Traffix Group

Traffic Engineering Assessment

Proposed Secondary School

Baranduda Catholic Secondary School, Baranduda – Masterplan

Prepared for
Catholic Education Sandhurst Limited (CESL)

April 2026

G37148R-01D

Level 28, 459 Collins St
MELBOURNE VIC 3000

Office 38, L4/60 Moorabool St
GEELONG VIC 3220

Traffix Group Pty Ltd
ABN: 32 100 481 570

T: 03 9822 2888
traffixgroup.com.au

Document Control

Our Reference: G37148R-01D

Issue No.	Type	Date	Prepared By	Approved By
A	Draft	10/02/26	P. Nguyen	B. Chisholm (RPE7582)
B	Final	13/02/26	P. Nguyen	B. Chisholm (RPE7582)
C	Masterplan - Draft	31/03/26	P. Nguyen	B. Chisholm (RPE7582)
D	Masterplan - Final	1/04/26	P. Nguyen	B. Chisholm (RPE7582)

AS/NZS ISO 45001-2018 Occupational Health & Safety Management Systems
AS/NZS ISO 14001 Environmental Management Systems
AS/NZS ISO 9001-2016 Quality Management Systems

Table of Contents

List of Figures

List of Tables

List of Appendices

Appendix A **Masterplan and Stage 1 Plan**

Appendix B **Swept Path Diagrams**

Appendix C **SIDRA Output**

1. Introduction

Traffix Group has been engaged by Catholic Education Sandhurst Limited (CESL) to undertake a Traffic Engineering Assessment for the Proposed Secondary School on John Schubert Drive in Baranduda.

In particular, this report assesses the traffic and parking impacts associated with the school masterplan and each development stage.

2. Existing Conditions

2.1. Subject Site

The subject site is located on the north side of John Schubert Drive, west side of Ellen McDonald Drive, and east side of Kiewa Valley Highway in Baranduda as shown in locality plan at Figure 1.

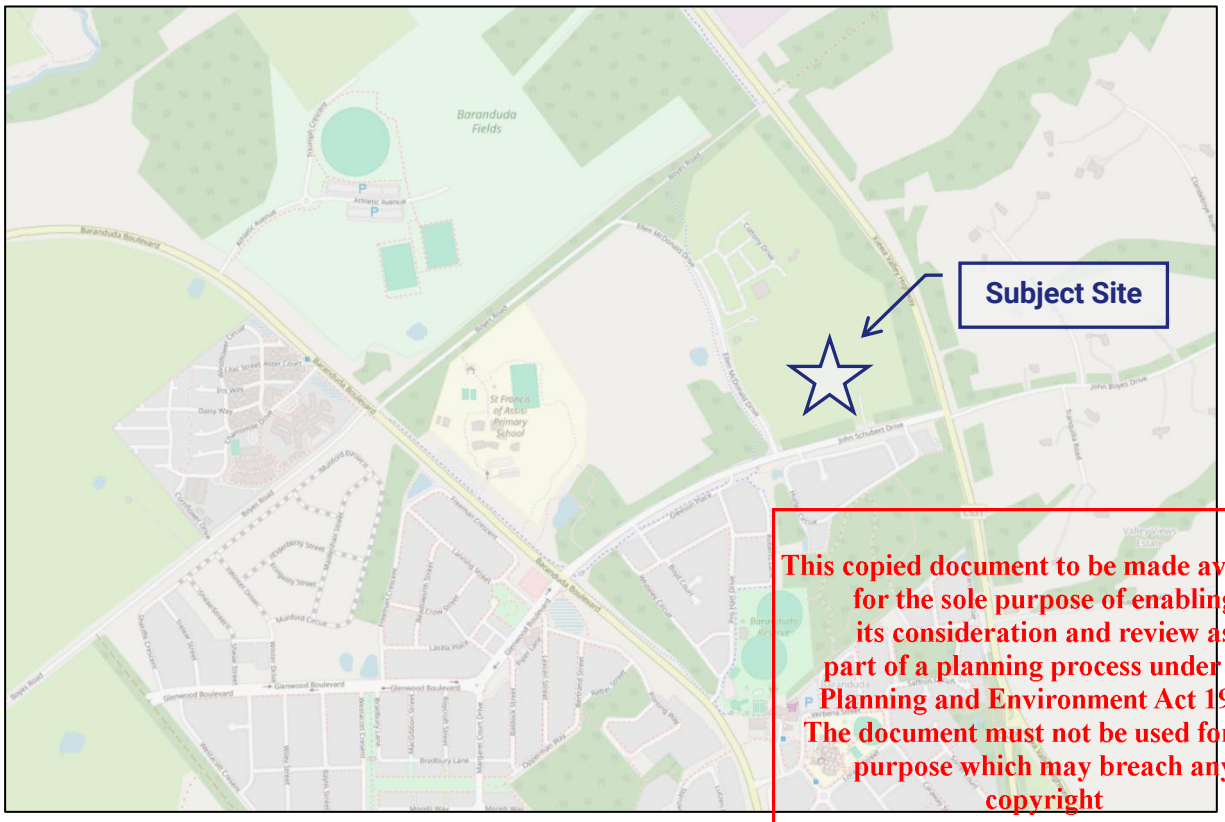


Figure 1: Locality Plan

Source: Melway Online

The site is currently vacant land.

The site has two existing vehicle access points including with John Schubert Drive midway along the site's southern frontage, and with Ellen McDonald Drive towards the northwestern corner of the site.

An aerial photograph of the subject site and its surrounds is provided at Figure 2.

Figure 2: Aerial Photograph

Source: NearMap (Oct 2025)

The subject site is zoned 'Urban Growth Zone – Schedule 1 (UGZ1)' under the Wodonga Planning Scheme, as shown in the land use zoning map at Figure 3. This zoning facilitates the Leneva Baranduda Precinct Structure Plan.

Schedule 1 to the Development Contributions Overlay (DCPO1) applies to the site which relates to the Leneva-Baranduda Development Contributions Plan.

Surrounding land uses largely consist of other urban growth zones and residential uses. Furthermore, there is a lifestyle village located immediately north of the site along Ellen McDonald Drive.

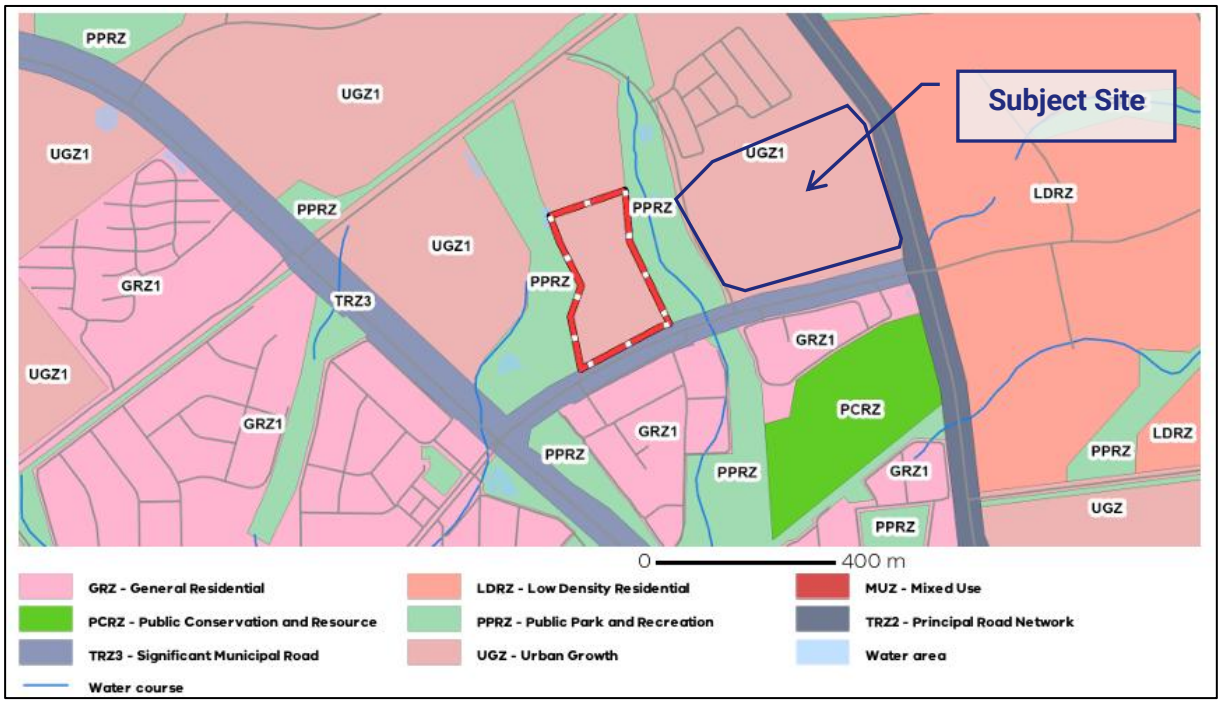


Figure 3: Land Use Zoning Map

Source: VicPlan

2.2. Road Network

Kiewa Valley Highway is an arterial road under the control of the Department of Transport & Planning (DTP).

Kiewa Valley Highway is aligned in a general north-south direction along the eastern boundary of the site. It generally provides one through traffic lane in each direction, with turning lanes provided at the intersection with John Schubert Drive.

Kiewa Valley Highway has a posted speed limit of 80km/h in the vicinity of the site.

Photos of Kiewa Valley Highway are provided at Figure 4 and Figure 5.

Figure 4: Kiewa Valley Highway - View North

Figure 5: Kiewa Valley Highway - View South

John Schubert Drive is a local collector road under the control Wodonga City Council. John Schubert Drive is aligned in a general east-west direction along southern boundary of the site.

John Schubert Drive generally provides a single through traffic lane in each direction, plus turning lanes at nearby intersections.

John Schubert Drive forms an unsignalised cross-intersection with Kiewa Valley Highway, noting that the John Boyes Drive on the eastern leg is slightly staggered to John Schubert Drive.

John Schubert Drive has a posted speed limit of 70km/h.

Photos of John Schubert Drive are provided at Figure 6 and Figure 7.

Figure 6: John Schubert Drive - View East

Figure 7: John Schubert Druve - View West

Ellen McDonald Drive is a local access road under the control Wodonga City Council. Ellen McDonald Drive is aligned in a general north-south direction along the western boundary of the site.

Ellen McDonald Drive provides a single through traffic lane in each direction, noting there is an existing right-turn lane at the site's existing access at the northern end of the site.

Ellen McDonald Drive has a posted speed limit of 70km/h.

Photos of Ellen McDonald Drive are provided at Figure 8 and Figure 9.

Figure 8: Ellen McDonald Drive - View North

Figure 9: Ellen McDonald Drive - View South

2.3. Public Transport

Bus Route B provides a service between Wodonga to Baranduda and is a part of the overall Albury and Wodonga bus network. Two bus stops are located approximately 1km southwest of the site along Baranduda Boulevard.

As the area develops, bus routes may be extended and/or new routes will be introduced to provide additional services within the surrounding area. Potential future bus routes may be incorporated along higher order roads including John Schubert Drive.

A map of the existing public transport network is presented at Figure 10.

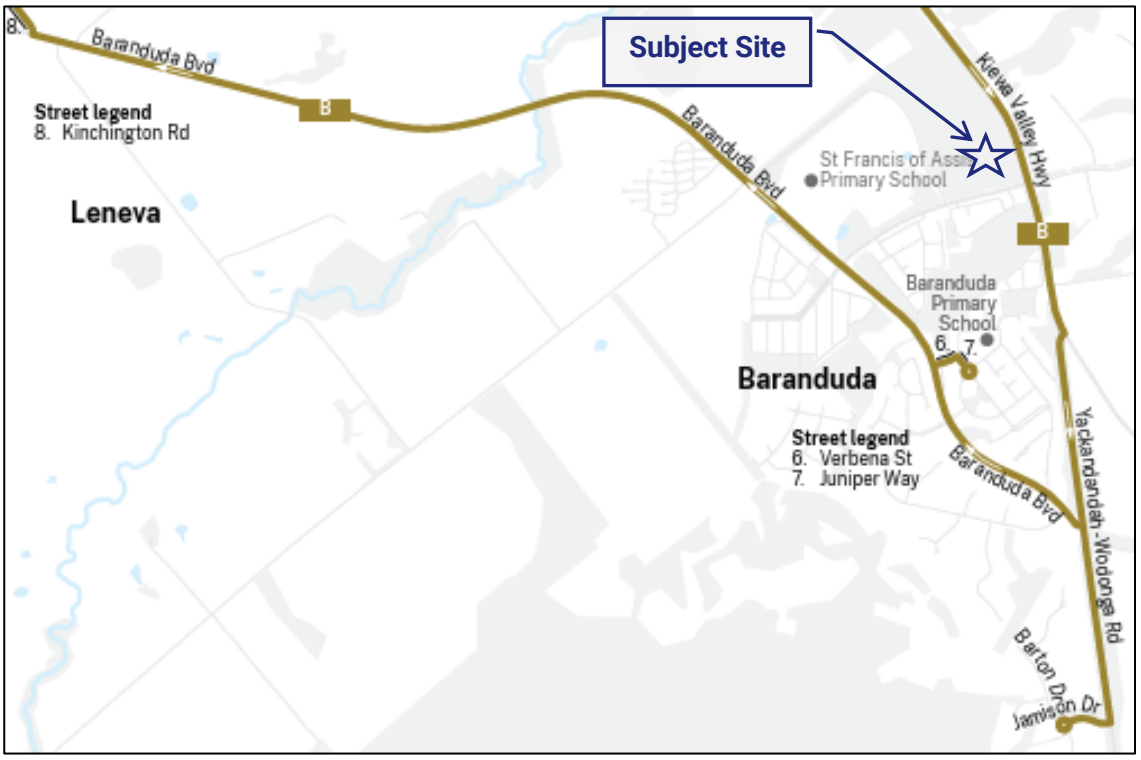


Figure 10: Public Transport Map

Source: PTV

3. Leneva – Baranduda Precinct Structure Plan

The Leneva–Baranduda Precinct Structure Plan (PSP) 'Street Network' and 'Healthy Living' plans indicate the following with regard to the abutting road network:

- A north-south arterial road (bus capable) road abutting the eastern boundary of the site (Kiewa Valley Highway).
- An east-west secondary arterial road (bus capable) road abutting the southern boundary of the site (John Schubert Drive).

All higher order roads abutting the site including Kiewa Valley Highway, John Schubert Drive and Baranduda Boulevard are identified to be bus capable.

Figure 11 and Figure 12, identifies the location of the subject site in context with the Leneva – Baranduda PSP 'Street Network' and 'Healthy Living' plans.

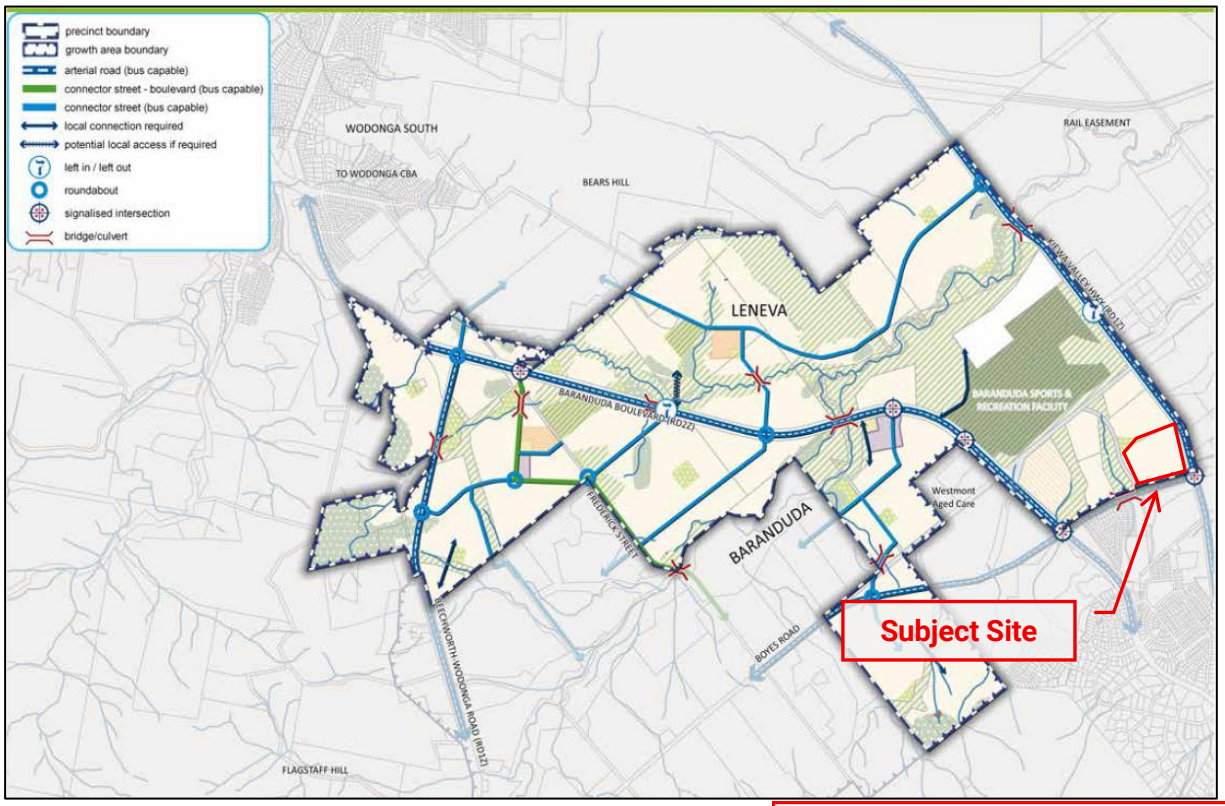


Figure 11: Leneva-Baranduda PSP – Street Network Plan

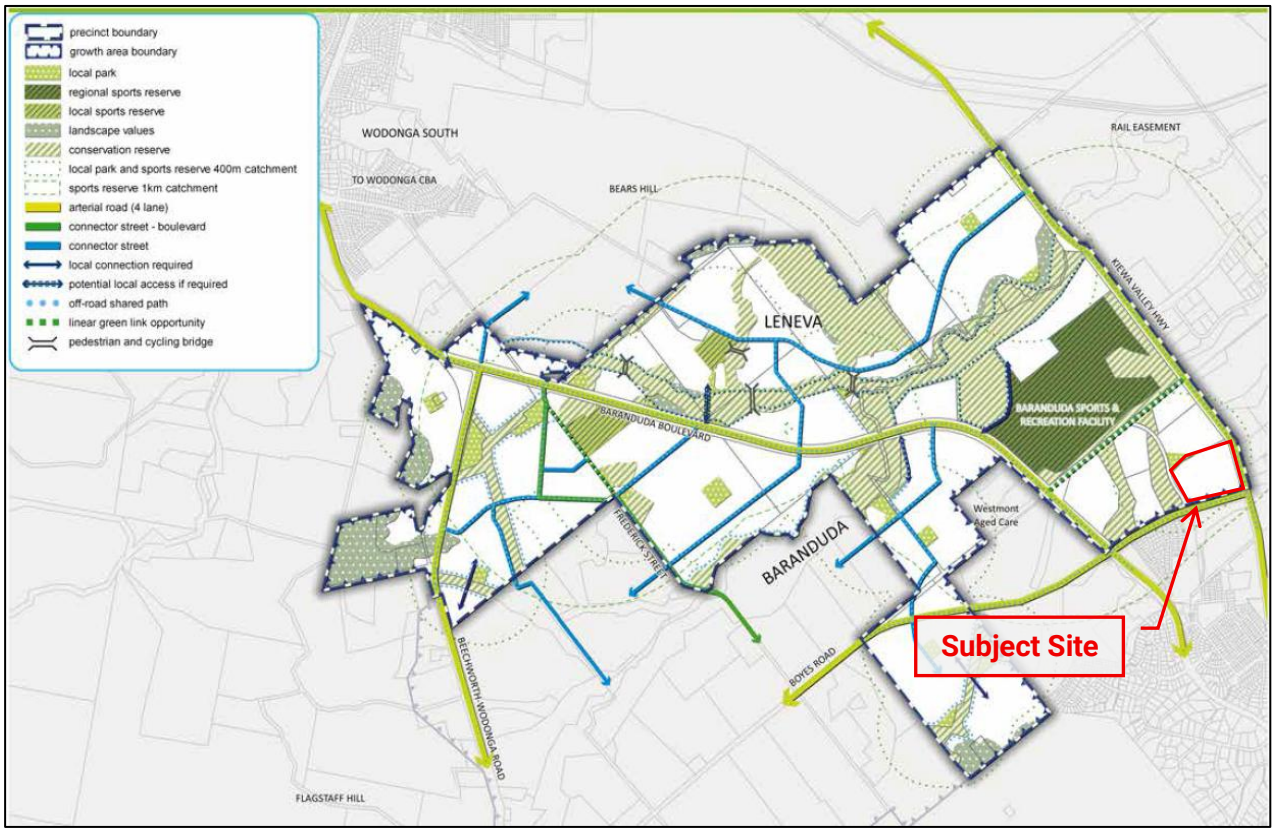


Figure 12: Leneva-Baranduda PSP – Healthy Living Plan

The Leneva-Baranduda Development Contributions Plan (DCP) identifies the Kiewa Valley Highway/John Schubert Drive intersection as DCP funded intersection project 'IN-08c'. This is described in the DCP as 'construction of an interim/ultimate 4-way signalised intersection'. A concept plan for this future intersection, as included in the DCP, is shown at Figure 13.

Furthermore, the future upgrade of John Schubert Drive adjacent is identified as DCP road projects 'RD-02' and 'RD-02c'. These road projects are described as purchase of land for an ultimate 4-lane secondary arterial, and construction of an interim secondary arterial (2-lane). Council has informed the project team that the future signalisation of the Kiewa Valley Highway/John Schubert Drive intersection and upgrade of John Schubert Drive are currently not within Council's forward works program as a priority.

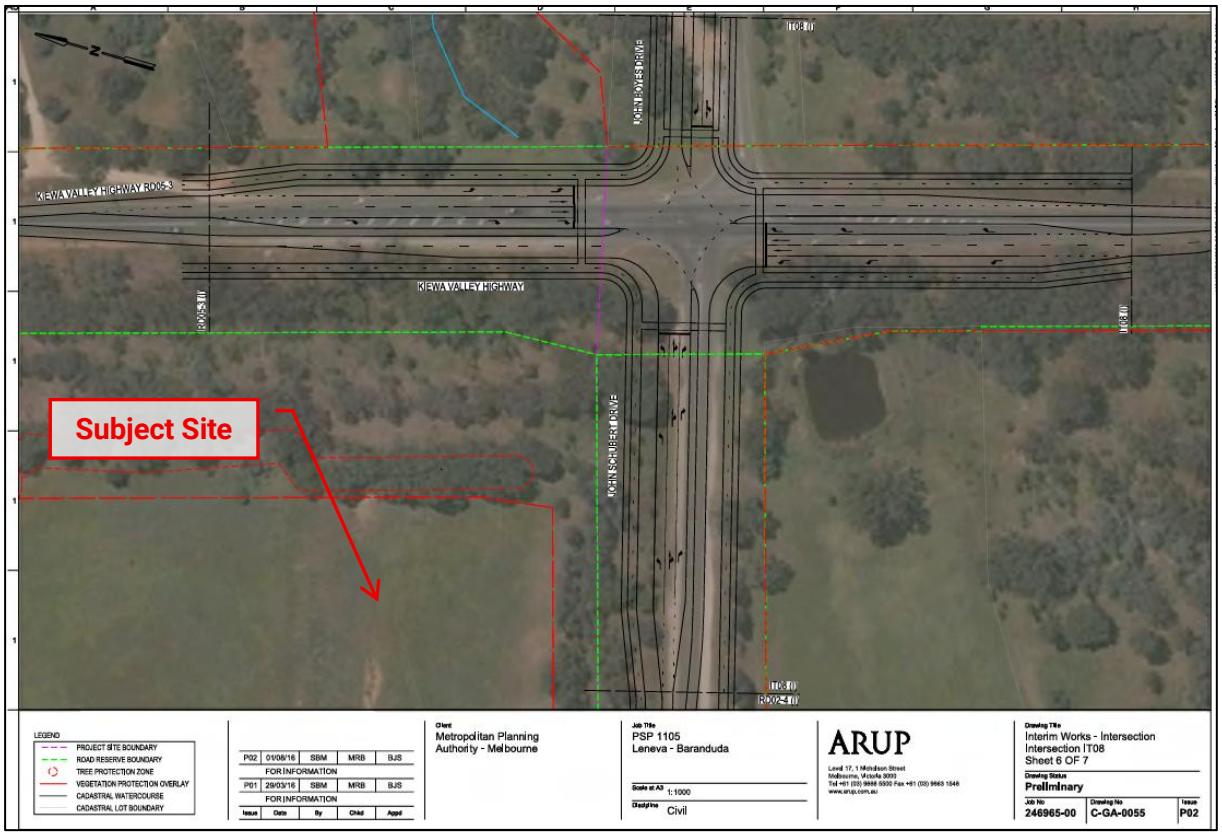


Figure 13: DCP Concept Plan for the Kiewa Valley Highway/John Schubert Drive intersection (IN-08)

4. Proposal

4.1. Development Summary

The proposal is for the development of a new Catholic Secondary School in Baranduda on John Schubert Drive. The school is to be affiliated with the nearby the existing St Francis of Assisi Primary School in Baranduda.

As part of the Stage 1 application, the school is to have up to 250 students and 28 staff[1].

Under the proposed masterplan for the school, it is to have ultimate enrolment of approximately 800 students and 100 staff[1].

A summary of proposed student and staff numbers at each development stage is provided at Table 1.

Table 1: Cumulative Students and Staff Numbers

Stage	Students	Staff[1]
Stage 1	250	28
Stage 2	500	55
Stage 3	750	87
Stage 4	750	90
Stage 5	800	100

A copy of the masterplan, prepared by LAW Architects, is attached at Appendix A.

4.2. Vehicle Access and Car Parking

Stage 1

Vehicle access for the proposed school will be provided via an existing vehicle connection with John Schubert Drive at the southern boundary of the site. A secondary access is proposed with Ellen McDondald Drive. This access will connect to a temporary internal gravel roadway that is to extend to the on-site car park.

At Stage 1, this will provide access to all on-site car parking including staff and parent spaces. A total of 75 car spaces will be provided at Stage 1, including two (2) accessible spaces. In the interim, the car park will have an unsealed gravel surface.

[1] The total number of staff includes teaching and non-teaching staff.

Stage 2

At Stage 2, the vehicle access arrangements for Stage 1 will generally be retained. However, the John Schubert Drive access will be upgraded to include a left-turn deceleration lane and prohibit right-turn entry movements.

A new car staff car park will be constructed to the east of the internal roundabout.

The vehicle access arrangements during Stages 1 and 2 are illustrated at Figure 14, noting that the Stage 2 staff car park accessed via the eastern side of the roundabout is not shown in this figure.

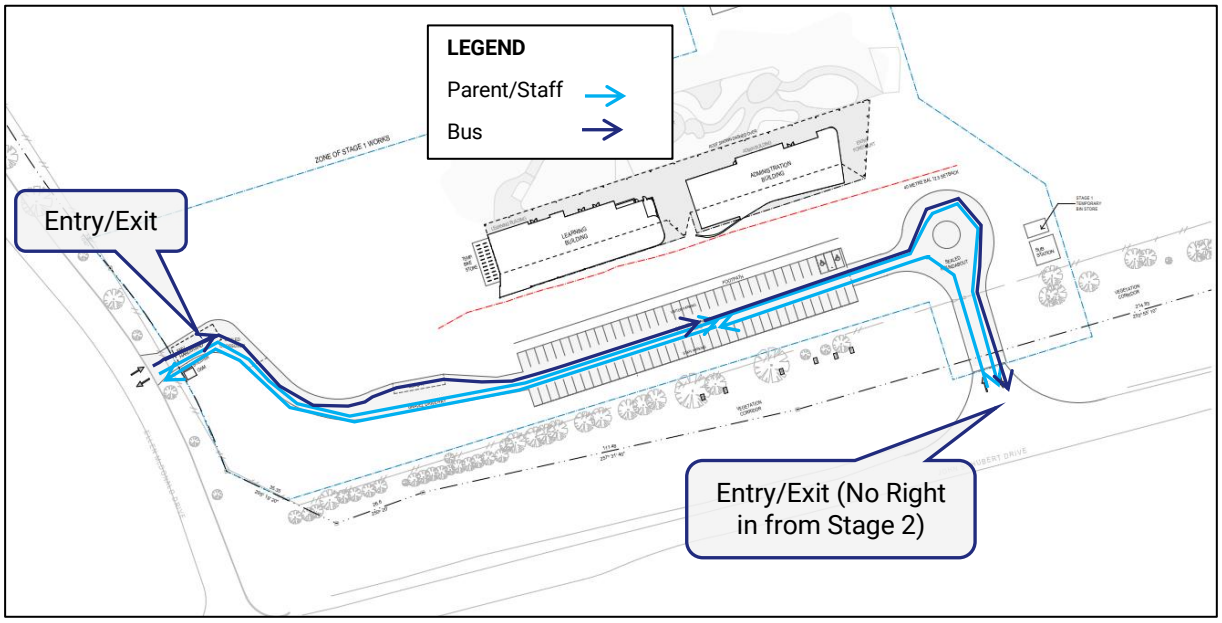


Figure 14: Vehicle Access – Stages 1 to 2

Stage 3

At Stage 3, the bus parking lane will be constructed with entry via the northern Ellen McDonald Drive vehicle access connection. At this time, the southern Ellen McDonald vehicle access will be converted to exit only (no entry).

The main car park will be extended further to the west to provided additional car parking.

Additionally, a new staff only car park will be constructed in the northwest corner of the site near the Ellen McDonald Drive northern access. This will include the first part of the car park with 14 car spaces.

Stages 4 & 5

At Stage 4, there will be no changes to car parking and access arrangements.

At Stage 5, the northwest staff car park will be extended by 12 car spaces.

The vehicle access arrangements during Stages 3 to 5 are illustrated at Figure 15.

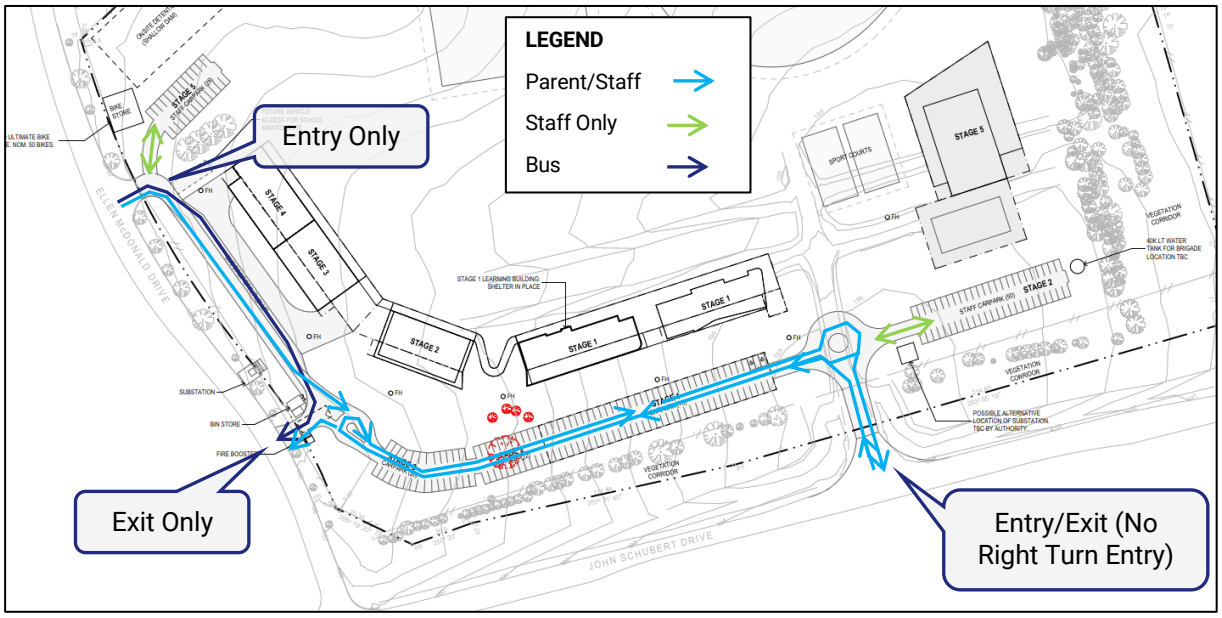


Figure 15: Vehicle Access – Stages 3 to 5

4.3. Waste Collection

Waste collection is proposed on-site via a private contractor.

The temporary Stage 1 bin store is identified to the east of the John Schubert Drive vehicle access near the internal roundabout. At Stage 1, the waste truck will utilise the John Schubert Drive access to enter and exit the site in a forward direction, propping temporarily within the internal roundabout to unload bins.

At Stage 2, a permanent bin store will be established just north of the proposed southern Ellen McDonald Drive access. Waste collection from Stage 2 onwards will occur within the internal roadway adjacent to the bin store.

4.4. Buses

During Stages 1 and 2, buses will be accommodated in a temporary arrangement within a gravel area to the west of the main car park. Buses will enter the site via the southern Ellen McDonald Drive access and exit via the John Schubert Drive

The permanent bus parking lane will be constructed at Stage 3 and will accommodate 4 large buses (i.e. 14.5m coach) at any one time. Buses will enter the site via the northern Ellen McDonald Drive access and exit via the southern Ellen McDondald Drive access which will become exit only from Stage 3 onwards.

The client has advised that there are 7 daily school buses that are anticipated to service the school using large full-size buses. These are existing school bus services which travel to several schools in the Baranduda and Wodonga region including the nearby St Francis of Assisi Primary School. We understand that arrivals of these buses in the morning drop-off and afternoon pick-up periods will be staggered.

A summary of these bus services including origins/destinations is as follows:

- Country bus - Allans flat, Osbornes Flat & outer Yackandandah
- Country bus - Kiewa Valley & Kergunyah
- Country bus – Tallangata & Baranduda
- Country bus - Tangambalanga, Kiewa & Baranduda
- Country bus – Yackandandah, Back Creek Rd,
- Town Bus - Yackandandah, Leneva, via Wodonga
- Town Bus - Killara, Indigo Valley, via Wodonga

5. Car Parking Considerations

5.1. Statutory Requirements – Clause 52.06

The proposal falls under the land use category of 'Secondary School' under Clause 73.03 of the Planning Scheme.

The car parking requirements for the proposed development are outlined under Clause 52.06 of the Wodonga Planning Scheme. The purpose of Clause 52.06 is:

- *To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.*
- *To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.*
- *To support sustainable transport alternatives to the motor car.*
- *To promote the efficient use of car parking spaces through the consolidation of car parking facilities.*
- *To ensure that car parking does not adversely affect the amenity of the locality.*
- *To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.*

The site is identified as Category 1 under the Car Parking Requirement Maps. Accordingly, Category 1 rates under Table 1 of Clause 52.06-5 apply to the proposed secondary school.

The statutory car parking requirement of the proposal under Clause 52.06-5 at each stage is presented at Table 2.

Table 2: Statutory Car Parking Requirements (Clause 52.06) – Stage 1

Stage	No. of Employees	Parking Rate (Category 1)	No. of Spaces Required
Stage 1	28	1 space to each secondary school employee	28 spaces
Stage 2	55	1 space to each secondary school employee	55 spaces
Stage 3	87	1 space to each secondary school employee	87 spaces
Stage 4	90	1 space to each secondary school employee	90 spaces
Stage 5	100	1 space to each secondary school employee	100 spaces

However, it is important to consider that the Clause 52.06 car parking rates for a 'Secondary School' does not make any allowance for the drop-off/pick-up demands generated by parents.

Accordingly, an empirical assessment of parking demands is provided in the following sections.

5.2. Drop-Off and Pick-Up Demand Assessment

As noted earlier, the Clause 52.06 rate for a 'Secondary School' use does not make any allowance for drop-off/pick-up demands.

The most critical period for proposed school developments is during the PM pick-up period where parents typically prefer to arrive earlier and find a car parking space before the school finish time. It is expected that peak parking demands would be lower during the morning drop-off period based on our experience with typical schools given that parent arrivals are more distributed and are on-site for a short time only.

In our experience with similar schools[2], a suitable rate for Stage 1to estimate the peak PM pick-up period demand is 0.3 car spaces/student[3]. As the school grows and enrolment increases to higher year levels, the peak car parking rate per student is expected to reduce. This is as a result of the higher likelihood of siblings attending the school and a higher uptake of travel via school bus services. Accordingly, from Stage 2 onwards a suitable rate to estimate the peak PM pick-up period demand is 0.25 car spaces/student.

As discussed earlier at Section 4.4, the client has advised that there are 7 daily school buses that currently service schools in the area and are anticipated to travel to the proposed secondary school. These buses have a wide range of origins/destinations in the broader region. Accordingly, the proposed school is expected to have a large proportion of students that will travel to and from school by bus and therefore would not generate a demand for drop-off/pick-up car parking.

2 Traffix Group surveyed peak parking demands at 'pick-up' time at a comparable school (Lighthouse Christian College on Springvale Road in Keysborough) in 2004. At the time of the survey, the school had a total of 390 enrolments and included pre-prep, primary and secondary students. The peak parking demand (inclusive of staff demands) was observed to be 82 spaces, which corresponds to a peak car parking generation rate of 0.21 car spaces per student (inclusive of staff demands).

Traffix Group surveyed peak parking demands at Aitken College, located off Mickleham Road in Greenvale, and identified a peak parking rate of 0.24 car spaces per student (inclusive of staff demands). Aitken College is similar to the proposed school it is located in an area with limited public transport and not easily accessible for pedestrians and cyclists.

3 This rate has also included staff car parking demands.

The anticipated PM peak parking demand during each stage and car parking spaces to be provided is summarised in Table 3.

The proposed provision of on-site parking at each stage exceeds the statutory minimum requirement and meets the anticipated peak demand during the critical afternoon pick-up period. Accordingly, the proposed level of on-site parking at each stage is appropriate.

Table 3: Peak Car Parking Demand and Provisions Summary

Stage	Students	Adopted Rate	Peak Demand	Car Spaces Provided
Stage 1	250	0.3 spaces/student	75	75
Stage 2	500	0.25 spaces/student	125	125
Stage 3	750	0.25 spaces/student	188	189
Stage 4	750	0.25 spaces/student	188	189
Stage 5	800	0.25 spaces/student	200	201

5.3. Car Parking Layout and Access Arrangements

As part of our involvement in this project, Traffix Group has provided design input into the development of the plans in order to ensure that the proposed development achieves an acceptable car parking layout.

We have assessed the proposed car parking layouts and access arrangements against the relevant requirements of Clause 52.06-9 of the Planning Scheme and the Australian Standards (where relevant). The following is noted:

5.3.1. Car Spaces

- All 90-degree car spaces are measured to be 2.6m wide, 4.9m long, with an aisle width at least 6.4m wide in accordance with Clause 52.06-9 (Design standard 2) of the Planning Scheme.
- At Stage 1, the car park is to have a gravel unsealed service with car spaces marked by wheel stops and/or tack down markers or similar. At Stage 2, the car park will be sealed.
- The disabled car spaces and adjacent shared area are measured to be 2.6m wide and 5.4m long, in excess of the requirements of the AS2890.6:2022, noting that Clause 52.06-9 allows for disabled parking bays to encroach the adjacent accessway width by 500mm.

5.3.2. Access Arrangements

- All required vehicles can easily enter and exit the site in a forward direction in accordance with Clause 52.06-9 (Design Standard 1).
- Vehicle access to/from the car park is to be accessed via either of the proposed access points:
  - John Schubert Drive via the existing dual-width accessway accommodating both entry and exit movements Stage 1. This access is to be sealed at Stage 1, including the internal roundabout, up to the eastern edge of the car park. The access is to be upgraded at Stage 2 to include a left-turn deceleration lane on John Schubert Drive and prohibit right-turn entry movements.
  - Ellen McDonald Drive via a proposed new southern access point. This access will accommodate both entry and exit movements at Stage 1. During Stage 1, this access is to be sealed at the entry to the bend before connecting to the internal gravel roadway. This access will be converted to exit only (no entry) at Stage 3 and the connecting internal accessway will become fully sealed.
  - Ellen McDonald Drive via the existing northern vehicle access connection. This internal roadway connection to this access point is to be delivered at Stage 3 and will accommodate entry movements only including buses and parent/staff vehicles.
- In Stages 1 and 2, we recommend that the internal roadway operates one-way with entry movements from Ellen McDonald Drive only and exit movements to John Schubert Drive only, particularly during the peak morning drop-off and afternoon pick-up periods. Outside of these peak periods, the access can operate as two-way with entry and exit movements.

- From Stage 3, there will be U-turn provisions at both ends of the main car park which will allow for recirculation by parents and two-way traffic movements.
- Pedestrian visibility splays that measure 2m along the frontage roads and 2.5m into the site can be provided on the exit lane side of the proposed access connections, in accordance with what is required under Clause 52.06-9 (Design Standard 1).

Swept path diagrams demonstrating the relevant design vehicles completing critical movements are attached at Appendix B.

Based on the above, we are satisfied that the proposed car parking layout and access arrangements are appropriate and in accordance with the objectives of Clause 52.06-9 of the Planning Scheme and the Australian Standards.

6. Bicycle Parking Considerations

Clause 52.34 of the Planning Scheme outlines the statutory bicycle parking requirements for various land uses. The statutory bicycle requirement for a 'Secondary School' is shown in Table 4.

Table 4: Statutory Bicycle Parking Requirement (Clause 52.34)

Stage	Measure	Bicycle Parking Rate	Statutory Bicycle Parking Requirement
Stage 1	28 secondary school staff 250 secondary school students	1 staff space to each 20 employees 1 student space to each 5 students	1 staff space 50 student spaces
Stage 2	55 secondary school staff 500 secondary school students	1 staff space to each 20 employees 1 student space to each 5 students	3 staff spaces 100 student spaces
Stage 3	87 secondary school staff 750 secondary school students	1 staff space to each 20 employees 1 student space to each 5 students	4 staff spaces 150 student spaces
Stage 4	90 secondary school staff 750 secondary school students	1 staff space to each 20 employees 1 student space to each 5 students	5 staff spaces 150 student spaces
Stage 5	100 secondary school staff 800 secondary school students	1 staff space to each 20 employees 1 student space to each 5 students	5 staff spaces 160 student spaces

Based on the above, the proposed school development has a statutory bicycle parking requirement to provide the following:

- Stage 1 – 51 bike spaces, including 1 staff space and 50 student spaces.
- Stage 2 – 103 bike spaces, including 3 staff space and 100 student spaces.
- Stage 3 – 154 bike spaces, including 4 staff spaces and 150 student spaces.
- Stage 4 – 155 bike spaces, including 5 staff spaces and 150 student spaces.
- Stage 5 – 165 bike spaces, including 5 staff spaces and 160 student spaces.

The Stage 1 development plans identify the total provision of 44 bike spaces within a temporary bike store for Stages 1 and 2. This is a statutory shortfall for 8 bike spaces at Stage 1 and 59 bike spaces at Stage 2.

As part of Stage 3 of the school development, a permanent bicycle storage facility will be established near the northern Ellen McDonald access. This bike store will accommodate a nominal 50 bicycle spaces, including student spaces and staff bicycle spaces within a lockable undercover compound. The equates to an ultimate shortfall of 115 bike spaces at Stage 5.

Given the regional catchment for the proposed school and the current lack of bicycle path infrastructure along surrounding roads, it is anticipated that very few students and staff will cycle to and from the school. Accordingly, bicycle parking demands are anticipated to be very low.

Accordingly, a Permit for a reduction in the statutory bicycle parking requirement is considered appropriate in this instance. Bicycle parking usage within the temporary store can be monitored when the school is operating during Stages 1 and 2 to determine a suitable rate of bicycle parking within the permanent store when it is established at Stage 3, noting the masterplan identifies a nominal 50 bike spaces.

Based on the above, an appropriate level of bicycle parking can be provided at each stage of the school development.

All hoops should be spaced at 1m intervals and accommodate 1.8m bike lengths with an adjacent accessway width of at least 1.5m, in accordance with AS2890.3:2015.

7. Traffic Considerations

7.1. Existing Traffic Volumes

Traffic volume surveys were undertaken by Trans Traffic Surveys at the below intersections surrounding the site:

- John Schubert Drive / John Boyes Drive / Kiewa Valley Highway
- John Schubert Drive / Hurley Circuit
- John Schubert Drive / Ellen McDonald Drive

The survey was undertaken on Wednesday 10th December 2025 (between 2:30pm-5:00pm) and on Thursday 11th December 2025 (between 7:30am-9:00am). The survey results show that the peaks hours occurred between 8:00am-9:00am and 3:00pm-4:00pm which coincide with school drop-off and pick-up periods, respectively.

The peak hour survey results are summarised in Figure 16, noting that the traffic volumes from the John Schubert Drive / Hurley Circuit intersection have been used to calculate through traffic volumes at the proposed school access.

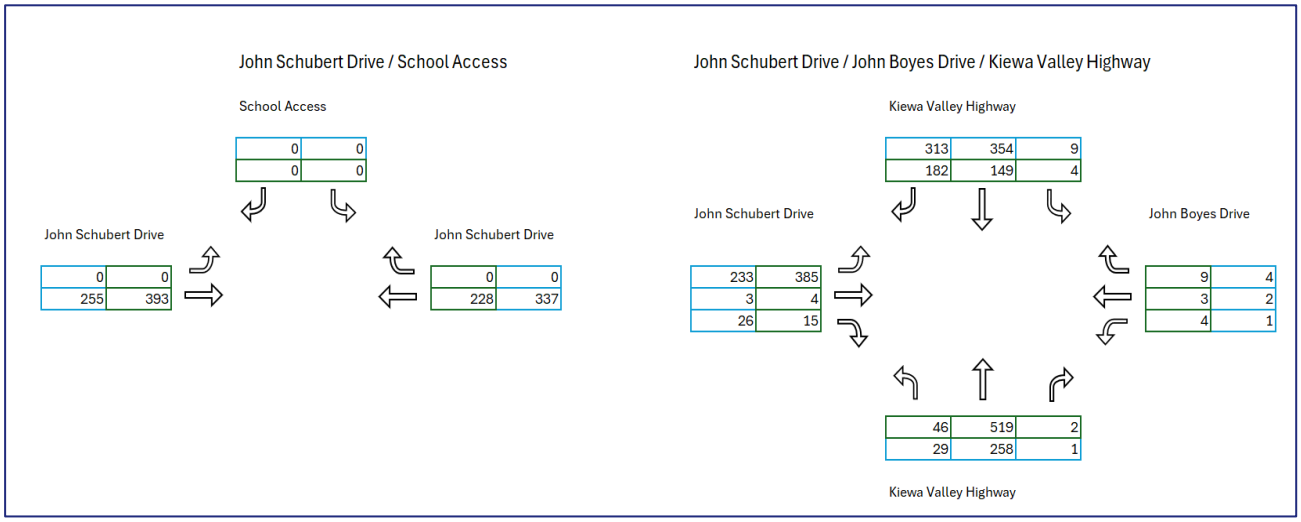


Figure 16: Existing Traffic Movements – Weekday AM & PM Peak Hours

The peak hour survey results for the John Schubert Drive / Ellen McDonald Drive intersection are summarised in Figure 17.

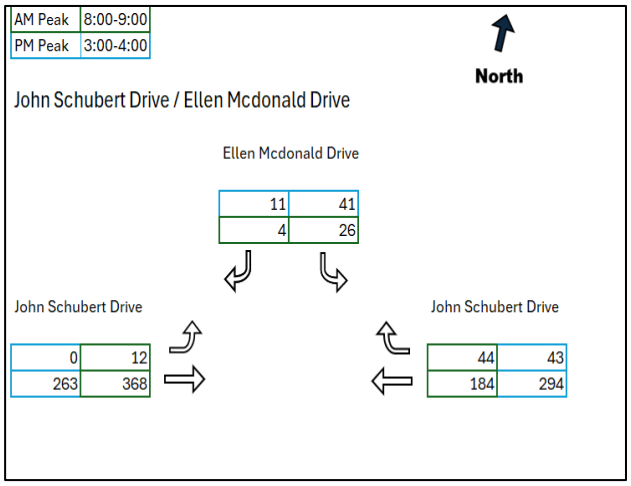


Figure 17: Existing Traffic Movements – Weekday AM & PM Peak Hours

7.2. Traffic Generation

For the proposed development traffic generation, we have adopted the following traffic generation rates:

- Stage 1 – 1 vehicle movement per student for the AM peak hour and 0.8 vehicle movements per student during the PM peak hour.
- Stages 2 to 5 – 0.9 vehicle movements per student for the AM peak hour and 0.6 vehicle movements per student during the PM peak hour.

At Stage 1, we have conservatively adopted a higher traffic generation rate per student. As the school grows and includes more students in higher year levels, there is anticipated to be more shared trips by siblings and also increased usage of school bus services. Accordingly, it is appropriate to adopt a reduced traffic generation rate.

For entry/exit proportions, we have adopted the following typical distributions:

- AM Peak Hour – 55% entry and 45% exit.
- PM Peak Hour – 40% entry and 60% exit.

For directional distributions to the east or west, we have adopted the following for both peak periods[4]:

- 44% east to/from Kiewa Valley Highway (with 40% to/from north and 4% to/from south)
- 56% west to/from Baranduda Boulevard.

As mentioned previously, right-turn entry movements at the John Schubert Drive access would be prohibited during school drop-off and pick-up periods. This access will provide for left-turn entry, left-turn exit and right-turn exit movements.

For distributions at the proposed vehicle access points, we have adopted the following:

- arriving/departing to/from the west:
  - 75% would enter and exit via John Schubert Drive
  - 25% would enter and exit via Ellen McDonald Drive
- arriving/departing to/from the east:
  - 100% would enter via Ellen McDonald Drive
  - 100% would exit via John Schubert Drive

7.2.1. Stage 1

On this basis, it is projected that the proposed Stage 1 development will generate 250 movements in the AM peak hour and 200 movement in the PM peak hour. The predicted traffic movements are summarised in Figure 18 and Figure 19.

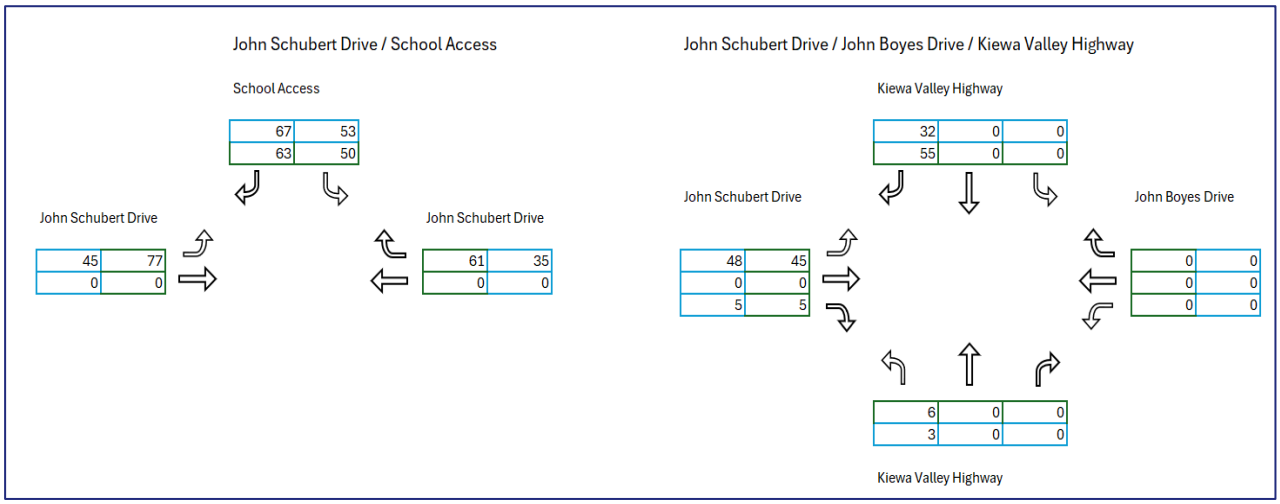


Figure 18: Traffic Generation of Proposed Development – Stage 1

[4] The directional distributions are based on estimates provided by the applicant with consideration of the proposed student catchment, using data of existing enrolment at the nearby St Francis of Assisi Primary School.

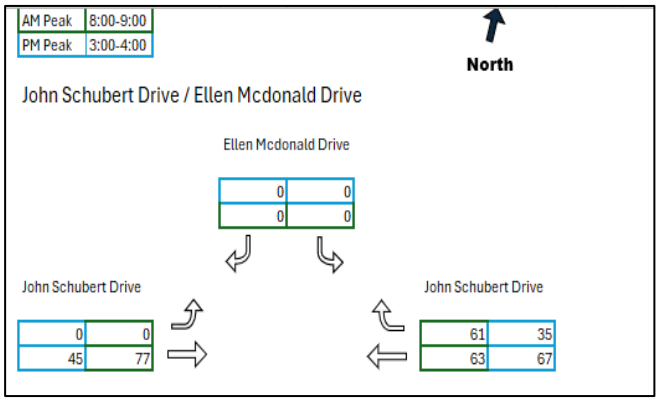


Figure 19: Traffic Generation of Proposed Development – Stage 1

Based on the projected traffic generation of the Stage 1 development, the post-development traffic volumes at each intersection are summarised at Figure 20 and Figure 21.

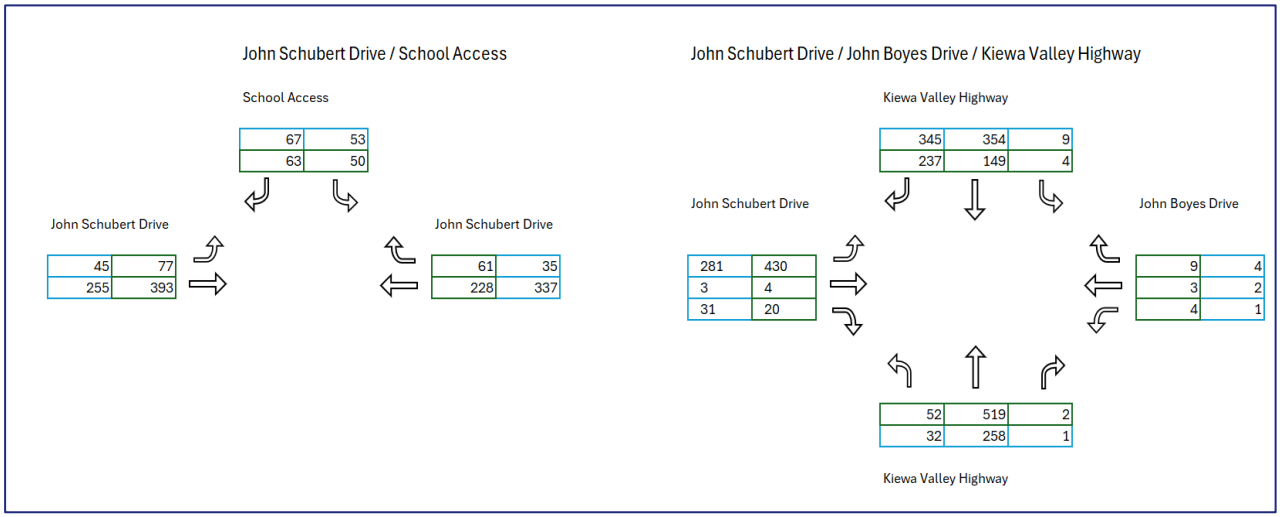


Figure 20: Post Development Traffic Volumes – Stage 1

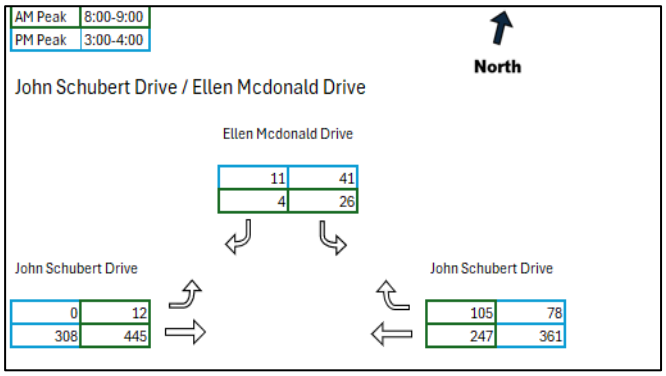


Figure 21: Post Development Traffic Volumes – Stage 1

7.2.2. Stage 2

The Stage 2 development will generate 500 movements in the AM peak hour and 400 movement in the PM peak hour. The predicted traffic movements are summarised in Figure 22 and Figure 23.

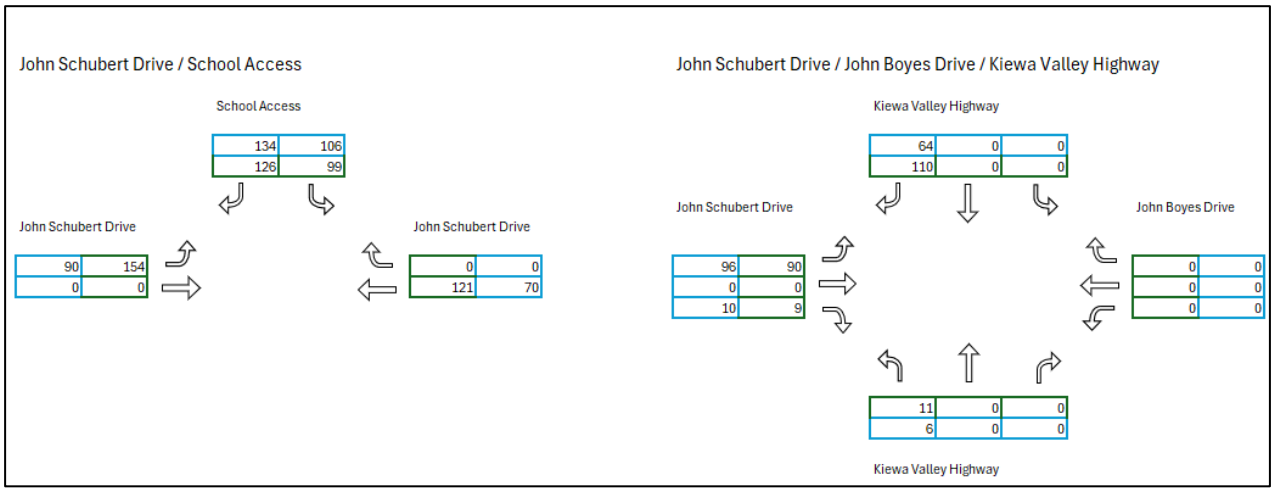


Figure 22: Traffic Generation of Proposed Development – Stage 2

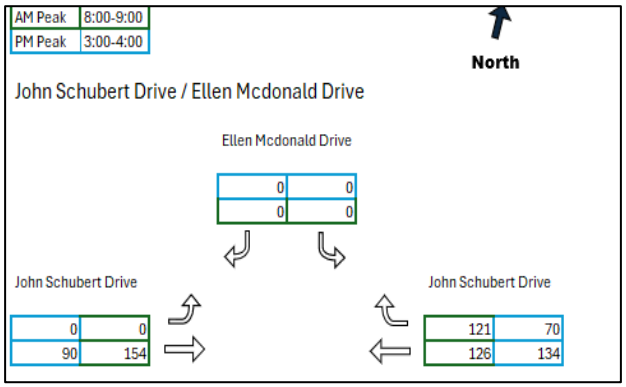


Figure 23: Traffic Generation of Proposed Development – Stage 2

Based on the projected traffic generation of the Stage 2 development, the post-development traffic volumes at each intersection are summarised at Figure 24 and Figure 25.

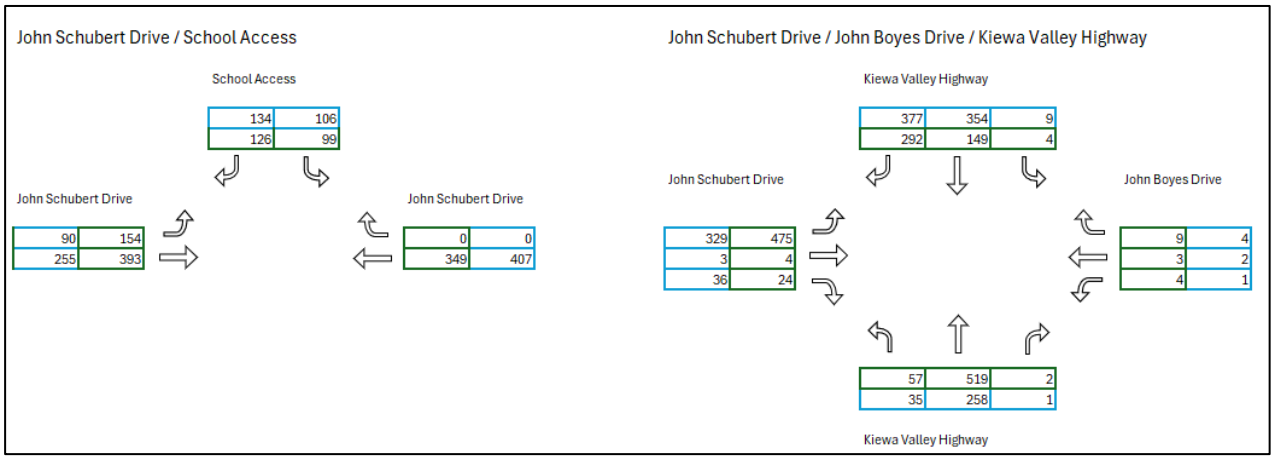


Figure 24: Post Development Traffic Volumes – Stage 2

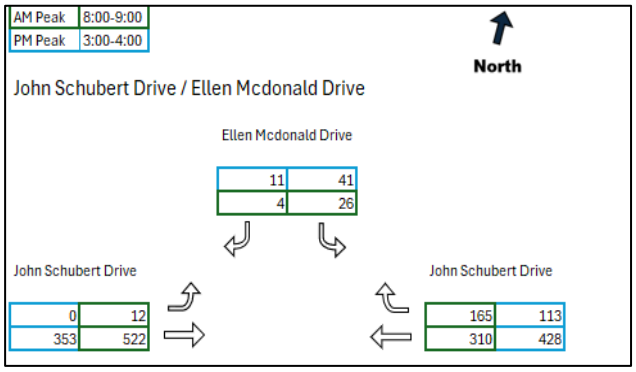


Figure 25: Post Development Traffic Volumes – Stage 2

7.2.3. Stage 5

On this basis, it is projected that the proposed complete masterplan (Stage 5) development will generate 720 movements in the AM peak hour and 480 movement in the PM peak hour. The predicted traffic movements are summarised in Figure 26 and Figure 27.

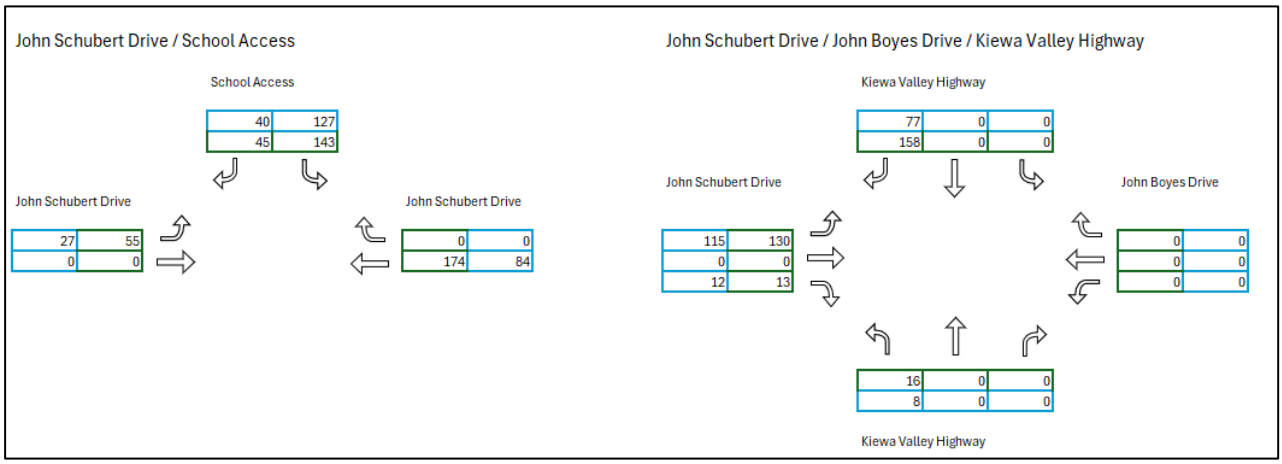


Figure 26: Traffic Generation of Proposed Development – Stage 5

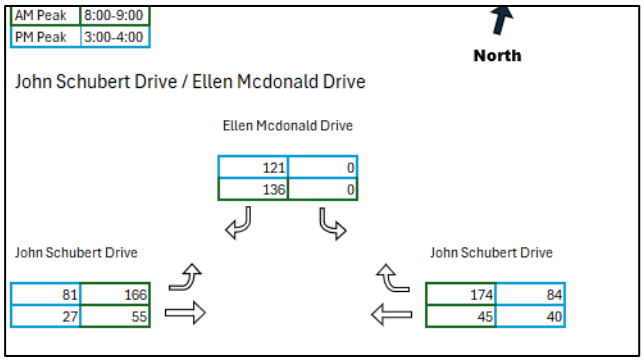


Figure 27: Traffic Generation of Proposed Development – Stage 5

Based on the projected traffic generation of the proposed complete masterplan (Stage 5) development, the post-development traffic volumes at each intersection are summarised at Figure 28 and Figure 29.

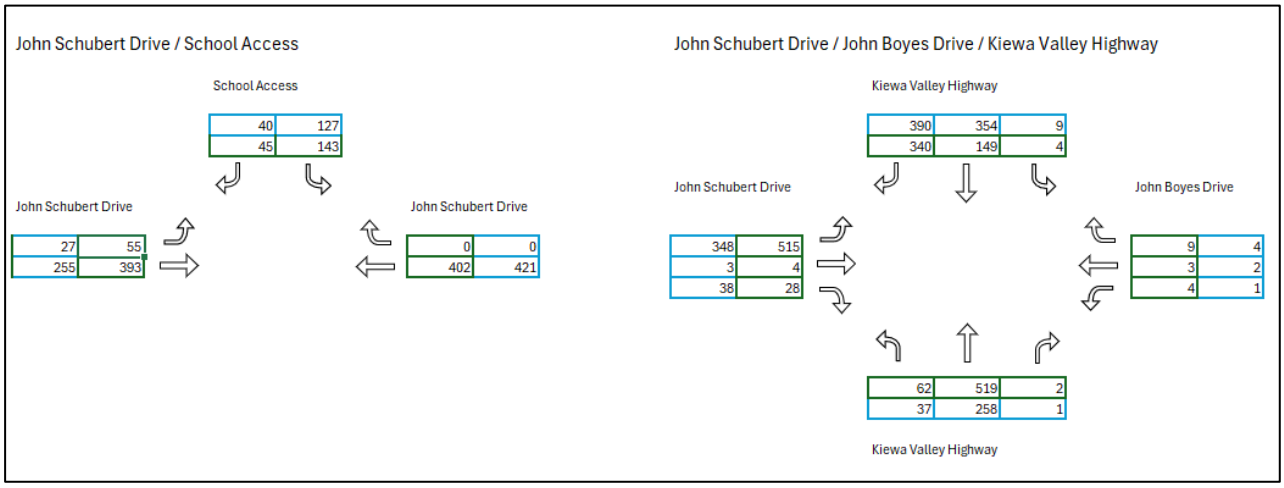


Figure 28: Post Development Traffic Volumes – Stage 5

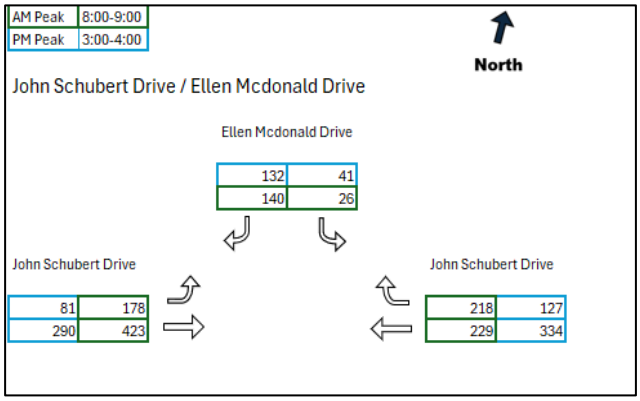


Figure 29: Post Development Traffic Volumes – Stage 5

7.3. Traffic Assessment

We have utilised SIDRA Intersection 10.0 to undertake an assessment of the intersections of John Schubert Drive / Kiewa Valley Highway /John Boyes Drive and Ellen McDonald Drive / John Schubert Drive, noting that these are the critical intersections for school traffic.

SIDRA is a computer simulation package which assesses the operating performance of intersections and road networks.

A summary of the key outputs is as follows:

- **Degree of Saturation (DoS) –** The ratio of traffic volume to maximum capacity for a particular turning movement. A DoS of 0.90 for an unsignalised intersection is typically considered the practical limit, the exceedance of which results in disproportionate increases to delay/queueing.
- **Average Delay (Avg. Delay) –** The average delay in seconds for a vehicle making a particular turning movement.
- **95th Percentile Queue (95% Queue) –** The 95th percentile queue length is the length in metres which 95 per cent of all observed cycle queues fall below (or 5% exceed) during the peak analysis period.

For the John Schubert Drive / Kiewa Valley Highway intersection, it is noted that no upgrade works are proposed as part of the Stage 1 development with the existing intersection layout assessed. However, at Stage 2, minor upgrade works are proposed on the John Schubert Drive (western) approach to the intersection to include separate left-turn and right-turn lanes, as shown in the concept plan at Figure 30.

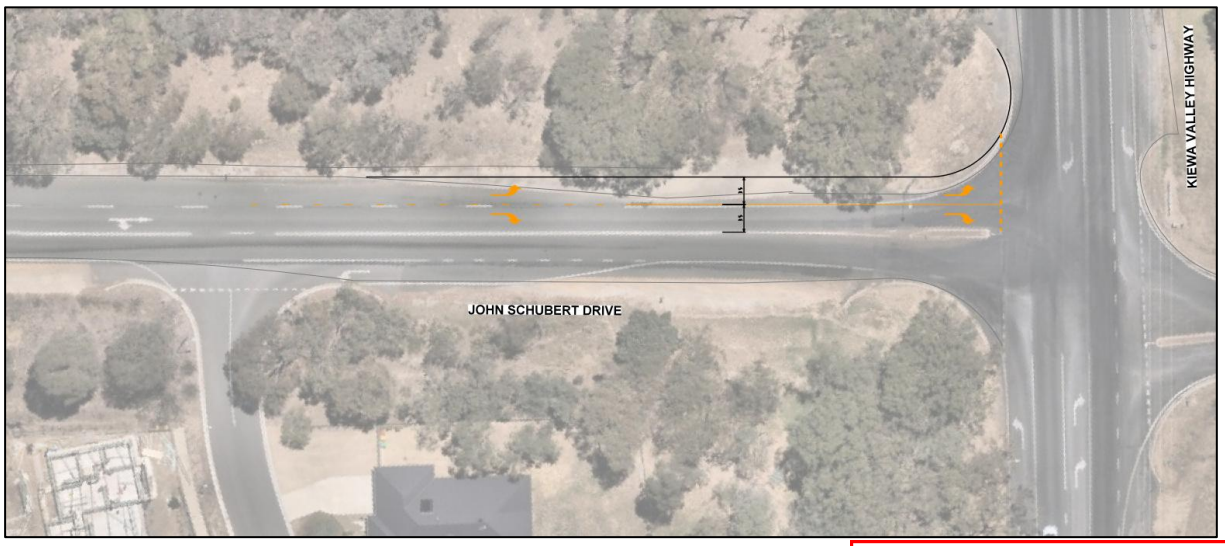


Figure 30: Stage 2 Upgrade Works – Concept Plan

The assessed SIDRA layouts are shown at Figure 31 to Figure 33.

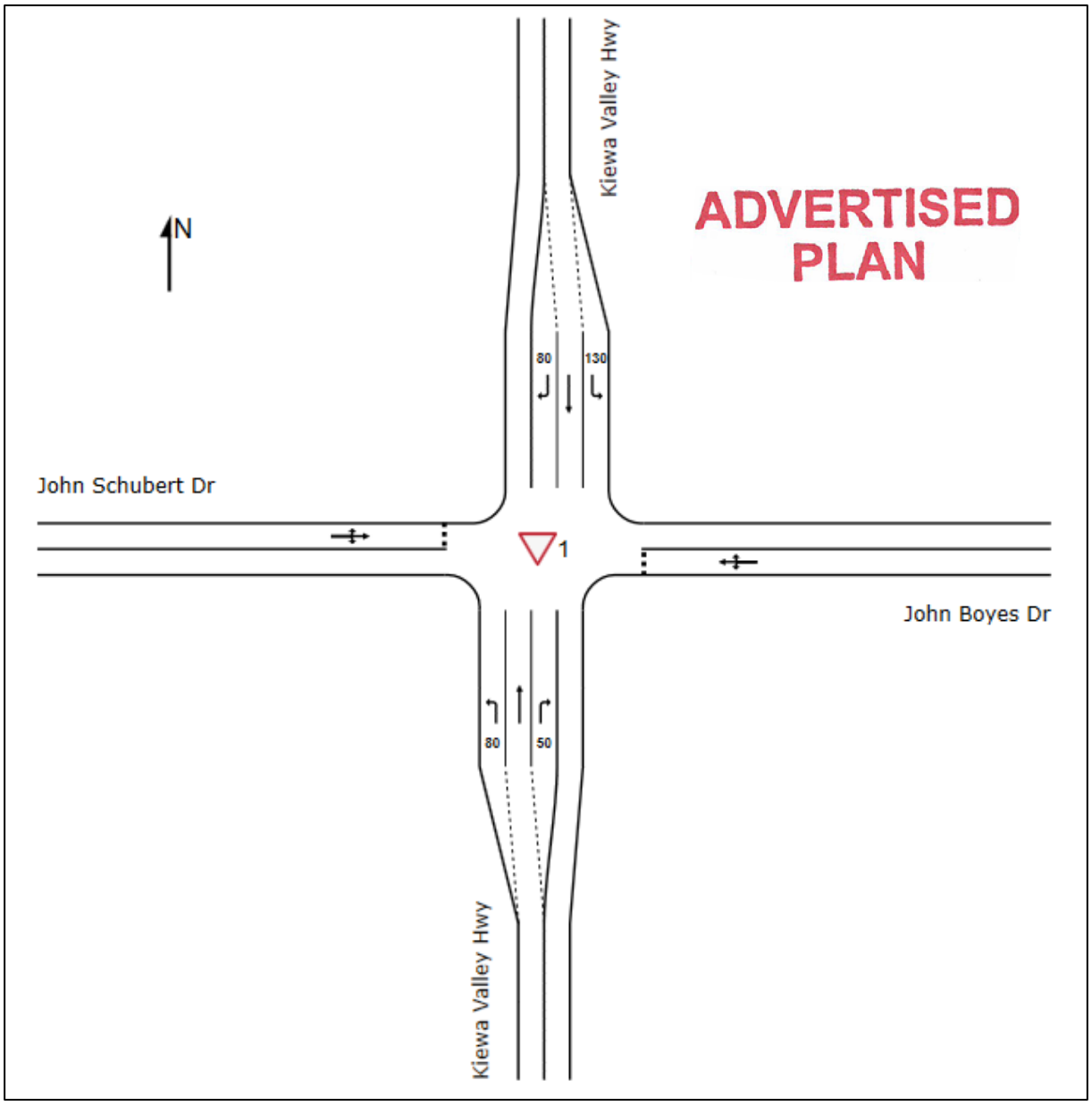


Figure 31: John Schubert Drive/Kiewa Valley Highway/John Boyes Drive - Layout (SIDRA) – Stage 1

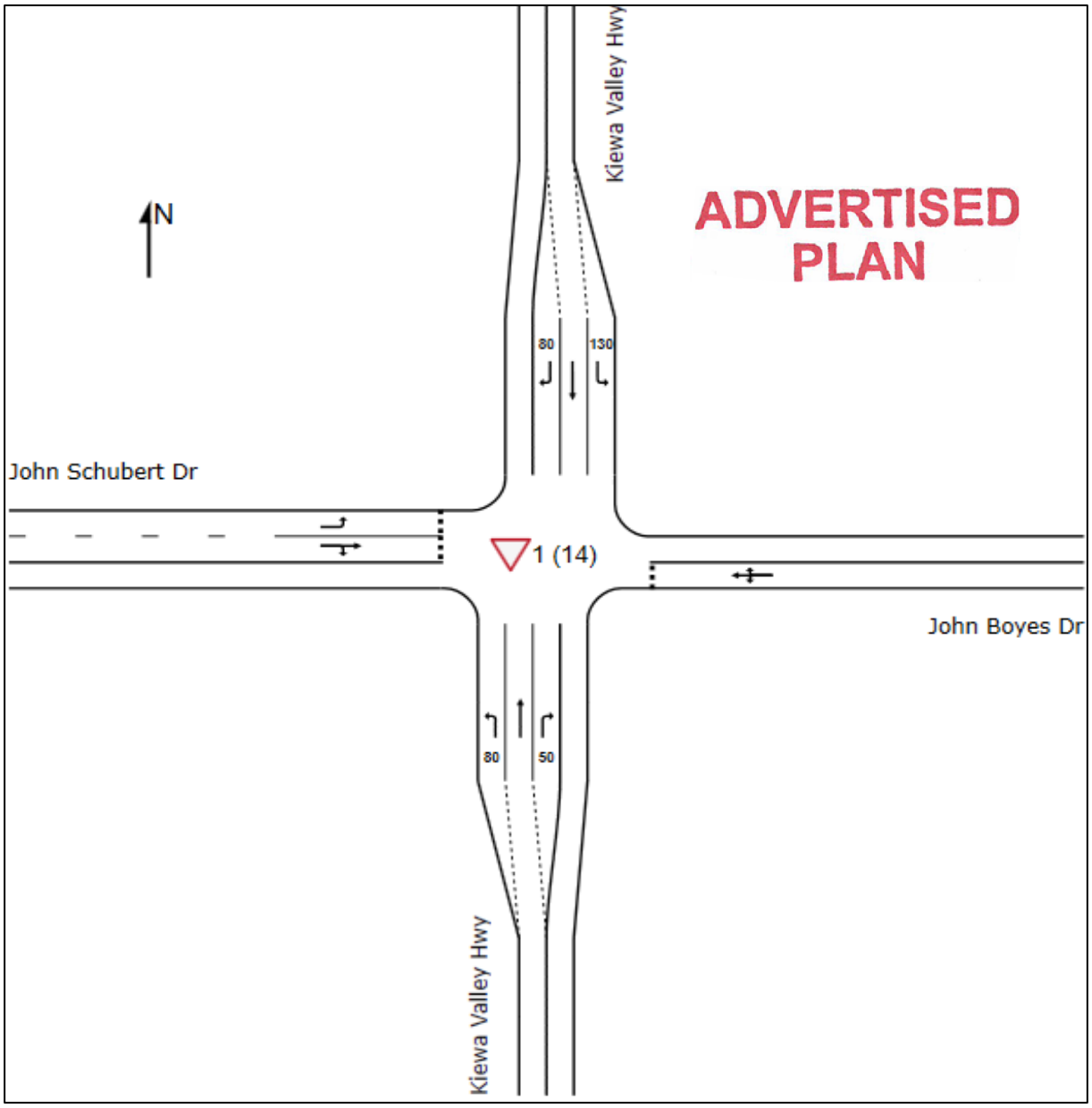


Figure 32: John Schubert Drive/Kiewa Valley Highway/John Boyes Drive - Layout (SIDRA) – Stages 2 to 5

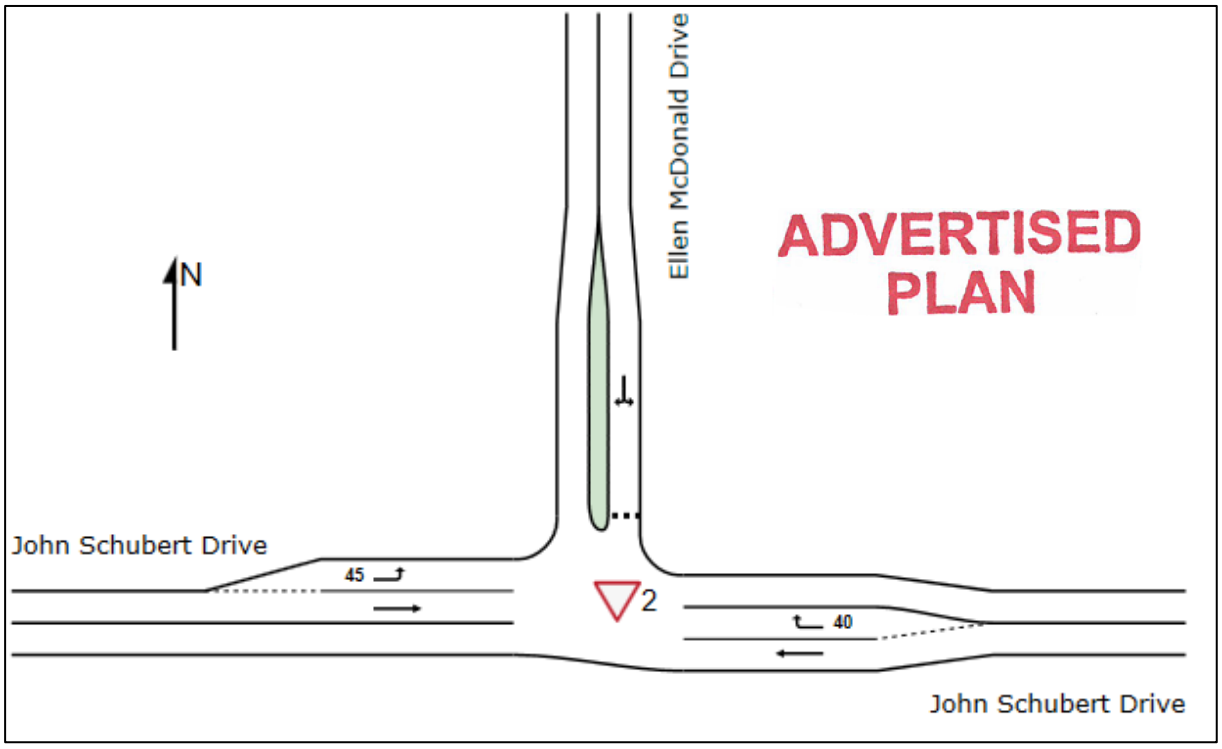


Figure 33: John Schubert Drive/Ellen McDonald Drive - Layout (SIDRA)

7.4. Traffic Impact

7.4.1. Kiewa Valley Highway / John Schubert Drive / John Boyes Drive

The key findings of our SIDRA assessment are summarised in Table 5 and Table 6, with full detailed results attached at Appendix C.

We note that the existing conditions and Stage 1 analysis assessed the existing intersection layout, whilst the Stages 2 and 5 assessed the proposed upgraded western approach as shown earlier at Figure 30.

Table 5: AM Peak Hour - SIDRA Results Comparison Table - Kiewa Valley Highway / John Schubert Drive

Intersection Leg/Movement		Existing Conditions			Post Development – Stage 1			Post Development – Stage 2			Post Development – Stage 5		
		DoS	Avg. Delay (s)	95% Queue (m)	DoS	Avg. Delay (s)	95% Queue (m)	DoS	Avg. Delay (s)	95% Queue (m)	DoS	Avg. Delay (s)	95% Queue (m)
Kiewa Valley Highway (South)	Left	0.03	7	0	0.03	7	0	0.03	7	0	0.03	7	0
	Through	0.29	0	0	0.31	0	0	0.29	0	0	0.29	0	0
	Right	0.00	7	0	0.00	7	0	0.00	7	0	0.00	7	0
John Boyes Drive (East)	Left	0.06	6	1	0.07	6	2	0.08	6	2	0.09	6	2
	Through	0.06	13	1	0.07	15	2	0.08	16	2	0.09	17	2
	Right	0.06	23	1	0.07	26	2	0.08	30	2	0.09	34	2
Kiewa Valley Highway (North)	Left	0.00	7	0	0.00	7	0	0.00	7	0	0.00	7	0
	Through	0.09	0	0	0.09	0	0	0.09	0	0	0.09	0	0
	Right	0.21	10	7	0.27	10	9	0.34	11	13	0.39	11	17
John Schubert Drive (West)	Left	0.76	19	49	0.87	24	76	0.86	23	75	0.93	31	112
	Through	0.76	25	49	0.87	33	76	0.11	16	3	0.14	17	3
	Right	0.76	31	49	0.87	38	76	0.11	19	3	0.14	21	3

Table 6: PM Peak Hour - SIDRA Results Comparison Table - Kiewa Valley Highway / John Schubert Drive

Intersection Leg/Movement		Existing Conditions			Post Development – Stage 1			Post Development – Stage 2			Post Development – Stage 5		
		DoS	Avg. Delay (s)	95% Queue (m)	DoS	Avg. Delay (s)	95% Queue (m)	DoS	Avg. Delay (s)	95% Queue (m)	DoS	Avg. Delay (s)	95% Queue (m)
Kiewa Valley Highway (South)	Left	0.02	7	0	0.02	7	0	0.02	7	0	0.02	7	0
	Through	0.15	0	0	0.15	0	0	0.15	0	0	0.15	0	0
	Right	0.00	8	0	0.00	8	0	0.00	8	0	0.00	8	0
John Boyes Drive (East)	Left	0.03	12	1	0.03	12	1	0.03	8	1	0.03	8	1
	Through	0.03	13	1	0.03	14	1	0.03	15	1	0.03	15	1
	Right	0.03	19	1	0.03	21	1	0.03	23	1	0.03	24	1
Kiewa Valley Highway (North)	Left	0.00	7	0	0.00	7	0	0.00	7	0	0.00	7	0
	Through	0.20	0	0	0.20	0	0	0.20	0	0	0.20	0	0
	Right	0.25	8	9	0.28	8	10	0.30	8	11	0.31	8	11
John Schubert Drive (West)	Left	0.39	9	15	0.47	10	22	0.40	9	16	0.42	9	18
	Through	0.39	19	15	0.47	21	22	0.14	16	3	0.15	16	4
	Right	0.39	22	15	0.47	24	22	0.14	18	3	0.15	19	4

As shown in the above tables, the SIDRA results demonstrate that the existing intersection of John Schubert Drive / Kiewa Valley Highway /John Boyes Drive will continue to operate well within acceptable operating conditions post Stage 1 development of school. Importantly, the proposed Stage 1 school traffic is predicted to only result in minor increases to average delays and 95th percentile queues at the intersection.

Furthermore, the results show that the upgraded John Schubert Drive / Kiewa Valley Highway /John Boyes Drive intersection layout with minor works on the western approach will operate within acceptable conditions from Stage 2 to the completion of the masterplan (Stage 5). In particular, queuing on the western approach during the critical AM peak period will have a 95th percentile queue that does not extend as far as the school's John Schubert Drive access.

As discussed previously, the future signalisation of the Kiewa Valley Highway/John Schubert Drive intersection is a DCP funded project that would be delivered by Council at some time in the future, noting that the SIDRA results demonstrate that the school does not rely on the future signalisation.

7.4.2. Ellen McDonald Drive / John Schubert Drive

We have assessed the Ellen McDonald Drive / John Schubert Drive intersection for existing conditions and full masterplan development (Stage 5). The key findings of our SIDRA assessment are summarised in Table 7 and Table 8, with full results provided at Appendix C.

Table 7: AM Peak Hour - SIDRA Results Comparison Table

Intersection Leg/Movement		AM Peak Hour					
		Existing Conditions			Post Development – Stage 5		
		DoS	Avg. Delay (s)	95% Queue (m)	DoS	Avg. Delay (s)	95% Queue (m)
John Schubert Drive (East)	Through	0.10	0	0	0.12	0	0
	Right	0.04	7	1	0.24	9	8
Ellen McDonald Drive (North)	Left	0.04	8	1	0.46	11	15
	Right	0.04	10	1	0.46	19	15
John Schubert Drive (West)	Left	0.00	6	0	0.10	6	0
	Through	0.20	0	0	0.23	0	0

Table 8: PM Peak Hour - SIDRA Results Comparison Table

Intersection Leg/Movement		PM Peak Hour					
		Existing Conditions			Post Development – Stage 5		
		DoS	Avg. Delay (s)	95% Queue (m)	DoS	Avg. Delay (s)	95% Queue (m)
John Schubert Drive (East)	Through	0.16	0	0	0.18	0	0
	Right	0.03	6	0	0.11	7	3
Ellen McDonald Drive (North)	Left	0.07	7	0	0.36	9	12
	Right	0.07	10	0	0.36	14	12
John Schubert Drive (West)	Left	0.00	6	0	0.05	6	0
	Through	0.15	0	0	0.16	0	0

As shown in the above tables, the SIDRA results demonstrate that the intersection of John Schubert Drive and Ellen McDonald Drive will continue to operate well within acceptable operating conditions post development of school masterplan (Stage 5). Importantly, the proposed Stage 5 school traffic is predicted to only result in minor increases to average delays and 95th percentile queues are relatively short.

Accordingly, traffic generation by proposed masterplan of the school can be adequately accommodated by the surrounding road network and intersections.

8. Loading and Waste Collection Arrangements

8.1. Loading/Deliveries

Clause 65.01 of the Planning Scheme states that the responsible authority must consider a number of matters as appropriate including:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.*

We expect that the proposed school will only require deliveries that are of an infrequent nature, which will most likely be undertaken by vans or small to medium size trucks.

The John Schubert Drive and proposed Ellen McDonald Drive vehicle access connections are to be designed to accommodate vehicles up to the size of a 14.5m long bus. Accordingly, medium and large rigid trucks will also be accommodated.

Loading is to occur within the car park accessway, noting deliveries must be scheduled to occur outside of school drop-off/pick-up periods.

Based on the above, we are satisfied that appropriate loading/delivery arrangements can be accommodated.

8.2. Waste Collection

Traffix Group has prepared a Waste Management Plan[5] for the proposed secondary school which provides further details on waste management arrangements.

A temporary Stage 1 bin store is identified to the east of the John Schubert Drive vehicle access near the internal roundabout. Waste collection will occur on-site via a private contractor using a rear-loader truck (up to approximately 10.2m long) or equivalent.

During Stage 1 of the development, the waste truck will utilise the John Schubert Drive access to enter and exit the site in a forward direction, propping temporarily within the internal roundabout to unload bins. Waste collection must be scheduled to occur outside of school drop-off/pick-up periods.

At Stage 3, a permanent bin store will be established just north of the proposed southern Ellen McDonald Drive access. Waste collection from Stage 3 onwards will occur within the internal roadway adjacent to the bin store, noting that waste collection will be scheduled to occur outside of the school drop-off and pick-up periods.

Based on the above, we are satisfied that the appropriate waste collection arrangements can be achieved for the proposed development at each stage.

[5] Our reference: G37148R-02B.

9. Conclusion

Having undertaken a detailed Traffic Engineering Assessment for the proposed secondary school on John Schubert Drive in Baranduda, we are of the opinion that:

a) the proposed on-site car parking provisions exceed the statutory minimum requirement under the Planning Scheme and meet the anticipated peak demand within the on-site car parks during the school peak periods at each stage of development,

b) the proposed car parking layout and access arrangements are to be provided in accordance with the requirements of Clause 52.06-9 of the Planning Scheme, and the relevant Australian Standards,

c) traffic generated by the proposed school at Stage 1 will be relatively low and can be accommodated by the surrounding road network and intersections without any upgrade works,

d) traffic generated by the school at Stage 2 will require minor upgrade works on John Schubert Drive on the western approach to its intersection with Kiewa Valley Highway intersection to provide separate left-turn and right-turn lanes,

e) traffic generated by the school masterplan will be adequately accommodated by the existing and future road network as outlined in the PSP, noting the future signalisation of the Kiewa Valley Highway/John Schubert Drive intersection, which is a DCP funded project,

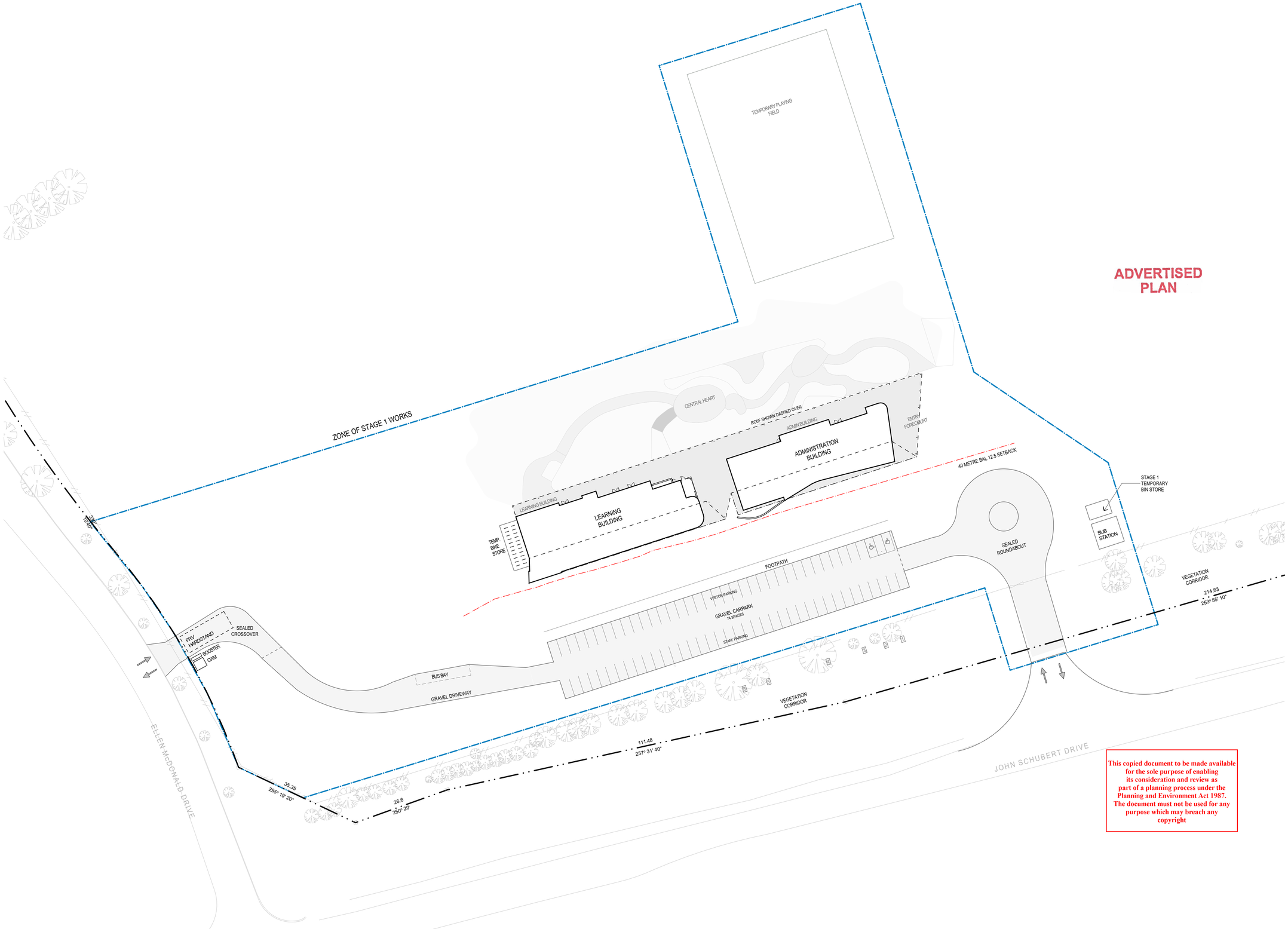
f) a suitable level of bicycle parking for students and staff is to be provided, and it is appropriate for a Permit for a reduction in the statutory requirement to be issued,

g) appropriate loading/delivery and waste collection arrangements can be accommodated during each development stage, and

h) there are no traffic engineering reasons why a Planning Permit for the masterplan of the proposed Baranduda Catholic Secondary School, Baranduda should not be approved.

Appendix A

Masterplan and Stage 1 Plan



LEGEND

- ZONE OF STAGE 1 WORKS
- SITE BOUNDARY
- EXISTING TREES
- VEHICLE DIRECTIONAL ARROW

NOTES

- REFER CIVIL DRAINAGE PLAN FOR ALL DRAINAGE WORKS
- REFER LANDSCAPE PLAN FOR ALL LANDSCAPE WORKS
- REFER ARBORIST REPORT
- REFER TRAFFIC REPORT
- REFER WASTE REPORT
- REFER BUSHFIRE REPORT

ADVERTISED PLAN

LAW ARCHITECTS

LAW ARCHITECTS PTY LTD
ACN: 128 424 493 ABN: 87 541 659 619
The Old Dairy, 45 Watkins St, Fitzroy North 3068
studio@lawarchitects.com.au 03 9489 9200 lawarchitects.com.au

STAGE 1 PRECINCT PLAN

N

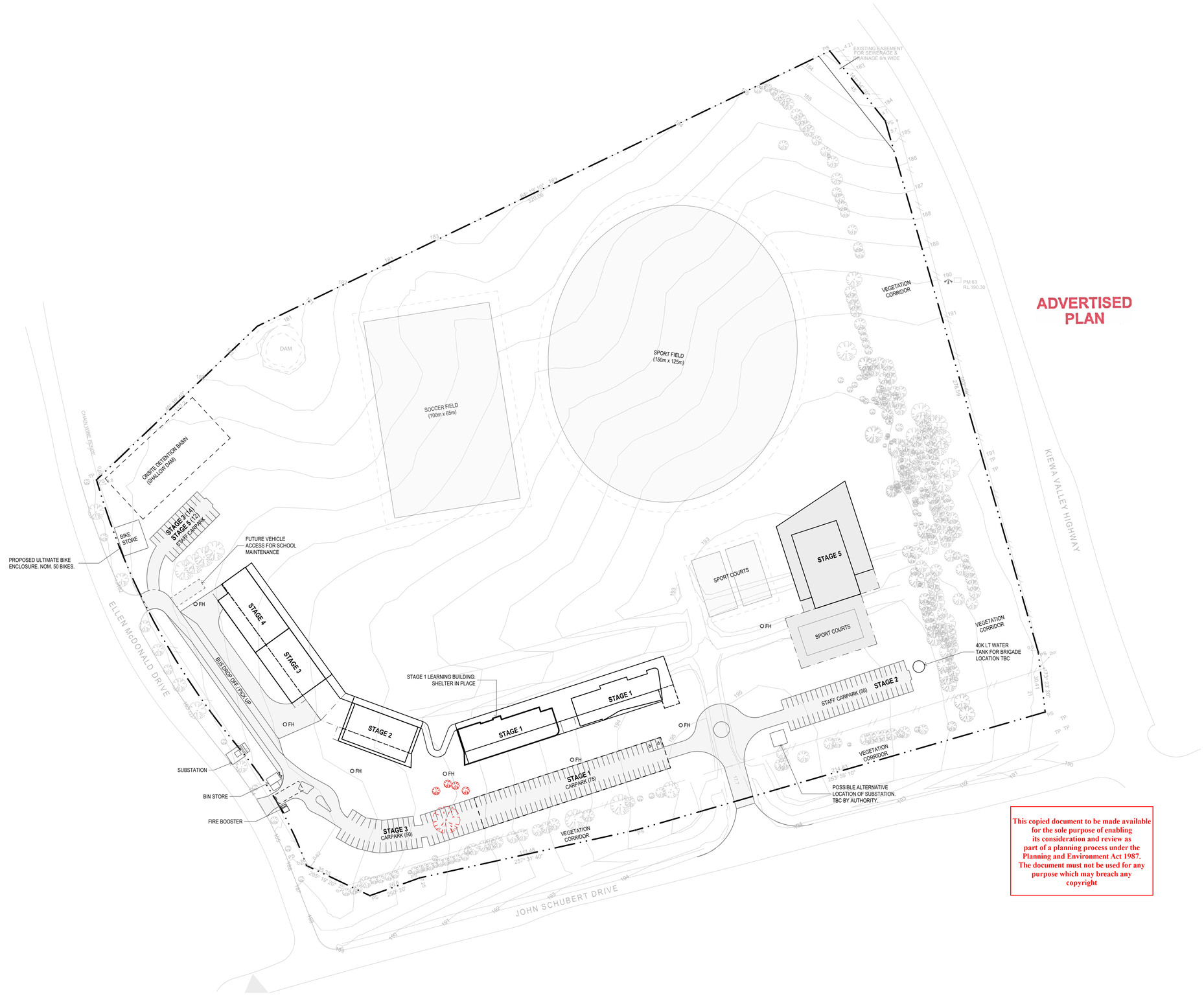
@ 1:500
0m 10 20

TP - 04 [A - WIP]

ST FRANCIS OF ASSISI COLLEGE (STAGE 1)

ELLEN MCDONALD DRIVE, BARANDUDA VIC 3691

P2025-01



LEGEND

- SITE BOUNDARY
- EXISTING TREES
- NRZ - NOMINAL ROOT ZONE
- TREE TO BE REMOVED
- FH — DUAL HEAD EXTERNAL ATTACK HYDRANT
- VEHICLE DIRECTIONAL ARROW

MASTER PLAN STAGES:

STAGE 1:
- NEW ADMINISTRATION BUILDING
- NEW LEARNING BUILDING
- NEW CARPARK AND CROSSOVER
  (JOHN SCHUBERT & SOUTHERN ELLEN MCDONALD DR)
- NEW LANDSCAPING AND SITE SERVICES
- TEMPORARY BIKE & BIN STORE

STAGE 2:
- NEW LEARNING AND SCIENCE BUILDING
- NEW LANDSCAPING
- STAFF CARPARK (EAST)

STAGE 3:
- NEW LEARNING AND ARTS CENTRE
- NEW LANDSCAPING
- NEW SPORTS FIELD
- MAIN CARPARK EXTENSION & U-TURN PROVISION
- BUS PARKING
  (NORTHERN ELLEN MCDONALD DR ACCESS)
- FINAL BIKE & BIN STORE

STAGE 4:
- NEW LEARNING AND TECHNOLOGY BUILDING
- NEW LANDSCAPING
- NEW OVAL AND OUTDOOR COURTS

STAGE 5:
- NEW GYMNASIUM AND COVERED COURTS
- STAFF CARPARK (NORTH-WEST)

ADVERTISED PLAN

LAW ARCHITECTS

LAW ARCHITECTS PTY LTD
ACN: 128 424 493 ABN: 87 541 659 619
The Old Dairy, 45 Watkins St, Fitzroy North 3068
studio@lawarchitects.com.au 03 9489 9200 lawarchitects.com.au

MASTERPLAN

MP - 01 [TP A]

ST FRANCIS OF ASSISI COLLEGE (STAGE 1)

ELLEN MCDONALD DRIVE, BARANDUDA VIC 3691

P2025-01

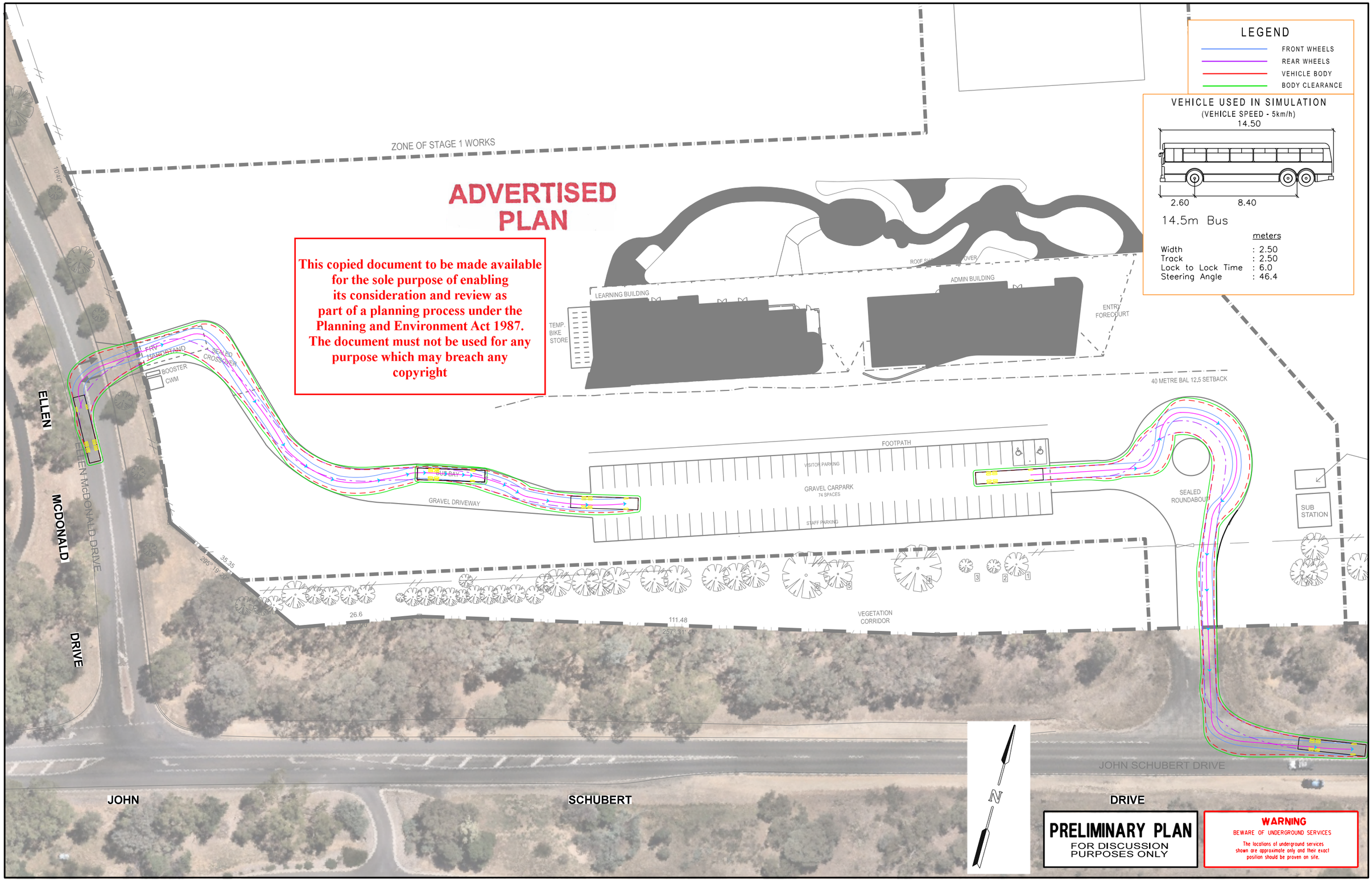
N

@ 1:1000

0mm 10 20 30 40 50

Appendix B

Swept Path Diagrams



ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	12/02/2026

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS FEB 2026)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3 MAIN ROAD - JOHN SCHUBERT DRIVE (SPEED ZONE 70km/h)

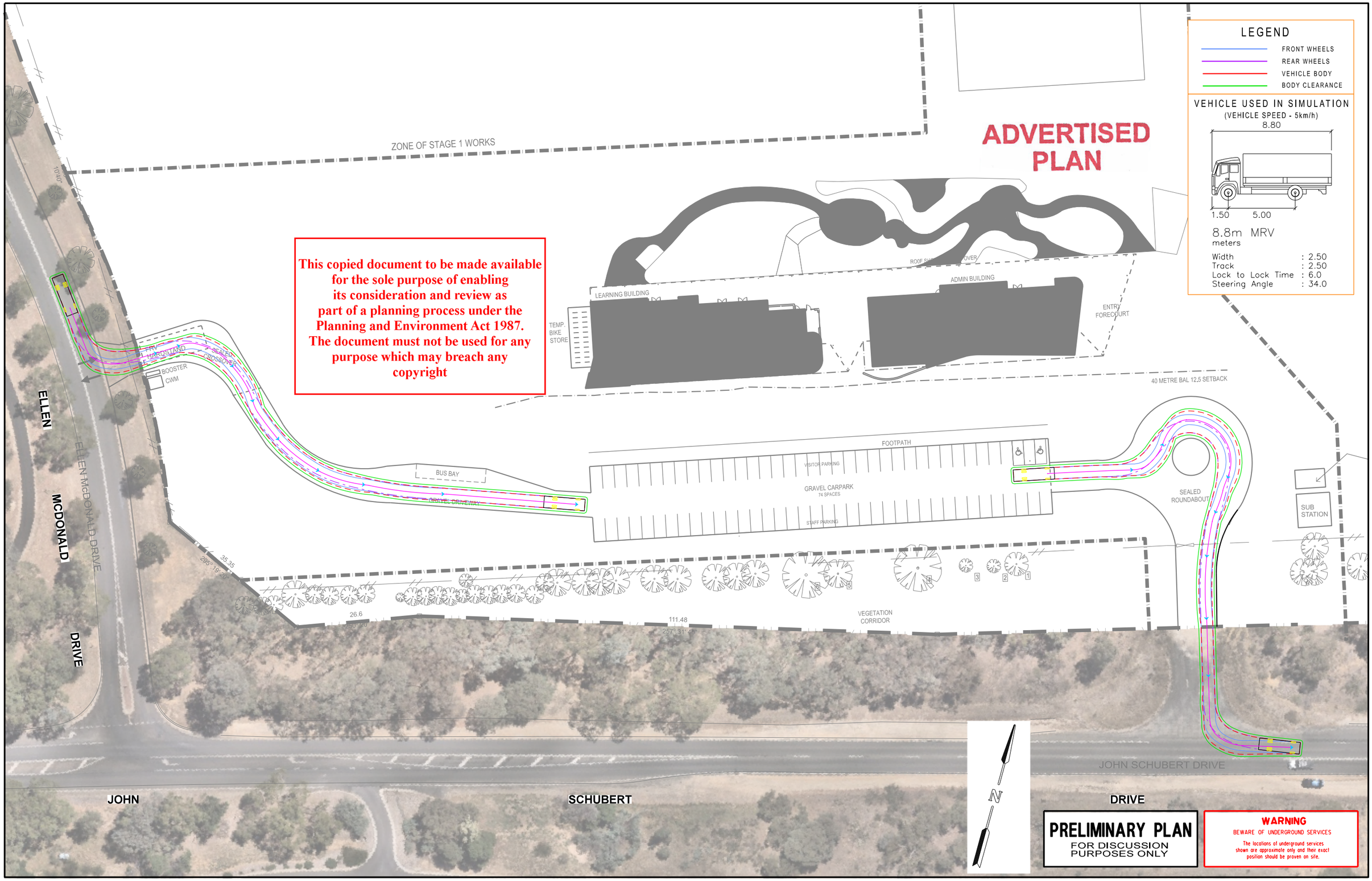
DESIGNED P. NGUYEN
CHECKED/APPROVED B. CHISHOLM
FILE NAME G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
14.5m BUS SWEPT PATHS

SCALE 1:750 (A3) 0 3.75 7.5 11.25 15
SHEET No. 1/4
DWG No. G37148-02-01

DATE: 02/13/26
MODEL: G37148-02-01
FILE: \\Traxs\v2\Group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn



LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)

8.8m MRV
meters

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services shown are approximate only and their exact position should be proven on site.

ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	12/02/2026

GENERAL NOTES
1. BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS FEB 2026)
2. ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3. MAIN ROAD - JOHN SCHUBERT DRIVE (SPEED ZONE 70km/h)

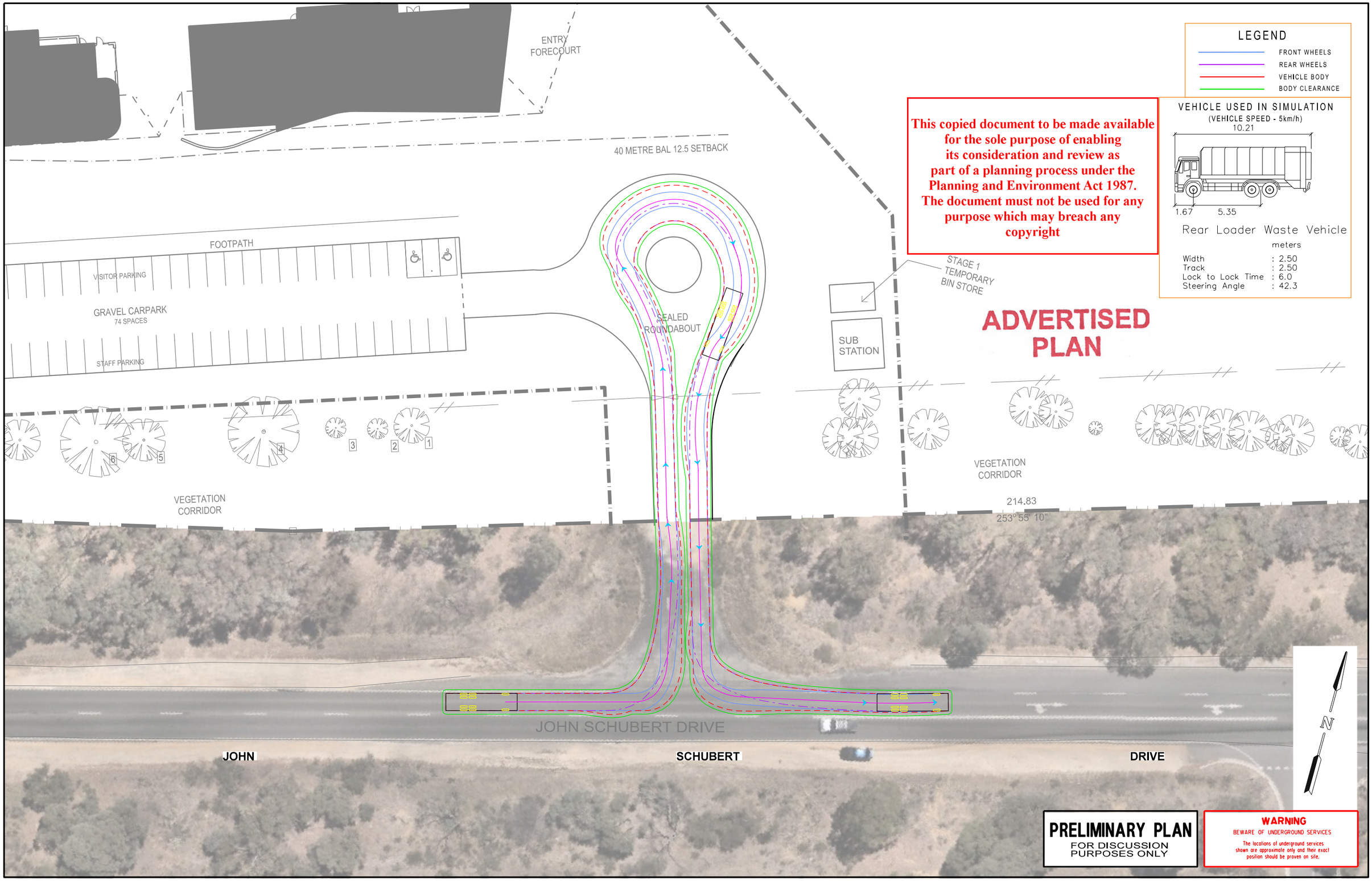
DESIGNED: P. NGUYEN
CHECKED/APPROVED: B. CHISHOLM
FILE NAME: G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
8.8m MRV SWEPT PATHS

SCALE 1:750 (A3) 0 3.75 7.5 11.25 15
SHEET No. 2/4
DWG No. G37148-02-02

DATE: 02/13/26
MODEL: G37148-02-02
FILE: \\fmksrv02\Group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn



LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)

Rear Loader Waste Vehicle

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 42.3

ADVERTISED PLAN

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services shown are approximate only and their exact position should be proven on site.

ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	12/02/2026

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS FEB 2026)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3 MAIN ROAD - JOHN SCHUBERT DRIVE (SPEED ZONE 70km/h)

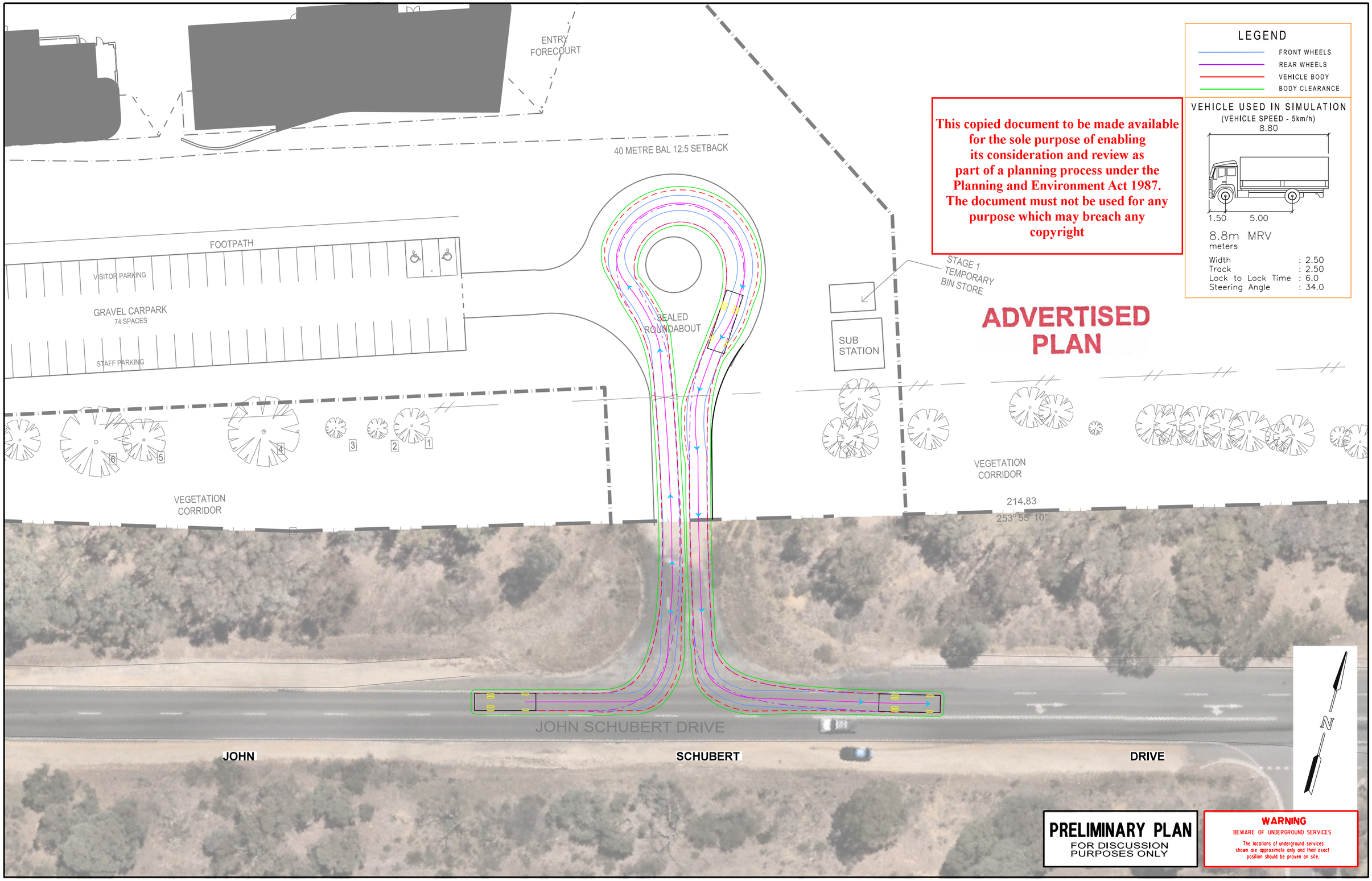
DESIGNED: P. NGUYEN
CHECKED/APPROVED: B. CHISHOLM
FILE NAME: G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
10.2m REAR LOADER WASTE TRUCK SWEPT PATHS

SCALE 1:500 (A3) 0 2.5 5 7.5 10 | SHEET No. 3/4 | DWG No. G37148-02-03

DATE: 02/13/26
MODEL: G37148-02-03
FILE: \\Traffix02\Group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn



LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)

8.8m MRV
meters

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

ADVERTISED PLAN

N

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services shown are approximate only and their exact position should be proven on site.

ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	12/02/2026

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS FEB 2026)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3 MAIN ROAD - JOHN SCHUBERT DRIVE (SPEED ZONE 70km/h)

DESIGNED: P. NGUYEN
CHECKED/APPROVED: B. CHISHOLM
FILE NAME: G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
8.8m MRV SWEPT PATHS

SCALE 1:500 (A3) 0 2.5 5 7.5 10 | SHEET No. 4/4 | DWG No. G37148-02-04

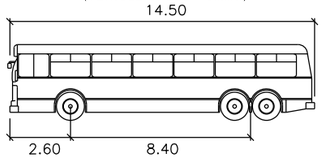
DATE: 02/13/26
MODEL: G37148-02-04
FILE: \\fmsvr02\Group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn

LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



14.5m Bus

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 46.4

ELLEN MCDONALD DRIVE

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services shown are approximate only and their exact position should be proven on site.

ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	31/03/2026

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS MAR 2026)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3 MAIN ROAD - ELLEN MCDONALD DRIVE (SPEED ZONE 70km/h)

DESIGNED: P. NGUYEN
CHECKED/APPROVED: B. CHISHOLM
FILE NAME: G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
14.5m BUS SWEPT PATHS

SCALE 1:500 (A3) 0 2.5 5 7.5 10 | SHEET No. 1/5 | DWG No. G37148-02-05

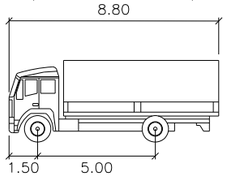
DATE: 31/03/2026
MODEL: G37148-02-05
FILE: \\tfaswl02\group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn

LEGEND

- FRONT WHEELS
- REAR WHEELS
- VEHICLE BODY
- BODY CLEARANCE

VEHICLE USED IN SIMULATION

(VEHICLE SPEED - 5km/h)



8.8m MRV
meters

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 34.0

ELLEN MCDONALD DRIVE

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services shown are approximate only and their exact position should be proven on site.

ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	31/03/2026

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS MAR 2026)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3 MAIN ROAD - ELLEN MCDONALD DRIVE (SPEED ZONE 70km/h)

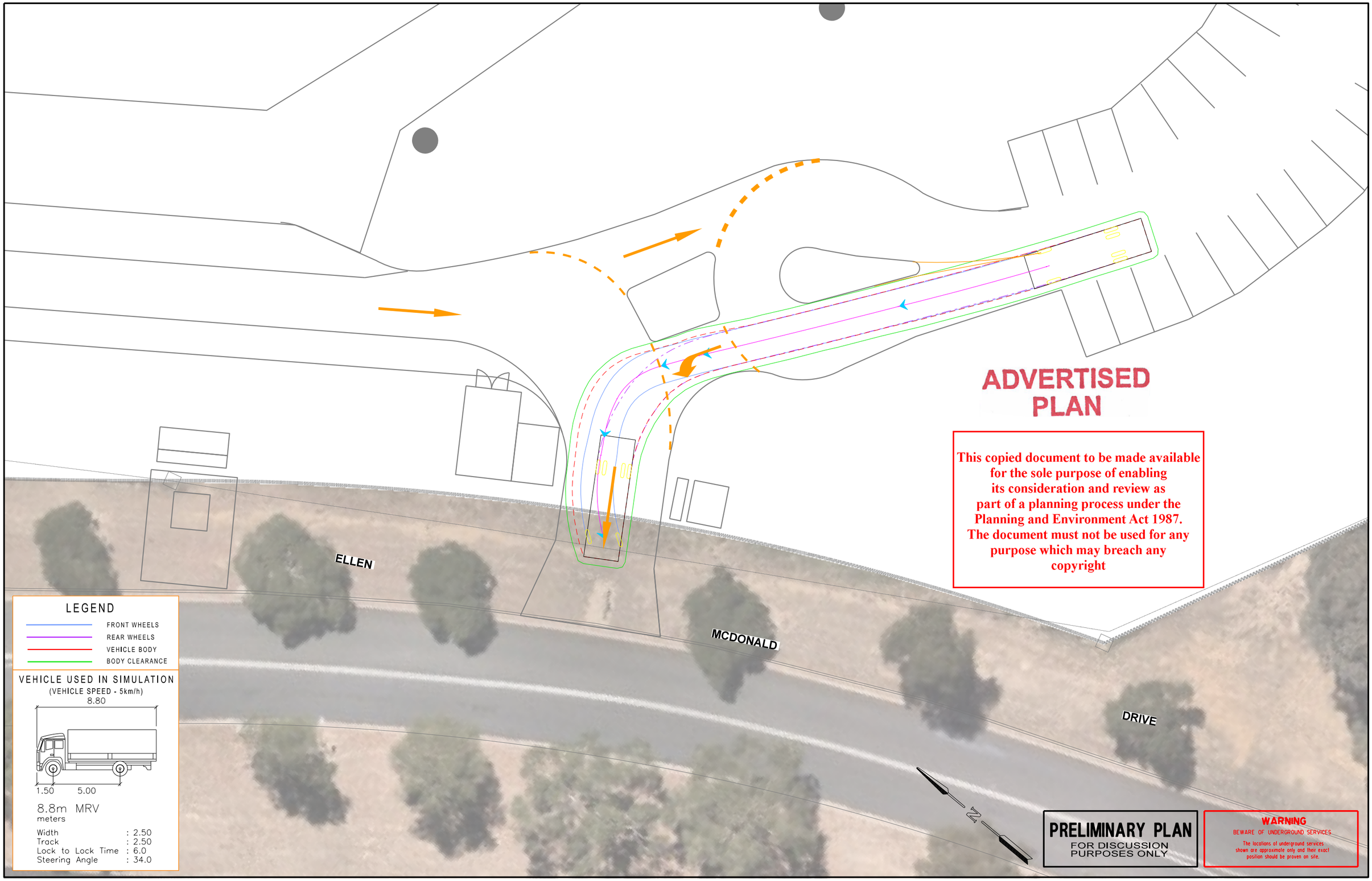
DESIGNED: P. NGUYEN
CHECKED/APPROVED: B. CHISHOLM
FILE NAME: G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
8.8m MRV SWEPT PATHS

SCALE 1:500 (A3) 0 2.5 5 7.5 10
SHEET No. 2/5
DWG No. G37148-02-06

DATE: 31/03/2026
MODEL: G37148-02-06
FILE: \\tsvr02group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn



ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	31/03/2026

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS MAR 2026)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3 MAIN ROAD - ELLEN MCDONALD DRIVE (SPEED ZONE 70km/h)

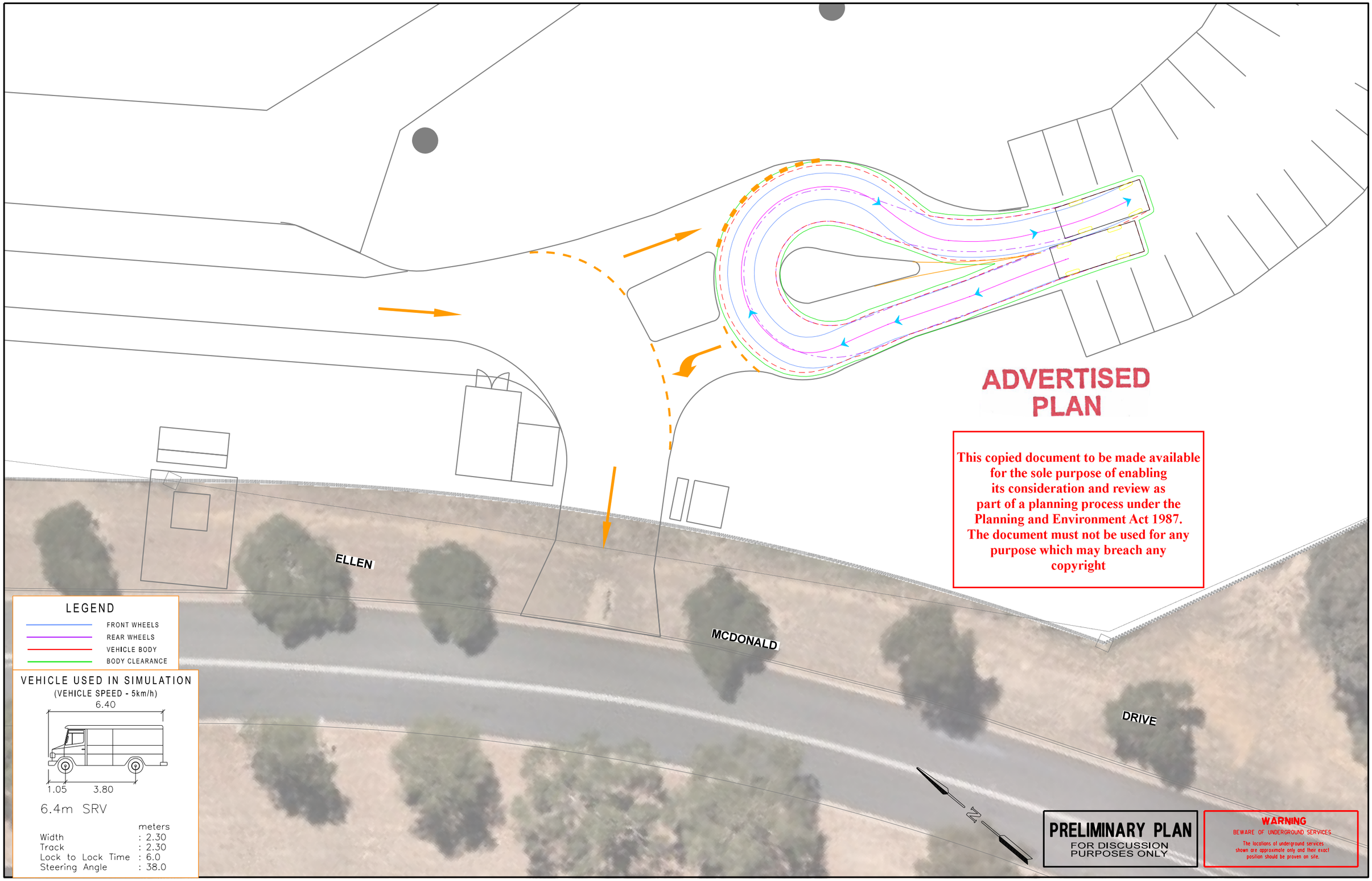
DESIGNED P. NGUYEN
CHECKED/APPROVED B. CHISHOLM
FILE NAME G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
14.5m BUS / 8.8m MRV SWEPT PATHS

SCALE 1:250 (A3) 0 12.5 25 37.5 5
SHEET No. 3/5
DWG No. G37148-02-07

DATE: 31/03/2026
MODEL: G37148-02-07
FILE: \\fmsvr02\group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn



ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	31/03/2026

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS MAR 2026)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3 MAIN ROAD - ELLEN MCDONALD DRIVE (SPEED ZONE 70km/h)

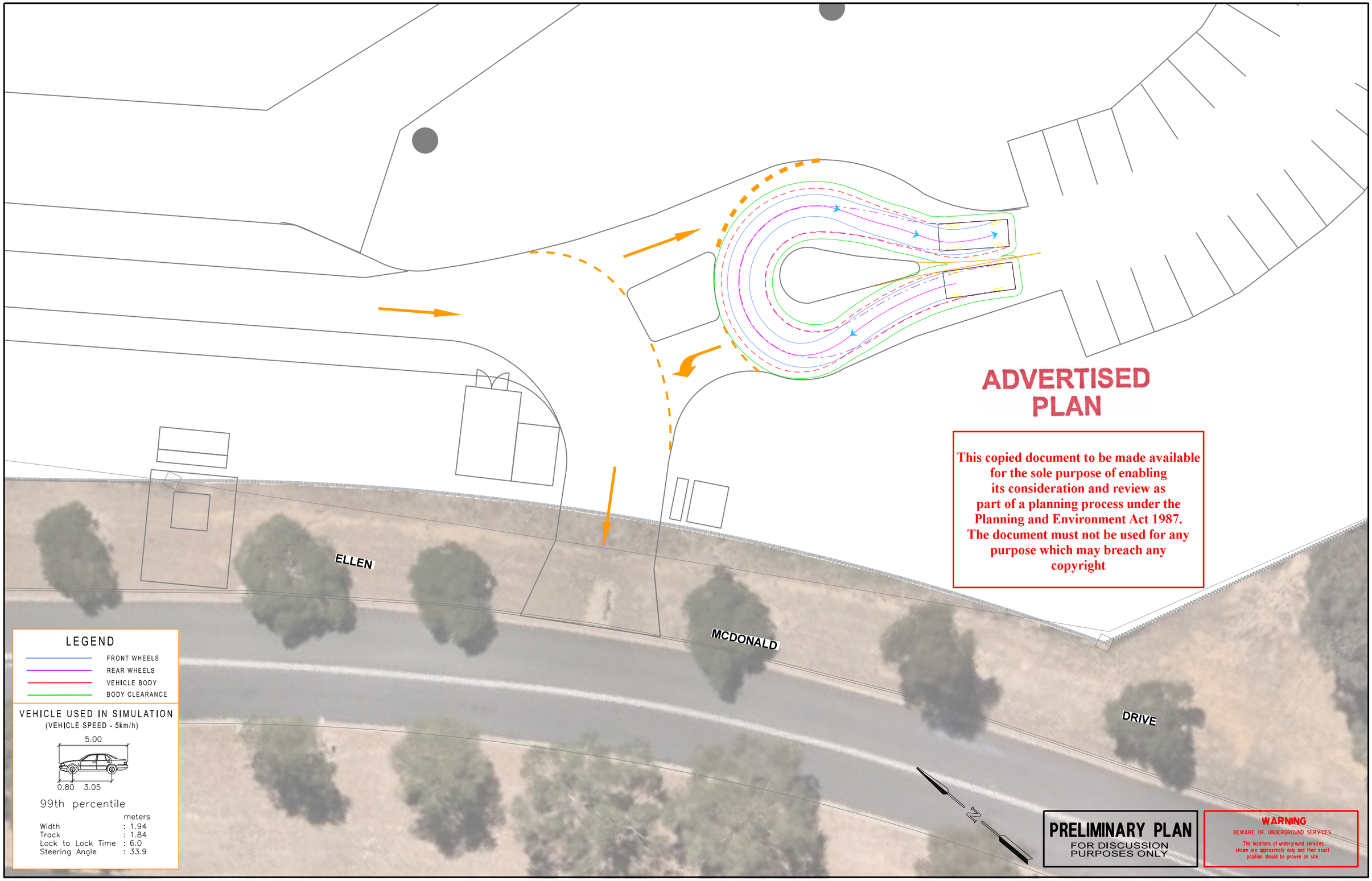
DESIGNED P. NGUYEN
CHECKED/APPROVED B. CHISHOLM
FILE NAME G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
6.4m SRV SWEPT PATHS

SCALE 1:250 (A3) 0 1.25 2.5 3.75 5
SHEET No. 4/5
DWG No. G37148-02-08

DATE: 31/03/2026
MODEL: G37148-02-08
FILE: \\tfsvr02\group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn



PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services shown are approximate only and their exact position should be proven on site.

ISSUE	ISSUE DESCRIPTION	DESIGNER	CHECKED/APPROVED	ISSUE DATE
A	INITIAL ISSUE	P. NGUYEN	B.C(RPE7582)	31/03/2026

GENERAL NOTES
1 BASE INFORMATION FROM AERIAL PHOTOGRAPH (SOURCE NEARMAP JUL 2025) AND ARCHITECTURAL PLANS (SOURCE LAW ARCHITECTS MAR 2026)
2 ALL DIMENSIONS ARE TO FACE OF KERB & CHANNE OR EDGE LINE
3 MAIN ROAD - ELLEN MCDONALD DRIVE (SPEED ZONE 70km/h)

DESIGNED P. NGUYEN
CHECKED/APPROVED B. CHISHOLM
FILE NAME G37148-02-00.dgn

Traffix Group
Level 28, 459 Collins Street
Melbourne, Victoria 3000
+61 3 9822 2888
www.traffixgroup.com.au

BARANDUDA CATHOLIC SECONDARY COLLEGE
BARANDUDA
WODONGA COUNCIL
B99 SWEPT PATHS

SCALE 1:250 (A3) 0 1.25 2.5 3.75 5
SHEET No. 5/5
DWG No. G37148-02-09

DATE: 31/03/2026
MODEL: G37148-02-09
FILE: \\fmsvr02\group\Synergy\Projects\GRP3\GRP37148\03-Drawings\G37148-02-00.dgn

Appendix C

SIDRA Output

MOVEMENT SUMMARY

Site: [1 (3)] John Schubert Dr / Kiewa Valley Hwy - AM Peak - AustRoads Gap (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Kiewa Valley Hwy															
1	L2	All MCs	48	6.5	48	6.5	0.027	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.5
2	T1	All MCs	546	3.1	546	3.1	0.286	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
3	R2	All MCs	2	0.0	2	0.0	0.001	7.1	LOS A	0.0	0.0	0.27	0.56	0.27	57.2
Approach			597	3.4	597	3.4	0.286	0.7	NA	0.0	0.0	0.00	0.05	0.00	77.9
East: John Boyes Dr															
4	L2	All MCs	4	0.0	4	0.0	0.061	6.3	LOS A	0.2	1.3	0.71	0.76	0.71	49.3
5	T1	All MCs	3	0.0	3	0.0	0.061	13.4	LOS B	0.2	1.3	0.71	0.76	0.71	47.9
6	R2	All MCs	9	0.0	9	0.0	0.061	22.6	LOS C	0.2	1.3	0.71	0.76	0.71	49.3
Approach			17	0.0	17	0.0	0.061	16.8	LOS C	0.2	1.3	0.71	0.76	0.71	49.0
North: Kiewa Valley Hwy															
7	L2	All MCs	4	0.0	4	0.0	0.002	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
8	T1	All MCs	157	16.1	157	16.1	0.089	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
9	R2	All MCs	192	6.0	192	6.0	0.211	9.8	LOS A	0.9	6.8	0.59	0.80	0.59	56.8
Approach			353	10.4	353	10.4	0.211	5.4	NA	0.9	6.8	0.32	0.44	0.32	65.3
West: John Schubert Dr															
10	L2	All MCs	405	2.3	405	2.3	0.764	18.7	LOS C	6.9	49.2	0.82	1.24	1.92	50.2
11	T1	All MCs	4	0.0	4	0.0	0.764	25.3	LOS D	6.9	49.2	0.82	1.24	1.92	47.0
12	R2	All MCs	16	13.3	16	13.3	0.764	30.7	LOS D	6.9	49.2	0.82	1.24	1.92	48.1
Approach			425	2.7	425	2.7	0.764	19.2	LOS C	6.9	49.2	0.82	1.24	1.92	50.1
All Vehicles			1392	4.9	1392	4.9	0.764	7.7	NA	6.9	49.2	0.34	0.52	0.68	63.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (5)] John Schubert Dr / Kiewa Valley Hwy - AM Peak - AustRoads Gap - Stage 1 (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Kiewa Valley Hwy															
1	L2	All MCs	55	5.8	55	5.8	0.031	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.7
2	T1	All MCs	546	3.1	546	3.1	0.286	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
3	R2	All MCs	2	0.0	2	0.0	0.001	7.1	LOS A	0.0	0.0	0.27	0.56	0.27	57.2
Approach			603	3.3	603	3.3	0.286	0.7	NA	0.0	0.0	0.00	0.06	0.00	77.8
East: John Boyes Dr															
4	L2	All MCs	4	0.0	4	0.0	0.070	6.3	LOS A	0.2	1.5	0.74	0.78	0.74	48.0
5	T1	All MCs	3	0.0	3	0.0	0.070	14.5	LOS B	0.2	1.5	0.74	0.78	0.74	46.7
6	R2	All MCs	9	0.0	9	0.0	0.070	25.8	LOS D	0.2	1.5	0.74	0.78	0.74	48.0
Approach			17	0.0	17	0.0	0.070	18.8	LOS C	0.2	1.5	0.74	0.78	0.74	47.7
North: Kiewa Valley Hwy															
7	L2	All MCs	4	0.0	4	0.0	0.002	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
8	T1	All MCs	157	16.1	157	16.1	0.089	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
9	R2	All MCs	249	4.6	249	4.6	0.273	10.1	LOS B	1.3	9.4	0.61	0.82	0.65	57.0
Approach			411	9.0	411	9.0	0.273	6.2	NA	1.3	9.4	0.37	0.50	0.39	64.1
West: John Schubert Dr															
10	L2	All MCs	453	2.1	453	2.1	0.867	24.1	LOS C	10.7	76.4	0.89	1.49	2.78	46.6
11	T1	All MCs	4	0.0	4	0.0	0.867	33.3	LOS D	10.7	76.4	0.89	1.49	2.78	43.8
12	R2	All MCs	21	10.0	21	10.0	0.867	38.4	LOS E	10.7	76.4	0.89	1.49	2.78	45.3
Approach			478	2.4	478	2.4	0.867	24.8	LOS C	10.7	76.4	0.89	1.49	2.78	46.6
All Vehicles			1508	4.5	1508	4.5	0.867	10.0	NA	10.7	76.4	0.39	0.64	1.00	60.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (9)] John Schubert Dr / Kiewa Valley Hwy - AM Peak - AustRoads Gap - Stage 2 - Alternate Layout (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Kiewa Valley Hwy															
1	L2	All MCs	60	5.3	60	5.3	0.034	7.0	LOS A	0.0	0.0	0.00	0.63	0.00	62.8
2	T1	All MCs	546	3.1	546	3.1	0.286	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
3	R2	All MCs	2	0.0	2	0.0	0.001	7.1	LOS A	0.0	0.0	0.27	0.56	0.27	57.2
Approach			608	3.3	608	3.3	0.286	0.8	NA	0.0	0.0	0.00	0.06	0.00	77.6
East: John Boyes Dr															
4	L2	All MCs	4	0.0	4	0.0	0.081	6.3	LOS A	0.2	1.7	0.78	0.80	0.78	46.5
5	T1	All MCs	3	0.0	3	0.0	0.081	15.7	LOS C	0.2	1.7	0.78	0.80	0.78	45.3
6	R2	All MCs	9	0.0	9	0.0	0.081	29.6	LOS D	0.2	1.7	0.78	0.80	0.78	46.5
Approach			17	0.0	17	0.0	0.081	21.2	LOS C	0.2	1.7	0.78	0.80	0.78	46.3
North: Kiewa Valley Hwy															
7	L2	All MCs	4	0.0	4	0.0	0.002	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
8	T1	All MCs	157	16.1	157	16.1	0.089	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
9	R2	All MCs	307	3.8	307	3.8	0.336	10.7	LOS B	1.8	13.0	0.63	0.85	0.75	56.9
Approach			468	7.9	468	7.9	0.336	7.1	NA	1.8	13.0	0.41	0.56	0.49	63.0
West: John Schubert Dr															
10	L2	All MCs	500	1.9	500	1.9	0.857	22.9	LOS C	10.5	74.7	0.88	1.45	2.62	47.8
11	T1	All MCs	4	0.0	4	0.0	0.112	16.2	LOS C	0.3	2.5	0.78	0.91	0.78	47.2
12	R2	All MCs	25	8.3	25	8.3	0.112	19.4	LOS C	0.3	2.5	0.78	0.91	0.78	49.3
Approach			529	2.2	529	2.2	0.857	22.7	LOS C	10.5	74.7	0.87	1.42	2.52	47.9
All Vehicles			1623	4.2	1623	4.2	0.857	10.0	NA	10.5	74.7	0.41	0.66	0.97	60.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (13)] John Schubert Dr / Kiewa Valley Hwy - AM Peak - AustRoads Gap - Stage 5 - Alternate Layout (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Kiewa Valley Hwy															
1	L2	All MCs	65	4.8	65	4.8	0.036	7.0	LOS A	0.0	0.0	0.00	0.63	0.00	63.0
2	T1	All MCs	546	3.1	546	3.1	0.286	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
3	R2	All MCs	2	0.0	2	0.0	0.001	7.1	LOS A	0.0	0.0	0.27	0.56	0.27	57.2
Approach			614	3.3	614	3.3	0.286	0.8	NA	0.0	0.0	0.00	0.07	0.00	77.5
East: John Boyes Dr															
4	L2	All MCs	4	0.0	4	0.0	0.092	6.3	LOS A	0.3	1.9	0.80	0.82	0.80	45.1
5	T1	All MCs	3	0.0	3	0.0	0.092	16.9	LOS C	0.3	1.9	0.80	0.82	0.80	44.0
6	R2	All MCs	9	0.0	9	0.0	0.092	33.5	LOS D	0.3	1.9	0.80	0.82	0.80	45.1
Approach			17	0.0	17	0.0	0.092	23.6	LOS C	0.3	1.9	0.80	0.82	0.80	44.9
North: Kiewa Valley Hwy															
7	L2	All MCs	4	0.0	4	0.0	0.002	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
8	T1	All MCs	157	16.1	157	16.1	0.089	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
9	R2	All MCs	358	3.2	358	3.2	0.391	11.1	LOS B	2.3	16.7	0.65	0.88	0.84	56.6
Approach			519	7.1	519	7.1	0.391	7.7	NA	2.3	16.7	0.45	0.61	0.58	62.2
West: John Schubert Dr															
10	L2	All MCs	542	1.7	542	1.7	0.928	30.6	LOS D	15.7	111.5	0.93	1.75	3.66	43.5
11	T1	All MCs	4	0.0	4	0.0	0.138	17.3	LOS C	0.4	3.1	0.80	0.92	0.80	46.5
12	R2	All MCs	29	7.1	29	7.1	0.138	20.5	LOS C	0.4	3.1	0.80	0.92	0.80	48.7
Approach			576	2.0	576	2.0	0.928	30.0	LOS D	15.7	111.5	0.93	1.70	3.49	43.7
All Vehicles			1725	4.0	1725	4.0	0.928	12.9	NA	15.7	111.5	0.45	0.78	1.35	57.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (4)] John Schubert Dr / Kiewa Valley Hwy - PM Peak - AustRoads Gap (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Kiewa Valley Hwy															
1	L2	All MCs	31	3.4	31	3.4	0.017	7.0	LOS A	0.0	0.0	0.00	0.63	0.00	63.4
2	T1	All MCs	272	7.8	272	7.8	0.146	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
3	R2	All MCs	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.43	0.56	0.43	56.7
Approach			303	7.3	303	7.3	0.146	0.8	NA	0.0	0.0	0.00	0.07	0.00	77.8
East: John Boyes Dr															
4	L2	All MCs	1	100.0	1	100.0	0.026	12.0	LOS B	0.1	0.6	0.73	0.85	0.73	41.6
5	T1	All MCs	2	0.0	2	0.0	0.026	13.3	LOS B	0.1	0.6	0.73	0.85	0.73	48.3
6	R2	All MCs	4	0.0	4	0.0	0.026	18.6	LOS C	0.1	0.6	0.73	0.85	0.73	49.7
Approach			7	14.3	7	14.3	0.026	16.2	LOS C	0.1	0.6	0.73	0.85	0.73	48.0
North: Kiewa Valley Hwy															
7	L2	All MCs	9	11.1	9	11.1	0.006	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	61.0
8	T1	All MCs	373	3.4	373	3.4	0.195	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
9	R2	All MCs	329	4.5	329	4.5	0.252	8.1	LOS A	1.3	9.3	0.45	0.67	0.45	58.7
Approach			712	4.0	712	4.0	0.252	3.8	NA	1.3	9.3	0.21	0.32	0.21	68.2
West: John Schubert Dr															
10	L2	All MCs	245	5.2	245	5.2	0.388	9.3	LOS A	2.1	15.3	0.54	0.75	0.66	56.2
11	T1	All MCs	3	0.0	3	0.0	0.388	18.8	LOS C	2.1	15.3	0.54	0.75	0.66	52.9
12	R2	All MCs	27	7.7	27	7.7	0.388	21.7	LOS C	2.1	15.3	0.54	0.75	0.66	55.6
Approach			276	5.3	276	5.3	0.388	10.6	LOS B	2.1	15.3	0.54	0.75	0.66	56.1
All Vehicles			1298	5.1	1298	5.1	0.388	4.6	NA	2.1	15.3	0.23	0.36	0.26	66.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (6)] John Schubert Dr / Kiewa Valley Hwy - PM Peak - AustRoads Gap - Stage 1 (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Kiewa Valley Hwy															
1	L2	All MCs	34	3.1	34	3.1	0.019	7.0	LOS A	0.0	0.0	0.00	0.63	0.00	63.5
2	T1	All MCs	272	7.8	272	7.8	0.146	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
3	R2	All MCs	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.43	0.56	0.43	56.7
Approach			306	7.2	306	7.2	0.146	0.8	NA	0.0	0.0	0.00	0.07	0.00	77.6
East: John Boyes Dr															
4	L2	All MCs	1	100.0	1	100.0	0.028	12.0	LOS B	0.1	0.7	0.75	0.87	0.75	41.0
5	T1	All MCs	2	0.0	2	0.0	0.028	13.9	LOS B	0.1	0.7	0.75	0.87	0.75	47.5
6	R2	All MCs	4	0.0	4	0.0	0.028	20.6	LOS C	0.1	0.7	0.75	0.87	0.75	48.8
Approach			7	14.3	7	14.3	0.028	17.5	LOS C	0.1	0.7	0.75	0.87	0.75	47.2
North: Kiewa Valley Hwy															
7	L2	All MCs	9	11.1	9	11.1	0.006	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	61.0
8	T1	All MCs	373	3.4	373	3.4	0.195	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
9	R2	All MCs	363	4.1	363	4.1	0.278	8.1	LOS A	1.4	10.4	0.46	0.67	0.46	58.8
Approach			745	3.8	745	3.8	0.278	4.1	NA	1.4	10.4	0.23	0.34	0.23	67.7
West: John Schubert Dr															
10	L2	All MCs	296	4.3	296	4.3	0.466	9.9	LOS A	3.0	21.9	0.58	0.80	0.80	55.7
11	T1	All MCs	3	0.0	3	0.0	0.466	21.3	LOS C	3.0	21.9	0.58	0.80	0.80	52.3
12	R2	All MCs	33	6.5	33	6.5	0.466	24.2	LOS C	3.0	21.9	0.58	0.80	0.80	55.2
Approach			332	4.4	332	4.4	0.466	11.4	LOS B	3.0	21.9	0.58	0.80	0.80	55.6
All Vehicles			1391	4.8	1391	4.8	0.466	5.2	NA	3.0	21.9	0.26	0.39	0.31	66.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (11)] John Schubert Dr / Kiewa Valley Hwy - PM Peak - AustRoads Gap - Stage 2 - Alternate Layout (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Kiewa Valley Hwy															
1	L2	All MCs	37	8.6	37	8.6	0.021	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	61.8
2	T1	All MCs	272	6.2	272	6.2	0.145	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
3	R2	All MCs	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.43	0.56	0.43	56.7
Approach			309	6.5	309	6.5	0.145	0.9	NA	0.0	0.0	0.00	0.08	0.00	77.1
East: John Boyes Dr															
4	L2	All MCs	1	0.0	1	0.0	0.030	7.6	LOS A	0.1	0.7	0.77	0.88	0.77	48.2
5	T1	All MCs	2	0.0	2	0.0	0.030	14.7	LOS B	0.1	0.7	0.77	0.88	0.77	46.9
6	R2	All MCs	4	0.0	4	0.0	0.030	23.0	LOS C	0.1	0.7	0.77	0.88	0.77	48.2
Approach			7	0.0	7	0.0	0.030	18.4	LOS C	0.1	0.7	0.77	0.88	0.77	47.9
North: Kiewa Valley Hwy															
7	L2	All MCs	9	0.0	9	0.0	0.005	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
8	T1	All MCs	373	6.8	373	6.8	0.200	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
9	R2	All MCs	397	2.9	397	2.9	0.302	8.3	LOS A	1.6	11.4	0.47	0.67	0.47	58.9
Approach			779	4.7	779	4.7	0.302	4.3	NA	1.6	11.4	0.24	0.35	0.24	67.5
West: John Schubert Dr															
10	L2	All MCs	346	2.7	346	2.7	0.401	9.0	LOS A	2.2	15.9	0.49	0.72	0.56	58.2
11	T1	All MCs	3	0.0	3	0.0	0.144	16.0	LOS C	0.5	3.3	0.77	0.91	0.77	47.8
12	R2	All MCs	38	5.6	38	5.6	0.144	18.1	LOS C	0.5	3.3	0.77	0.91	0.77	50.4
Approach			387	3.0	387	3.0	0.401	10.0	LOS A	2.2	15.9	0.52	0.74	0.59	57.3
All Vehicles			1483	4.6	1483	4.6	0.401	5.2	NA	2.2	15.9	0.27	0.40	0.28	66.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [1 (14)] John Schubert Dr / Kiewa Valley Hwy - PM Peak - AustRoads Gap - Stage 5 - Alternate Layout (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Kiewa Valley Hwy															
1	L2	All MCs	39	8.1	39	8.1	0.022	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.0
2	T1	All MCs	272	6.2	272	6.2	0.145	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
3	R2	All MCs	1	0.0	1	0.0	0.001	7.8	LOS A	0.0	0.0	0.43	0.56	0.43	56.7
Approach			312	6.4	312	6.4	0.145	0.9	NA	0.0	0.0	0.00	0.08	0.00	77.0
East: John Boyes Dr															
4	L2	All MCs	1	0.0	1	0.0	0.032	7.6	LOS A	0.1	0.7	0.78	0.89	0.78	47.8
5	T1	All MCs	2	0.0	2	0.0	0.032	15.0	LOS C	0.1	0.7	0.78	0.89	0.78	46.5
6	R2	All MCs	4	0.0	4	0.0	0.032	24.0	LOS C	0.1	0.7	0.78	0.89	0.78	47.8
Approach			7	0.0	7	0.0	0.032	19.1	LOS C	0.1	0.7	0.78	0.89	0.78	47.4
North: Kiewa Valley Hwy															
7	L2	All MCs	9	0.0	9	0.0	0.005	6.9	LOS A	0.0	0.0	0.00	0.63	0.00	64.6
8	T1	All MCs	373	6.8	373	6.8	0.200	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
9	R2	All MCs	411	2.8	411	2.8	0.313	8.3	LOS A	1.7	11.9	0.48	0.67	0.48	58.9
Approach			793	4.6	793	4.6	0.313	4.4	NA	1.7	11.9	0.25	0.36	0.25	67.3
West: John Schubert Dr															
10	L2	All MCs	366	2.6	366	2.6	0.423	9.2	LOS A	2.5	17.7	0.50	0.73	0.59	58.1
11	T1	All MCs	3	0.0	3	0.0	0.154	16.4	LOS C	0.5	3.5	0.78	0.91	0.78	47.6
12	R2	All MCs	40	5.3	40	5.3	0.154	18.5	LOS C	0.5	3.5	0.78	0.91	0.78	50.2
Approach			409	2.8	409	2.8	0.423	10.1	LOS B	2.5	17.7	0.53	0.75	0.61	57.2
All Vehicles			1521	4.5	1521	4.5	0.423	5.3	NA	2.5	17.7	0.27	0.41	0.30	65.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [2 (5)] John Schubert Dr / Ellen McDonald Dr - AM Peak - AustRoads Gap - Existing (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
East: John Schubert Drive															
5	T1	All MCs	194	0.0	194	0.0	0.099	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
6	R2	All MCs	46	0.0	46	0.0	0.038	6.9	LOS A	0.2	1.1	0.44	0.62	0.44	51.5
Approach			240	0.0	240	0.0	0.099	1.3	NA	0.2	1.1	0.09	0.12	0.09	58.1
North: Ellen McDonald Drive															
7	L2	All MCs	27	0.0	27	0.0	0.043	7.8	LOS A	0.1	1.0	0.45	0.67	0.45	51.1
9	R2	All MCs	4	0.0	4	0.0	0.043	9.7	LOS A	0.1	1.0	0.45	0.67	0.45	51.0
Approach			32	0.0	32	0.0	0.043	8.0	LOS A	0.1	1.0	0.45	0.67	0.45	51.1
West: John Schubert Drive															
10	L2	All MCs	13	0.0	13	0.0	0.007	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
11	T1	All MCs	387	0.0	387	0.0	0.199	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			400	0.0	400	0.0	0.199	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.6
All Vehicles			672	0.0	672	0.0	0.199	1.0	NA	0.2	1.1	0.05	0.09	0.05	58.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / FLOATING | Processed: Wednesday, 1 April 2026 9:46:15 AM
Project: \\tfxsrv02\Group\Synergy\Projects\GRP3\GRP37148\07-Analysis\SIDRA\G37148 Baranduda New Secondary School.sipx

MOVEMENT SUMMARY

Site: [2] John Schubert Dr / Ellen McDonald Dr - AM Peak - AustRoads Gap - Stage 5 (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
East: John Schubert Drive															
5	T1	All MCs	241	0.0	241	0.0	0.124	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	229	0.0	229	0.0	0.240	8.5	LOS A	1.1	7.6	0.60	0.77	0.60	50.6
Approach			471	0.0	471	0.0	0.240	4.1	NA	1.1	7.6	0.29	0.38	0.29	55.0
North: Ellen McDonald Drive															
7	L2	All MCs	27	0.0	27	0.0	0.464	11.3	LOS B	2.2	15.1	0.79	1.01	1.14	45.0
9	R2	All MCs	147	0.0	147	0.0	0.464	18.8	LOS C	2.2	15.1	0.79	1.01	1.14	45.0
Approach			175	0.0	175	0.0	0.464	17.7	LOS C	2.2	15.1	0.79	1.01	1.14	45.0
West: John Schubert Drive															
10	L2	All MCs	187	0.0	187	0.0	0.101	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
11	T1	All MCs	445	0.0	445	0.0	0.228	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			633	0.0	633	0.0	0.228	1.7	NA	0.0	0.0	0.00	0.17	0.00	57.6
All Vehicles			1278	0.0	1278	0.0	0.464	4.8	NA	2.2	15.1	0.22	0.36	0.26	54.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / FLOATING | Processed: Wednesday, 1 April 2026 9:46:16 AM
Project: \\tfxsrv02\Group\Synergy\Projects\GRP3\GRP37148\07-Analysis\SIDRA\G37148 Baranduda New Secondary School.sipx

MOVEMENT SUMMARY

Site: [2 (6)] John Schubert Dr / Ellen McDonald Dr - PM Peak - AustRoads Gap - Existing (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
East: John Schubert Drive															
5	T1	All MCs	309	0.0	309	0.0	0.159	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	45	0.0	45	0.0	0.033	6.4	LOS A	0.1	1.0	0.37	0.58	0.37	51.7
Approach			355	0.0	355	0.0	0.159	0.8	NA	0.1	1.0	0.05	0.07	0.05	58.7
North: Ellen McDonald Drive															
7	L2	All MCs	43	0.0	43	0.0	0.069	7.1	LOS A	0.2	1.7	0.41	0.64	0.41	51.3
9	R2	All MCs	12	0.0	12	0.0	0.069	9.8	LOS A	0.2	1.7	0.41	0.64	0.41	51.3
Approach			55	0.0	55	0.0	0.069	7.6	LOS A	0.2	1.7	0.41	0.64	0.41	51.3
West: John Schubert Drive															
10	L2	All MCs	1	0.0	1	0.0	0.001	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
11	T1	All MCs	282	0.0	282	0.0	0.145	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			283	0.0	283	0.0	0.145	0.1	NA	0.0	0.0	0.00	0.00	0.00	59.9
All Vehicles			693	0.0	693	0.0	0.159	1.1	NA	0.2	1.7	0.06	0.09	0.06	58.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / FLOATING | Processed: Wednesday, 1 April 2026 9:46:16 AM
Project: \\tfxsrv02\Group\Synergy\Projects\GRP3\GRP37148\07-Analysis\SIDRA\G37148 Baranduda New Secondary School.sipx

MOVEMENT SUMMARY

Site: [2 (2)] John Schubert Dr / Ellen McDonald Dr - PM Peak - AustRoads Gap - Stage 5 (Folder1)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

New Site
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
East: John Schubert Drive															
5	T1	All MCs	352	0.0	352	0.0	0.180	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
6	R2	All MCs	134	0.0	134	0.0	0.107	6.9	LOS A	0.5	3.4	0.45	0.65	0.45	51.5
Approach			485	0.0	485	0.0	0.180	1.9	NA	0.5	3.4	0.12	0.18	0.12	57.3
North: Ellen McDonald Drive															
7	L2	All MCs	43	0.0	43	0.0	0.359	8.5	LOS A	1.7	11.7	0.66	0.90	0.85	47.8
9	R2	All MCs	139	0.0	139	0.0	0.359	14.2	LOS B	1.7	11.7	0.66	0.90	0.85	47.8
Approach			182	0.0	182	0.0	0.359	12.9	LOS B	1.7	11.7	0.66	0.90	0.85	47.8
West: John Schubert Drive															
10	L2	All MCs	85	0.0	85	0.0	0.046	5.6	LOS A	0.0	0.0	0.00	0.58	0.00	52.9
11	T1	All MCs	305	0.0	305	0.0	0.157	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach			391	0.0	391	0.0	0.157	1.2	NA	0.0	0.0	0.00	0.13	0.00	58.2
All Vehicles			1058	0.0	1058	0.0	0.359	3.6	NA	1.7	11.7	0.17	0.28	0.20	55.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Organisation: TRAFFIX GROUP PTY LTD | Licence: NETWORK / FLOATING | Processed: Wednesday, 1 April 2026 9:46:17 AM
Project: \\tfxsrv02\Group\Synergy\Projects\GRP3\GRP37148\07-Analysis\SIDRA\G37148 Baranduda New Secondary School.sipx