 | LOS E | 0.0 | 0.0 | 0.88 | 0.88 | 218.8 | 223.5 | 1.02 |
| East: AIE Access | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 21.6 | LOS C | 0.0 | 0.0 | 0.60 | 0.60 | 188.5 | 217.0 | 1.15 |
| North: Mamre Rd | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 46.8 | LOS E | 0.0 | 0.0 | 0.88 | 0.88 | 219.1 | 224.0 | 1.02 |
| All Pedestrians | | 30 | 32 | 38.4 | LOS D | 0.0 | 0.0 | 0.79 | 0.79 | 208.8 | 221.5 | 1.06 |

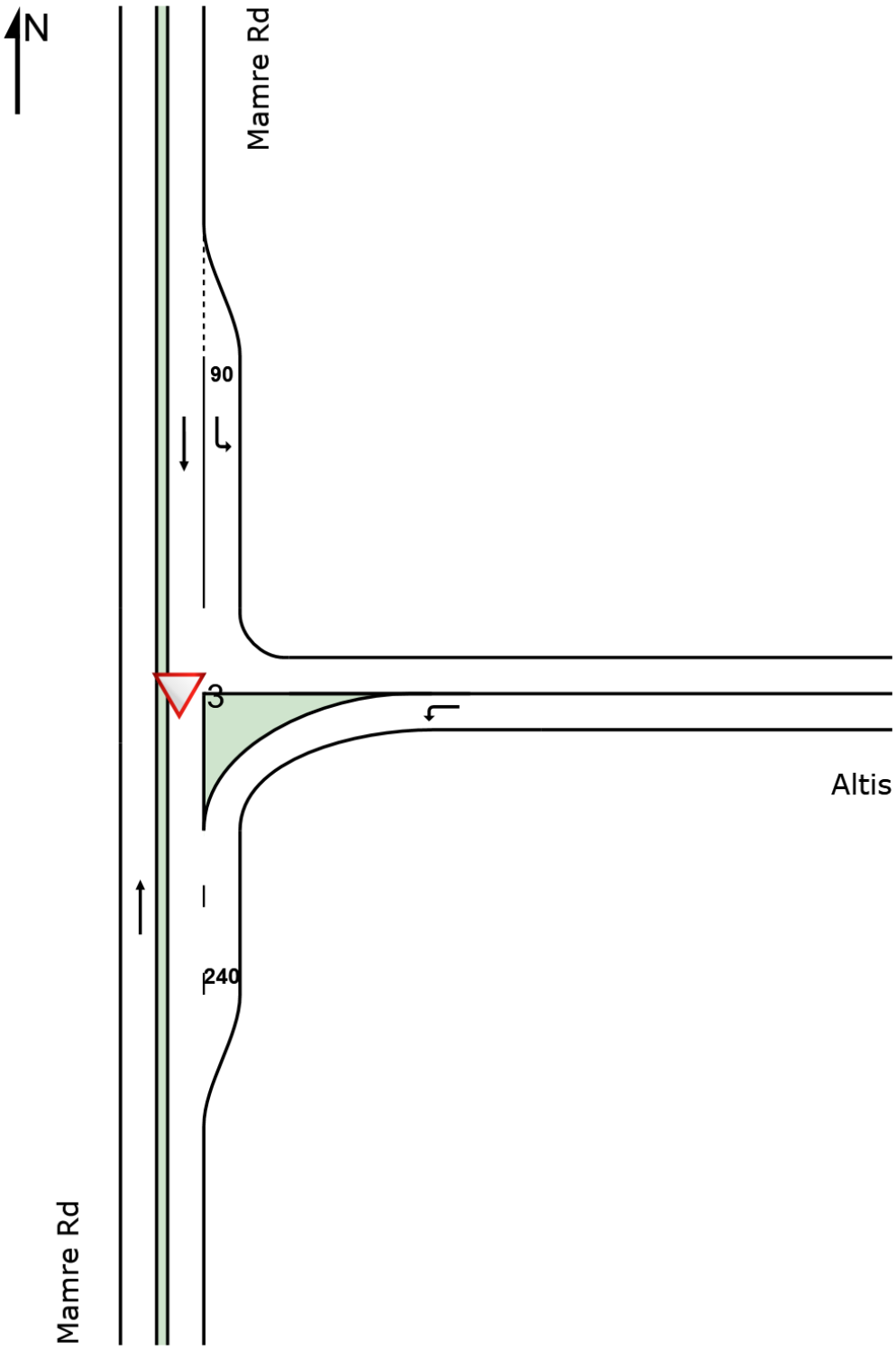
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 3 [ID [3]. Mamre Road / Altis Access - AM (Site Folder: 2026 - AM - Scenario 2)]

Mamre Road x Altis Access
Site Category: (None)
Give-Way (Two-Way)

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



# MOVEMENT SUMMARY

## Site: 3 [ID [3]. Mamre Road / Altis Access - AM (Site Folder: 2026 - AM - Scenario 2)]

Mamre Road x Altis Access
Site Category: (None)
Give-Way (Two-Way)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | | | |
| 2 | T1 | 1098 | 154 | 1156 | 14.0 | 0.709 | 0.6 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 78.6 |
| Approach | | 1098 | 154 | 1156 | 14.0 | 0.709 | 0.6 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 78.6 |
| East: Altis | | | | | | | | | | | | | | |
| 4 | L2 | 137 | 53 | 144 | 38.7 | 0.129 | 6.9 | LOS A | 0.0 | 0.0 | 0.00 | 0.51 | 0.00 | 54.6 |
| Approach | | 137 | 53 | 144 | 38.7 | 0.129 | 6.9 | NA | 0.0 | 0.0 | 0.00 | 0.51 | 0.00 | 54.6 |
| North: Mamre Rd | | | | | | | | | | | | | | |
| 7 | L2 | 119 | 21 | 125 | 17.6 | 0.086 | 7.3 | LOS A | 0.0 | 0.0 | 0.00 | 0.63 | 0.00 | 59.5 |
| 8 | T1 | 923 | 139 | 972 | 15.1 | 0.607 | 0.3 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 79.1 |
| Approach | | 1042 | 160 | 1097 | 15.4 | 0.607 | 1.1 | NA | 0.0 | 0.0 | 0.00 | 0.07 | 0.00 | 76.8 |
| All Vehicles | | 2277 | 367 | 2397 | 16.1 | 0.709 | 1.2 | NA | 0.0 | 0.0 | 0.00 | 0.06 | 0.00 | 75.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

## Site: 3 [ID [3]. Mamre Road / Altis Access - PM (Site Folder: 2026 - PM - Scenario 2)]

Mamre Road x Altis Access
Site Category: (None)
Give-Way (Two-Way)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Rd | | | | | | | | | | | | | | |
| 2 | T1 | 1350 | 172 | 1421 | 12.7 | 0.860 | 1.6 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 76.7 |
| Approach | | 1350 | 172 | 1421 | 12.7 | 0.860 | 1.6 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 76.7 |
| East: Altis | | | | | | | | | | | | | | |
| 4 | L2 | 468 | 62 | 493 | 13.2 | 0.319 | 37.1 | LOS C | 0.0 | 0.0 | 0.00 | 0.52 | 0.00 | 55.4 |
| Approach | | 468 | 62 | 493 | 13.2 | 0.319 | 37.1 | NA | 0.0 | 0.0 | 0.00 | 0.52 | 0.00 | 55.4 |
| North: Mamre Rd | | | | | | | | | | | | | | |
| 7 | L2 | 31 | 22 | 33 | 71.0 | 0.036 | 8.4 | LOS A | 0.0 | 0.0 | 0.00 | 0.63 | 0.00 | 46.8 |
| 8 | T1 | 1479 | 187 | 1557 | 12.6 | 0.932 | 37.4 | LOS C | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 73.4 |
| Approach | | 1510 | 209 | 1589 | 13.8 | 0.932 | 36.8 | NA | 0.0 | 0.0 | 0.00 | 0.01 | 0.00 | 72.7 |
| All Vehicles | | 3328 | 443 | 3503 | 13.3 | 0.932 | 22.5 | NA | 0.0 | 0.0 | 0.00 | 0.08 | 0.00 | 71.0 |

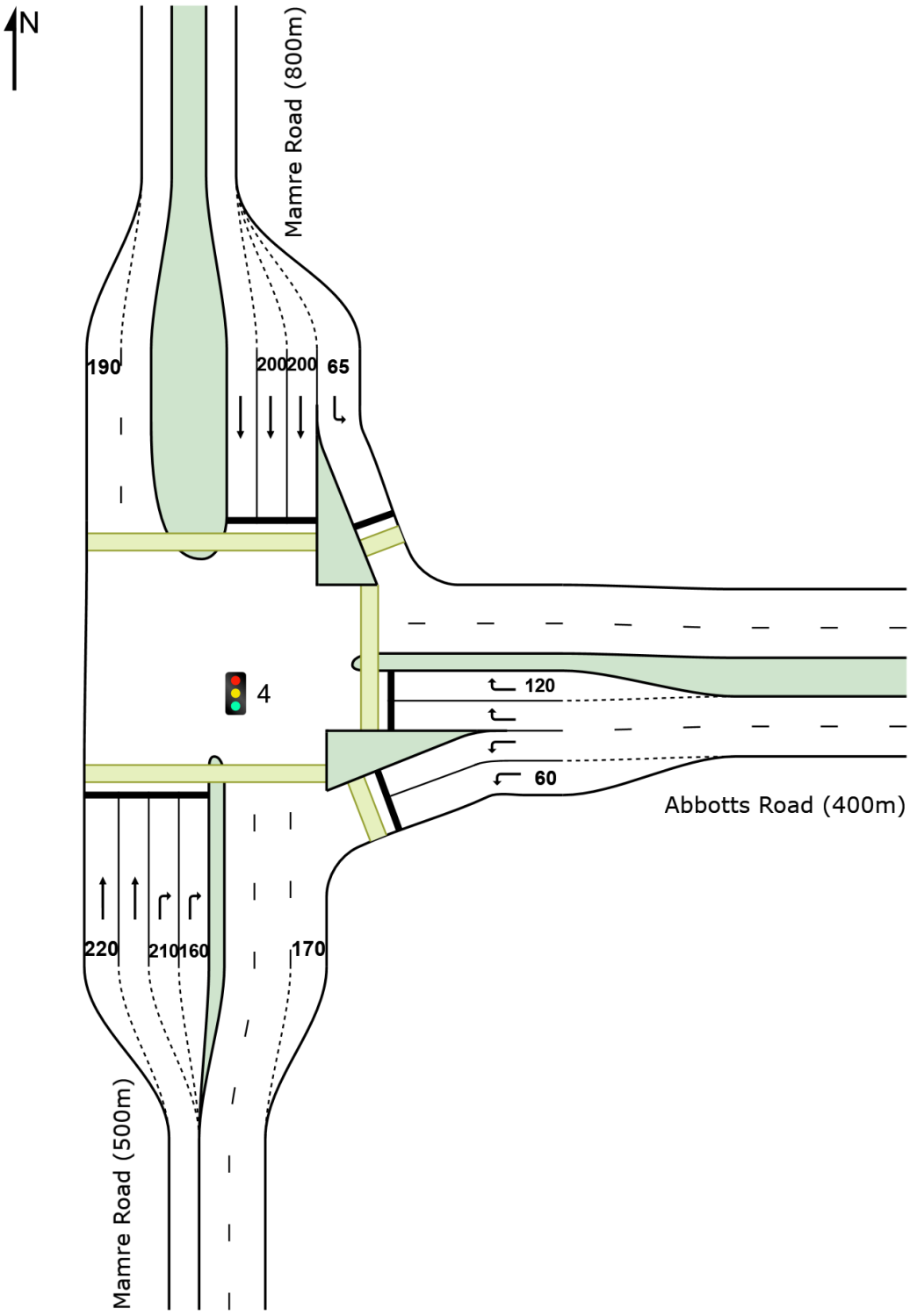
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# SITE LAYOUT

## Site: 4 [ID [4]. Abbotts Road / Mamre Road - AM (Site Folder: 2026 - AM - Scenario 2)]

Abbotts Road / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated

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



# MOVEMENT SUMMARY

## Site: 4 [ID [4]. Abbotts Road / Mamre Road - AM (Site Folder: 2026 - AM - Scenario 2)]

Abbotts Road / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (500m) | | | | | | | | | | | | | | |
| 2 | T1 | 1076 | 146 | 1133 | 13.6 | * 0.427 | 1.9 | LOS A | 1.1 | 9.4 | 0.04 | 0.03 | 0.04 | 79.4 |
| 3 | R2 | 121 | 55 | 127 | 45.5 | 0.512 | 44.9 | LOS D | 2.8 | 31.3 | 0.98 | 0.77 | 0.98 | 35.2 |
| Approach | | 1197 | 201 | 1260 | 16.8 | 0.512 | 6.2 | LOS A | 2.8 | 31.3 | 0.13 | 0.11 | 0.13 | 72.7 |
| East: Abbotts Road (400m) | | | | | | | | | | | | | | |
| 4 | L2 | 31 | 17 | 33 | 54.8 | 0.048 | 35.2 | LOS C | 0.6 | 8.4 | 0.70 | 0.67 | 0.70 | 32.9 |
| 6 | R2 | 23 | 8 | 24 | 34.8 | * 0.070 | 56.8 | LOS E | 0.6 | 6.7 | 0.90 | 0.69 | 0.90 | 32.8 |
| Approach | | 54 | 25 | 57 | 46.3 | 0.070 | 44.4 | LOS D | 0.6 | 8.4 | 0.78 | 0.68 | 0.78 | 32.8 |
| North: Mamre Road (800m) | | | | | | | | | | | | | | |
| 7 | L2 | 138 | 27 | 145 | 19.6 | 0.164 | 19.9 | LOS B | 3.9 | 35.8 | 0.49 | 0.72 | 0.49 | 53.3 |
| 8 | T1 | 918 | 160 | 966 | 17.4 | 0.355 | 8.8 | LOS A | 5.8 | 51.0 | 0.33 | 0.29 | 0.33 | 70.0 |
| Approach | | 1056 | 187 | 1112 | 17.7 | 0.355 | 10.3 | LOS A | 5.8 | 51.0 | 0.35 | 0.34 | 0.35 | 67.4 |
| All Vehicles | | 2307 | 413 | 2428 | 17.9 | 0.512 | 9.0 | LOS A | 5.8 | 51.0 | 0.25 | 0.23 | 0.25 | 68.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (500m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 246.0 | 230.2 | 0.94 |
| East: Abbotts Road (400m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.7 | 219.0 | 0.93 |
| P2B | Slip/ Bypass | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 227.9 | 208.5 | 0.91 |
| North: Mamre Road (800m) | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 244.8 | 228.8 | 0.93 |
| P3B | Slip/ Bypass | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 225.8 | 206.0 | 0.91 |
| All Pedestrians | | 50 | 53 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.3 | 218.5 | 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.

# MOVEMENT SUMMARY

## Site: 4 [ID [4]. Abbotts Road / Mamre Road - PM. (Site Folder: 2026 - PM - Scenario 2)]

Abbotts Road / Mamre Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (500m) | | | | | | | | | | | | | | |
| 2 | T1 | 1232 | 131 | 1297 | 10.6 | 0.448 | 3.0 | LOS A | 1.3 | 10.8 | 0.04 | 0.04 | 0.04 | 79.5 |
| 3 | R2 | 368 | 51 | 387 | 13.9 | * 0.837 | 70.0 | LOS E | 12.4 | 105.3 | 1.00 | 0.93 | 1.26 | 28.1 |
| Approach | | 1600 | 182 | 1684 | 11.4 | 0.837 | 18.4 | LOS B | 12.4 | 105.3 | 0.26 | 0.24 | 0.32 | 60.4 |
| East: Abbotts Road (400m) | | | | | | | | | | | | | | |
| 4 | L2 | 126 | 24 | 133 | 19.0 | 0.145 | 42.0 | LOS C | 2.9 | 23.8 | 0.77 | 0.73 | 0.77 | 35.1 |
| 6 | R2 | 112 | 36 | 118 | 32.1 | * 0.526 | 68.6 | LOS E | 3.5 | 37.9 | 1.00 | 0.77 | 1.00 | 30.6 |
| Approach | | 238 | 60 | 251 | 25.2 | 0.526 | 54.5 | LOS D | 3.5 | 37.9 | 0.87 | 0.75 | 0.88 | 32.5 |
| North: Mamre Road (800m) | | | | | | | | | | | | | | |
| 7 | L2 | 30 | 18 | 32 | 60.0 | 0.046 | 17.2 | LOS B | 0.7 | 8.7 | 0.40 | 0.67 | 0.40 | 54.1 |
| 8 | T1 | 1943 | 236 | 2045 | 12.1 | * 0.641 | 9.1 | LOS A | 13.5 | 109.8 | 0.36 | 0.33 | 0.36 | 71.6 |
| Approach | | 1973 | 254 | 2077 | 12.9 | 0.641 | 9.3 | LOS A | 13.5 | 109.8 | 0.37 | 0.34 | 0.37 | 71.3 |
| All Vehicles | | 3811 | 496 | 4012 | 13.0 | 0.837 | 15.9 | LOS B | 13.5 | 109.8 | 0.35 | 0.32 | 0.38 | 62.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Mamre Road (500m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 246.0 | 230.2 | 0.94 |
| East: Abbotts Road (400m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.7 | 219.0 | 0.93 |
| P2B | Slip/ Bypass | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 227.9 | 208.5 | 0.91 |
| North: Mamre Road (800m) | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 244.8 | 228.8 | 0.93 |
| P3B | Slip/ Bypass | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 225.8 | 206.0 | 0.91 |
| All Pedestrians | | 50 | 53 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 236.3 | 218.5 | 0.92 |

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

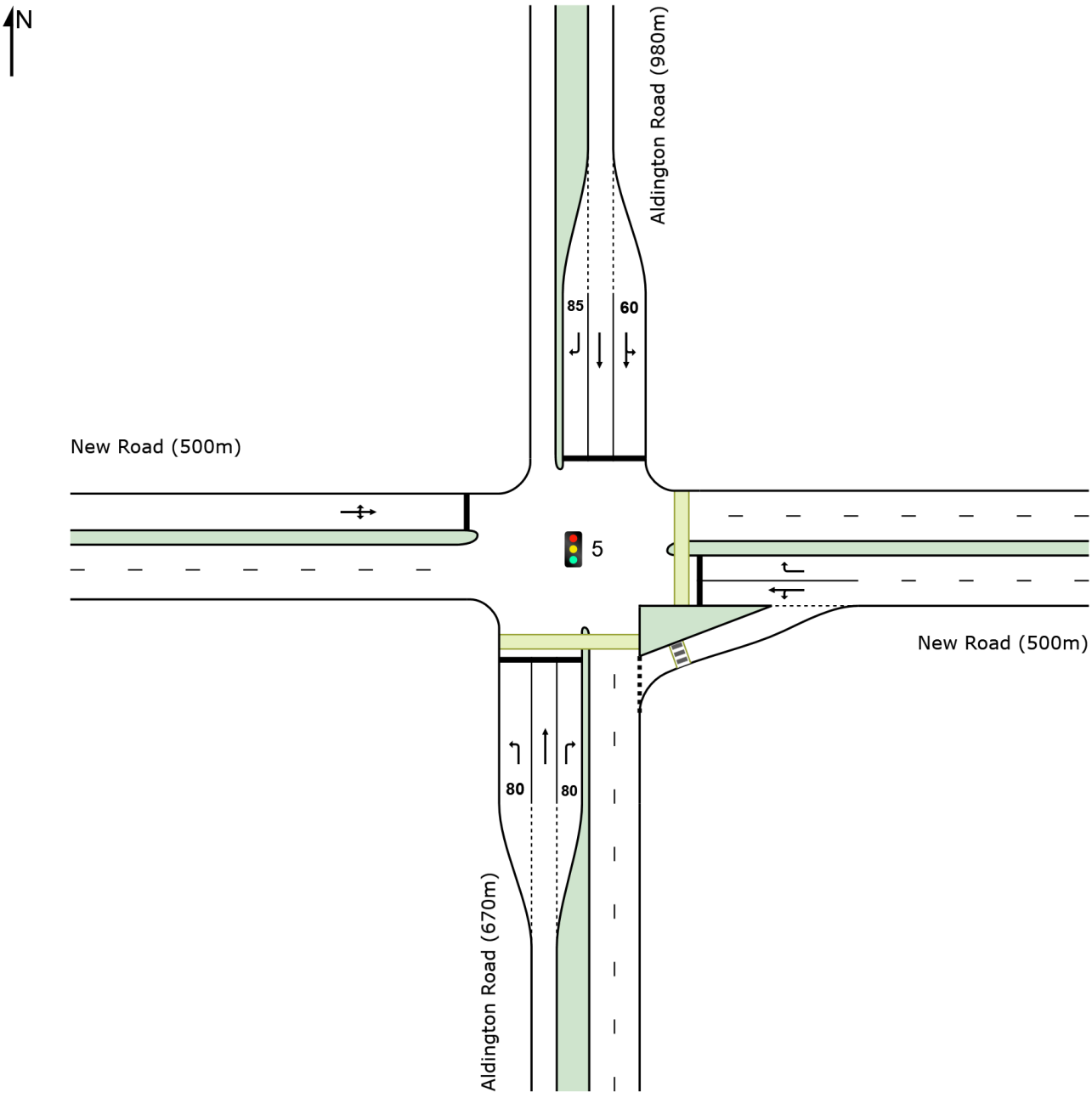
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 5 [ID [5]. Aldington Road /Bakers Lane / Fife Kemps Creek (North) - AM (Site Folder: 2026 - AM - Scenario 2)]

Aldington Road /Bakers Lane / Fife Kemps Creek (North)
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: 5 [ID [5]. Aldington Road /Bakers Lane / Fife Kemps Creek (North) - AM (Site Folder: 2026 - AM - Scenario 2)]

Aldington Road /Bakers Lane / Fife Kemps Creek (North)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (670m) | | | | | | | | | | | | | | |
| 1 | L2 | 6 | 3 | 6 | 50.0 | 0.009 | 19.4 | LOS B | 0.2 | 1.7 | 0.48 | 0.63 | 0.48 | 43.6 |
| 2 | T1 | 26 | 2 | 27 | 7.7 | 0.050 | 29.5 | LOS C | 1.1 | 9.1 | 0.71 | 0.53 | 0.71 | 46.3 |
| 3 | R2 | 1 | 0 | 1 | 0.0 | 0.008 | 62.7 | LOS E | 0.1 | 0.4 | 0.95 | 0.59 | 0.95 | 30.4 |
| Approach | | 33 | 5 | 35 | 15.2 | 0.050 | 28.7 | LOS C | 1.1 | 9.1 | 0.68 | 0.55 | 0.68 | 45.4 |
| East: New Road (500m) | | | | | | | | | | | | | | |
| 4 | L2 | 1 | 0 | 1 | 0.0 | 0.004 | 26.3 | LOS B | 0.1 | 0.5 | 0.73 | 0.53 | 0.73 | 41.8 |
| 5 | T1 | 1 | 0 | 1 | 0.0 | 0.004 | 21.8 | LOS B | 0.1 | 0.5 | 0.73 | 0.53 | 0.73 | 37.7 |
| 6 | R2 | 85 | 0 | 89 | 0.0 | 0.197 | 43.5 | LOS D | 4.2 | 29.2 | 0.84 | 0.75 | 0.84 | 38.3 |
| Approach | | 87 | 0 | 92 | 0.0 | 0.197 | 43.1 | LOS D | 4.2 | 29.2 | 0.83 | 0.74 | 0.83 | 38.3 |
| North: Aldington Road (980m) | | | | | | | | | | | | | | |
| 7 | L2 | 289 | 0 | 304 | 0.0 | *0.276 | 13.3 | LOS A | 5.7 | 39.6 | 0.56 | 0.73 | 0.56 | 49.0 |
| 8 | T1 | 1 | 0 | 1 | 0.0 | 0.002 | 28.5 | LOS B | 0.0 | 0.3 | 0.69 | 0.42 | 0.69 | 46.7 |
| 9 | R2 | 28 | 0 | 29 | 0.0 | *0.236 | 65.5 | LOS E | 1.7 | 12.0 | 0.98 | 0.72 | 0.98 | 33.1 |
| Approach | | 318 | 0 | 335 | 0.0 | 0.276 | 18.0 | LOS B | 5.7 | 39.6 | 0.59 | 0.73 | 0.59 | 47.0 |
| West: New Road (500m) | | | | | | | | | | | | | | |
| 10 | L2 | 8 | 0 | 8 | 0.0 | 0.096 | 51.0 | LOS D | 1.1 | 11.0 | 0.88 | 0.70 | 0.88 | 36.3 |
| 11 | T1 | 1 | 0 | 1 | 0.0 | *0.096 | 46.4 | LOS D | 1.1 | 11.0 | 0.88 | 0.70 | 0.88 | 29.6 |
| 12 | R2 | 12 | 8 | 13 | 66.7 | 0.096 | 51.5 | LOS D | 1.1 | 11.0 | 0.88 | 0.70 | 0.88 | 32.2 |
| Approach | | 21 | 8 | 22 | 38.1 | 0.096 | 51.1 | LOS D | 1.1 | 11.0 | 0.88 | 0.70 | 0.88 | 33.8 |
| All Vehicles | | 459 | 13 | 483 | 2.8 | 0.276 | 25.0 | LOS B | 5.7 | 39.6 | 0.66 | 0.72 | 0.66 | 44.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (670m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 238.8 | 221.5 | 0.93 |
| East: New Road (500m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 235.8 | 218.0 | 0.92 |
| All | | 0 | 21 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 237.3 | 219.8 | 0.93 |

## Pedestrians

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.

# MOVEMENT SUMMARY

## Site: 5 [ID [5]. Aldington Road /Bakers Lane / Fife Kemps Creek (North) - PM. (Site Folder: 2026 - PM - Scenario 2)]

Aldington Road /Bakers Lane / Fife Kemps Creek (North)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (670m) | | | | | | | | | | | | | | |
| 1 | L2 | 17 | 6 | 18 | 35.3 | 0.024 | 20.9 | LOS B | 0.5 | 4.6 | 0.51 | 0.66 | 0.51 | 43.0 |
| 2 | T1 | 101 | 0 | 106 | 0.0 | *0.196 | 35.7 | LOS C | 4.7 | 33.2 | 0.81 | 0.65 | 0.81 | 44.2 |
| 3 | R2 | 1 | 0 | 1 | 0.0 | 0.011 | 65.5 | LOS E | 0.1 | 0.4 | 0.97 | 0.59 | 0.97 | 29.8 |
| Approach | | 119 | 6 | 125 | 5.0 | 0.196 | 33.8 | LOS C | 4.7 | 33.2 | 0.77 | 0.65 | 0.77 | 44.0 |
| East: New Road (500m) | | | | | | | | | | | | | | |
| 4 | L2 | 1 | 0 | 1 | 0.0 | 0.004 | 23.0 | LOS B | 0.1 | 0.4 | 0.68 | 0.51 | 0.68 | 43.2 |
| 5 | T1 | 1 | 0 | 1 | 0.0 | 0.004 | 18.5 | LOS B | 0.1 | 0.4 | 0.68 | 0.51 | 0.68 | 39.0 |
| 6 | R2 | 127 | 0 | 134 | 0.0 | *0.251 | 40.1 | LOS C | 6.0 | 42.1 | 0.81 | 0.76 | 0.81 | 39.3 |
| Approach | | 129 | 0 | 136 | 0.0 | 0.251 | 39.8 | LOS C | 6.0 | 42.1 | 0.81 | 0.75 | 0.81 | 39.3 |
| North: Aldington Road (980m) | | | | | | | | | | | | | | |
| 7 | L2 | 32 | 0 | 34 | 0.0 | 0.094 | 23.0 | LOS B | 1.4 | 9.5 | 0.75 | 0.66 | 0.75 | 45.9 |
| 8 | T1 | 69 | 0 | 73 | 0.0 | 0.094 | 29.4 | LOS C | 2.2 | 15.4 | 0.77 | 0.61 | 0.77 | 46.0 |
| 9 | R2 | 1 | 0 | 1 | 0.0 | *0.011 | 65.5 | LOS E | 0.1 | 0.4 | 0.97 | 0.59 | 0.97 | 33.1 |
| Approach | | 102 | 0 | 107 | 0.0 | 0.094 | 27.7 | LOS B | 2.2 | 15.4 | 0.77 | 0.63 | 0.77 | 45.8 |
| West: New Road (500m) | | | | | | | | | | | | | | |
| 10 | L2 | 18 | 0 | 19 | 0.0 | 0.112 | 47.7 | LOS D | 2.0 | 14.5 | 0.86 | 0.72 | 0.86 | 37.1 |
| 11 | T1 | 1 | 0 | 1 | 0.0 | *0.112 | 43.2 | LOS D | 2.0 | 14.5 | 0.86 | 0.72 | 0.86 | 30.3 |
| 12 | R2 | 20 | 2 | 21 | 10.0 | 0.112 | 47.8 | LOS D | 2.0 | 14.5 | 0.86 | 0.72 | 0.86 | 33.8 |
| Approach | | 39 | 2 | 41 | 5.1 | 0.112 | 47.6 | LOS D | 2.0 | 14.5 | 0.86 | 0.72 | 0.86 | 35.3 |
| All Vehicles | | 389 | 8 | 409 | 2.1 | 0.251 | 35.6 | LOS C | 6.0 | 42.1 | 0.79 | 0.68 | 0.79 | 41.9 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (670m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 238.8 | 221.5 | 0.93 |
| East: New Road (500m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 235.8 | 218.0 | 0.92 |
| All | | 0 | 21 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 237.3 | 219.8 | 0.93 |

## Pedestrians

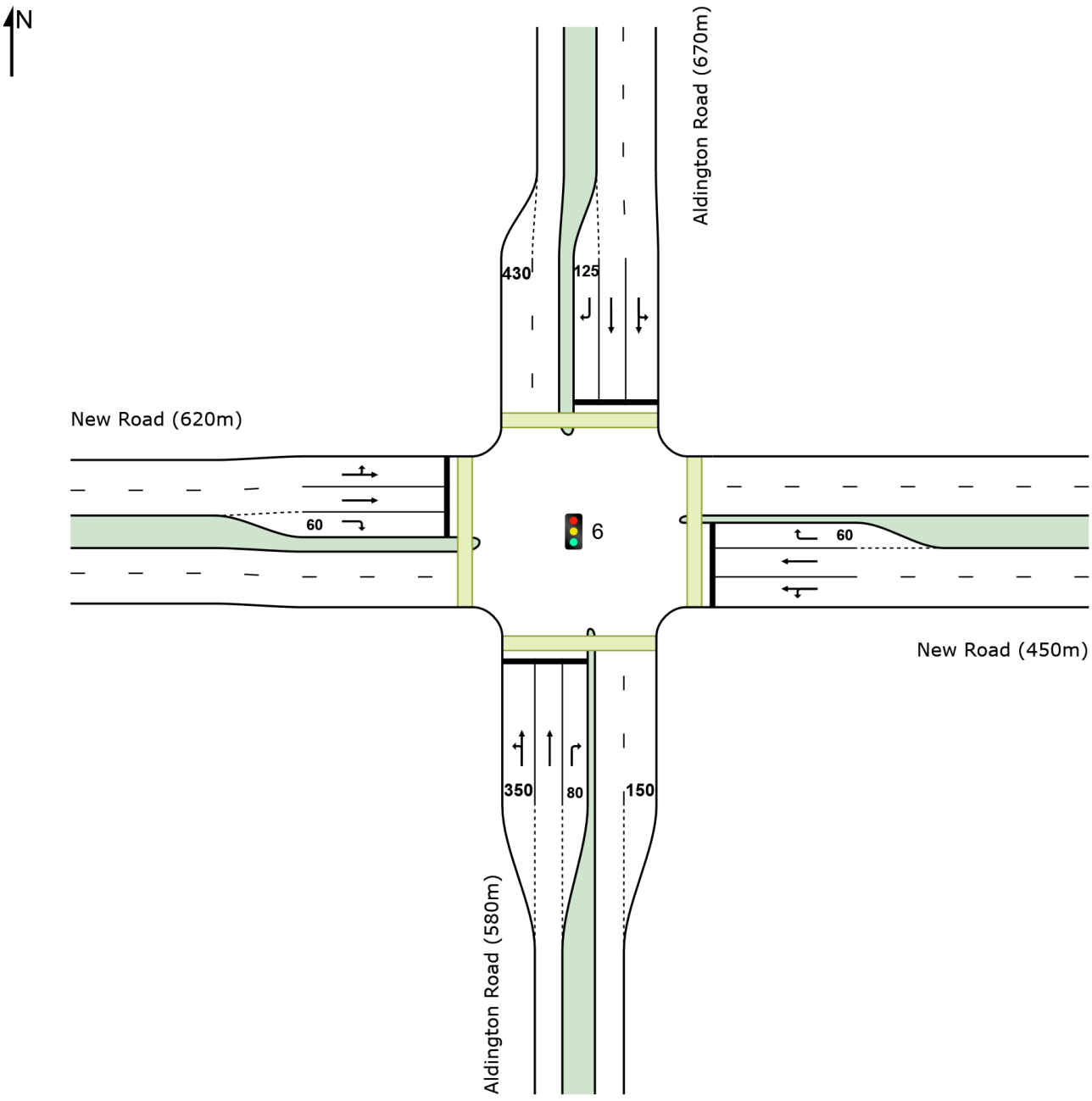
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 6 [ID [6]. Aldington Road /Bakers Lane / Fife Kemps Creek (South) - AM (Site Folder: 2026 - AM - Scenario 2)]

Aldington Road /Bakers Lane / Fife Kemps Creek (South)
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: 6 [ID [6]. Aldington Road /Bakers Lane / Fife Kemps Creek (South) - AM (Site Folder: 2026 - AM - Scenario 2)]

Aldington Road /Bakers Lane / Fife Kemps Creek (South)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (580m) | | | | | | | | | | | | | | |
| 1 | L2 | 62 | 38 | 65 | 61.3 | 0.187 | 38.0 | LOS C | 2.8 | 34.5 | 0.76 | 0.74 | 0.76 | 36.4 |
| 2 | T1 | 24 | 2 | 25 | 8.3 | * 0.143 | 54.6 | LOS D | 1.4 | 11.1 | 0.95 | 0.68 | 0.95 | 35.0 |
| 3 | R2 | 60 | 30 | 63 | 50.0 | * 0.210 | 42.1 | LOS C | 2.9 | 35.0 | 0.80 | 0.74 | 0.80 | 34.1 |
| Approach | | 146 | 70 | 154 | 47.9 | 0.210 | 42.4 | LOS C | 2.9 | 35.0 | 0.81 | 0.73 | 0.81 | 35.2 |
| East: New Road (450m) | | | | | | | | | | | | | | |
| 4 | L2 | 7 | 6 | 7 | 85.7 | 0.233 | 46.8 | LOS D | 2.6 | 38.7 | 0.85 | 0.68 | 0.85 | 32.1 |
| 5 | T1 | 94 | 63 | 99 | 67.0 | * 0.233 | 41.3 | LOS C | 2.6 | 38.8 | 0.85 | 0.67 | 0.85 | 32.7 |
| 6 | R2 | 1 | 0 | 1 | 0.0 | 0.002 | 41.5 | LOS C | 0.0 | 0.3 | 0.78 | 0.58 | 0.78 | 35.2 |
| Approach | | 102 | 69 | 107 | 67.6 | 0.233 | 41.7 | LOS C | 2.6 | 38.8 | 0.85 | 0.67 | 0.85 | 32.7 |
| North: Aldington Road (670m) | | | | | | | | | | | | | | |
| 7 | L2 | 1 | 0 | 1 | 0.0 | 0.009 | 34.0 | LOS C | 0.1 | 0.5 | 0.89 | 0.58 | 0.89 | 38.3 |
| 8 | T1 | 2 | 1 | 2 | 50.0 | 0.010 | 44.7 | LOS D | 0.1 | 0.7 | 0.91 | 0.57 | 0.91 | 37.4 |
| 9 | R2 | 8 | 7 | 8 | 87.5 | 0.033 | 40.4 | LOS C | 0.4 | 5.0 | 0.75 | 0.66 | 0.75 | 37.0 |
| Approach | | 11 | 8 | 12 | 72.7 | 0.033 | 40.6 | LOS C | 0.4 | 5.0 | 0.79 | 0.64 | 0.79 | 37.2 |
| West: New Road (620m) | | | | | | | | | | | | | | |
| 10 | L2 | 5 | 4 | 5 | 80.0 | 0.123 | 48.3 | LOS D | 1.1 | 17.6 | 0.85 | 0.65 | 0.85 | 33.8 |
| 11 | T1 | 38 | 37 | 40 | 97.4 | * 0.123 | 42.9 | LOS D | 1.1 | 16.9 | 0.85 | 0.64 | 0.85 | 32.0 |
| 12 | R2 | 1 | 0 | 1 | 0.0 | 0.003 | 44.1 | LOS D | 0.0 | 0.3 | 0.81 | 0.58 | 0.81 | 34.9 |
| Approach | | 44 | 41 | 46 | 93.2 | 0.123 | 43.5 | LOS D | 1.1 | 17.6 | 0.84 | 0.64 | 0.84 | 32.3 |
| All Vehicles | | 303 | 188 | 319 | 62.0 | 0.233 | 42.3 | LOS C | 2.9 | 38.8 | 0.83 | 0.70 | 0.83 | 34.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (580m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.3 | 223.3 | 0.93 |
| East: New Road (450m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 239.9 | 222.9 | 0.93 |
| North: Aldington Road (670m) | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.6 | 223.7 | 0.93 |
| West: New Road (620m) | | | | | | | | | | | | |
| P4 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 239.9 | 222.9 | 0.93 |
| All Pedestrians | | 0 | 42 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.2 | 223.2 | 0.93 |

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.

# MOVEMENT SUMMARY

## Site: 6 [ID [6]. Aldington Road /Bakers Lane / Fife Kemps Creek (South) - PM. (Site Folder: 2026 - PM - Scenario 2)]

Aldington Road /Bakers Lane / Fife Kemps Creek (South)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (580m) | | | | | | | | | | | | | | |
| 1 | L2 | 159 | 30 | 167 | 18.9 | 0.403 | 44.3 | LOS D | 8.1 | 73.5 | 0.86 | 0.80 | 0.86 | 34.8 |
| 2 | T1 | 21 | 1 | 22 | 4.8 | * 0.231 | 62.6 | LOS E | 1.3 | 9.6 | 0.99 | 0.70 | 0.99 | 33.0 |
| 3 | R2 | 159 | 22 | 167 | 13.8 | * 0.360 | 41.4 | LOS C | 7.7 | 65.2 | 0.83 | 0.78 | 0.83 | 34.4 |
| Approach | | 339 | 53 | 357 | 15.6 | 0.403 | 44.1 | LOS D | 8.1 | 73.5 | 0.86 | 0.78 | 0.86 | 34.5 |
| East: New Road (450m) | | | | | | | | | | | | | | |
| 4 | L2 | 80 | 18 | 84 | 22.5 | 0.410 | 44.3 | LOS D | 7.8 | 72.8 | 0.87 | 0.76 | 0.87 | 33.2 |
| 5 | T1 | 225 | 62 | 237 | 27.6 | * 0.410 | 39.4 | LOS C | 7.9 | 75.6 | 0.87 | 0.73 | 0.87 | 33.1 |
| 6 | R2 | 17 | 0 | 18 | 0.0 | 0.036 | 39.1 | LOS C | 0.8 | 5.4 | 0.77 | 0.67 | 0.77 | 36.0 |
| Approach | | 322 | 80 | 339 | 24.8 | 0.410 | 40.6 | LOS C | 7.9 | 75.6 | 0.87 | 0.74 | 0.87 | 33.3 |
| North: Aldington Road (670m) | | | | | | | | | | | | | | |
| 7 | L2 | 1 | 1 | 1 | 100.0 | 0.014 | 35.0 | LOS C | 0.1 | 1.1 | 0.86 | 0.60 | 0.86 | 36.8 |
| 8 | T1 | 2 | 0 | 2 | 0.0 | 0.017 | 53.8 | LOS D | 0.1 | 0.7 | 0.95 | 0.59 | 0.95 | 34.9 |
| 9 | R2 | 88 | 5 | 93 | 5.7 | 0.175 | 38.9 | LOS C | 4.0 | 29.3 | 0.78 | 0.74 | 0.78 | 37.8 |
| Approach | | 91 | 6 | 96 | 6.6 | 0.175 | 39.2 | LOS C | 4.0 | 29.3 | 0.78 | 0.74 | 0.78 | 37.7 |
| West: New Road (620m) | | | | | | | | | | | | | | |
| 10 | L2 | 76 | 5 | 80 | 6.6 | 0.235 | 46.0 | LOS D | 4.2 | 33.4 | 0.86 | 0.75 | 0.86 | 35.1 |
| 11 | T1 | 49 | 48 | 52 | 98.0 | * 0.235 | 42.4 | LOS C | 4.2 | 33.4 | 0.86 | 0.68 | 0.86 | 32.3 |
| 12 | R2 | 4 | 3 | 4 | 75.0 | 0.024 | 45.1 | LOS D | 0.2 | 3.4 | 0.80 | 0.64 | 0.80 | 33.5 |
| Approach | | 129 | 56 | 136 | 43.4 | 0.235 | 44.6 | LOS D | 4.2 | 36.2 | 0.86 | 0.72 | 0.86 | 34.1 |
| All Vehicles | | 881 | 195 | 927 | 22.1 | 0.410 | 42.4 | LOS C | 8.1 | 75.6 | 0.85 | 0.75 | 0.85 | 34.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: Aldington Road (580m) | | | | | | | | | | | | |
| P1 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.3 | 223.3 | 0.93 |
| East: New Road (450m) | | | | | | | | | | | | |
| P2 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 239.9 | 222.9 | 0.93 |
| North: Aldington Road (670m) | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.6 | 223.7 | 0.93 |
| West: New Road (620m) | | | | | | | | | | | | |
| P4 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 239.9 | 222.9 | 0.93 |
| All Pedestrians | | 0 | 42 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 240.2 | 223.2 | 0.93 |

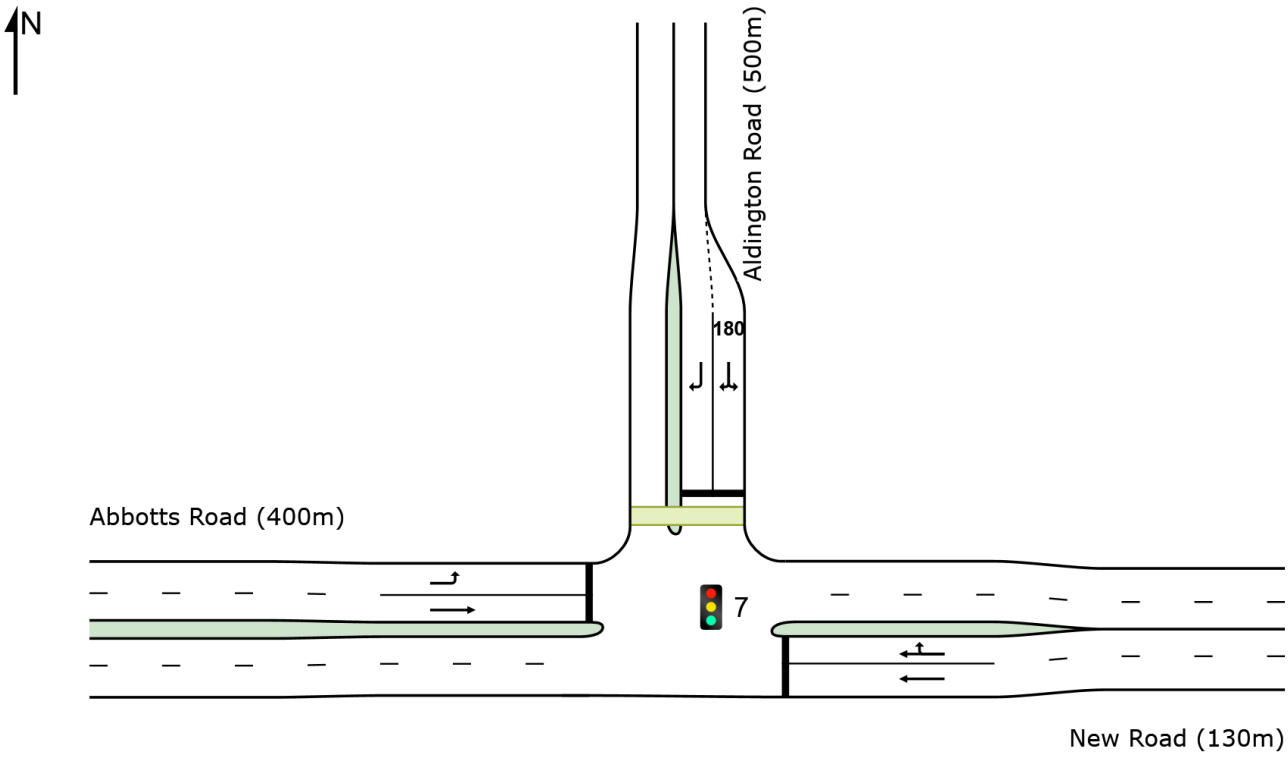
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 7 [ID [7]. Aldington Road / Abbotts Road - AM (Site Folder: 2026 - AM - Scenario 2)]

Aldington Road / Abbotts Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated

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





Organisation: ASON GROUP PTY LTD | Licence: NETWORK / 1PC | Created: Sunday, 16 July 2023 7:39:52 PM
Project: C:\Users\Arun Mohan\Desktop\Ason Group\P2368 - Aldington road Sidra ped crossing\SIDRA - Amend\P2368_LOGE_2026_Scenario 2.sip9

# MOVEMENT SUMMARY

## Site: 7 [ID [7]. Aldington Road / Abbotts Road - AM (Site Folder: 2026 - AM - Scenario 2)]

Aldington Road / Abbotts Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| East: New Road (130m) | | | | | | | | | | | | | | |
| 5 | T1 | 51 | 21 | 54 | 41.2 | 0.036 | 9.5 | LOS A | 0.6 | 6.9 | 0.39 | 0.30 | 0.39 | 44.9 |
| 6 | R2 | 1 | 0 | 1 | 0.0 | * 0.036 | 20.7 | LOS B | 0.6 | 6.9 | 0.53 | 0.41 | 0.53 | 41.2 |
| Approach | | 52 | 21 | 55 | 40.4 | 0.036 | 9.7 | LOS A | 0.6 | 6.9 | 0.40 | 0.31 | 0.40 | 44.8 |
| North: Aldington Road (500m) | | | | | | | | | | | | | | |
| 7 | L2 | 1 | 0 | 1 | 0.0 | 0.028 | 48.3 | LOS D | 0.3 | 3.4 | 0.84 | 0.67 | 0.84 | 27.7 |
| 9 | R2 | 11 | 4 | 12 | 36.4 | * 0.028 | 49.3 | LOS D | 0.3 | 3.4 | 0.84 | 0.67 | 0.84 | 31.7 |
| Approach | | 12 | 4 | 13 | 33.3 | 0.028 | 49.3 | LOS D | 0.3 | 3.4 | 0.84 | 0.67 | 0.84 | 31.4 |
| West: Abbotts Road (400m) | | | | | | | | | | | | | | |
| 10 | L2 | 71 | 30 | 75 | 42.3 | 0.129 | 24.3 | LOS B | 2.4 | 25.3 | 0.58 | 0.71 | 0.58 | 40.8 |
| 11 | T1 | 122 | 22 | 128 | 18.0 | * 0.170 | 19.2 | LOS B | 4.1 | 36.1 | 0.59 | 0.57 | 0.59 | 36.8 |
| Approach | | 193 | 52 | 203 | 26.9 | 0.170 | 21.1 | LOS B | 4.1 | 36.1 | 0.58 | 0.62 | 0.58 | 38.7 |
| All Vehicles | | 257 | 77 | 271 | 30.0 | 0.170 | 20.1 | LOS B | 4.1 | 36.1 | 0.56 | 0.56 | 0.56 | 39.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| North: Aldington Road (500m) | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 233.0 | 214.6 | 0.92 |
| All Pedestrians | | 0 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 233.0 | 214.6 | 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.

# MOVEMENT SUMMARY

## Site: 7 [ID [7]. Aldington Road / Abbotts Road - PM. (Site Folder: 2026 - PM - Scenario 2)]

Aldington Road / Abbotts Road
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated  Cycle Time = 120 seconds (Site User-Given Phase Times)

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| East: New Road (130m) | | | | | | | | | | | | | | |
| 5 | T1 | 142 | 30 | 149 | 21.1 | 0.104 | 12.3 | LOS A | 2.1 | 18.0 | 0.43 | 0.35 | 0.43 | 42.2 |
| 6 | R2 | 8 | 0 | 8 | 0.0 | * 0.104 | 41.9 | LOS C | 1.8 | 15.4 | 0.80 | 0.63 | 0.80 | 30.6 |
| Approach | | 150 | 30 | 158 | 20.0 | 0.104 | 13.9 | LOS A | 2.1 | 18.0 | 0.45 | 0.36 | 0.45 | 41.1 |
| North: Aldington Road (500m) | | | | | | | | | | | | | | |
| 7 | L2 | 1 | 0 | 1 | 0.0 | 0.187 | 50.3 | LOS D | 2.3 | 22.5 | 0.88 | 0.75 | 0.88 | 27.2 |
| 9 | R2 | 87 | 23 | 92 | 26.4 | * 0.187 | 51.0 | LOS D | 2.3 | 22.5 | 0.88 | 0.75 | 0.88 | 31.4 |
| Approach | | 88 | 23 | 93 | 26.1 | 0.187 | 51.0 | LOS D | 2.3 | 22.6 | 0.88 | 0.75 | 0.88 | 31.4 |
| West: Abbotts Road (400m) | | | | | | | | | | | | | | |
| 10 | L2 | 324 | 50 | 341 | 15.4 | * 0.467 | 27.9 | LOS B | 13.2 | 114.8 | 0.72 | 0.79 | 0.72 | 39.8 |
| 11 | T1 | 84 | 25 | 88 | 29.8 | 0.132 | 18.9 | LOS B | 2.8 | 27.6 | 0.57 | 0.55 | 0.57 | 37.0 |
| Approach | | 408 | 75 | 429 | 18.4 | 0.467 | 26.0 | LOS B | 13.2 | 114.8 | 0.69 | 0.74 | 0.69 | 39.4 |
| All Vehicles | | 646 | 128 | 680 | 19.8 | 0.467 | 26.6 | LOS B | 13.2 | 114.8 | 0.66 | 0.65 | 0.66 | 38.1 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

**Pedestrian Movement Performance**

| Mov ID | Crossing | Input Vol. ped/h | Dem. Flow ped/h | Aver. Delay sec | Level of Service | AVERAGE BACK OF QUEUE [ Ped ped | Dist ] m | Prop. Que | Effective Stop Rate | Travel Time sec | Travel Dist. m | Aver. Speed m/sec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| North: Aldington Road (500m) | | | | | | | | | | | | |
| P3 | Full | 10 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 233.0 | 214.6 | 0.92 |
| All Pedestrians | | 0 | 11 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 233.0 | 214.6 | 0.92 |

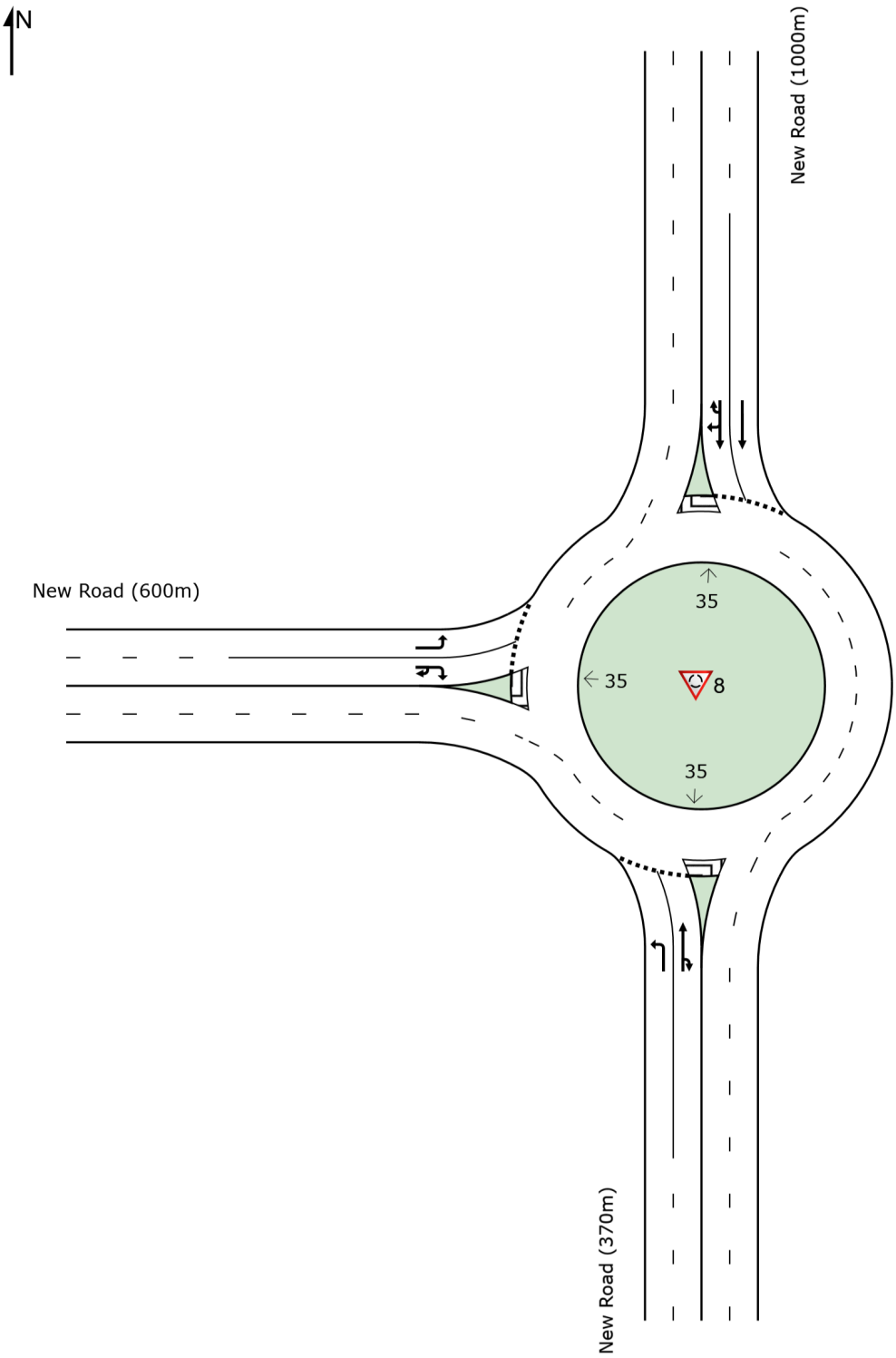
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

# SITE LAYOUT

## Site: 8 [ID [8]. Internal Road Roundabout (Mirvac) - AM (Site Folder: 2026 - AM - Scenario 2)]

Internal Road Roundabout (Mirvac)
Site Category: (None)
Roundabout

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



# MOVEMENT SUMMARY

## Site: 8 [ID [8]. Internal Road Roundabout (Mirvac) - AM (Site Folder: 2026 - AM - Scenario 2)]

Internal Road Roundabout (Mirvac)
Site Category: (None)
Roundabout

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: New Road (370m) | | | | | | | | | | | | | | |
| 1 | L2 | 223 | 121 | 235 | 54.3 | 0.207 | 3.1 | LOS A | 1.2 | 15.6 | 0.31 | 0.37 | 0.31 | 47.8 |
| 2 | T1 | 1 | 0 | 1 | 0.0 | 0.002 | 2.0 | LOS A | 0.0 | 0.1 | 0.25 | 0.45 | 0.25 | 48.5 |
| 3u | U | 1 | 0 | 1 | 0.0 | 0.002 | 9.9 | LOS A | 0.0 | 0.1 | 0.25 | 0.45 | 0.25 | 50.5 |
| Approach | | 225 | 121 | 237 | 53.8 | 0.207 | 3.2 | LOS A | 1.2 | 15.6 | 0.31 | 0.37 | 0.31 | 47.8 |
| North: New Road (1000m) | | | | | | | | | | | | | | |
| 8 | T1 | 29 | 10 | 31 | 34.5 | 0.044 | 4.7 | LOS A | 0.2 | 2.5 | 0.51 | 0.45 | 0.51 | 49.2 |
| 9 | R2 | 68 | 26 | 72 | 38.2 | 0.069 | 9.5 | LOS A | 0.3 | 3.8 | 0.47 | 0.61 | 0.47 | 47.7 |
| 9u | U | 1 | 0 | 1 | 0.0 | 0.069 | 10.6 | LOS A | 0.3 | 3.8 | 0.47 | 0.61 | 0.47 | 49.2 |
| Approach | | 98 | 36 | 103 | 36.7 | 0.069 | 8.1 | LOS A | 0.3 | 3.8 | 0.48 | 0.56 | 0.48 | 48.1 |
| West: New Road (600m) | | | | | | | | | | | | | | |
| 10 | L2 | 1 | 0 | 1 | 0.0 | 0.001 | 2.2 | LOS A | 0.0 | 0.0 | 0.03 | 0.31 | 0.03 | 49.4 |
| 12 | R2 | 292 | 76 | 307 | 26.0 | 0.192 | 7.7 | LOS A | 1.1 | 10.1 | 0.03 | 0.55 | 0.03 | 48.0 |
| 12u | U | 1 | 0 | 1 | 0.0 | 0.192 | 9.5 | LOS A | 1.1 | 10.1 | 0.03 | 0.55 | 0.03 | 49.8 |
| Approach | | 294 | 76 | 309 | 25.9 | 0.192 | 7.7 | LOS A | 1.1 | 10.1 | 0.03 | 0.55 | 0.03 | 48.0 |
| All Vehicles | | 617 | 233 | 649 | 37.8 | 0.207 | 6.1 | LOS A | 1.2 | 15.6 | 0.21 | 0.49 | 0.21 | 48.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

## Site: 8 [ID [8]. Internal North Rounabout (Mirvac)- PM (Site Folder: 2026 - PM - Scenario 2)]

Internal Road Roundabout (Mirvac)
Site Category: (None)
Roundabout

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: New Road (370m) | | | | | | | | | | | | | | |
| 1 | L2 | 390 | 106 | 411 | 27.2 | 0.297 | 3.0 | LOS A | 1.9 | 18.4 | 0.35 | 0.39 | 0.35 | 47.9 |
| 2 | T1 | 1 | 0 | 1 | 0.0 | 0.002 | 2.1 | LOS A | 0.0 | 0.1 | 0.28 | 0.45 | 0.28 | 48.5 |
| 3u | U | 1 | 0 | 1 | 0.0 | 0.002 | 10.0 | LOS A | 0.0 | 0.1 | 0.28 | 0.45 | 0.28 | 50.4 |
| Approach | | 392 | 106 | 413 | 27.0 | 0.297 | 3.0 | LOS A | 1.9 | 18.4 | 0.35 | 0.39 | 0.35 | 47.9 |
| North: New Road (1000m) | | | | | | | | | | | | | | |
| 8 | T1 | 93 | 18 | 98 | 19.4 | 0.088 | 3.2 | LOS A | 0.4 | 4.1 | 0.43 | 0.38 | 0.43 | 49.3 |
| 9 | R2 | 99 | 29 | 104 | 29.3 | 0.088 | 8.8 | LOS A | 0.4 | 4.1 | 0.40 | 0.57 | 0.40 | 48.2 |
| 9u | U | 1 | 0 | 1 | 0.0 | 0.088 | 10.4 | LOS A | 0.4 | 4.1 | 0.40 | 0.57 | 0.40 | 49.4 |
| Approach | | 193 | 47 | 203 | 24.4 | 0.088 | 6.1 | LOS A | 0.4 | 4.1 | 0.41 | 0.48 | 0.41 | 48.7 |
| West: New Road (600m) | | | | | | | | | | | | | | |
| 10 | L2 | 1 | 0 | 1 | 0.0 | 0.001 | 2.2 | LOS A | 0.0 | 0.0 | 0.03 | 0.31 | 0.03 | 49.4 |
| 12 | R2 | 200 | 92 | 211 | 46.0 | 0.150 | 7.8 | LOS A | 0.8 | 9.2 | 0.04 | 0.53 | 0.04 | 47.7 |
| 12u | U | 1 | 0 | 1 | 0.0 | 0.150 | 9.5 | LOS A | 0.8 | 9.2 | 0.04 | 0.53 | 0.04 | 49.8 |
| Approach | | 202 | 92 | 213 | 45.5 | 0.150 | 7.8 | LOS A | 0.8 | 9.2 | 0.04 | 0.53 | 0.04 | 47.7 |
| All Vehicles | | 787 | 245 | 828 | 31.1 | 0.297 | 5.0 | LOS A | 1.9 | 18.4 | 0.28 | 0.45 | 0.28 | 48.1 |

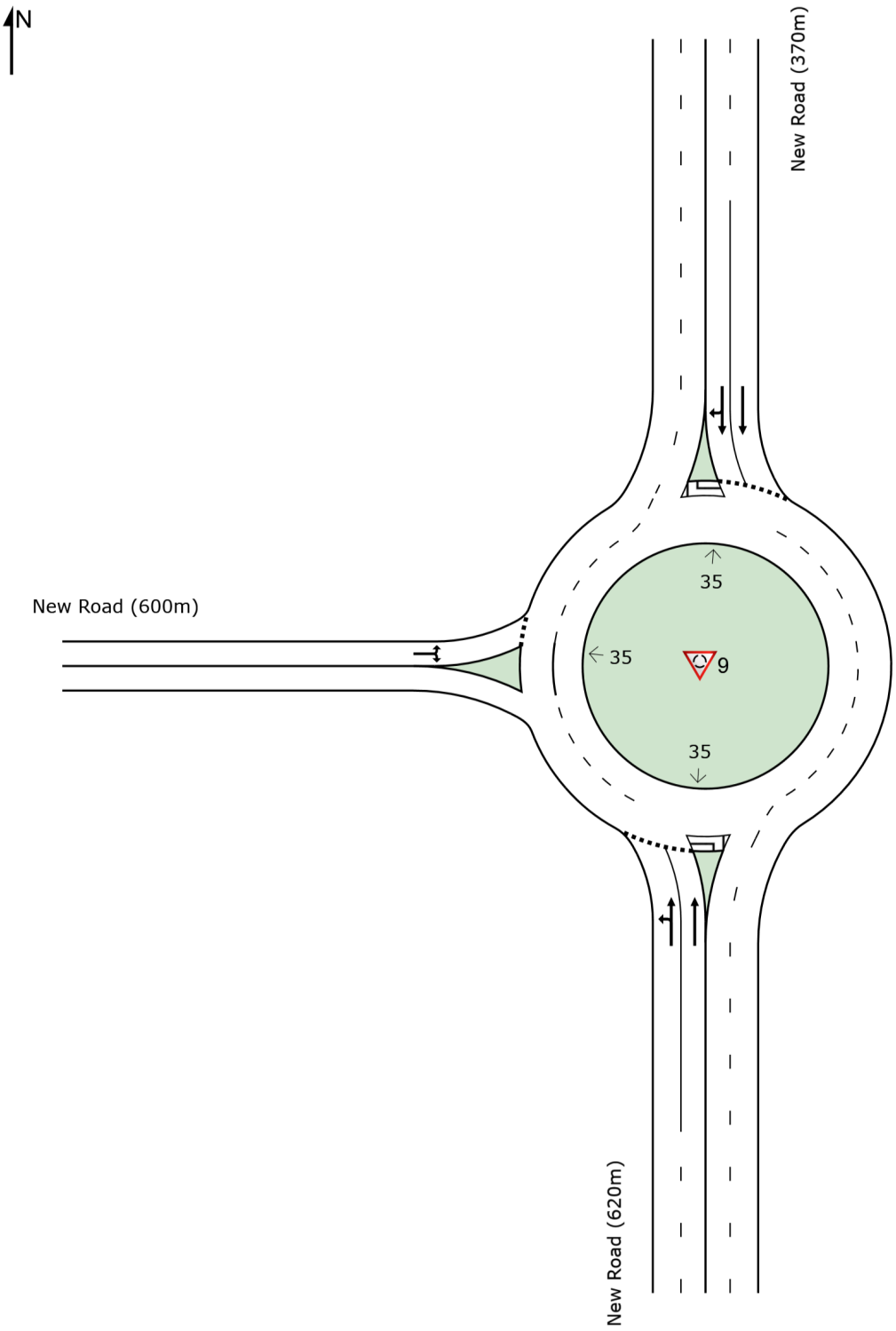
Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# SITE LAYOUT

## Site: 9 [ID [9]. Internal Road Roundabout (Altis ) - AM (Site Folder: 2026 - AM - Scenario 2)]

Internal Road Roundabout Altis
Site Category: (None)
Roundabout

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



# MOVEMENT SUMMARY

## Site: 9 [ID [9]. Internal Road Roundabout (Altis ) - AM (Site Folder: 2026 - AM - Scenario 2)]

Internal Road Roundabout Altis
Site Category: (None)
Roundabout

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: New Road (620m) | | | | | | | | | | | | | | |
| 1 | L2 | 108 | 46 | 114 | 42.6 | 0.142 | 2.7 | LOS A | 0.8 | 9.7 | 0.18 | 0.28 | 0.18 | 48.7 |
| 2 | T1 | 194 | 111 | 204 | 57.2 | 0.142 | 2.2 | LOS A | 0.8 | 9.7 | 0.20 | 0.24 | 0.20 | 50.2 |
| Approach | | 302 | 157 | 318 | 52.0 | 0.142 | 2.3 | LOS A | 0.8 | 10.2 | 0.19 | 0.25 | 0.19 | 49.6 |
| North: New Road (370m) | | | | | | | | | | | | | | |
| 8 | T1 | 295 | 76 | 311 | 25.8 | 0.129 | 2.0 | LOS A | 0.8 | 7.3 | 0.22 | 0.25 | 0.22 | 50.0 |
| 9 | R2 | 28 | 10 | 29 | 35.7 | 0.129 | 8.3 | LOS A | 0.7 | 7.5 | 0.23 | 0.31 | 0.23 | 50.1 |
| Approach | | 323 | 86 | 340 | 26.6 | 0.129 | 2.5 | LOS A | 0.8 | 7.5 | 0.22 | 0.26 | 0.22 | 50.0 |
| West: New Road (600m) | | | | | | | | | | | | | | |
| 10 | L2 | 31 | 15 | 33 | 48.4 | 0.106 | 4.8 | LOS A | 0.5 | 4.8 | 0.45 | 0.60 | 0.45 | 45.5 |
| 12 | R2 | 45 | 9 | 47 | 20.0 | 0.106 | 9.4 | LOS A | 0.5 | 4.8 | 0.45 | 0.60 | 0.45 | 48.2 |
| Approach | | 76 | 24 | 80 | 31.6 | 0.106 | 7.5 | LOS A | 0.5 | 4.8 | 0.45 | 0.60 | 0.45 | 47.2 |
| All Vehicles | | 701 | 267 | 738 | 38.1 | 0.142 | 3.0 | LOS A | 0.8 | 10.2 | 0.23 | 0.29 | 0.23 | 49.5 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# MOVEMENT SUMMARY

## Site: 9 [ID [9]. Internal South Rounabout (Altis ) - PM (Site Folder: 2026 - PM - Scenario 2)]

Internal Road Roundabout (Altis )
Site Category: (None)
Roundabout

**Vehicle Movement Performance**

| Mov ID | Turn | INPUT VOLUMES [ Total veh/h | HV ] veh/h | DEMAND 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 | Effective Stop Rate | Aver. No. Cycles | Aver. Speed km/h |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South: New Road (620m) | | | | | | | | | | | | | | |
| 1 | L2 | 300 | 41 | 316 | 13.7 | 0.277 | 3.2 | LOS A | 1.7 | 15.0 | 0.40 | 0.40 | 0.40 | 48.2 |
| 2 | T1 | 346 | 99 | 364 | 28.6 | 0.277 | 3.0 | LOS A | 1.7 | 15.0 | 0.43 | 0.37 | 0.43 | 49.3 |
| Approach | | 646 | 140 | 680 | 21.7 | 0.277 | 3.1 | LOS A | 1.7 | 15.9 | 0.42 | 0.38 | 0.42 | 48.7 |
| North: New Road (370m) | | | | | | | | | | | | | | |
| 8 | T1 | 133 | 87 | 140 | 65.4 | 0.122 | 2.0 | LOS A | 0.8 | 6.8 | 0.15 | 0.25 | 0.15 | 49.9 |
| 9 | R2 | 162 | 24 | 171 | 14.8 | 0.122 | 7.7 | LOS A | 0.8 | 6.8 | 0.13 | 0.51 | 0.13 | 48.0 |
| Approach | | 295 | 111 | 311 | 37.6 | 0.122 | 5.1 | LOS A | 0.8 | 9.4 | 0.14 | 0.39 | 0.14 | 48.8 |
| West: New Road (600m) | | | | | | | | | | | | | | |
| 10 | L2 | 48 | 10 | 51 | 20.8 | 0.096 | 4.6 | LOS A | 0.4 | 4.1 | 0.53 | 0.60 | 0.53 | 46.9 |
| 12 | R2 | 18 | 8 | 19 | 44.4 | 0.096 | 10.6 | LOS A | 0.4 | 4.1 | 0.53 | 0.60 | 0.53 | 49.1 |
| Approach | | 66 | 18 | 69 | 27.3 | 0.096 | 6.2 | LOS A | 0.4 | 4.1 | 0.53 | 0.60 | 0.53 | 47.5 |
| All Vehicles | | 1007 | 269 | 1060 | 26.7 | 0.277 | 3.9 | LOS A | 1.7 | 15.9 | 0.34 | 0.40 | 0.34 | 48.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

# Attachment 3 - Traffic Signal Warrant Analysis

**TABLE 6 TRAFFIC WARRANT FOR 2026 – 1,290,000M2 GFA**

| ID | Intersection | Warrant A | Major Road>900vph | Minor>100vph | Major>900vph | Minor>100vph | Traffic Flow Warrant Met? |
|---|---|---|---|---|---|---|---|
| | | Warrant B | Major Road>600vph | Minor>200vph | Major>600vph | Minor>200vph | |
| | | Hour | South (veh) | East (veh) | North (veh) | West (veh) | |
| 1 | Mamre Road / Bakers Lane | 7-8AM | 1,415 | 164 | 2,217 | 150 | Yes |
| | | 8-9AM | 1,525 | 429 | 2,120 | 215 | Yes |
| | | 3-4PM | 1,774 | 573 | 1,703 | 355 | Yes |
| | | 4-5PM | 1,734 | 497 | 1,502 | 412 | Yes |
| 2 | Mamre Road / Mirvac Access | 7-8AM | 1,101 | 410 | 1,595 | - | Yes |
| | | 8-9AM | 1,180 | 509 | 1,561 | - | Yes |
| | | 3-4PM | 1,378 | 516 | 1,663 | - | Yes |
| | | 4-5PM | 1,381 | 551 | 1,603 | - | Yes |
| 4 | Mamre Road / Abbotts Road | 3-4PM | 1,600 | 240 | 1,973 | - | Yes |
| | | 4-5PM | 1,663 | 295 | 1,906 | - | Yes |
| | | 5-6PM | 1,385 | 163 | 1,791 | - | Yes |
| | | 6-7PM | 968 | 151 | 1,141 | - | Yes |
| 5 | Aldington Road / Fife Kemps Creek (North) | 7-8AM | 33 | 87 | 318 | 21 | No |
| | | 8-9AM | 74 | 103 | 240 | 26 | No |
| | | 3-4PM | 119 | 129 | 102 | 39 | No |
| | | 4-5PM | 173 | 209 | 58 | 53 | No |
| 6 | Aldington Road / Fife Kemps Creek (South) | 7-8AM | 146 | 102 | 11 | 44 | No |
| | | 8-9AM | 152 | 115 | 10 | 74 | No |
| | | 3-4PM | 339 | 322 | 91 | 129 | No |
| | | 4-5PM | 382 | 246 | 50 | 247 | No |
| 7 | Aldington Road / Abbotts Road | 7-8AM | - | 81 | 13 | 260 | No |
| | | 8-9AM | - | 95 | 21 | 228 | No |
| | | 3-4PM | - | 150 | 88 | 408 | No |
| | | 4-5PM | - | 157 | 196 | 468 | No |

## TABLE 7 TRAFFIC WARRANT FOR 2036 NETWORK – FULL PRECINCT

| ID | Intersection | Warrant A / Warrant B | Major Road>900vph / Major Road>600vph | Minor>100vph / Minor>200vph | Major>900vph / Major>600vph | Minor>100vph / Minor>200vph | Traffic Flow Warrant Met? |
|---|---|---|---|---|---|---|---|
| | | Hour | South (veh) | East (veh) | North (veh) | West (veh) | |
| 1 | Mamre Road / Bakers Lane | 7-8AM | 2,137 | 902 | 2,881 | 233 | Yes |
| | | 8-9AM | 2,250 | 922 | 2,703 | 312 | Yes |
| | | 3-4PM | 2,278 | 875 | 1,703 | 355 | Yes |
| | | 4-5PM | 1,584 | 759 | 1,924 | 496 | Yes |
| 2 | Mamre Road / Mirvac Access | 7-8AM | 1,898 | 389 | 2,761 | 245 | Yes |
| | | 8-9AM | 2,027 | 259 | 2,952 | 277 | Yes |
| | | 3-4PM | 2,094 | 162 | 2,878 | 277 | Yes |
| | | 4-5PM | 2,192 | 166 | 1,371 | 752 | Yes |
| 4 | Mamre Road / Abbotts Road | 3-4PM | 2,505 | 138 | 2,180 | 134 | Yes |
| | | 4-5PM | 2,661 | 157 | 2,157 | 174 | Yes |
| | | 5-6PM | 2,814 | 138 | 2,013 | 210 | Yes |
| | | 6-7PM | 2,000 | 123 | 1,490 | 208 | Yes |
| 5 | Aldington Road / Fife Kemps Creek (North) | 7-8AM | 655 | 201 | 2,111 | 327 | Yes |
| | | 8-9AM | 717 | 223 | 2,193 | 224 | Yes |
| | | 3-4PM | 839 | 260 | 1,913 | 264 | Yes |
| | | 4-5PM | 601 | 416 | 1,454 | 205 | Yes |
| 6 | Aldington Road / Fife Kemps Creek (South) | 7-8AM | 720 | 203 | 1,044 | 211 | Yes |
| | | 8-9AM | 798 | 202 | 1,082 | 206 | Yes |
| | | 3-4PM | 859 | 210 | 1,045 | 210 | Yes |
| | | 4-5PM | 648 | 237 | 1,156 | 203 | Yes |
| 7 | Aldington Road / Abbotts Road | 7-8AM | 119 | 123 | 1,088 | 1,240 | Yes |
| | | 8-9AM | 143 | 112 | 1,065 | 1,171 | Yes |
| | | 3-4PM | 300 | 108 | 1,552 | 1,021 | Yes |
| | | 4-5PM | 202 | 201 | 1,266 | 881 | Yes |