



Appendix G

TRANSPORT IMPACT ASSESSMENT





Proposed Mixed-Use Development Lot 13, 14, 15 & 5 (410) Canning Highway, Attadale Transport Impact Assessment

**PREPARED FOR:
Western Corporate**

September 2026

Document history and status

Author	Revision	Approved by	Date approved	Revision type
W Tun	r01	B Bordbar	24/09/2026	Draft
W Tun	r01a	B Bordbar	30/09/2026	Final

File name: t26.044.wt.r01a

Author: Waihin Tun

Project manager: Waihin Tun

Client: Western Corporate

Project: Lot 13, 14, 15 & 5 (410) Canning Highway, Attadale

Document revision: r01a

Project number: t26.044

2026 Copyright in all drawings, reports, specifications, calculations and other documents provided by the Consultant in connection with the Project shall remain the property of the Consultant.

The Client alone shall have a license to use the documents referred to above for the purpose of completing the Project, but the Client shall not use, or make copies of, such documents in connection with any work not included in the Project, unless written approval is obtained from the Consultant or otherwise agreed through a separate contract..

TABLE OF CONTENTS

1	INTRODUCTION AND BACKGROUND	5
2	DEVELOPMENT PROPOSAL.....	8
2.1	PROPOSED SITE USE.....	8
2.2	PROPOSED ACCESS FOR ALL MODES	9
3	EXISTING SITUATION.....	11
3.1	EXISTING LAND USE	11
3.2	EXISTING ROAD NETWORK.....	11
3.2.1	CANNING HIGHWAY.....	11
3.2.2	STOCK ROAD.....	12
3.3	EXISTING TRAFFIC VOLUME ON ROADS.....	13
3.4	CRASH RECORDS.....	13
3.5	PUBLIC TRANSPORT ACCESS.....	14
3.6	PEDESTRIAN AND CYCLIST FACILITIES	17
4	PRE-LODGE MENT MEETING.....	18
5	CHANGES TO SURROUNDING TRANSPORT NETWORK	20
6	INTEGRATION WITH SURROUNDING AREA	21
7	TRAFFIC ASSESSMENT.....	22
7.1	ASSESSMENT PERIOD	22
7.2	TRIP GENERATION	22
7.2.1	EXISTING TRAFFIC GENERATION	22
7.2.2	PROPOSED DEVELOPMENT TRAFFIC GENERATION.....	22
7.3	TRIP DISTRIBUTION.....	25
7.4	TRAFFIC FLOW	28
7.5	ANALYSIS OF LOCAL INTERSECTIONS & CROSSOVERS.....	31
7.5.1	FULL MOVEMENT CROSSOVER ON STOCK ROAD (CROSSOVER 1)	33
7.5.2	LEFT IN/ LEFT OUT ONLY CROSSOVER ON CANNING HIGHWAY (CROSSOVER 2).....	34
7.5.3	SIGNALISED INTERSECTION OF CANNING HIGHWAY/ STOCK ROAD	34
7.5.4	LEFT IN ONLY CROSSOVER ON CANNING HIGHWAY (OPTION REQUESTED BY MAIN ROADS WA)....	35
7.6	IMPACT ON SURROUNDING ROADS AND NEIGHBOURING AREAS.....	37
7.7	TRAFFIC NOISE AND VIBRATION.....	37
7.8	ROAD SAFETY	38
8	PARKING.....	39
9	PUBLIC TRANSPORT ACCESS	40
10	PEDESTRIAN AND CYCLIST ACCESS.....	41
11	PROVISION FOR SERVICE VEHICLES	42
12	CONCLUSIONS.....	43

APPENDIX A: PROPOSED DEVELOPMENT PLAN

APPENDIX B: SWEEP T PATH ANALYSIS

APPENDIX C: SIGHT LINE ASSESSMENTS

APPENDIX D: SIDEA RESULTS – EXISTING SCENARIO

APPENDIX E: SIDRA RESULTS – POST DEVELOPMENT SCENARIO (YEAR 2027)

**APPENDIX F: SIDRA RESULTS – 10-YEAR POST DEVELOPMENT SCENARIO
(YEAR 2037)**

**APPENDIX G: SIDRA RESULTS – OPTION 2: 10-YEAR POST DEVELOPMENT
SCENARIO (YEAR 2037)**

APPENDIX H: PRE-LODGEMENT MEETING MINUTES (MAIN ROADS WA)

REPORT FIGURES

Figure 1. Subject site location under Local Planning Schemes (LPS) map	6
Figure 2. Location of the subject site	7
Figure 3. Locations of the crossovers	10
Figure 4. Eastbound view along Canning Highway	11
Figure 5. Northbound view along Stock Road	12
Figure 6. Existing peak hour traffic flows at the signalised intersection of Canning Highway and Stock Road – AM/ PM peak hours	13
Figure 7. Available public transport services map 1 (source: Transperth)	15
Figure 8. Available public transport services map 2 (source: Transperth)	16
Figure 9. Existing bike network in the vicinity of the subject site (source: City of Melville & Murdoch University – Public Transport Information)	17
Figure 10. Existing traffic flows on Canning Highway and Stock Road in the vicinity of the subject site (AM/ PM peak hours)	26
Figure 11. Proposed development traffic (AM/ PM peak hours).....	27
Figure 12. 2027 traffic flows: base traffic + proposed development traffic (AM/ PM peak hours) 29	
Figure 13. 10-year post development 2037 traffic flows – 2037 base + proposed development traffic (AM/ PM peak hours)	30
Figure 14. SIDRA layout – existing intersection of Canning Highway/ Stock Road.....	32
Figure 15. SIDRA network layout – post development scenarios (2027 and 2037)	33
Figure 16. SIDRA network layout for option 2 – post development scenario (2037).....	35
Figure 17. 10-year post development 2037 traffic flows: left in only at Canning Highway crossover option – 2037 base + proposed development traffic (AM/ PM peak hours).....	36

REPORT TABLES

Table 1. Schedule of areas.....	8
Table 2. Crashes at the intersection of Canning Highway/ Stock Road	14
Table 3. Passing trade and non-passing trade components of the trip generation	25
Table 4. Traffic distribution	25

1 Introduction and Background

This Transport Impact Assessment (TIA) has been prepared by Transcore on behalf of Western Corporate with respect to the proposed mixed-use development to be located at Lot 13, 14, 15 & 5 (410) Canning Highway, Attadale (the subject site) in the City of Melville.

The subject site is located at the northeast corner of the signalised intersection of Canning Highway and Stock Road, as shown in **Figure 1**. This figure also depicts the zones and reservations of the Metropolitan Region Scheme (MRS) overlaid on a current aerial photograph and shows the Primary Regional Roads Reservations (Red Road) for Canning Highway fronting the subject site.

The subject site entails a total of four lots (one vacant lot currently under the care and control of the City of Melville and three residential lots). The subject site is bound by residential properties to its immediate north and east, Canning Highway to the south and Stock Road to the west, as shown in **Figure 2**.

It is proposed to provide one full movement crossover on Stock Road and one left in/left out only crossover with a deceleration lane on Canning Highway to serve the proposed development. The crossover and access/ egress are vital to the proposed development to achieve satisfactory circulation within the site, particularly for service and waste collection vehicles.

A pre-lodgement meeting was held on 17 June 2026 between Main Roads WA, Transcore, Western Corporate and TBB Planning and the key advice received from Main Roads WA are detailed in **Section 4**.

In accordance with the WAPC's *"Transport Impact Assessment Guidelines, Volume 4 – Individual Developments (2016)"*, a Transport impact Assessment is required for developments that generate more than 100 vehicles per hour. Accordingly, a Transport Impact Assessment is warranted in this case. Therefore, this TIA will estimate the trip generation and distribution of the proposed development and will assess the impact of the proposed development traffic on the surrounding road network.

The key issue that will be addressed in this report include the traffic generation of the proposed development, the resultant traffic pattern on the surrounding road network and capacity analysis of the proposed development crossovers on Canning Highway and Stock Road and the existing signalised intersection of Canning Highway and Stock Road.

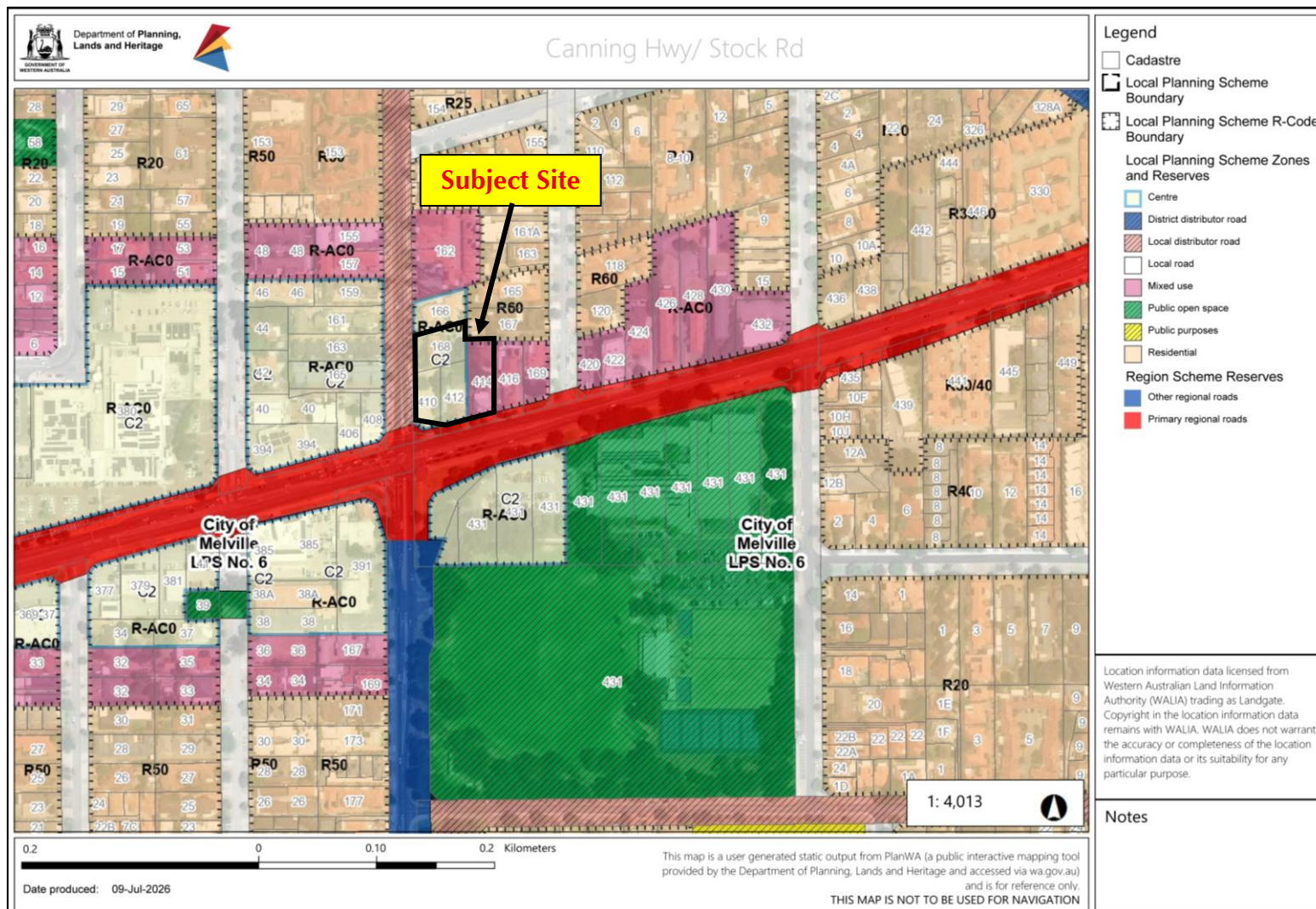


Figure 1. Subject site location under Local Planning Schemes (LPS) map



Figure 2. Location of the subject site

2 Development Proposal

2.1 Proposed Site Use

The Development Application (DA) for the subject site proposes a multi-storey mixed-use development comprising a supermarket and three commercial tenancies on the ground floor, nine (9) medical suites on the first floor and 34 residential apartments on second to sixth floors.

Based on the information provided in the development plan, the floor areas (GFA) of each component of the proposed development are detailed in **Table 1**.

Table 1. Schedule of areas

Level	Land Use	Areas
Ground Floor	Supermarket	1,095m ²
	Commercial 1 - 3	Total of 249m ²
First Floor	Nine (9) medical suites	974m ² (Clinic 1 to 9)
	Café	25m ²
Second Floor	Apartments	8
Third – fifth floors	Apartments	24
Sixth floor	Penthouse apartments	2

The proposed development will provide a total of 101 parking spaces including 37 retail/ commercial bays and 64 residential bays in the basement level and a total of 43 parking spaces for retail/ commercial uses on the ground floor level. Accordingly, a total of 144 parking spaces including two (2) ACROD bays (one on each level) are provided within the site for the use of residents and commercial' patrons and staff. A turnaround bay is also provided in the basement carpark at the end of the blind aisle.

Two separate bicycle storage areas for commercial and residential uses are provided in the basement.

A service bay is proposed on the easternmost side of the building on the ground floor. The largest size vehicle that will access the proposed development would be a 12.5m single unit vehicle. Bin storage areas for commercial and residential land uses are located at the southeast corner of the building on the ground floor.

The development is proposed to be served by a full movement crossover on Stock Road and one left in/ left out only crossover with deceleration lane on Canning Highway.

Copies of the development plans are shown in **Appendix A**.

2.2 Proposed Access for All Modes

The subject site currently entails two constructed full movement crossovers on Stock Road serving a residential property, and two left in/ left out only crossovers on Canning Highway serving two residential lots.

As part of the development proposal, the existing crossovers will be rationalised and the access/ egress to/ from the subject site is proposed by the following crossovers:

- Closing both full movement crossovers on Stock Road;
- Proposing one full movement crossover on Stock Road at the northern boundary of the site;
- Closing the existing western left in/ left out crossover on Canning Highway; and,
- Retaining, modifying and relocating further west the existing eastern left in/ left out crossover on Canning Highway with deceleration lane.

This access/egress system is necessary for the development to achieve satisfactory circulation, particularly for service vehicles. **Figure 3** shows the locations of the proposed crossovers. Swept path analysis has been undertaken for 12.5m single unit truck, and the results of the swept path analysis are provided in **Appendix B**.

Pedestrian access to the subject site is available from the existing footpath network on both abutting roads, Canning Highway and Stock Road.

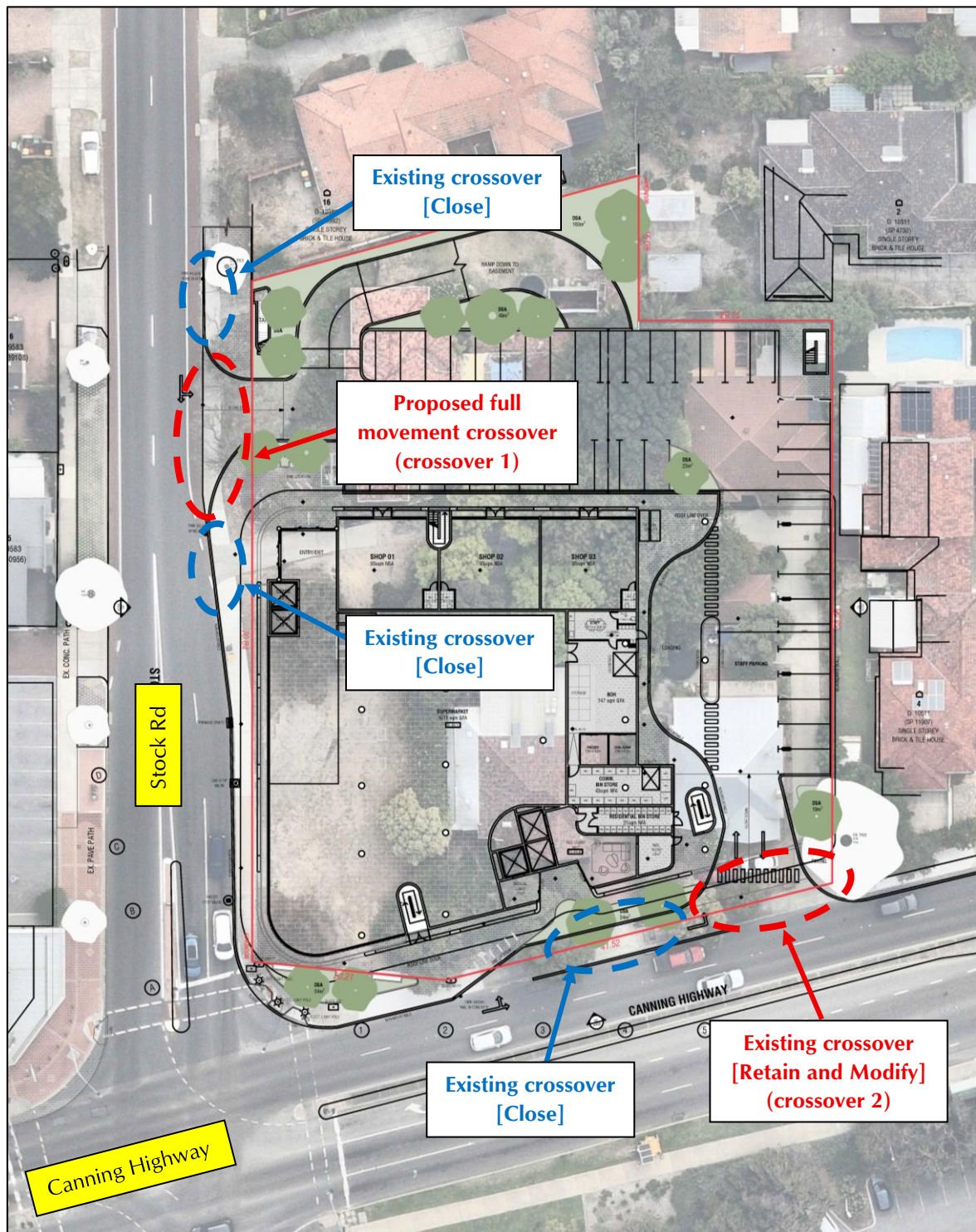


Figure 3. Locations of the crossovers

3 Existing Situation

3.1 Existing Land Use

The proposed development is located at the northeast corner of the signalised intersection of Canning Highway and Stock Road. The subject site entails a total of four lots (one vacant lot currently owned by the City of Melville and three residential lots). The subject site currently entails two constructed full movement crossovers on Stock Road serving a residential property, and two left in/ left out only crossovers on Canning Highway serving two residential lots.

3.2 Existing Road Network

3.2.1 Canning Highway

Canning Highway is constructed as a four-lane dual divided carriageway with raised median. Pedestrian footpaths are in place on both sides of the road in the vicinity of the subject site. Refer to **Figure 4** for more details.

Canning Highway is designated as a Primary Regional Roads reservation in the MRS as shown in **Figure 1** and is classified as *Primary Distributor* in the Main Roads WA Functional Road Hierarchy. It operates under the posted speed limit of 60km/h.



Figure 4. Eastbound view along Canning Highway

3.2.2 Stock Road

Stock Road, in the immediate vicinity of the subject site, is constructed as a single carriageway, two-lane divided road with pedestrian footpaths on both sides of the road. Refer to **Figure 5** for more details.

Stock Road in the vicinity of the subject site is classified as a *Local Distributor Road* in the Main Roads WA Functional Road Hierarchy and operates under the default posted speed limit of 50km/h.



Figure 5. Northbound view along Stock Road

3.3 Existing Traffic Volume on Roads

Existing traffic volumes at the signalised intersection of Canning Highway and Stock Road have been sourced from the available SCAT data from Main Roads WA and manual turn counts organised by Transcore on 27 May 2026. The existing traffic counts during AM and PM peak hours are shown in **Figure 6**.

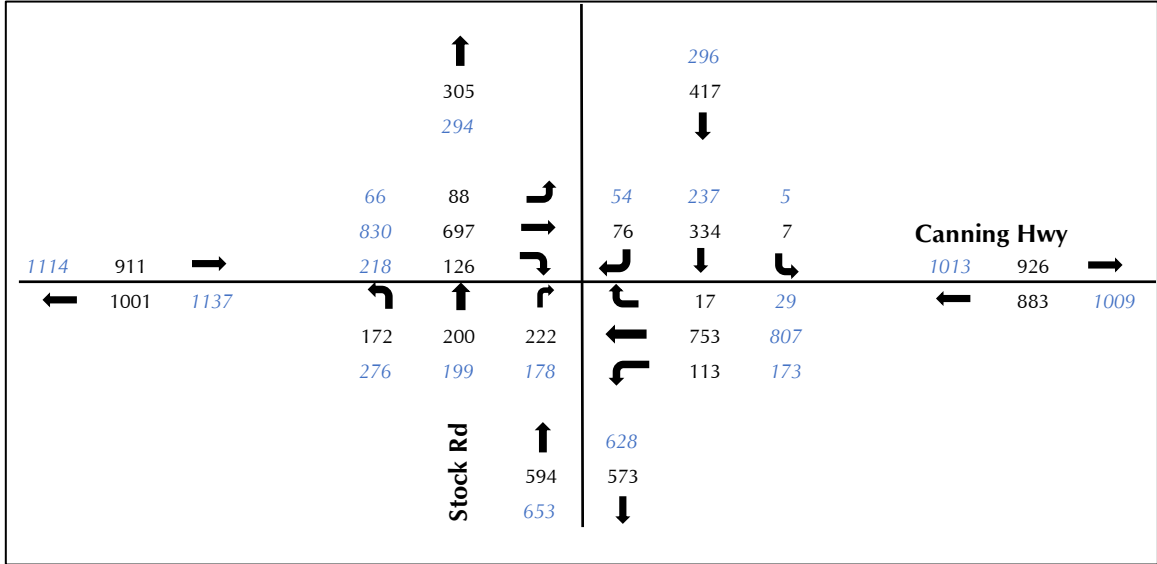


Figure 6. Existing peak hour traffic flows at the signalised intersection of Canning Highway and Stock Road – AM/ PM peak hours

3.4 Crash Records

Information available on the Main Roads WA website provides crash statistics for the signalised intersection of Canning Highway and Stock Road during the five-year period ending in December 2025.

The crash records indicate that the intersection Canning Highway and Stock Road recorded a total of 29 crashes, with two (2) crashes required hospitalisation and nine (9) crashes required medical attention. The details of the crashes are presented in **Table 2**.

An analysis of crash data at this intersection indicates that the majority of the incidents were classified as “rear end” nature crashes, with four (4) right angle, two (2) sideswipe same direction and one (1) right turn thru crashes recorded.

Based on the review, it is noted that the years 2022 and 2023 recorded the highest number of crashes with 9 and 8, respectively, while the years 2024 and 2025 recorded the lowest number of recorded crashes with 2 and 4, respectively.

Table 2. Crashes at the intersection of Canning Highway/ Stock Road

Intersection						Total Crashes	KSI Crashes
Canning Highway/ Stock Road						29	2
Right Turn Thru	Rear End	Sideswipe same dir	Right Angle	Hit Object	Others		
1	19	2	4	1	2		
Fatal	Hospital	Medical	PDO Major	PDO Minor			
N/A	2	9	12	6			

3.5 Public Transport Access

According to the current Transperth bus network map, the subject site has direct access to the existing bus services operating on Canning Highway.

The closet available bus services operating on Canning Highway are bus routes 111 and 910 with the nearest bus stop located at the southeast corner of the subject site. These bus routes provide direct links to Elizabeth Quay Bus Station, Canning Highway Train Station and Fremantle Train Station.

The public transport services available to the subject site is illustrated in the relevant Transperth service map (please refer to **Figure 7** and **Figure 8**).

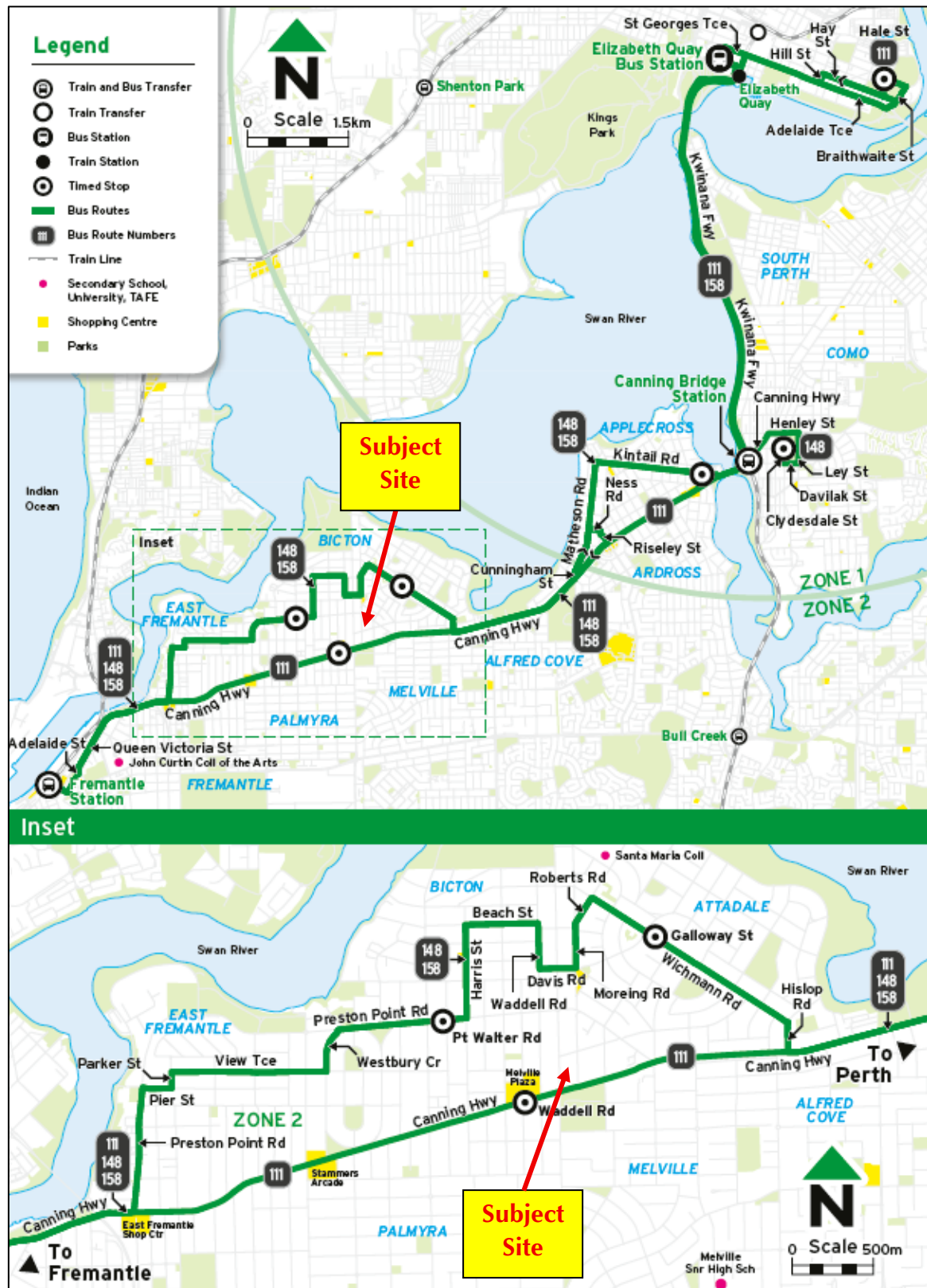


Figure 7. Available public transport services map 1 (source: Transperth)



Figure 8. Available public transport services map 2 (source: Transperth)

3.6 Pedestrian and Cyclist Facilities

There are existing pedestrian footpaths along both sides of Canning Highway and Stock Road, forming part of the surrounding path system which provides direct pedestrian access to the subject site. Pedestrian crossing opportunities are available at the existing signalised intersection of Canning Highway and Stock Road, in the vicinity of the subject site.

According to the current “Map Your Move - City of Melville: City of Melville & Murdoch University – Public Transport Information” document from the City of Melville and Department of Transport, the existing bike path network within the locality of the subject site is classified as “Bicycle Lanes of Sealed Shoulder Either Side” on Stock Road and “Other Shared Path (Bikes & Pedestrians)” on Canning Highway in the vicinity of the subject site.

The existing bike network map in the locality of the subject site is illustrated in **Figure 9**, and it shows the cyclist connectivity in the vicinity of the subject site.

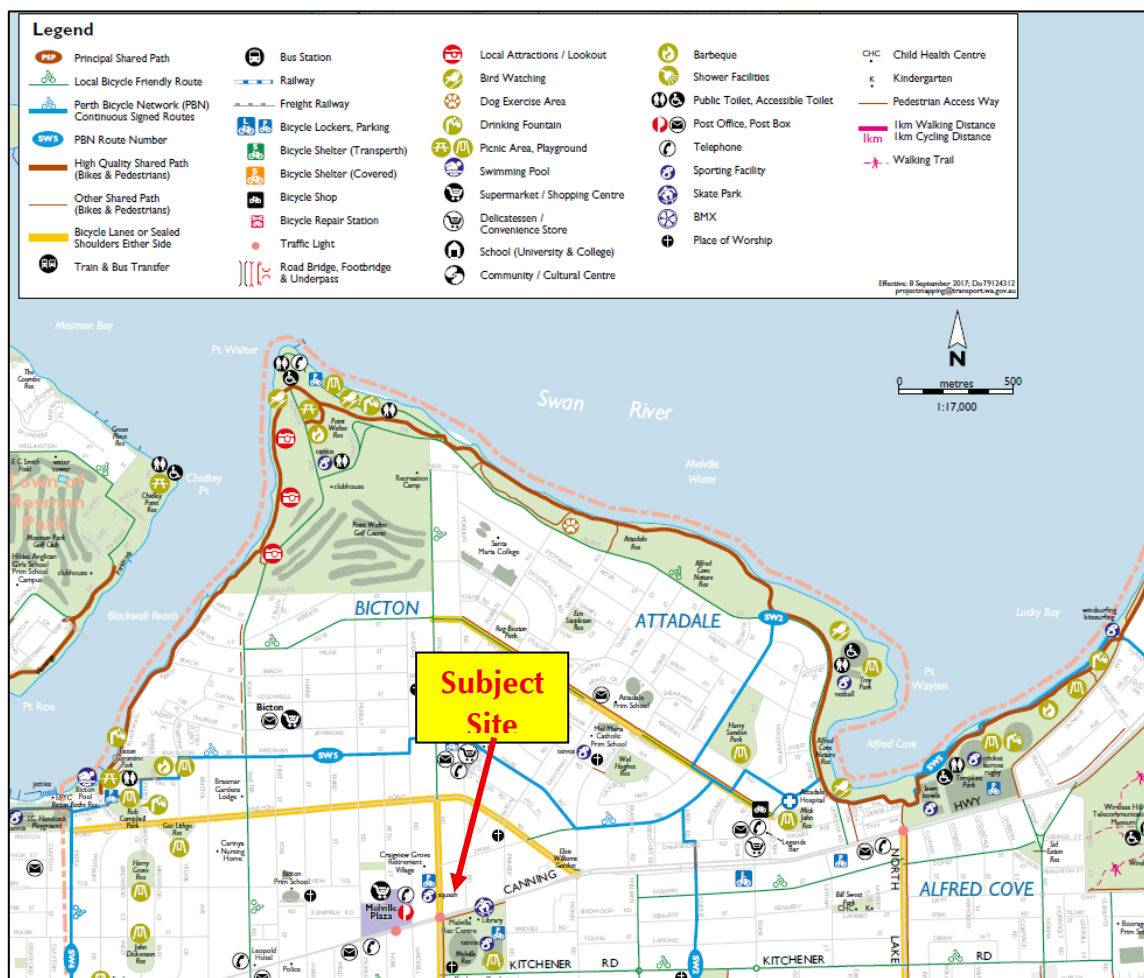


Figure 9. Existing bike network in the vicinity of the subject site (source: City of Melville & Murdoch University – Public Transport Information)

4 Pre-lodgement Meeting

A pre-lodgement meeting was held on 17 June 2026 between Main Roads WA, Transcore, Western Corporate and TBB Planning. The key items discussed and Transcore's responses are summarised below:

Transport Impact Assessment (TIA)

Main Roads WA advised that TIA to be prepared in accordance with the TIA guidelines (August 2016) and electronic SIDRA intersection files (.sip) in Version 10 to be submitted including the following:

- Detail the existing and proposed development conditions and traffic volumes;
- Assess various scenarios for access arrangements, including left-in only, left-in/left-out and no access from Canning Highway. The site operation should be evaluated against available alternative access arrangements for the site.
- Consideration of reducing the median on Canning Highway to increase capacity of the right turn lane.
- Trip generation rates to be provided for the different land uses.
- Details to be provided on how the interface the basement level and access from Stock Road will work during peak periods given basement parking includes residential and commercial parking.

Accordingly, this TIA has been prepared in accordance with WAPC's "Transport Impact Assessment Guidelines, Volume 4 – Individual Developments (2016)", including the information and results requested by Main Roads WA, as part of the development application. The TIA also considered the impact of this development on the capacity of the right turn lane in the westbound direction on Canning Highway at the signalised intersection.

On-Site Sightline Assessment

Main Roads WA also advised that an on-site sightline assessment is required at all access points to confirm Safe Intersection Sight Distance is achieved for safe turning movement. The sightline assessment is required to consider any existing large trees, any proposed signs and allowances for pedestrian crossings at entrances and exits.

Sight distance assessments were undertaken for both proposed crossovers on Canning Highway and Stock Road, and the results are discussed in [Section 7.8](#) and presented in [Appendix C](#) of the report.

Vehicle Swept Path/ Turning Movement Diagram

Main Roads WA further requested that a vehicle swept path/ turning movement diagram is required, preferably CAD drawings and drawn to scale demonstrating:

- The largest vehicle used on site can enter and exit in forward gear.
- Swept paths for the largest service vehicle to access the site must be shown for all expected movements at the intersection of Canning Highway and Stock Road to confirm feasibility within the existing intersection.
- Simultaneous turn movements of vehicles entering and exiting will not obstruct each other for all access points.

Swept path assessments were undertaken using 12.5m SU truck, which is the largest vehicles anticipated to be used at the subject site and B99 passenger vehicles. The results of the swept path assessments are discussed in **Sections 8** and **11** and presented in **Appendix B** of the report.

In addition, Main Roads WA also requested the following:

- A concept 15% design plan of the proposed road upgrades and access points onto Canning Highway.
- Development plans which clearly show the extent of the Primary Regional Road Reservation, including the future road widening.
- Acoustic report, prepared in accordance with State Planning Policy 5.4 Road and Rail Noise and the associated WAPC guidelines.
- Details of the proposed signage.
- Waste Management Plan, detailing how waste disposal and collection shall occur onsite, as no waste collection is permitted on Canning Highway.

Other Advice from Main Roads WA

The properties (Lots 14, 13 and 5) adjacent to Canning Highway (Primary Regional Road PRR) are subject to land requirements for future road widening purpose under the Metropolitan Region Scheme.

Planning documents show the future road upgrades which include four lane dual carriageway, on-road cycle lane, localised bus lane/ queue jump and 4.1m-4.5m verge. It is advised that these upgrades are anticipated to impact the properties.

Main Roads has confirmed that the upgrading/ widening of Canning Highway is not in Main Roads WA's current 4-year forward estimated construction/funding program and all projects not listed are subject to change without notice.

Meeting Outcome

The proposed access arrangement for the subject site was generally supported by Main Roads WA, subject to detailed assessments and resolution of the matters outlined in advice provided during the meeting.

A copy of the pre-lodgement meeting minutes supplied by Main Roads WA is provided in **Appendix H**.

5 Changes to Surrounding Transport Network

The changes to surrounding transport network associated with the development are the rationalisation of existing crossovers and the proposed access arrangements at the subject site as detailed in **Section 2.2**.

It should be noted that the 15% design stage requested by Main Roads is outside the scope during the development application stage of the project. However, detailed design of the crossover arrangements will be undertaken following approval of the development and during the detailed design stage of the project.

No other changes to surrounding roads and paths are proposed as part of the development proposal.

6 Integration with Surrounding Area

The proposed development includes residential apartments, supermarket, other retail outlets and medical clinics. This mixed-use commercial/retail and residential offering is intended to meet both current and future demand for such services in the local area. Therefore, it is understood that the proposed land uses are generally consistent with the planning intent for the surrounding area.

Further, the subject site has very good pedestrian and cyclist accessibility with convenient access to public transport services.

7 Traffic Assessment

7.1 Assessment Period

Due to the nature of the development, it is expected that the greatest demand on the local road network capacity will be experienced during the combined peak hour business activity of the development and the peak commuter traffic activity during the weekday morning peak hour between 7:30am – 8:30am and afternoon peak hour between 4:45pm – 5:45pm. As such, trip generation is estimated and traffic analysis for the proposed development is undertaken for these periods. This approach is in accordance with WAPC guidelines.

For the purpose of the assessment, it is assumed that the proposed development would be fully constructed and operated by the end of 2027 (opening year). Therefore, the assessment year that has been adopted for this analysis is year 2027 which represents the assumed post development scenario and 2037 for 10-year post development scenario.

7.2 Trip Generation

7.2.1 Existing Traffic Generation

The subject site is currently occupied by three residential and one vacant lot, and for the purpose of a robust assessment, it is assumed zero existing traffic.

7.2.2 Proposed Development Traffic Generation

The traffic generation rates for the proposed development were sourced from the *Institute of Transportation Engineers – Trip Generation Manual 12th Edition (ITE)* using “Supermarket – 850” and “Walk-in Clinic - 630” for the proposed supermarket and medical suits land uses and “*Guide to Transport Impact Assessment: Technical guidance for transport practitioners TS 00085 | Version 1.1*” for the proposed commercial and residential land uses.

The trip rates which were used to estimate the traffic generation for the proposed development are as follows:

Supermarket (ITE 850) – 1000 Sq. Ft. GFA

- Weekday daily: $92.29 \text{ trips per } 1000 \text{ Sq. Ft. GFA} / 0.929 = 99.34 \text{ vpd} / 100 \text{m}^2 \text{ GFA}$;
- Weekday AM: $2.95 \text{ trips per } 1000 \text{ Sq. Ft. GFA} / 0.929 = 3.18 \text{ vpd} / 100 \text{m}^2 \text{ GFA}$; and,
- Weekday PM: $8.79 \text{ trips per } 1000 \text{ Sq. Ft. GFA} / 0.929 = 9.46 \text{ vpd} / 100 \text{m}^2 \text{ GFA}$.

Accordingly, it is estimated that the traffic generations for the proposed supermarket land use are:

- Weekday daily: $99.34 \times (1,095/100) = 1,088\text{vpd}$;
- Weekday AM peak hour: $3.18 \times (1,095/100) = 35\text{vph}$; and,
- Weekday PM peak hour: $9.46 \times (1,095/100) = 104\text{vph}$.

Walk-in Clinic (ITE 630) – 1000 Sq. Ft. GFA

- Weekday daily: $37.6 \text{ trips per } 1000 \text{ Sq. Ft. GFA} / 0.929 = 40.5\text{vpd}/100\text{m}^2 \text{ GFA}$;
- Weekday AM: $2.75 \text{ trips per } 1000 \text{ Sq. Ft. GFA} / 0.929 = 2.96\text{vpd}/100\text{m}^2 \text{ GFA}$; and,
- Weekday PM: $3.67 \text{ trips per } 1000 \text{ Sq. Ft. GFA} / 0.929 = 3.95\text{vpd}/100\text{m}^2 \text{ GFA}$.

Accordingly, it is estimated that the traffic generations for the proposed medical suites land use are:

- Weekday daily: $40.5 \times (974/100) = 394\text{vpd}$;
- Weekday AM peak hour: $2.96 \times (974/100) = 29\text{vph}$; and,
- Weekday PM peak hour: $3.95 \times (974/100) = 38\text{vph}$.

Residential – Medium design residential dwellings - TS 0085

- Weekday daily vehicle trips = $2.72 \text{ per dwelling}$;
- Weekday AM peak hour trip = $0.39 \text{ per dwelling}$; and,
- Weekday PM peak hour trip = $0.37 \text{ per dwelling}$.

Accordingly, it is calculated that the daily and peak hour traffic generation for the proposed residential land use are:

- Weekday daily vehicle trips = $2.72 \times 34 = 92\text{vpd}$;
- Weekday PM peak hour trips = $0.39 \times 34 = 13\text{vph}$; and,
- Weekday PM peak hour trips = $0.37 \times 34 = 13\text{vph}$.

Commercial –Goods stores - TS 0085

- Weekday daily vehicle trips = $32.99 \text{ trips per } 100\text{m}^2$;
- Weekday AM peak hour trip = $1.68 \text{ trips per } 100\text{m}^2$; and,
- Weekday PM peak hour trip = $2.7 \text{ trips per } 100\text{m}^2$.

Accordingly, it is calculated that the daily and peak hour traffic generation for the proposed commercial land use are:

- Weekday daily vehicle trips = $32.99 \times 249/100 = 82\text{vpd}$;
- Weekday PM peak hour trips = $1.68 \times 249/100 = 4\text{vph}$; and,
- Weekday PM peak hour trips = $2.7 \times 249/100 = 7\text{vph}$.

It should be noted that the café land use proposed on the first floor is not expected to generate its own traffic, due to its relatively small floor area of only 25m² and its intended function of primarily serving residents, staff and visitors to the subject development.

There is typically cross-trade between the proposed land uses as they are co-located within the same site. Therefore, a cross trade of 15% is assumed to be reasonable to allow for internal trips between the proposed residential and commercial land uses within the site.

Accordingly, it is estimated that the proposed development would generate about **1,408** vehicular trips per typical weekday, and about **69** trips during the typical weekday AM and about **137** trips during the typical weekday PM peak hours. These totals include both inbound and outbound vehicle movements.

Further, supermarket and commercial (shops) land uses attract reasonable proportion of their customers as passing trades from the traffic already passing the site on the adjacent road network. Data from Table E.13 of ITE Trip Generation Handbook 3rd Edition indicates that the passing trade for this type of land use is typically around 36%. Therefore, 36% passing trade was assumed for supermarket and commercial (shops) land uses for the analysis for both AM and PM peak hours.

Therefore, the net additional traffic of the proposed development when accounting passing trades for supermarket and commercial (shops) land uses, is **+1,050vpd** (daily), **+57vph** (AM peak hour), and **+103vph** (PM peak hour)) on the surrounding road network.

The directional split of inbound/ outbound trips for the proposed development is assumed in accordance with ITE guidelines and WAPC guidelines as follows:

- 59%/41% during AM peak and 50%/50% during PM peak for supermarket;
- 50%/50% during both AM and PM peaks for retails (shops);
- 81%/19% during AM peak and 29%/71% during PM peak for clinic; and,
- 25%/75% during AM peak and 62.5%/37.5% during PM peak for residential apartments.

Table 3 shows the passing and non-passing trade components of the proposed development's trip generation.

Table 3. Passing trade and non-passing trade components of the trip generation

Land Uses	Passing	Daily	AM		PM		Non-Passing	Daily	AM		PM	
			In	Out	In	Out			In	Out	In	Out
Supermarket	36%	333	6	4	16	16	64%	592	11	8	28	28
Shops	36%	25	1	1	1	1	64%	45	1	1	2	2
Clinic	0%	0	0	0	0	0	100%	335	20	5	9	23
Residential	0%	0	0	0	0	0	100%	79	3	8	7	4
Total		358	12		34			1,050	57		103	

7.3 Trip Distribution

The existing traffic flows used as the base for traffic distribution are presented in **Figure 10** which is the outcomes of the SCAT data available from Main Roads WA website and the manual turn counts organised by Transcore at the signalised intersection of Canning Highway and Stock Road in May 2026.

Pass-by trips will be more strongly related to eastbound traffic flows on Canning Highway because of access convenience factor. The resulting modelled traffic distribution of the proposed development is summarised in **Table 4**.

Table 4. Traffic distribution

Approach/ Departure Route	Primary Trips	Pass-by Trips
Canning Hwy west (eastbound)	10%	35% (towards east)
Canning Hwy east (westbound)	40%	0%
Stock Rd north (southbound)	30%	30% (towards east)
Stock Rd south (northbound)	20%	35% (towards north)
Total	100%	100%

Accordingly, the traffic movements generated by the proposed development have been manually assigned on the adjacent road network and the resulting traffic movements generated by this development are shown in **Figure 11**.

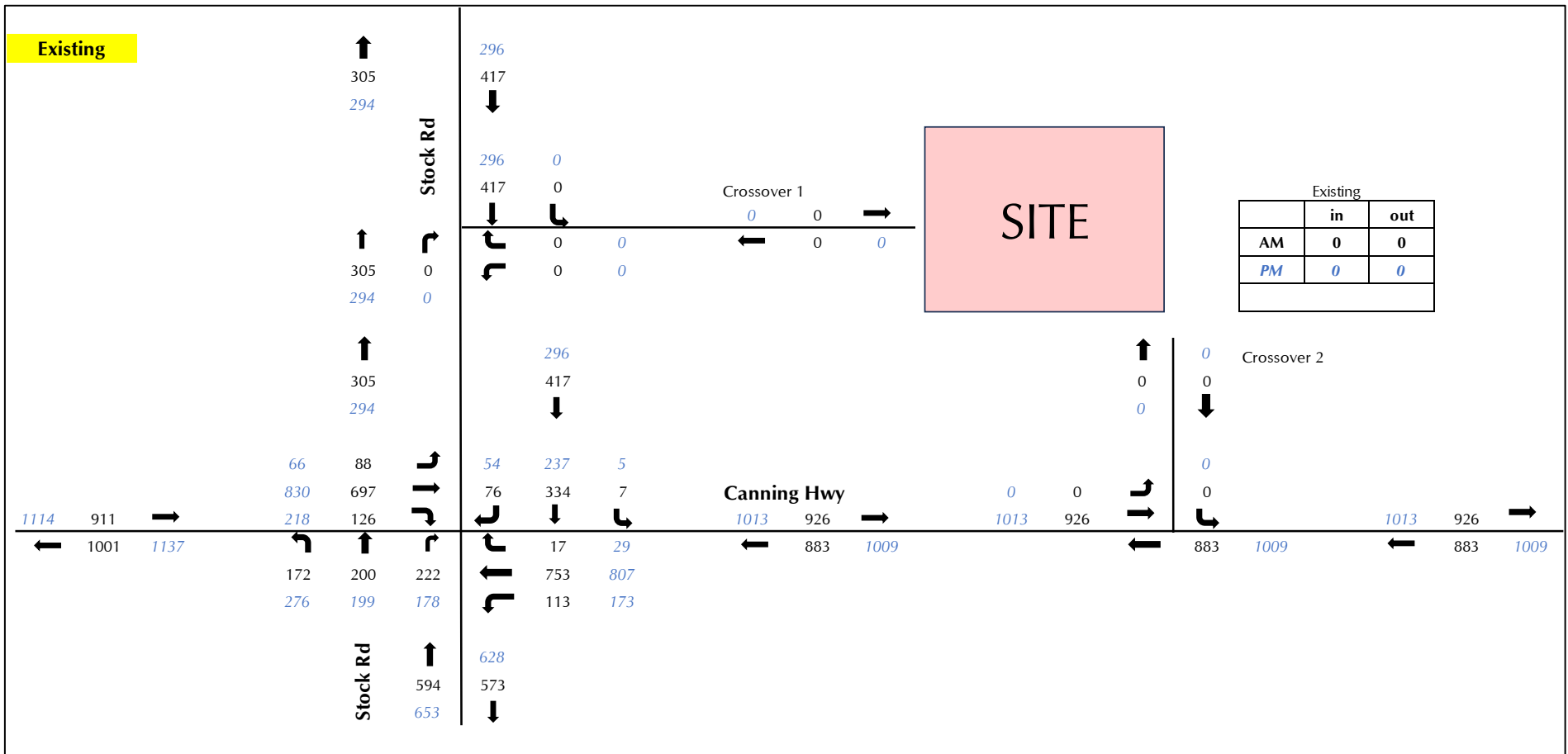


Figure 10. Existing traffic flows on Canning Highway and Stock Road in the vicinity of the subject site (AM/ PM peak hours)

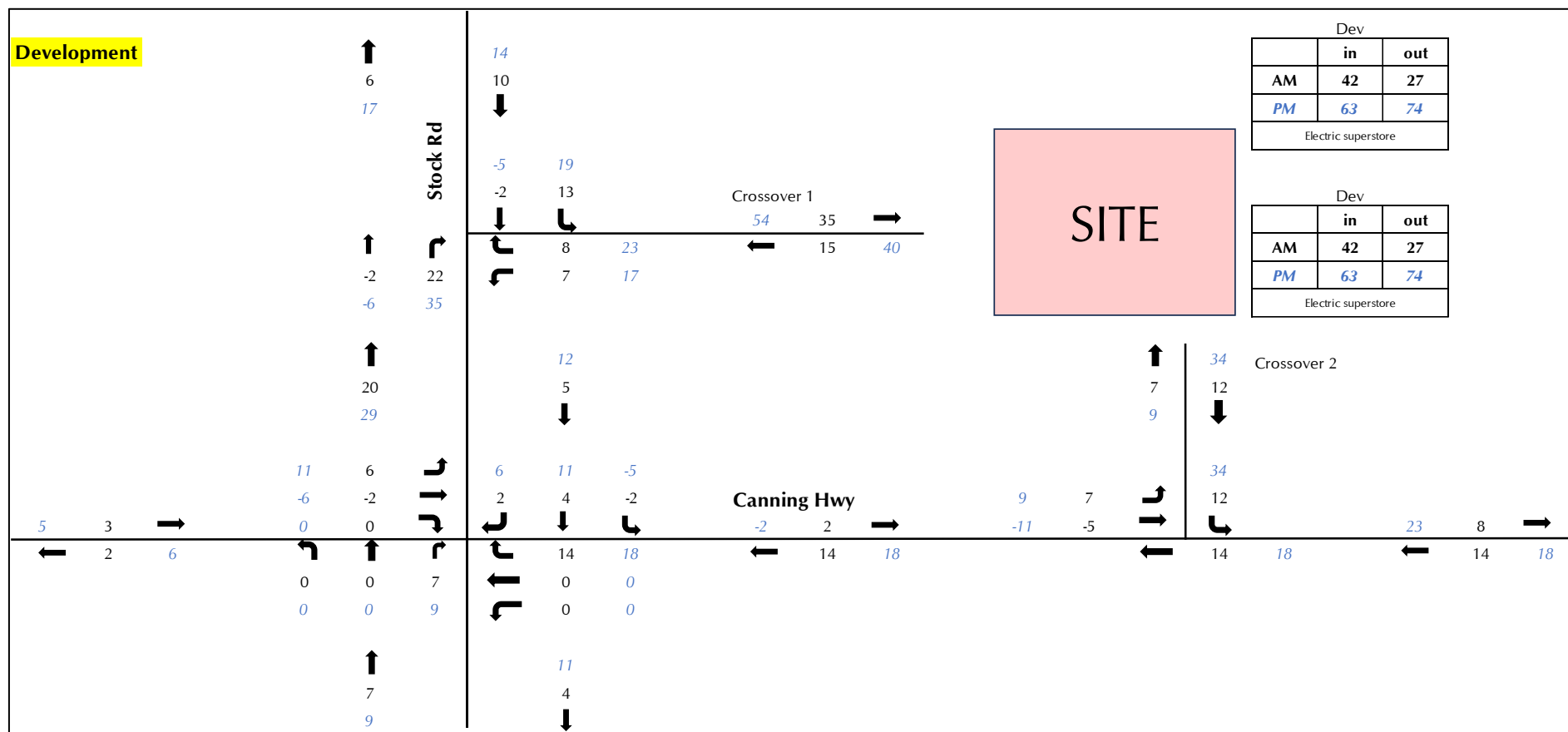


Figure 11. Proposed development traffic (AM/ PM peak hours)

7.4 Traffic Flow

Future year base traffic flows on Canning Highway have been estimated by applying an annual growth rate of 2% to the existing through traffic flows on Canning Highway. This growth rate has been adopted based on the historical traffic volumes and growth in the vicinity of the subject site, which has been calculated to be approximately 1.78% per annum. No traffic growth on Stock Road was assumed as the historical traffic counts are not available and the localities along Stock Road in the vicinity of the subject site are fully established.

Accordingly, 2% per annum growth was assumed for Canning Highway to forecast the future background traffic volumes for the post development (the year 2027) and the 10-year post development (the year 2037) scenarios.

The combined 2027 development traffic volumes for the post development scenario are presented in **Figure 12**.

The total 10-year post development traffic volumes (the year 2037) are presented in **Figure 13**.

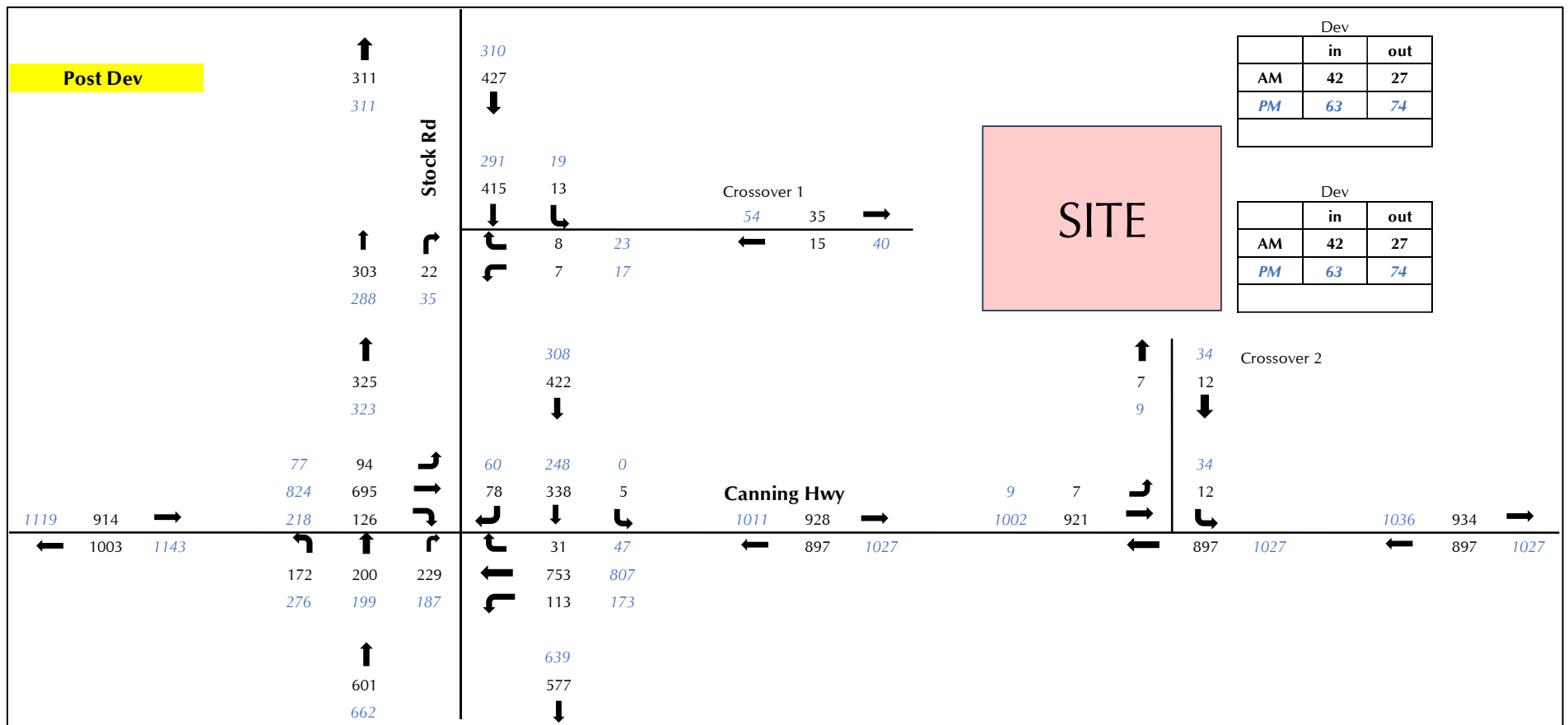


Figure 12. 2027 traffic flows: base traffic + proposed development traffic (AM/ PM peak hours)

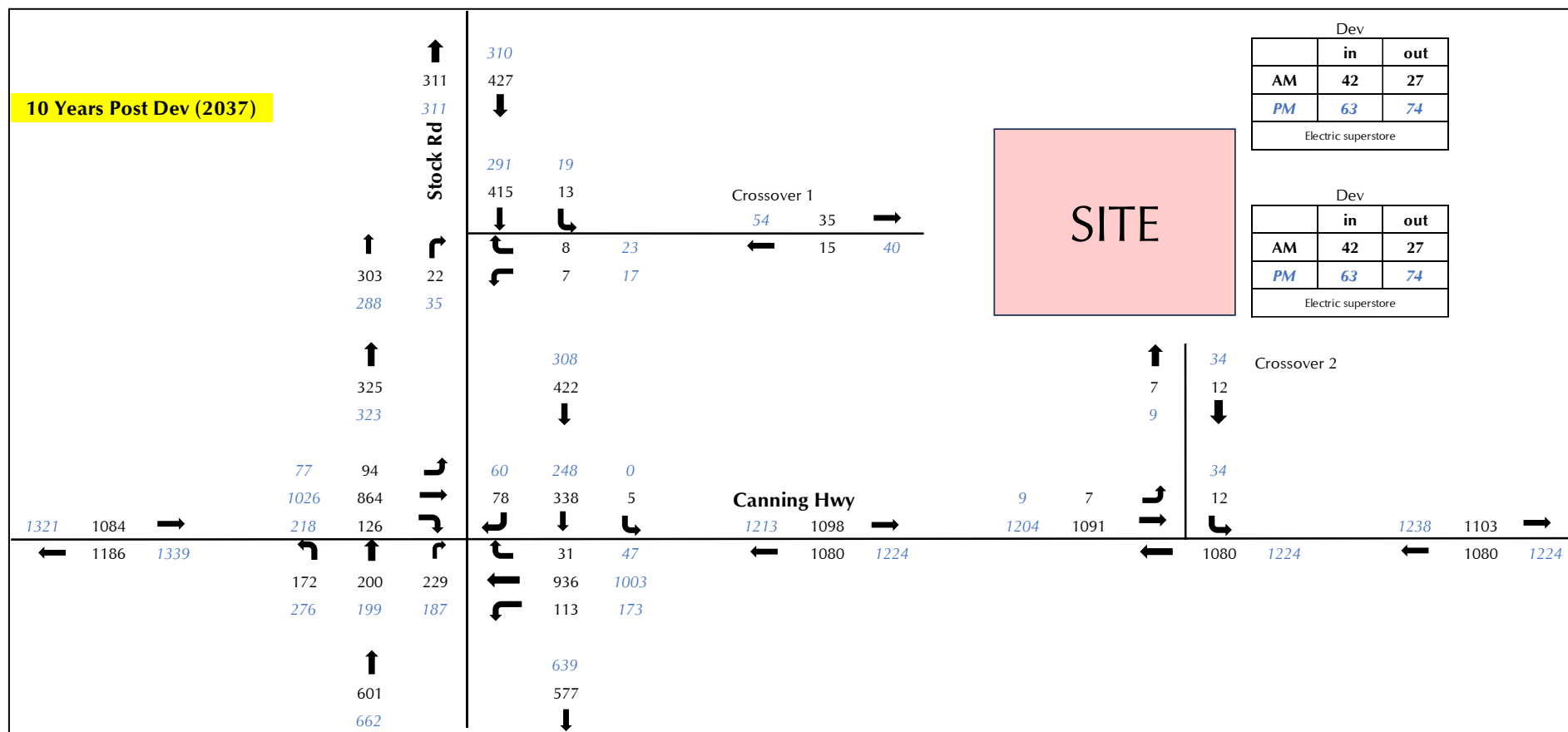


Figure 13. 10-year post development 2037 traffic flows – 2037 base + proposed development traffic (AM/ PM peak hours)

7.5 Analysis of Local Intersections & Crossovers

SIDRA 11.0 intersection analysis was undertaken for the subject site crossovers on Canning Highway and Stock Road and the signalised intersection of Canning Highway/ Stock Road as a Network in order to assess their operations in the existing and post development scenarios (2027 and 10-year post development 2037) for weekday AM and PM peak hours.

SIDRA is an intersection modelling tool commonly used by traffic engineers for all types of intersections. SIDRA outputs are presented in the form of Degree of Saturation, Level of Service, Average Delay and 95% Queue. These characteristics are defined as follows:

- **Degree of Saturation** is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The Degree of Saturation ranges from close to zero for infrequent traffic flow up to one for saturated flow or capacity.
- **Level of Service** is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. In general, there are 6 levels of service, designated from A to F, with Level of Service A representing the best operating condition (i.e. free flow) and Level of Service F the worst (i.e. forced or breakdown flow).
- **Average Delay** is the average of all travel time delays for vehicles through the intersection.
- **95% Queue** is the queue length below which 95% of all observed queue lengths fall.

The layout of the existing intersection is illustrated in **Figure 14** and the layout of the modelled network for the post development scenarios are illustrated in **Figure 15**.

The SIDRA analysis has been undertaken in accordance with current Main Roads WA operational modelling guidelines including separate input of different classes of heavy vehicles and the parameters specified by Main Roads WA for those vehicle classes.

The results of the SIDRA analysis are summarised in **Appendix D** (Existing), **Appendix E** (2027 post development scenario), and **Appendix F** (2037 10-year post development scenario).

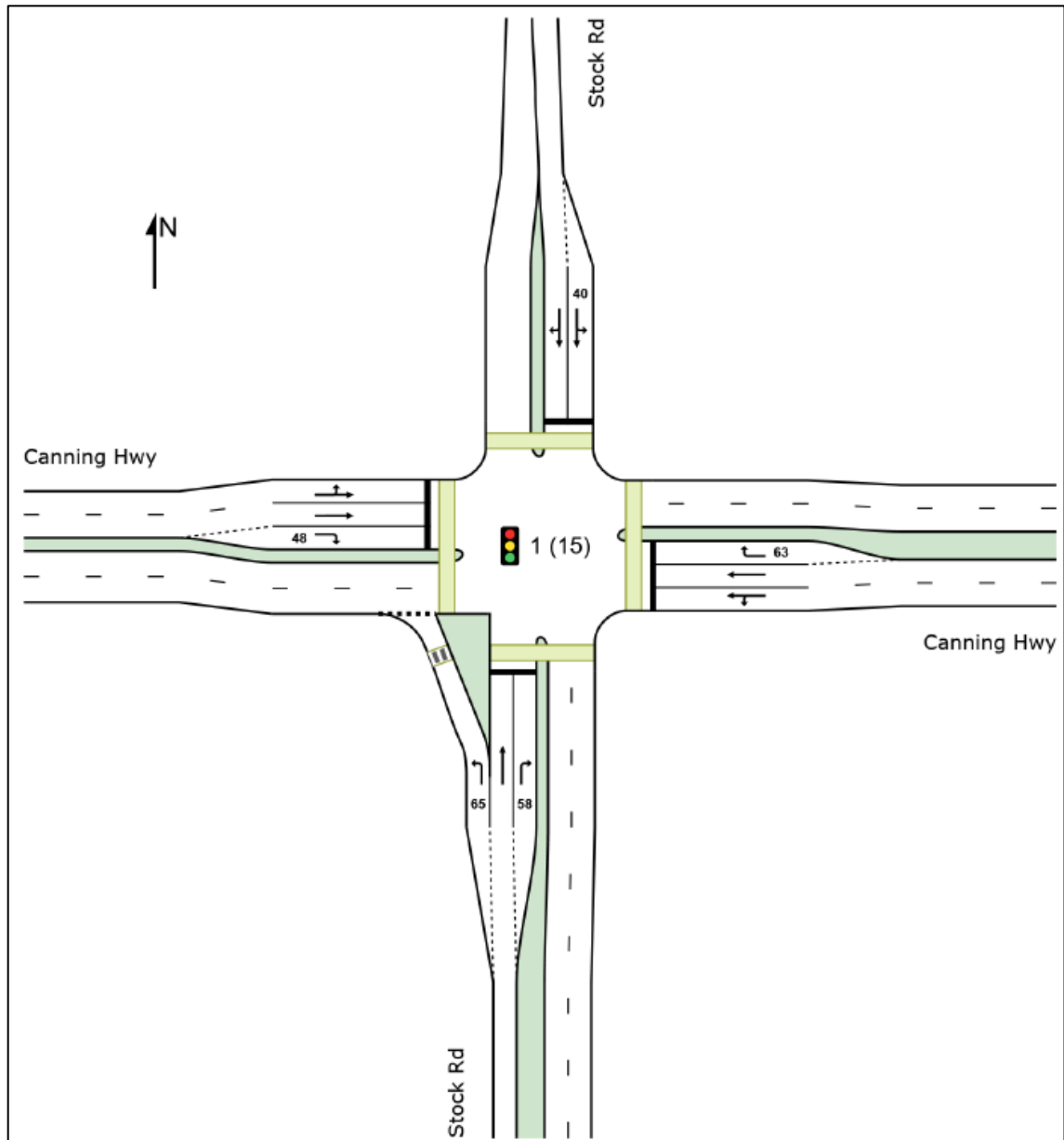


Figure 14. SIDRA layout – existing intersection of Canning Highway/ Stock Road

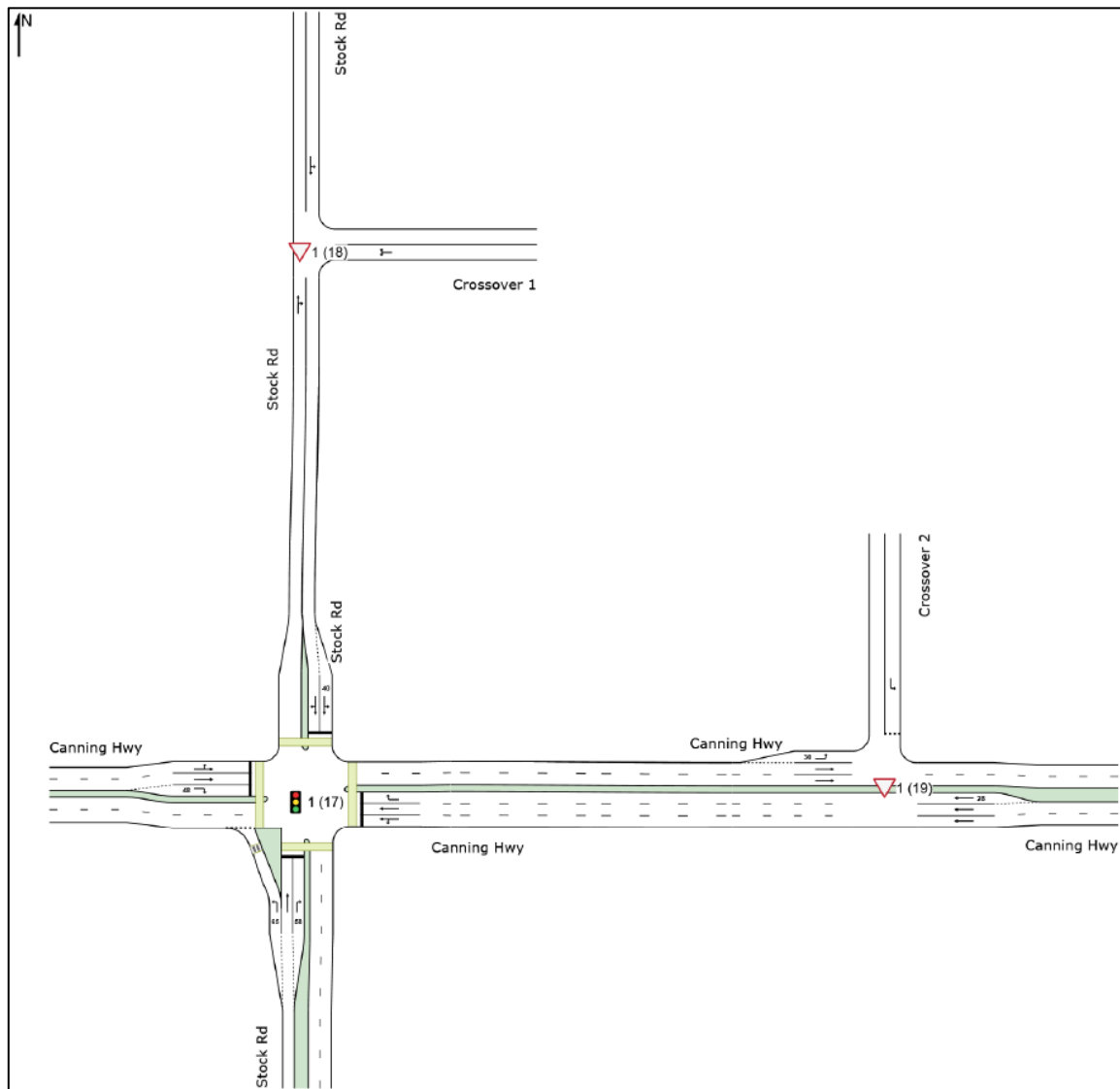


Figure 15. SIDRA network layout – post development scenarios (2027 and 2037)

7.5.1 Full movement crossover on Stock Road (crossover 1)

The SIDRA results for the proposed full movement crossover on Stock Road indicate that this crossover would operate at a good level of service (LoS) A during both typical AM and PM peak hours in both post development scenarios (2027 and 2037).

However, the reported 95th percentile queue length on Stock Road from the signalised Canning Highway/Stock Road intersection during the AM peak hour extends beyond the location of the proposed Stock Road crossover.

Even though the traffic generation of the development during this peak hour is relatively low and this queue back is short term and expected to clear quickly during the AM peak hour signal cycle, it is recommended that a “KEEP CLEAR” pavement marking to be implemented on Stock Road pavement outside the crossover to keep the crossover clear of any queue back and assist vehicles turning in and out of the development during the AM peak hour.

7.5.2 Left in/ left out only crossover on Canning Highway (crossover 2)

The SIDRA results for this left in/ left out only crossover with deceleration lane on Canning Highway indicate that this crossover would operate at a good overall Level of Service (LoS) A during typical AM and PM peak periods in the post development scenarios (both 2027 and 2037).

7.5.3 Signalised intersection of Canning Highway/ Stock Road

Existing scenario

SIDRA intersection analysis for the existing situation indicates that this signalised intersection is currently operating with acceptable conditions during peak periods with overall Level of Service (LoS) D and E during AM and PM peak hours, respectively.

LoS F were reported for through and right turn movements from Stock Road southbound during the AM peak hour and the right turn movement from Canning Highway eastbound during the PM peak hour.

Post development – year 2027 scenario

The SIDRA results for the post development scenario confirms that the addition of traffic generated by the proposed development will not have a material impact on the operation of this signalised intersection which retains the current level of services and records marginal increases in queues and delays in this scenario.

10-Year post development – year 2037 scenario

With the addition of the traffic growth on Canning Highway in year 2037, this signalised intersection is reported to operate with an overall LoS of F and E during both typical AM and PM peak hours. Similar to the existing and post development scenarios, Stock Road southbound during AM peak and Canning Highway eastbound movements during the PM peak were reported to operate at the capacity.

As such, this intersection may require long-term interventions, regardless of any proposed developments in the area. We therefore recommend that the City of Melville and Main Roads WA to monitor the operations of this signalised intersection and undertake further investigations to evaluate and plan for future operations of this intersection.

Based on the assessment of the signalised intersection, it is concluded that the proposed development does not adversely impact the operation or function of the westbound right turn lane on Canning Highway to Stock Road northbound. Accordingly, it is considered that no upgrade to this right turn lane is necessary as a result of the proposed development.

7.5.4 Left in only crossover on Canning Highway (option requested by Main Roads WA)

As discussed in **Section 4**, Main Roads WA requested SIDRA assessment option with the left in only crossover with deceleration lane on Canning Highway, instead of the proposed left in/ left out only arrangement with deceleration lane at this crossover.

Accordingly, this option was investigated for 10-year post development scenario (2037) and the associated SIDRA results are presented in **Appendix G**. The layout of the modelled network for this scenario is illustrated in **Figure 16**, and the 10-year post development traffic volumes (the year 2037) for this option are presented in **Figure 17**.

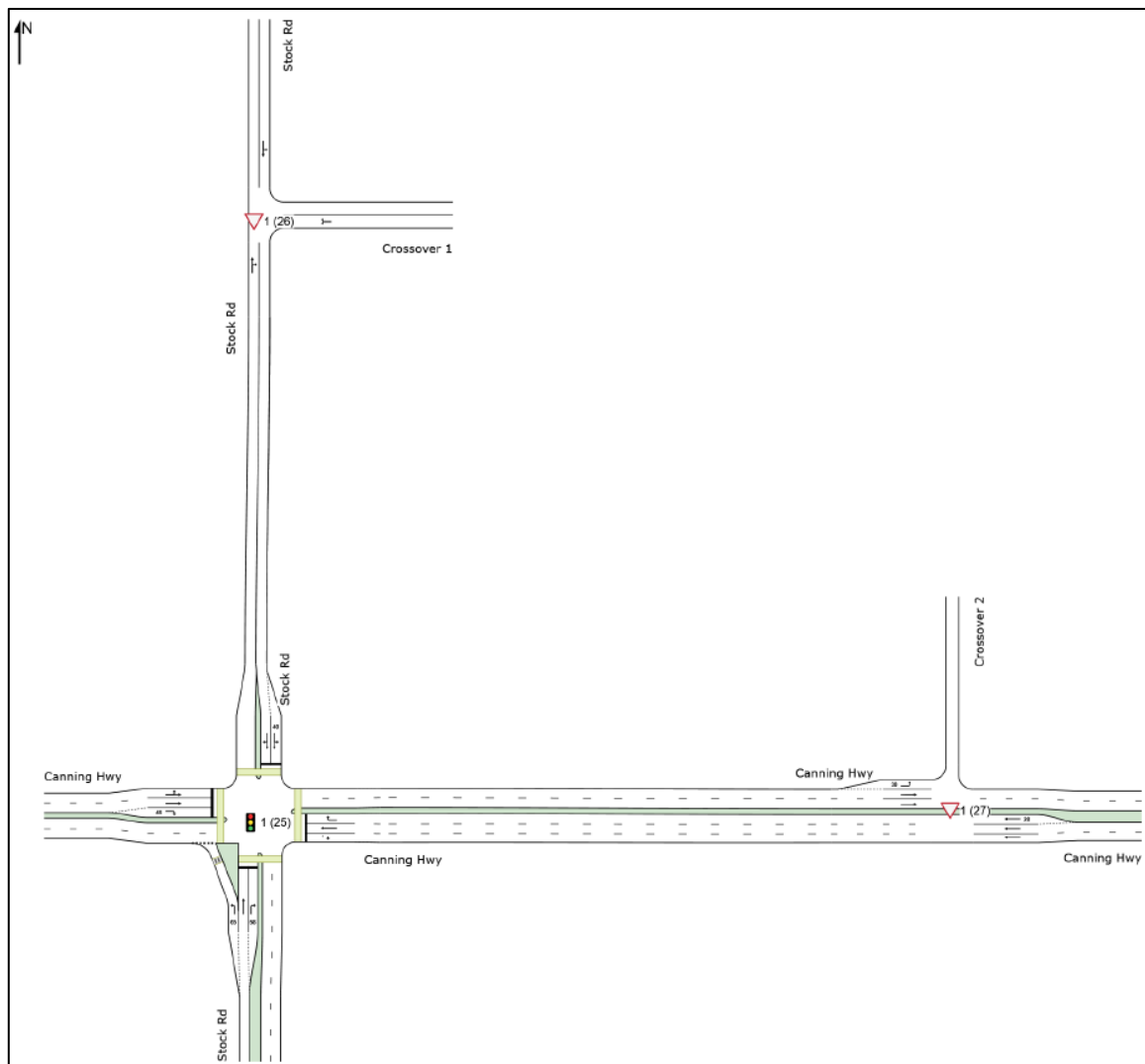


Figure 16. SIDRA network layout for option 2 – post development scenario (2037)

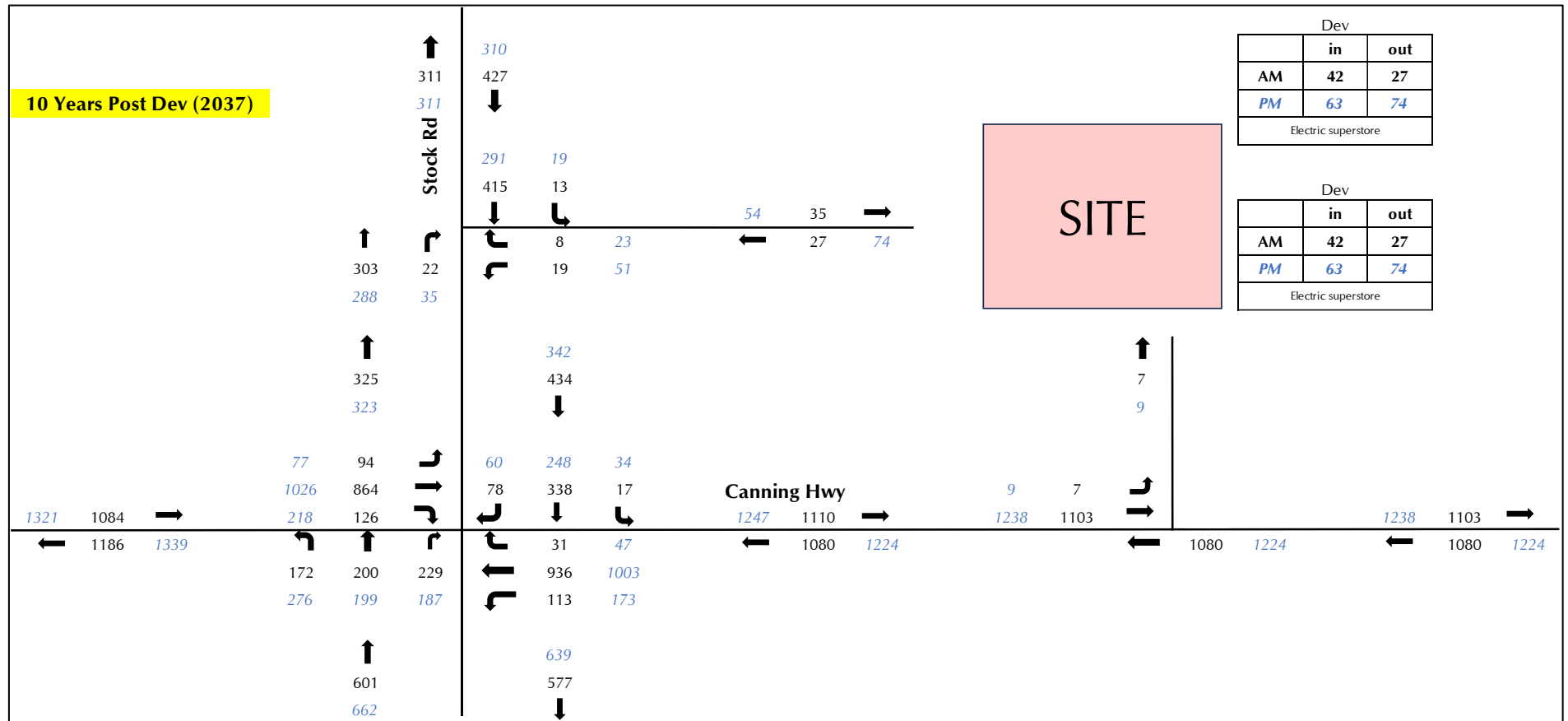


Figure 17. 10-year post development 2037 traffic flows: left in only at Canning Highway crossover option – 2037 base + proposed development traffic (AM/ PM peak hours)

The results for this scenario indicate that the 95th percentile queue length on southbound direction along Stock Road at the signalised intersection would increase to 138m during the critical AM peak hour. It should also be noted that the proposed full movement crossover on Stock Road would experience significant internal delays, as all exiting movements from the subject site would be accommodated via this crossover under this option.

Therefore, it is concluded that the proposed access arrangement, comprising a left in only crossover on Canning Highway is not the optimal arrangement and a full movement crossover on Stock Road and a left in/left out only crossover on Canning Highway, would provide better traffic operations both within the subject site and across the surrounding road network, particularly at the signalised intersection of Canning Highway and Stock Road.

Accordingly, no further options, including an option without a crossover on Canning Highway, were assessed, as this option with only one crossover on Stock Road to serve the proposed development is not feasible due to the anticipated traffic operations resulting in significant delays and queues at the Stock Road crossover and the signalised intersection.

7.6 Impact on Surrounding Roads and Neighbouring Areas

The WAPC Transport Impact Assessment Guidelines (2016) provides the following guidance on the assessment of traffic impacts:

“As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis.”

The proposed development will not increase traffic flows on any roads adjacent to the site by the quoted WAPC threshold of +100vph per lane to warrant further analysis. Therefore, the impact of development traffic on the surrounding road network will not be significant.

7.7 Traffic Noise and Vibration

The WAPC's *State Planning Policy 5.4: Road and Rail Transport Noise and Freight Considerations in Land Use Planning* requires assessment of noise impact on noise-sensitive developments when a road carries more than 20,000vpd in an urban area or 5,000vpd in a rural area.

The traffic generation of the proposed development will be around 1,350vpd and will not increase the traffic flows on any surrounding roads near the abovementioned traffic thresholds, so no noise impacts on surrounding areas are anticipated.

7.8 Road Safety

Main Roads WA in their Pre-lodgement meeting minutes stated that Safe Intersection Sight Distance (SISD) assessments are required at all access points to achieve safe turning movements.

It is our understanding that a Safe Intersection Sight Distance (SISD) assessment is not the appropriate method of assessing the proposed development crossovers/ accesses, as SISD applies to sight distance requirements at public road intersections involving both major and minor roads. As stated in AGRD 4A sight lines for property access points should be access in accordance with the requirements of AS 2890.1 (SSD).

However, for the purpose of a robust assessment, SISD assessment was undertaken for the proposed left in/ left out only crossover on Canning Highway in accordance with *AGRD4A*, but the proposed full movement crossover on Stock Road has been assessed against the sight distance requirements specified in *AS2890.1: Off-street Car Parking*.

The results of the sight distance assessments at both crossovers are included in **Appendix C**. It is confirmed that the vehicles exiting the proposed crossovers have clear visibility of through traffic along Canning Highway and Stock Road, with the required sight lines unobstructed by any existing permanent structures including existing large trees.

8 Parking

The proposed development will provide a total of 101 parking spaces including 37 retail/ commercial bays and 64 residential bays in the basement level and a total of 43 parking spaces for retail/ commercial uses on the ground floor level, resulting in a total of 144 parking spaces including two (2) ACROD bays provided within the site for the use of residents and commercial's patrons and staff.

Transcore has reviewed the proposed car parks within the subject site against Australian Standard AS 2890.1, and it is confirmed that the designs and the layout of the parking bays including the length and width of the bays and widths of the aisle are satisfactory for the intended user class. In addition, all the structural elements including the columns within the carpark are located outside of parking design envelopes.

Further, Transcore also reviewed the ramp connecting the ground floor and the basement carpark against AS 2890.1 requirements, and it is confirmed that the width of the ramp (6.8m) meets the minimum requirement for the outside radius of 12.5m for a circular ramp. The maximum ramp gradient of 1:8 also meets the minimum requirement of 1:5 (20%) maximum gradient.

In addition, as requested by Main Roads WA during the pre-lodgement meeting, scenarios involving two passenger vehicles travelling simultaneously in opposing directions at each access point were also assessed. Accordingly, swept path assessments were undertaken using B99 passenger vehicles with 300mm vehicle body envelope clearance at all access points. The assessments confirm that all access points are satisfactory, with two passenger vehicles able to safely and satisfactorily pass each other simultaneously. The results of the swept path assessments are presented in **Appendix B**.

Based on the development plans provided in **Appendix A**, it is understood that the basement car park will be managed through a secure access system, with automatic gates proposed at both access points to the residential car parking area. Accordingly, the residential car bays will be secured and inaccessible to the public, including commercial parking users, at all times. This access control system will also help prevent unauthorised use of the residential car bays.

9 Public Transport Access

The existing public transport services in this area have been noted in **Section 3.5** of this report.

10 Pedestrian and Cyclist Access

The existing pedestrian and cyclist facilities in this area have been noted in **Section 3.6** of this report.

11 Provision for Service Vehicles

A service bay is proposed on the easternmost side of the building on the ground floor. The largest size vehicle that will access the proposed development would be a 12.5m single unit vehicle. Bin storage areas for commercial and residential land uses are located at the southeast corner of the building on the ground floor.

Delivery and service trucks will enter the subject site via the left in/ left out only crossover on Canning Highway (crossover 2), access the service bay and exit the subject site via the full movement crossover on Stock Road (crossover 1) in forward gear.

It is anticipated that delivery and service trucks will service the site outside peak operating hours of the proposed development to minimise internal conflicts.

Swept path analysis was undertaken for a 12.5m long single unit truck to confirm the satisfactory access, egress and circulation within the subject site. The swept path diagrams are included in **Appendix B**.

12 Conclusions

This Transport Impact Assessment (TIA) has been prepared by Transcore on behalf of Western Corporate with respect to the proposed mixed-use development to be located at Lot 13, 14, 15 & 5 (410) Canning Highway, Attadale in the City of Melville. The subject site entails a total of four lots and is located at the northeast corner of the signalised intersection of Canning Highway and Stock Road.

A pre-lodgement meeting was held on 17th June 2026 between Main Roads WA, Transcore, Western Corporate and TBB Planning.

The Development Application (DA) for the subject site proposes a multi-storey mixed-use development comprising a supermarket and three commercial tenancies on the ground floor, nine (9) medial suites on the first floor and 34 residential apartments on second to sixth floors.

The proposed development will provide a total of 147 parking spaces including two (2) ACROD bays across the basement level and the ground floor level for the use of residents and commercial' patrons and staff.

A service bay is proposed on the easternmost side of the building on the ground floor. Bin storage areas for commercial and residential are located at the southeast corner of the building on the ground floor. The largest size vehicle that will access the proposed development would be a 12.5m single unit vehicle, and the swept path assessment was undertaken confirms the satisfactory access, egress and circulation within the subject site.

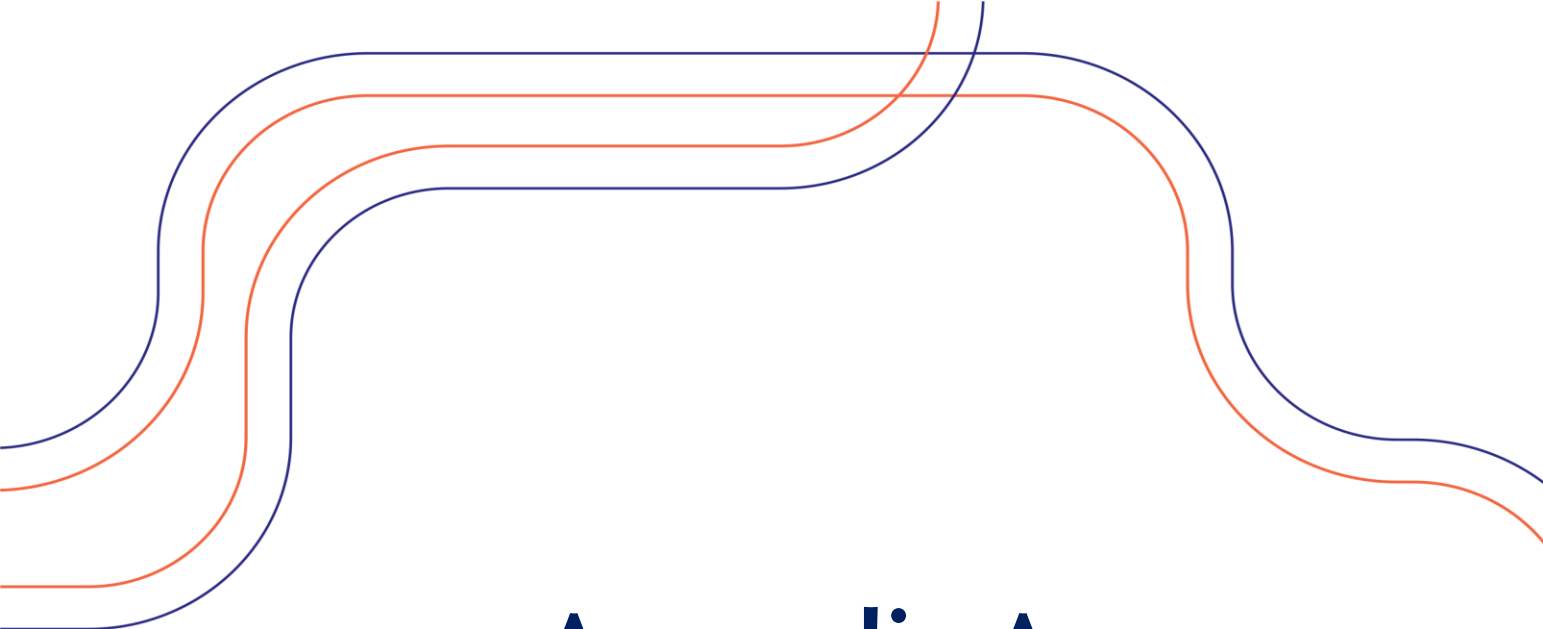
The development is proposed to be served by a full movement crossover on Stock Road and one left in/ left out only crossover with deceleration lane on Canning Highway. It is important to note that the crossover and access/ egress are vital to the proposed development to achieve satisfactory circulation within the site, particularly for service and waste collection vehicles.

The traffic analysis undertaken in this report shows that the traffic generation of the proposed development is expected to be in order of approximately 1,348 total daily trips with approximately 67 and 131 trips during a typical weekday AM and PM peak hours, respectively. These totals include both inbound and outbound vehicle movements.

The results of SIDRA network analysis undertaken indicate that the traffic associated with the proposed development can be accommodated on the surrounding road network without undermining the current traffic operations. The SIDRA analysis also confirmed that the proposed crossover arrangement for the proposed development is the optimum arrangement to minimise internal and external queuing and delays.

Based on the traffic assessments undertaken, it is concluded that no upgrade to the right turn lane on westbound direction of Canning Highway at the signalised intersection is required as a result of the proposed development.

In conclusion, the findings of this Transport Impact Assessment are supportive of the proposed development.



Appendix A

PROPOSED DEVELOPMENT PLANS



ZARQ.™

185 YORK STREET,
SUBIACO
6008, WA AUSTRALIA
+61 0400 829 659
zarq.com.au

STAGE
DEVELOPMENT
APPLICATION

NOTE

1. CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANT DOCUMENTS AND SPECIFICATIONS.
3. SEEK CLARIFICATION OF INCONSISTENCIES/ CONFLICTS FROM THE ARCHITECT.
4. FIGURED DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

REV COMMENTS

I DEVELOPMENT APPLICATION - CITY OF MELVILLE
H CONCEPT DESIGN

DATE

SEPT 2026
AUG 2026

PROJECT

#LOT 13, 14, 15 & 5 (410) CANNING
HIGHWAY, ATTADALE, WESTERN
AUSTRALIA 6156



JOB NO. ARCHITECT SCALE

2050 ZE 1:400 @A3

CLIENT

WESTERN CORPORATE

DRAWING TITLE

SITE PLAN

REVISION

I

DRAWING

A104



ZONING: CHECK WITH LGA
PRECINCT: CITY OF MELVILLE
BLOCK SIZE: 4309m²

LANDSCAPING: 387m² or 9%
PARKING: 43 BAYS
BICYCLE BAYS: 8+

COVERED SPACE:
BUILDING (GROUND FLOOR): 2727.92m²
STAIR 1: 12.74m²
STAIR 2: 10.29m²

TOTAL COVERED: 2750.95m²

OPEN SPACE (UNCOVERED): 1558.05m² OR
36.2%

PROPOSED SITE PLAN
1:400

COMMERCIAL:
STANDARD PARKING: 36
UAT PARKING: 1
EV PARKING: 6

TOTAL: 37 PARKING BAYS
BICYCLE BAYS: 16

RESIDENTIAL:
STANDARD PARKING: 64

TOTAL: 64 PARKING BAYS
BICYCLE BAYS: 21
STORAGE: 32

RESIDENTIAL STORE ROOM SIZE:

01. 4.5m ²	17. 4m ²
02. 4.5m ²	18. 4m ²
03. 4.7m ²	19. 6m ²
04. 4.8m ²	20. 6.5m ²
05. 4.6m ²	21. 4.8m ²
06. 4m ²	22. 4m ²
07. 4m ²	23. 4m ²
08. 4m ²	24. 4m ²
09. 4m ²	25. 5.3m ²
10. 5.3m ²	26. 4.5m ²
11. 6m ²	27. 4.5m ²
12. 5.5m ²	28. 6m ²
13. 4.2m ²	29. 5.5m ²
14. 4.6m ²	30. 5.5m ²
15. 5.3m ²	31. 5m ²
16. 6m ²	32. 5m ²



LEGEND

SW SOAK WELL
EV ELECTRIC VEHICLE PARKING
RL RELATIVE LEVEL
DSA DEEP SOIL AREA
ST STORAGE ROOM

ZONING: R-A00
PRECINCT: CITY OF MELVILLE
BLOCK SIZE: 4309m²

PROPOSED BUILDING AREA:
BASEMENT: 3485m²
GROUND FLOOR: 1593m²
1 FLOOR: 1420m²
2 FLOOR: 747m²
3 FLOOR: 747m²
4 FLOOR: 747m²
5 FLOOR: 736m²
6 FLOOR: 560m²

ZARQ.™

185 YORK STREET,
SUBIACO
6008, WA AUSTRALIA
+61 0400 829 659
zarq.com.au

STAGE
DEVELOPMENT
APPLICATION

NOTE

- CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANT DOCUMENTS AND SPECIFICATIONS.
- SEEK CLARIFICATION OF INCONSISTENCIES/ CONFLICTS FROM THE ARCHITECT.
- FIGURED DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

REV COMMENTS

I DEVELOPMENT APPLICATION - CITY OF MELVILLE
H CONCEPT DESIGN

DATE

SEPT 2026
AUG 2026

PROJECT

#LOT 13, 14, 15 & 5 (410) CANNING
HIGHWAY, ATTADALE, WESTERN
AUSTRALIA 6156



JOB NO. ARCHITECT SCALE

2050 ZE 1:400 @A3

CLIENT

WESTERN CORPORATE

DRAWING TITLE

BASEMENT LEVEL

REVISION

1

DRAWING

A105

ZARQ.™

185 YORK STREET,
SUBIACO
6008, WA AUSTRALIA
+61 0400 829 659
zarq.com.au

STAGE
DEVELOPMENT
APPLICATION

NOTE

1. CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANT DOCUMENTS AND SPECIFICATIONS.
3. SEEK CLARIFICATION OF INCONSISTENCIES/ CONFLICTS FROM THE ARCHITECT.
4. FIGURED DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

REV COMMENTS

I DEVELOPMENT APPLICATION - CITY OF MELVILLE
H CONCEPT DESIGN

DATE

SEPT 2026
AUG 2026

PROJECT

#LOT 13, 14, 15 & 5 (410) CANNING
HIGHWAY, ATTADALE, WESTERN
AUSTRALIA 6156



JOB NO. ARCHITECT SCALE

2050 ZE 1:400 @A3
CLIENT
WESTERN CORPORATE

DRAWING TITLE

GROUND PLAN

REVISION
1

DRAWING

A106



LEGEND

- FP FIREPLACE
- FFL FINISHED FLOOR LEVEL
- FCL FINISHED CEILING LEVEL
- PDR POWDER ROOM
- P PANTRY
- L LINEN
- L'DRY LAUNDRY
- RL RELATIVE LEVEL
- TOW TOP OF WALL
- GMB GAS METER BOX
- MB METER BOX
- (Oc) BRICK COURSING HEIGHT
- EX. EXISTING
- ST STORE ROOM
- WH WATER HOSE
- FW FLOOR WASTE

ZONING: R-AC0

PRECINCT: CITY OF MELVILLE

BLOCK SIZE: 4309m²

PROPOSED BUILDING AREA:

BASEMENT: 3485m²
GROUND FLOOR: 1593m²
1 FLOOR: 1420m²
2 FLOOR: 747m²
3 FLOOR: 747m²
4 FLOOR: 747m²
5 FLOOR: 736m²
6 FLOOR: 560m²

ZARQ.™

185 YORK STREET,
SUBIACO
6008, WA AUSTRALIA
+61 0400 829 659
zarq.com.au

STAGE
DEVELOPMENT
APPLICATION

NOTE

1. CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANT DOCUMENTS AND SPECIFICATIONS.
3. SEEK CLARIFICATION OF INCONSISTENCIES/ CONFLICTS FROM THE ARCHITECT.
4. FIGURED DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

REV COMMENTS

I DEVELOPMENT APPLICATION - CITY OF MELVILLE
H CONCEPT DESIGN

DATE

SEPT 2026
AUG 2026

PROJECT

#LOT 13, 14, 15 & 5 (410) CANNING
HIGHWAY, ATTADALE, WESTERN
AUSTRALIA 6156



JOB NO. ARCHITECT SCALE

2050 ZE 1:400 @A3

CLIENT

WESTERN CORPORATE

DRAWING TITLE

1ST FLOOR PLAN

REVISION

I

DRAWING

A107



LEGEND

- FP FIREPLACE
- FFL FINISHED FLOOR LEVEL
- FCL FINISHED CEILING LEVEL
- PDR POWDER ROOM
- P PANTRY
- L LINEN
- L'DRY LAUNDRY
- RL RELATIVE LEVEL
- TOW TOP OF WALL
- GMB GAS METER BOX
- MB METER BOX
- (0c) BRICK COURSING HEIGHT
- EX. EXISTING
- ST STORE ROOM

ZONING: R-AC0
PRECINCT: CITY OF MELVILLE
BLOCK SIZE: 4309m²

PROPOSED BUILDING AREA:
BASEMENT: 3485m²
GROUND FLOOR: 1593m²
1 FLOOR: 1420m²
2 FLOOR: 747m²
3 FLOOR: 747m²
4 FLOOR: 747m²
5 FLOOR: 736m²
6 FLOOR: 560m²

ZARQ.TM

185 YORK STREET,
SUBIACO
6008, WA AUSTRALIA
+61 0400 829 659
zarq.com.au

**STAGE
DEVELOPMENT
APPLICATION**

NOTE

1. CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANT DOCUMENTS AND SPECIFICATIONS.
3. SEEK CLARIFICATION OF INCONSISTENCIES/ CONFLICTS FROM THE ARCHITECT.
4. FIGURED DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

REV COMMENTS

I DEVELOPMENT APPLICATION - CITY OF MELVILLE
H CONCEPT DESIGN

DATE

SEPT 2026
AUG 2026

PROJECT

#LOT 13, 14, 15 & 5 (410) CANNING
HIGHWAY, ATTADALE, WESTERN
AUSTRALIA 6156



JOB NO. ARCHITECT SCALE

2050 ZE 1:250 @A3

CLIENT
WESTERN CORPORATE

DRAWING TITLE
2ND FLOOR PLAN

REVISION
1

DRAWING

A108



LEGEND

- FP FIREPLACE
- FFL FINISHED FLOOR LEVEL
- FCL FINISHED CEILING LEVEL
- PDR POWDER ROOM
- P PANTRY
- L LINEN
- L'DRY LAUNDRY
- RL RELATIVE LEVEL
- TOW TOP OF WALL
- GMB GAS METER BOX
- MB METER BOX
- (0c) BRICK COURSE HEIGHT
- EX. EXISTING
- ST STORE ROOM

ZONING: R-AC0

PRECINCT: CITY OF MELVILLE

BLOCK SIZE: 4309m²

PROPOSED BUILDING AREA:

BASEMENT: 3485m²
GROUND FLOOR: 1593m²
1 FLOOR: 1420m²
2 FLOOR: 747m²
3 FLOOR: 747m²
4 FLOOR: 747m²
5 FLOOR: 736m²
6 FLOOR: 560m²



LEGEND

- FP FIREPLACE
- FFL FINISHED FLOOR LEVEL
- FCL FINISHED CEILING LEVEL
- PDR POWDER ROOM
- P PANTRY
- L LINEN
- L'DRY LAUNDRY
- RL RELATIVE LEVEL
- TOW TOP OF WALL
- GMB GAS METER BOX
- MB METER BOX
- (0c) BRICK COURSING HEIGHT
- EX. EXISTING
- ST STORE ROOM

ZONING: R-AC0
PRECINCT: CITY OF MELVILLE
BLOCK SIZE: 4309m²

PROPOSED BUILDING AREA:
BASEMENT: 3485m²
GROUND FLOOR: 1593m²
1 FLOOR: 1420m²
2 FLOOR: 747m²
3 FLOOR: 747m²
4 FLOOR: 747m²
5 FLOOR: 736m²
6 FLOOR: 560m²

ZARQ.TM

185 YORK STREET,
SUBIACO
6008, WA AUSTRALIA
+61 0400 829 659
zarq.com.au

**STAGE
DEVELOPMENT
APPLICATION**

NOTE
1. CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANT DOCUMENTS AND SPECIFICATIONS.
3. SEEK CLARIFICATION OF INCONSISTENCIES/ CONFLICTS FROM THE ARCHITECT.
4. FIGURED DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

REV	COMMENTS	DATE
I	DEVELOPMENT APPLICATION - CITY OF MELVILLE	SEPT 2026
H	CONCEPT DESIGN	AUG 2026

PROJECT
#LOT 13, 14, 15 & 5 (410) CANNING
HIGHWAY, ATTADALE, WESTERN
AUSTRALIA 6156



JOB NO. ARCHITECT SCALE
2050 ZE 1:250 @A3
CLIENT
WESTERN CORPORATE

DRAWING TITLE
3RD FLOOR PLAN
REVISION
1

DRAWING
A109

NOTE

1. CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANT DOCUMENTS AND SPECIFICATIONS.
3. SEEK CLARIFICATION OF INCONSISTENCIES/ CONFLICTS FROM THE ARCHITECT.
4. FIGURED DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

REV COMMENTS

I	DEVELOPMENT APPLICATION - CITY OF MELVILLE
H	CONCEPT DESIGN

DATE

SEPT 2026
AUG 2026

PROJECT

#LOT 13, 14, 15 & 5 (410) CANNING
HIGHWAY, ATTADALE, WESTERN
AUSTRALIA 6156



JOB NO. ARCHITECT SCALE

2050 ZE 1:250 @A3

CLIENT
WESTERN CORPORATE

DRAWING TITLE

4TH FLOOR PLAN

REVISION
1

DRAWING

A110



LEGEND

- FP FIREPLACE
- FFL FINISHED FLOOR LEVEL
- FCL FINISHED CEILING LEVEL
- PDR POWDER ROOM
- P PANTRY
- L LINEN
- L'DRY LAUNDRY
- RL RELATIVE LEVEL
- TOW TOP OF WALL
- GMB GAS METER BOX
- MB METER BOX
- (0c) BRICK COURSE HEIGHT
- EX. EXISTING
- ST STORE ROOM

ZONING: R-AC0

PRECINCT: CITY OF MELVILLE

BLOCK SIZE: 4309m²

PROPOSED BUILDING AREA:

BASEMENT: 3485m²
GROUND FLOOR: 1593m²
1 FLOOR: 1420m²
2 FLOOR: 747m²
3 FLOOR: 747m²
4 FLOOR: 747m²
5 FLOOR: 736m²
6 FLOOR: 560m²



- LEGEND**
- FP FIREPLACE
 - FFL FINISHED FLOOR LEVEL
 - FCL FINISHED CEILING LEVEL
 - PDR POWDER ROOM
 - P PANTRY
 - L LINEN
 - L'DRY LAUNDRY
 - RL RELATIVE LEVEL
 - TOW TOP OF WALL
 - GMB GAS METER BOX
 - MB METER BOX
 - (0c) BRICK COURSING HEIGHT
 - EX. EXISTING
 - ST STORE ROOM
- ZONING:** R-AC0
PRECINCT: CITY OF MELVILLE
BLOCK SIZE: 4309m²
- PROPOSED BUILDING AREA:**
BASEMENT: 3485m²
GROUND FLOOR: 1593m²
1 FLOOR: 1420m²
2 FLOOR: 747m²
3 FLOOR: 747m²
4 FLOOR: 747m²
5 FLOOR: 736m²
6 FLOOR: 560m²

ZARQ.TM

185 YORK STREET,
SUBIACO
6008, WA AUSTRALIA
+61 0400 829 659
zarq.com.au

**STAGE
DEVELOPMENT
APPLICATION**

NOTE

1. CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, CONSULTANT DOCUMENTS AND SPECIFICATIONS.
3. SEEK CLARIFICATION OF INCONSISTENCIES/ CONFLICTS FROM THE ARCHITECT.
4. FIGURED DIMENSIONS TAKE PRECEDENCE. DO NOT SCALE DRAWINGS.

REV COMMENTS

I DEVELOPMENT APPLICATION - CITY OF MELVILLE
H CONCEPT DESIGN

DATE

SEPT 2026
AUG 2026

PROJECT

#LOT 13, 14, 15 & 5 (410) CANNING
HIGHWAY, ATTADALE, WESTERN
AUSTRALIA 6156



JOB NO. ARCHITECT SCALE

2050 ZE 1:250 @A3

CLIENT
WESTERN CORPORATE

DRAWING TITLE

6TH FLOOR PLAN - PENTHOUSE

REVISION
1

DRAWING

A112



LEGEND

- FP FIREPLACE
- FFL FINISHED FLOOR LEVEL
- FCL FINISHED CEILING LEVEL
- PDR POWDER ROOM
- P PANTRY
- L LINEN
- L'DRY LAUNDRY
- RL RELATIVE LEVEL
- TOW TOP OF WALL
- GMB GAS METER BOX
- MB METER BOX
- (0c) BRICK COURSING HEIGHT
- EX. EXISTING
- ST STORE ROOM

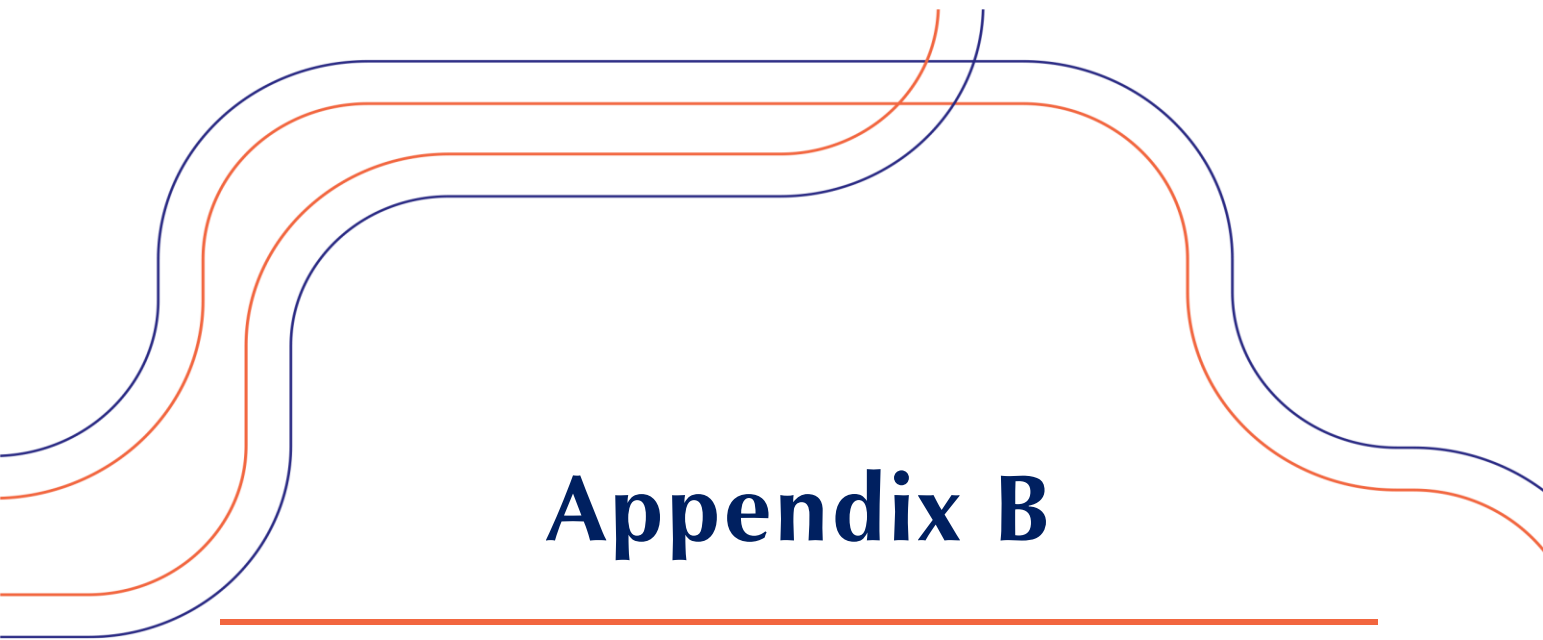
ZONING: R-AC0

PRECINCT: CITY OF MELVILLE

BLOCK SIZE: 4309m²

PROPOSED BUILDING AREA:

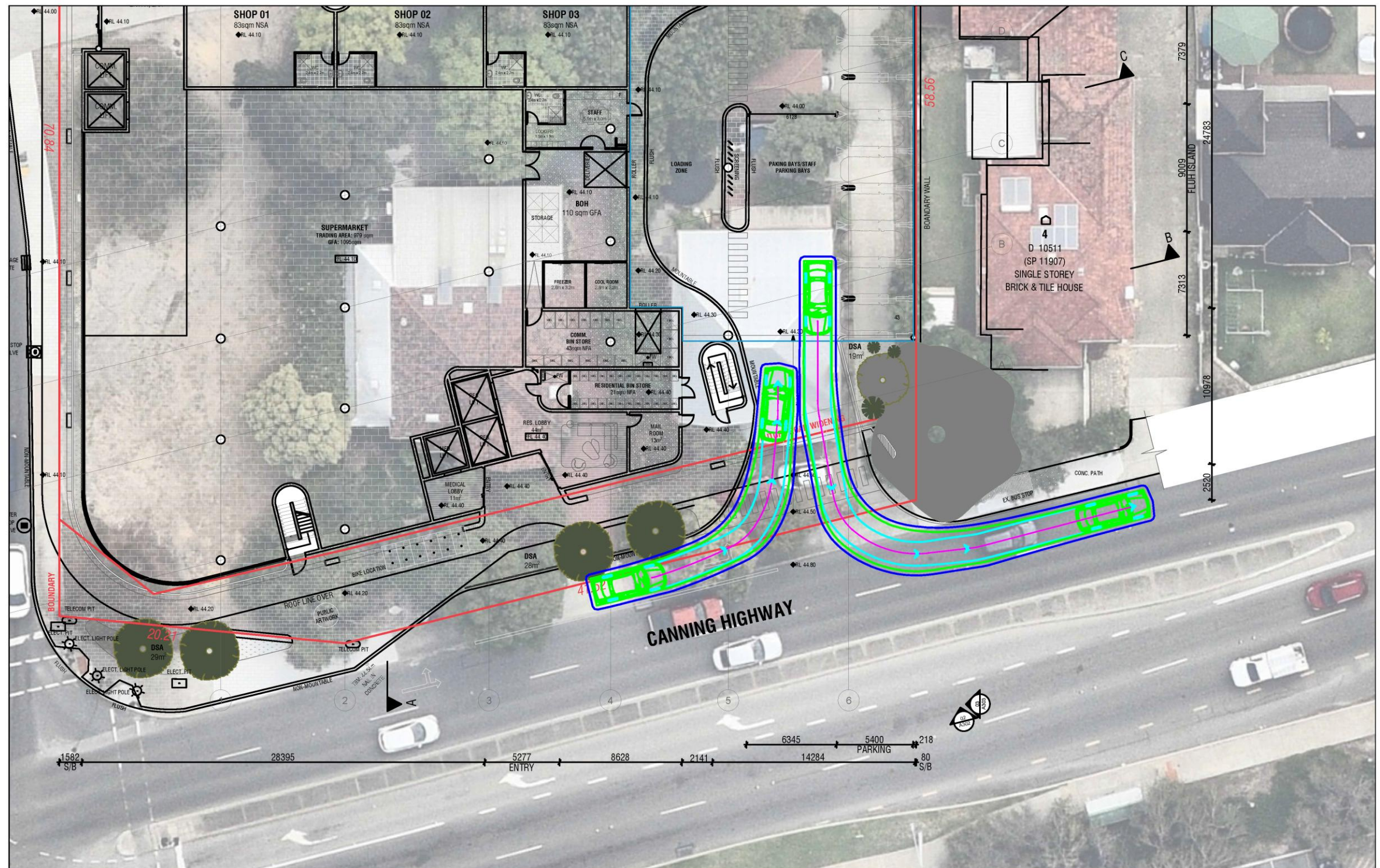
BASEMENT: 3485m²
GROUND FLOOR: 1593m²
1 FLOOR: 1420m²
2 FLOOR: 747m²
3 FLOOR: 747m²
4 FLOOR: 747m²
5 FLOOR: 736m²
6 FLOOR: 560m²



Appendix B

SWEPT PATH ANALYSIS





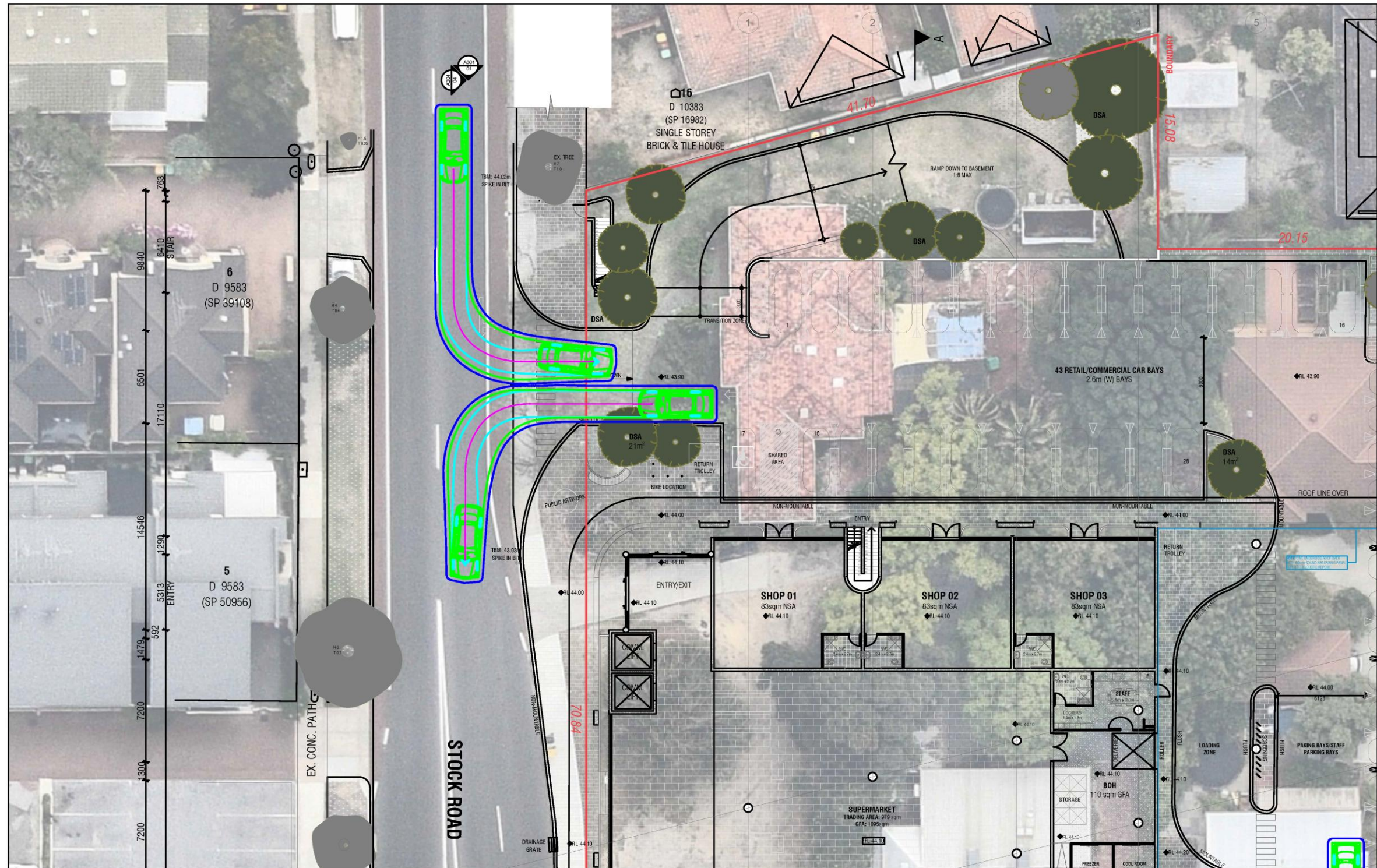
Canning Highway Development
 Austroads 2023: B99 Passenger Vehicle
 2 Passenger vehicles' simultaneous movements at Canning Hwy crossover

LEGEND
 Vehicle Body
 Wheel Path
 300mm Clearance



t26.044.sk03a
 22/09/2026
 Scale: 1:250 @ A3



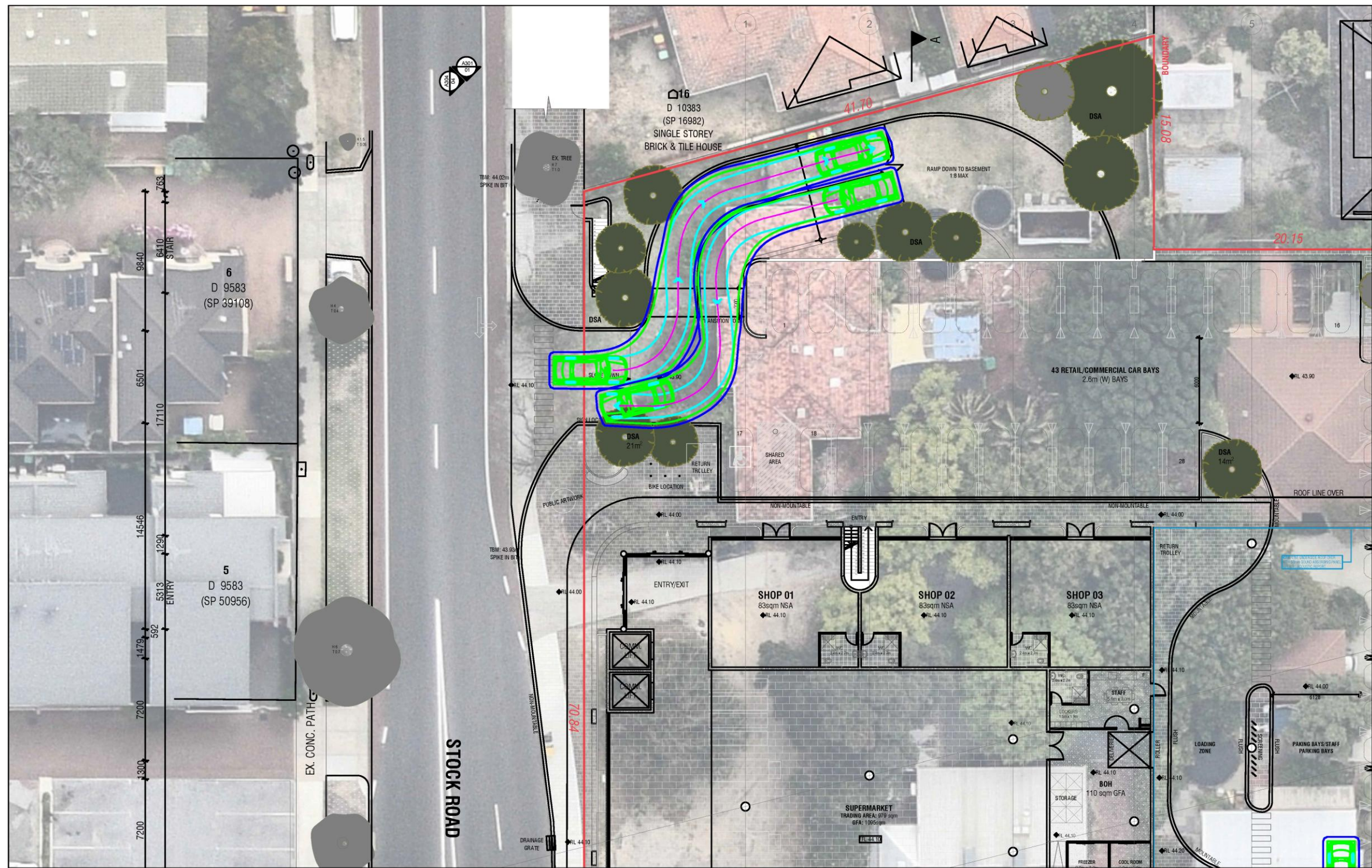


Canning Highway Development
 Austroads 2023: B99 Passenger Vehicle
 2 Passenger vehicles' simultaneous movements at Stock Rd crossover

LEGEND
 Vehicle Body
 Wheel Path
 300mm Clearance

t26.044.sk04a
 22/09/2026
 Scale: 1:250 @ A3





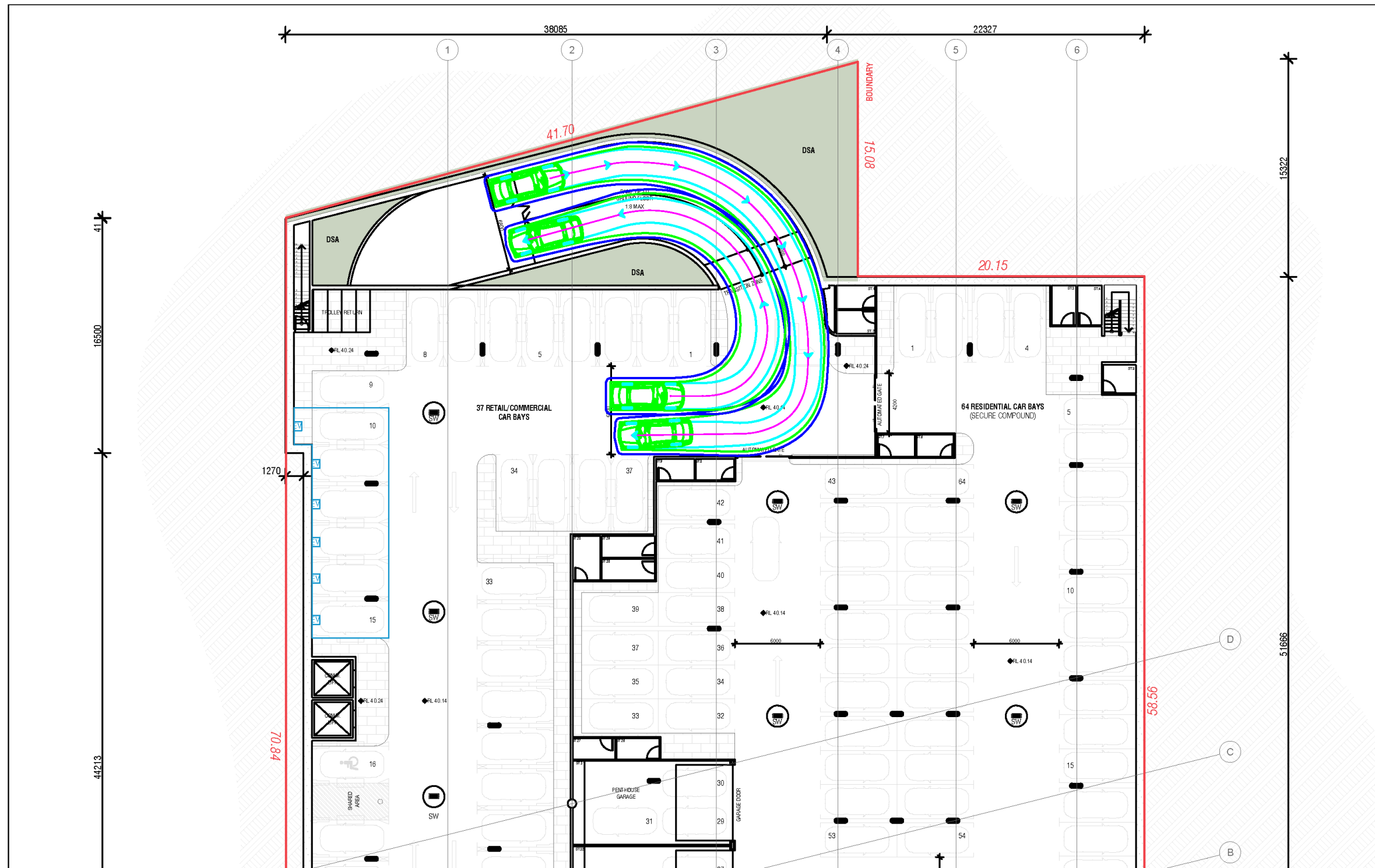
Canning Highway Development
 Austroads 2023: B99 Passenger Vehicle
 2 Passenger vehicles' simultaneous movements at ground floor ramp

LEGEND
 Vehicle Body
 Wheel Path
 300mm Clearance



t26.044.sk05a
 22/09/2026
 Scale: 1:250 @ A3





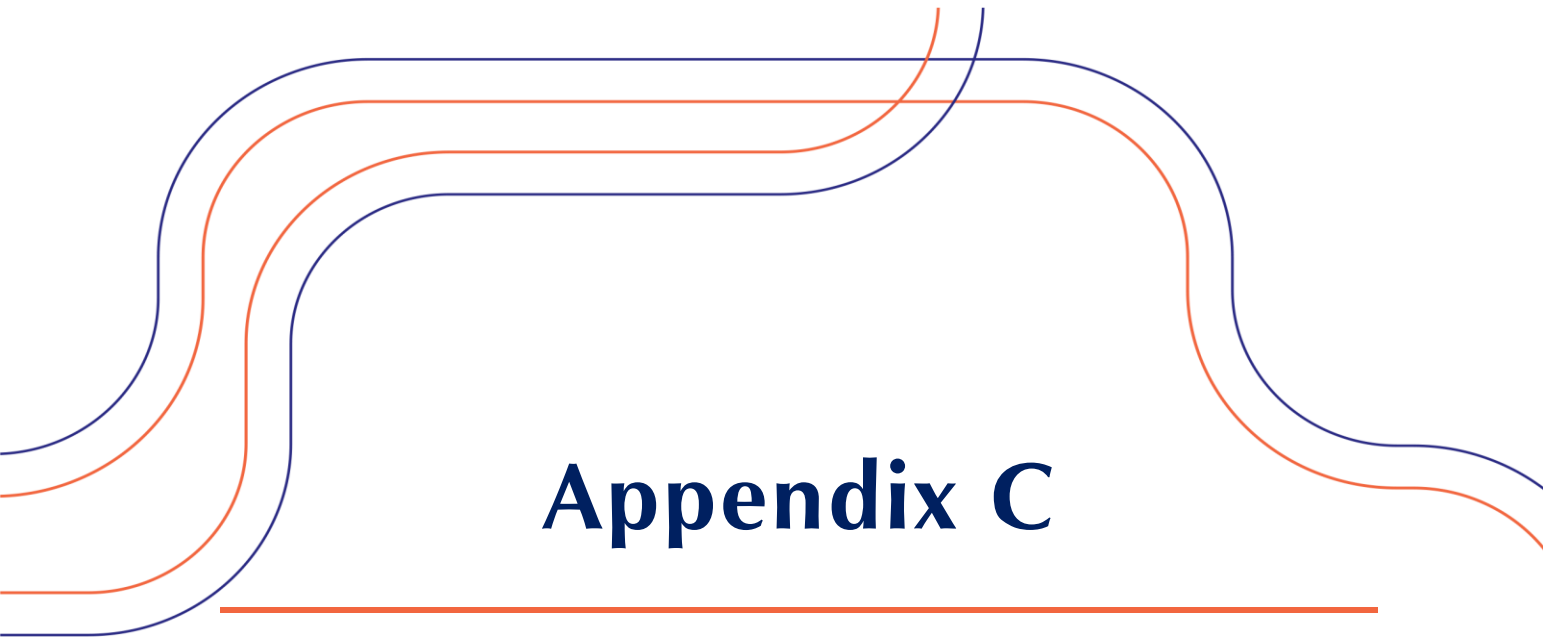
Canning Highway Development
 Austroads 2023: B99 Passenger Vehicle
 2 Passenger vehicles' simultaneous movements at basement level

LEGEND
 Vehicle Body
 Wheel Path
 300mm Clearance



t26.044.sk06a
 22/09/2026
 Scale: 1:250 @ A3

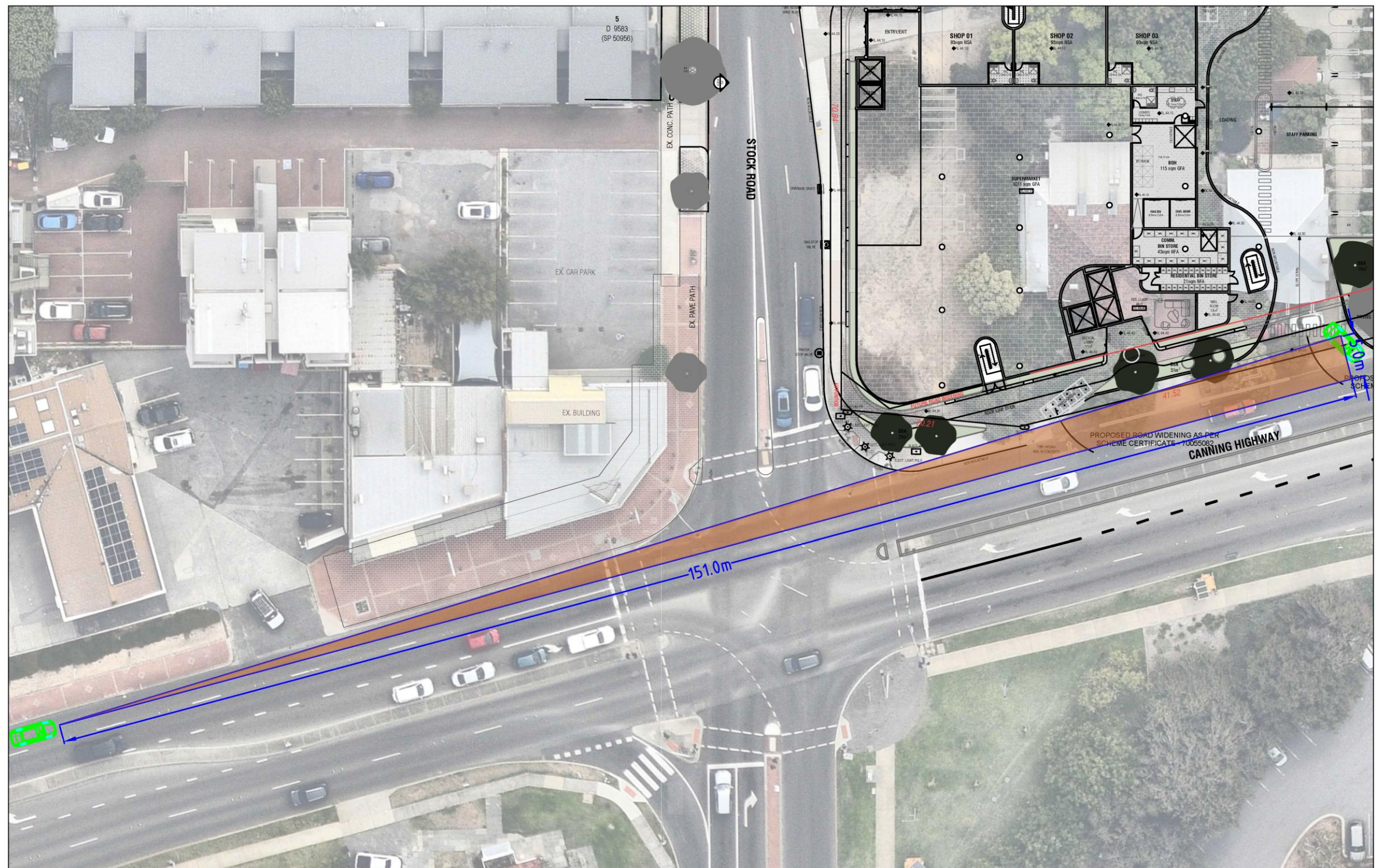




Appendix C

SIGHT LINE ASSESSMENTS





Canning Highway Development

Austrroads Part 4A: Safe Intersection Sight Distance (SISD) = 151m for Design Speed of 70km/h
SISD assessment at the left in/ left out crossover on Canning Highway

t26.044.sk07

25/08/2026

Scale: 1:400 @ A3





Appendix D

SIDRA RESULTS – EXISTING SCENARIO



MOVEMENT SUMMARY

 Site: [1 (15)] Existing - Canning Hwy/Stock Rd - AM (Existing)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 107.0 seconds (Site User-Given Phase Times)

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

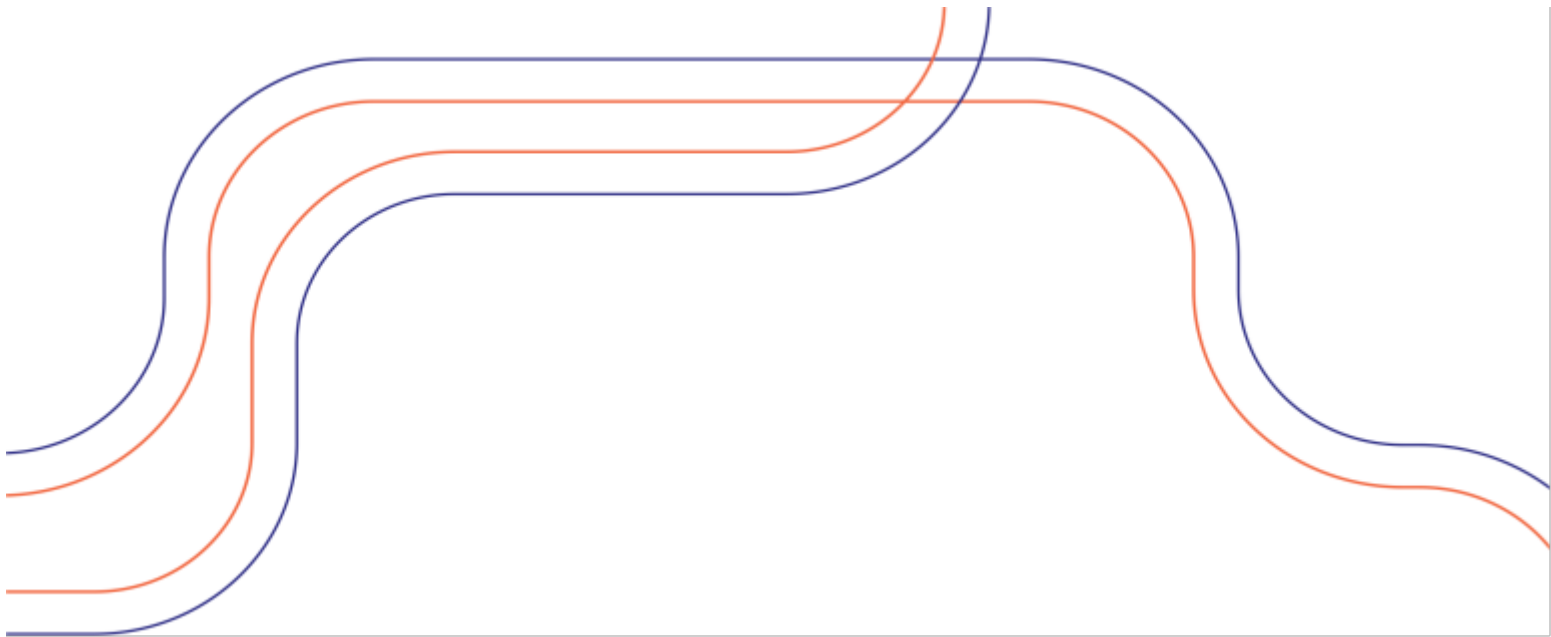
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			veh/h	%	veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Stock Rd															
4	L2	All MCs	181	6.9	181	6.9	0.203	11.7	LOS B	3.8	29.7	0.50	0.70	0.50	47.4
2	T1	All MCs	211	6.9	211	6.9	0.749	51.3	LOS D	11.2	88.7	1.00	0.89	1.11	31.0
6	R2	All MCs	234	6.9	234	6.9	* 0.878	64.4	LOS E	13.9	109.8	1.00	0.97	1.31	28.1
Approach			625	6.9	625	6.9	0.878	44.7	LOS D	13.9	109.8	0.86	0.87	1.01	33.0
East: Canning Hwy															
7	L2	All MCs	119	8.0	119	8.0	0.754	40.4	LOS D	21.7	172.8	0.95	0.86	0.98	35.6
8	T1	All MCs	793	8.0	793	8.0	* 0.754	40.7	LOS D	21.7	172.9	0.95	0.86	0.98	38.0
6	R2	All MCs	18	8.0	18	8.0	0.094	63.4	LOS E	0.9	6.9	0.93	0.70	0.93	30.0
Approach			929	8.0	929	8.0	0.754	41.1	LOS D	21.7	172.9	0.95	0.86	0.98	35.6
North: Stock Rd															
7	L2	All MCs	7	6.7	7	6.7	* 0.944	55.1	LOS E	14.8	116.7	1.00	1.29	1.52	25.4
8	T1	All MCs	352	6.7	352	6.7	* 0.944	80.8	LOS F	14.8	116.7	1.00	1.24	1.52	26.1
9	R2	All MCs	80	6.7	80	6.7	0.944	85.1	LOS F	14.6	114.8	1.00	1.16	1.52	25.1
Approach			439	6.7	439	6.7	0.944	81.1	LOS F	14.8	116.7	1.00	1.23	1.52	24.5
West: Canning Hwy															
10	L2	All MCs	93	7.6	93	7.6	0.718	38.7	LOS D	20.0	159.2	0.93	0.83	0.94	35.3
2	T1	All MCs	734	7.6	734	7.6	0.718	39.5	LOS D	20.0	159.2	0.93	0.83	0.94	38.6
3	R2	All MCs	133	7.6	133	7.6	0.702	70.3	LOS E	7.2	57.0	1.00	0.85	1.11	29.3
Approach			959	7.6	959	7.6	0.718	43.7	LOS D	20.0	159.2	0.94	0.83	0.96	34.5
All Vehicles			2953	7.4	2953	7.4	0.944	48.7	LOS D	21.7	172.9	0.93	0.90	1.06	32.5

MOVEMENT SUMMARY

 **Site: [1 (16)] Existing - Canning Hwy/Stock Rd - PM (Existing)**
Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 113.0 seconds (Site User-Given Phase Times)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh.]	Dist]				
			veh/h		veh/h		v/c	sec		veh	m				km/h
South: Stock Rd															
4	L2	All MCs	291	6.9	291	6.9	0.318	26.2	LOS C	6.6	52.1	0.57	0.84	0.57	44.2
2	T1	All MCs	209	6.9	209	6.9	* 0.823	67.7	LOS E	12.4	98.0	1.00	0.94	1.20	29.2
6	R2	All MCs	187	6.9	187	6.9	0.777	61.0	LOS E	10.8	85.4	1.00	0.89	1.15	28.8
Approach			687	6.9	687	6.9	0.823	48.4	LOS D	12.4	98.0	0.82	0.89	0.92	32.0
East: Canning Hwy															
7	L2	All MCs	182	8.0	182	8.0	0.821	45.2	LOS D	27.8	221.9	0.97	0.92	1.05	33.8
8	T1	All MCs	849	8.0	849	8.0	* 0.821	48.5	LOS D	27.8	221.9	0.97	0.93	1.05	36.2
6	R2	All MCs	31	8.0	31	8.0	0.113	64.9	LOS E	1.5	11.7	0.89	0.72	0.89	30.7
Approach			1062	8.0	1062	8.0	0.821	48.4	LOS D	27.8	221.9	0.97	0.92	1.05	33.1
North: Stock Rd															
7	L2	All MCs	5	6.7	5	6.7	0.671	24.8	LOS C	8.7	68.5	1.00	1.04	1.05	29.3
8	T1	All MCs	249	6.7	249	6.7	* 0.671	53.5	LOS D	8.7	68.5	1.00	0.96	1.05	30.3
9	R2	All MCs	57	6.7	57	6.7	0.671	57.8	LOS E	8.4	66.6	1.00	0.84	1.06	28.9
Approach			312	6.7	312	6.7	0.671	53.8	LOS D	8.7	68.5	1.00	0.94	1.05	30.0
West: Canning Hwy															
10	L2	All MCs	69	7.6	69	7.6	0.821	45.0	LOS D	28.2	224.3	0.97	0.93	1.05	33.5
2	T1	All MCs	874	7.6	874	7.6	0.821	47.3	LOS D	28.2	224.3	0.97	0.93	1.07	36.0
3	R2	All MCs	229	7.6	229	7.6	* 1.042	141.9	LOS F	20.1	160.1	1.00	1.27	1.87	18.9
Approach			1173	7.6	1173	7.6	1.042	65.7	LOS E	28.2	224.3	0.98	1.00	1.22	28.6
All Vehicles			3234	7.5	3234	7.5	1.042	55.2	LOS E	28.2	224.3	0.95	0.94	1.09	30.8



Appendix E

**SIDRA RESULTS – POST DEVELOPMENT SCENARIO (YEAR
2027)**



MOVEMENT SUMMARY

 Site: [1 (17)] Post Dev - Canning Hwy/Stock Rd - AM (Post Dev)

Network: [1] Post Dev AM (2027)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 107.0 seconds (Site User-Given Phase Times)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance														
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue	Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%	v/c	sec		[Veh.] veh	[Dist] m			km/h
South: Stock Rd														
4	L2	All MCs	181	6.9	181	6.9	0.204	11.5	LOS B	3.8	29.7	0.50	0.70	47.5
2	T1	All MCs	211	6.9	211	6.9	0.749	51.3	LOS D	11.2	88.7	1.00	0.89	22.7
6	R2	All MCs	241	6.9	241	6.9	*0.905	68.2	LOS E	14.9	117.6	1.00	1.00	18.8
Approach			633	6.9	633	6.9	0.905	46.4	LOS D	14.9	117.6	0.86	0.88	27.3
East: Canning Hwy														
7	L2	All MCs	119	8.0	119	8.0	0.748	38.4	LOS D	21.4 ^{NB}	170.6 ^{NB}	0.95	0.86	27.1
8	T1	All MCs	793	8.0	793	8.0	*0.748	34.4	LOS C	21.7 ^{NB}	172.8 ^{NB}	0.95	0.85	29.7
6	R2	All MCs	33	8.0	33	8.0	0.172	51.9	LOS D	1.6	12.7	0.94	0.72	4.5
Approach			944	8.0	944	8.0	0.748	35.5	LOS D	21.7 ^{NB}	172.8 ^{NB}	0.95	0.85	28.7
North: Stock Rd														
7	L2	All MCs	5	6.7	5	6.7	*0.962	60.4	LOS E	15.6 ^{NB}	122.8 ^{NB}	1.00	1.32	3.3
8	T1	All MCs	356	6.7	356	6.7	*0.962	86.8	LOS F	15.6 ^{NB}	122.8 ^{NB}	1.00	1.28	18.2
9	R2	All MCs	82	6.7	82	6.7	0.962	90.6	LOS F	15.3 ^{NB}	120.8 ^{NB}	1.00	1.20	17.3
Approach			443	6.7	443	6.7	0.962	87.2	LOS F	15.6 ^{NB}	122.8 ^{NB}	1.00	1.26	16.6
West: Canning Hwy														
10	L2	All MCs	99	7.6	99	7.6	0.723	38.9	LOS D	20.2	160.7	0.93	0.83	28.5
2	T1	All MCs	732	7.6	732	7.6	0.723	39.8	LOS D	20.2	160.7	0.93	0.83	28.6
3	R2	All MCs	133	7.6	133	7.6	0.702	70.4	LOS E	7.2	57.0	1.00	0.85	29.3
Approach			963	7.6	963	7.6	0.723	43.9	LOS D	20.2	160.7	0.94	0.83	26.5
All Vehicles			2983	7.4	2983	7.4	0.962	48.2	LOS D	21.7 ^{NB}	172.8 ^{NB}	0.93	0.91	25.1

MOVEMENT SUMMARY

Site: [1 (18)] Post Dev - Stock Rd/Crossover 1 - AM (Post Dev)

Network: [1] Post Dev AM (2027)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist] m				km/h
			veh/h	%	veh/h	%	v/c	sec							
South: Stock Rd															
2	T1	All MCs	319	6.9	319	6.9	0.197	0.2	LOS A	0.2	1.6	0.07	0.10	0.07	49.2
6	R2	All MCs	23	2.0	23	2.0	0.197	6.2	LOS A	0.2	1.6	0.07	0.10	0.07	29.0
Approach			342	6.6	342	6.6	0.197	0.6	NA	0.2	1.6	0.07	0.10	0.07	48.7
East: Crossover 1															
7	L2	All MCs	7	2.0	7	2.0	0.027	1.7	LOS A	_N7	_N7	0.50	0.39	0.50	15.7
6	R2	All MCs	8	2.0	8	2.0	0.027	4.5	LOS A	_N7	_N7	0.50	0.39	0.50	38.4
Approach			16	2.0	16	2.0	0.027	3.2	LOS A	_N7	_N7	0.50	0.39	0.50	34.0
North: Stock Rd															
7	L2	All MCs	14	2.0	14	2.0	0.247	4.7	LOS A	_N7	_N7	0.00	0.02	0.00	43.5
8	T1	All MCs	437	6.7	437	6.7	0.247	0.1	LOS A	_N7	_N7	0.00	0.02	0.00	49.7
Approach			451	6.6	451	6.6	0.247	0.2	NA	_N7	_N7	0.00	0.02	0.00	49.5
All Vehicles			808	6.5	808	6.5	0.247	0.5	NA	_N7	_N7	0.04	0.06	0.04	48.8

MOVEMENT SUMMARY

Site: [1 (19)] Post Dev - Canning Hwy/Crossover 2 - AM (Post Dev)

Network: [1] Post Dev AM (2027)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				km/h
East: Canning Hwy															
8	T1	All MCs	944	8.0	944	8.0	0.177	0.0	LOS A	_N7	_N7	0.00	0.00	0.00	59.9
Approach			944	8.0	944	8.0	0.177	0.0	NA	_N7	_N7	0.00	0.00	0.00	59.9
North: Crossover 2															
7	L2	All MCs	13	2.0	13	2.0	0.015	2.4	LOS A	0.1	0.5	0.47	0.29	0.47	42.7
Approach			13	2.0	13	2.0	0.015	2.4	LOS A	0.1	0.5	0.47	0.29	0.47	42.7
West: Canning Hwy															
10	L2	All MCs	7	2.0	7	2.0	0.004	3.9	LOS A	0.0	0.0	0.00	0.55	0.00	31.3
2	T1	All MCs	969	7.6	969	7.6	0.272	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			977	7.6	977	7.6	0.272	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.7
All Vehicles			1934	7.7	1934	7.7	0.272	0.1	NA	_N7	_N7	0.00	0.00	0.00	59.7

MOVEMENT SUMMARY

 Site: [1 (20)] Post Dev - Canning Hwy/Stock Rd - PM (Post Dev)

Network: [2] Post Dev PM (2027)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 113.0 seconds (Site User-Given Phase Times)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number Rate to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh]	[Dist] m				km/h
South: Stock Rd															
4	L2	All MCs	291	6.9	291	6.9	0.320	24.9	LOS C	6.6	52.1	0.58	0.84	0.58	44.2
2	T1	All MCs	209	6.9	209	6.9	*0.823	66.5	LOS E	12.4	98.0	1.00	0.94	1.20	20.8
6	R2	All MCs	197	6.9	197	6.9	0.816	63.1	LOS E	11.6	92.0	1.00	0.91	1.20	19.9
Approach			697	6.9	697	6.9	0.823	48.2	LOS D	12.4	98.0	0.82	0.89	0.94	28.0
East: Canning Hwy															
7	L2	All MCs	182	8.0	182	8.0	0.809	42.5	LOS D	27.0 ^{NB}	215.2 ^{NB}	0.97	0.91	1.04	25.6
8	T1	All MCs	849	8.0	849	8.0	0.809	38.4	LOS D	27.4 ^{NB}	218.9 ^{NB}	0.97	0.91	1.03	28.0
6	R2	All MCs	49	8.0	49	8.0	0.184	49.1	LOS D	2.4	19.2	0.90	0.74	0.90	4.7
Approach			1081	8.0	1081	8.0	0.809	39.6	LOS D	27.4 ^{NB}	218.9 ^{NB}	0.97	0.90	1.03	26.8
North: Stock Rd															
7	L2	All MCs	1	6.7	1	6.7	0.702	24.6	LOS C	9.2	72.7	1.00	1.05	1.08	4.6
8	T1	All MCs	261	6.7	261	6.7	*0.702	53.9	LOS D	9.2	72.7	1.00	0.98	1.08	23.0
9	R2	All MCs	63	6.7	63	6.7	0.702	57.9	LOS E	8.9	70.4	1.00	0.86	1.08	21.6
Approach			325	6.7	325	6.7	0.702	54.6	LOS D	9.2	72.7	1.00	0.96	1.08	22.7
West: Canning Hwy															
10	L2	All MCs	81	7.6	81	7.6	0.826	45.5	LOS D	28.6	227.4	0.98	0.93	1.06	26.0
2	T1	All MCs	867	7.6	867	7.6	*0.826	48.0	LOS D	28.6	227.4	0.98	0.94	1.08	25.8
3	R2	All MCs	229	7.6	229	7.6	*1.042	142.4	LOS F	20.2	160.3	1.00	1.27	1.87	18.9
Approach			1178	7.6	1178	7.6	1.042	66.2	LOS E	28.6	227.4	0.98	1.00	1.23	21.3
All Vehicles			3281	7.5	3281	7.5	1.042	52.5	LOS D	28.6 ^{NB}	227.4 ^{NB}	0.94	0.94	1.09	24.4

MOVEMENT SUMMARY

Site: [1 (21)] Post Dev - Stock Rd/Crossover 1 - PM (Post Dev)

Network: [2] Post Dev PM (2027)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist] m				
			veh/h	%	veh/h	%									
South: Stock Rd															
2	T1	All MCs	303	6.9	303	6.9	0.196	0.2	LOS A	0.3	2.2	0.08	0.12	0.08	49.0
6	R2	All MCs	37	2.0	37	2.0	0.196	5.5	LOS A	0.3	2.2	0.08	0.12	0.08	28.6
Approach			340	6.4	340	6.4	0.196	0.8	NA	0.3	2.2	0.08	0.12	0.08	48.2
East: Crossover 1															
7	L2	All MCs	18	2.0	18	2.0	0.055	1.1	LOS A	0.2	1.3	0.45	0.35	0.45	16.5
6	R2	All MCs	24	2.0	24	2.0	0.055	3.5	LOS A	0.2	1.3	0.45	0.35	0.45	38.9
Approach			42	2.0	42	2.0	0.055	2.5	LOS A	0.2	1.3	0.45	0.35	0.45	35.2
North: Stock Rd															
7	L2	All MCs	20	2.0	20	2.0	0.221	4.7	LOS A	0.0	0.0	0.00	0.03	0.00	43.3
8	T1	All MCs	306	6.7	306	6.7	0.221	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	49.5
Approach			326	6.4	326	6.4	0.221	0.4	NA	0.0	0.0	0.00	0.03	0.00	49.0
All Vehicles			708	6.1	708	6.1	0.221	0.7	NA	0.3	2.2	0.07	0.09	0.07	47.8

MOVEMENT SUMMARY

Site: [1 (22)] Post Dev - Canning Hwy/Crossover 2 - PM (Post Dev)

Network: [2] Post Dev PM (2027)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

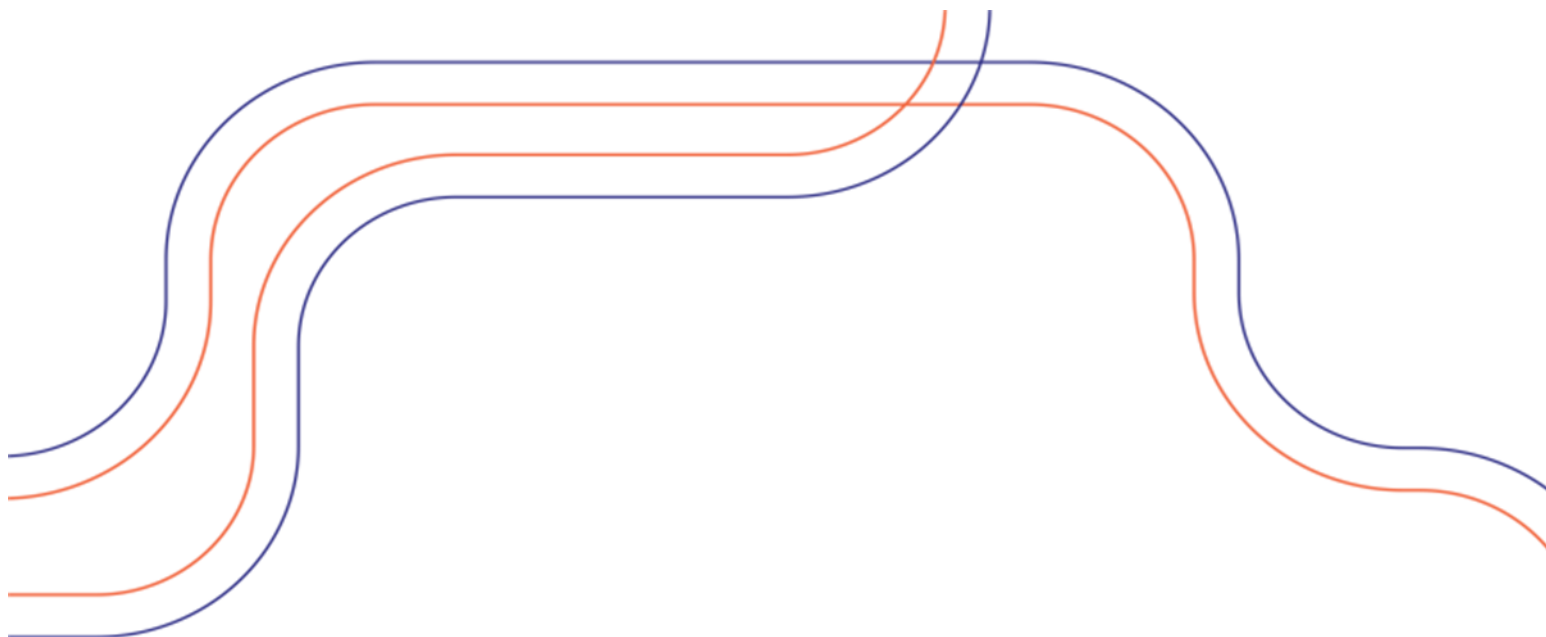
Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	[Total HV]	[Veh.	Dist]									
			veh/h	%	veh/h	%				veh	m				
East: Canning Hwy															
8	T1	All MCs	1081	8.0	1081	8.0	0.203	0.1	LOS A	-N7	-N7	0.00	0.00	0.00	59.9
Approach			1081	8.0	1081	8.0	0.203	0.1	NA	-N7	-N7	0.00	0.00	0.00	59.9
North: Crossover 2															
7	L2	All MCs	36	2.0	36	2.0	0.045	2.8	LOS A	0.2	1.5	0.50	0.35	0.50	42.3
Approach			36	2.0	36	2.0	0.045	2.8	LOS A	0.2	1.5	0.50	0.35	0.50	42.3
West: Canning Hwy															
10	L2	All MCs	9	2.0	9	2.0	0.005	3.9	LOS A	0.0	0.0	0.00	0.55	0.00	31.3
2	T1	All MCs	1055	7.6	1055	7.6	0.296	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			1064	7.6	1064	7.6	0.296	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.7
All Vehicles			2181	7.7	2181	7.7	0.296	0.1	NA	-N7	-N7	0.01	0.01	0.01	59.4



Appendix F

**SIDRA RESULTS – 10-YEAR POST DEVELOPMENT
SCENARIO (YEAR 2037)**



MOVEMENT SUMMARY

 Site: [1 (9)] 2037 - Canning Hwy/Stock Rd - AM (10-Yrs Post Dev)

Network: [3] 2037 AM (2037)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 107.0 seconds (Site User-Given Phase Times)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number Rate to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Stock Rd															
4	L2	All MCs	181	6.9	181	6.9	0.214	16.8	LOS B	3.8	29.7	0.55	0.82	0.55	44.4
2	T1	All MCs	211	6.9	211	6.9	0.749	51.3	LOS D	11.2	88.7	1.00	0.89	1.11	22.7
6	R2	All MCs	241	6.9	241	6.9	*0.905	68.2	LOS E	14.9	117.6	1.00	1.00	1.38	18.8
Approach			633	6.9	633	6.9	0.905	47.9	LOS D	14.9	117.6	0.87	0.91	1.05	26.9
East: Canning Hwy															
7	L2	All MCs	119	8.0	119	8.0	0.905	54.3	LOS D	33.0 ^{NB}	263.2 ^{NB}	1.00	1.06	1.23	22.5
8	T1	All MCs	985	8.0	985	8.0	*0.905	50.3	LOS D	33.3 ^{NB}	265.9 ^{NB}	1.00	1.06	1.23	24.2
6	R2	All MCs	33	8.0	33	8.0	0.172	51.9	LOS D	1.6	12.7	0.94	0.72	0.94	4.5
Approach			1137	8.0	1137	8.0	0.905	50.8	LOS D	33.3 ^{NB}	265.9 ^{NB}	1.00	1.05	1.22	23.6
North: Stock Rd															
7	L2	All MCs	5	6.7	5	6.7	*0.962	60.4	LOS E	15.6 ^{NB}	122.8 ^{NB}	1.00	1.32	1.58	3.3
8	T1	All MCs	356	6.7	356	6.7	*0.962	86.8	LOS F	15.6 ^{NB}	122.8 ^{NB}	1.00	1.28	1.58	18.2
9	R2	All MCs	82	6.7	82	6.7	0.962	90.6	LOS F	15.3 ^{NB}	120.8 ^{NB}	1.00	1.20	1.58	17.3
Approach			443	6.7	443	6.7	0.962	87.2	LOS F	15.6 ^{NB}	122.8 ^{NB}	1.00	1.26	1.58	16.6
West: Canning Hwy															
10	L2	All MCs	99	7.6	99	7.6	0.883	52.1	LOS D	30.9	245.7	1.00	1.02	1.19	23.8
2	T1	All MCs	909	7.6	909	7.6	0.883	56.0	LOS E	30.9	245.7	1.00	1.03	1.20	23.7
3	R2	All MCs	133	7.6	133	7.6	0.702	75.8	LOS E	7.2	57.0	1.00	0.85	1.11	29.3
Approach			1141	7.6	1141	7.6	0.883	58.0	LOS E	30.9	245.7	1.00	1.01	1.19	22.3
All Vehicles			3354	7.5	3354	7.5	0.962	57.5	LOS E	33.3 ^{NB}	265.9 ^{NB}	0.98	1.04	1.23	22.5

MOVEMENT SUMMARY

Site: [1 (10)] 2037 - Stock Rd/Crossover 1 - AM (10-Yrs Post Dev)

Network: [3] 2037 AM (2037)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: Stock Rd															
2	T1	All MCs	319	6.9	319	6.9	0.197	0.2	LOS A	0.2	1.6	0.07	0.10	0.07	49.2
6	R2	All MCs	23	2.0	23	2.0	0.197	6.2	LOS A	0.2	1.6	0.07	0.10	0.07	29.0
Approach			342	6.6	342	6.6	0.197	0.6	NA	0.2	1.6	0.07	0.10	0.07	48.7
East: Crossover 1															
7	L2	All MCs	7	2.0	7	2.0	0.027	1.7	LOS A	_N7	_N7	0.50	0.39	0.50	15.7
6	R2	All MCs	8	2.0	8	2.0	0.027	4.4	LOS A	_N7	_N7	0.50	0.39	0.50	38.4
Approach			16	2.0	16	2.0	0.027	3.2	LOS A	_N7	_N7	0.50	0.39	0.50	34.0
North: Stock Rd															
7	L2	All MCs	14	2.0	14	2.0	0.247	4.7	LOS A	_N7	_N7	0.00	0.02	0.00	43.5
8	T1	All MCs	437	6.7	437	6.7	0.247	0.1	LOS A	_N7	_N7	0.00	0.02	0.00	49.7
Approach			451	6.6	451	6.6	0.247	0.2	NA	_N7	_N7	0.00	0.02	0.00	49.5
All Vehicles			808	6.5	808	6.5	0.247	0.5	NA	_N7	_N7	0.04	0.06	0.04	48.8

MOVEMENT SUMMARY

Site: [1 (11)] 2037 - Canning Hwy/Crossover 2 - AM (10-Yrs Post Dev)

Network: [3] 2037 AM (2037)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Canning Hwy															
8	T1	All MCs	1137	8.0	1137	8.0	0.214	0.1	LOS A	_N7	_N7	0.00	0.00	0.00	59.9
Approach			1137	8.0	1137	8.0	0.214	0.1	NA	_N7	_N7	0.00	0.00	0.00	59.9
North: Crossover 2															
7	L2	All MCs	13	2.0	13	2.0	0.017	3.1	LOS A	0.1	0.5	0.52	0.33	0.52	42.1
Approach			13	2.0	13	2.0	0.017	3.1	LOS A	0.1	0.5	0.52	0.33	0.52	42.1
West: Canning Hwy															
10	L2	All MCs	7	2.0	7	2.0	0.004	3.9	LOS A	0.0	0.0	0.00	0.55	0.00	31.3
2	T1	All MCs	1148	7.6	1148	7.6	0.323	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			1156	7.6	1156	7.6	0.323	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.7
All Vehicles			2305	7.7	2305	7.7	0.323	0.1	NA	_N7	_N7	0.00	0.00	0.00	59.6

MOVEMENT SUMMARY

 Site: [1 (12)] 2037 - Canning Hwy/Stock Rd - PM (10-Yrs Post Dev)

Network: [4] 2037 PM (2037)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 113.0 seconds (Site User-Given Phase Times)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate to Depart	Number Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh.]	Dist]				km/h
			veh/h		veh/h					veh	m				
South: Stock Rd															
4	L2	All MCs	291	6.9	291	6.9	0.333	38.9	LOS D	8.4	66.2	0.62	0.91	0.62	42.4
2	T1	All MCs	209	6.9	209	6.9	*0.823	76.9	LOS E	12.4	98.0	1.00	0.94	1.20	20.8
6	R2	All MCs	197	6.9	197	6.9	0.816	63.1	LOS E	11.6	92.0	1.00	0.91	1.20	19.9
Approach			697	6.9	697	6.9	0.823	57.1	LOS E	12.4	98.0	0.84	0.92	0.96	25.6
East: Canning Hwy															
7	L2	All MCs	182	8.0	182	8.0	0.969	74.4	LOS E	45.3 ^{NB}	361.5 ^{NB}	1.00	1.16	1.38	18.3
8	T1	All MCs	1056	8.0	1056	8.0	0.969	70.3	LOS E	46.0 ^{NB}	366.6 ^{NB}	1.00	1.18	1.38	19.5
6	R2	All MCs	49	8.0	49	8.0	0.184	49.1	LOS D	2.4	19.2	0.90	0.74	0.90	4.7
Approach			1287	8.0	1287	8.0	0.969	70.0	LOS E	46.0 ^{NB}	366.6 ^{NB}	1.00	1.16	1.36	19.1
North: Stock Rd															
7	L2	All MCs	1	6.7	1	6.7	0.702	24.6	LOS C	9.2	72.7	1.00	1.05	1.08	4.6
8	T1	All MCs	261	6.7	261	6.7	*0.702	53.9	LOS D	9.2	72.7	1.00	0.98	1.08	23.0
9	R2	All MCs	63	6.7	63	6.7	0.702	57.9	LOS E	8.9	70.4	1.00	0.86	1.08	21.6
Approach			325	6.7	325	6.7	0.702	54.6	LOS D	9.2	72.7	1.00	0.96	1.08	22.7
West: Canning Hwy															
10	L2	All MCs	81	7.6	81	7.6	1.016	98.8	LOS F	54.2	431.5	1.00	1.39	1.56	15.0
2	T1	All MCs	1080	7.6	1080	7.6	*1.016	105.3	LOS F	54.2	431.5	1.00	1.41	1.59	14.7
3	R2	All MCs	229	7.6	229	7.6	*1.058	159.3	LOS F	20.9	166.2	1.00	1.31	1.94	17.9
Approach			1391	7.6	1391	7.6	1.058	113.8	LOS F	54.2	431.5	1.00	1.40	1.64	14.4
All Vehicles			3700	7.5	3700	7.5	1.058	82.7	LOS F	54.2 ^{NB}	431.5 ^{NB}	0.97	1.19	1.37	18.1

MOVEMENT SUMMARY

Site: [1 (13)] 2037 - Stock Rd/Crossover 1 - PM (10-Yrs Post Dev)

Network: [4] 2037 PM (2037)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Stock Rd															
2	T1	All MCs	303	6.9	302	6.9	0.195	0.2	LOS A	0.3	2.2	0.08	0.12	0.08	49.0
6	R2	All MCs	37	2.0	37	2.0	0.195	5.5	LOS A	0.3	2.2	0.08	0.12	0.08	28.6
Approach			340	6.4	339	6.4	0.195	0.8	NA	0.3	2.2	0.08	0.12	0.08	48.2
East: Crossover 1															
7	L2	All MCs	18	2.0	18	2.0	0.055	1.1	LOS A	0.2	1.3	0.45	0.35	0.45	16.5
6	R2	All MCs	24	2.0	24	2.0	0.055	3.4	LOS A	0.2	1.3	0.45	0.35	0.45	38.9
Approach			42	2.0	42	2.0	0.055	2.5	LOS A	0.2	1.3	0.45	0.35	0.45	35.2
North: Stock Rd															
7	L2	All MCs	20	2.0	20	2.0	0.221	4.7	LOS A	0.0	0.0	0.00	0.03	0.00	43.3
8	T1	All MCs	306	6.7	306	6.7	0.221	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	49.5
Approach			326	6.4	326	6.4	0.221	0.4	NA	0.0	0.0	0.00	0.03	0.00	49.0
All Vehicles			708	6.1	707	6.1	0.221	0.7	NA	0.3	2.2	0.07	0.09	0.07	47.8

MOVEMENT SUMMARY

Site: [1 (14)] 2037 - Canning Hwy/Crossover 2 - PM (10-Yrs Post Dev)

Network: [4] 2037 PM (2037)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Canning Hwy															
8	T1	All MCs	1288	8.0	1288	8.0	0.242	0.1	LOS A	-N7	-N7	0.00	0.00	0.00	59.9
Approach			1288	8.0	1288	8.0	0.242	0.1	NA	-N7	-N7	0.00	0.00	0.00	59.9
North: Crossover 2															
7	L2	All MCs	36	2.0	36	2.0	0.051	3.7	LOS A	0.2	1.6	0.55	0.40	0.55	41.6
Approach			36	2.0	36	2.0	0.051	3.7	LOS A	0.2	1.6	0.55	0.40	0.55	41.6
West: Canning Hwy															
10	L2	All MCs	9	2.0	9	2.0	0.005	3.9	LOS A	0.0	0.0	0.00	0.55	0.00	31.3
2	T1	All MCs	1267	7.6	1251	7.6	0.351	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			1277	7.6	1260	7.6	0.351	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.7
All Vehicles			2601	7.7	2584	7.8	0.351	0.1	NA	-N7	-N7	0.01	0.01	0.01	59.4



Appendix G

**SIDRA RESULTS – OPTION 2: 10-YEAR POST
DEVELOPMENT SCENARIO (YEAR 2037)**

MOVEMENT SUMMARY

 Site: [1 (25)] 2037 Opt 2 - Canning Hwy/Stock Rd - AM (2037 LI)

Network: [5] 2037 Opt 2 - AM (2037 LI)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 107.0 seconds (Site User-Given Phase Times)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number Rate to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Stock Rd															
4	L2	All MCs	181	6.9	181	6.9	0.214	16.9	LOS B	3.8	29.7	0.56	0.82	0.56	44.4
2	T1	All MCs	211	6.9	211	6.9	0.749	51.3	LOS D	11.2	88.7	1.00	0.89	1.11	22.7
6	R2	All MCs	241	6.9	241	6.9	*0.905	68.2	LOS E	14.9	117.6	1.00	1.00	1.38	18.8
Approach			633	6.9	633	6.9	0.905	47.9	LOS D	14.9	117.6	0.87	0.91	1.05	26.8
East: Canning Hwy															
7	L2	All MCs	119	8.0	119	8.0	0.905	54.3	LOS D	33.0 ^{N8}	263.2 ^{N8}	1.00	1.06	1.23	22.5
8	T1	All MCs	985	8.0	985	8.0	*0.905	50.3	LOS D	33.3 ^{N8}	265.9 ^{N8}	1.00	1.06	1.23	24.2
6	R2	All MCs	33	8.0	33	8.0	0.172	51.9	LOS D	1.6	12.7	0.94	0.72	0.94	4.5
Approach			1137	8.0	1137	8.0	0.905	50.8	LOS D	33.3 ^{N8}	265.9 ^{N8}	1.00	1.05	1.22	23.6
North: Stock Rd															
7	L2	All MCs	18	6.7	18	6.7	*1.003	79.5	LOS E	17.8 ^{N8}	140.5 ^{N8}	1.00	1.46	1.74	0.3
8	T1	All MCs	356	6.7	356	6.7	*1.003	106.4	LOS F	17.8 ^{N8}	140.5 ^{N8}	1.00	1.43	1.74	3.7
9	R2	All MCs	82	6.7	82	6.7	1.003	109.6	LOS F	17.4 ^{N8}	137.6 ^{N8}	1.00	1.37	1.74	15.0
Approach			456	6.7	456	6.7	1.003	105.9	LOS F	17.8 ^{N8}	140.5 ^{N8}	1.00	1.42	1.74	3.9
West: Canning Hwy															
10	L2	All MCs	99	7.6	99	7.6	0.883	52.1	LOS D	30.9	245.7	1.00	1.02	1.19	23.8
2	T1	All MCs	909	7.6	909	7.6	0.883	56.0	LOS E	30.9	245.7	1.00	1.03	1.20	23.7
3	R2	All MCs	133	7.6	133	7.6	0.702	75.8	LOS E	7.2	57.0	1.00	0.85	1.11	29.3
Approach			1141	7.6	1141	7.6	0.883	58.0	LOS E	30.9	245.7	1.00	1.01	1.19	22.3
All Vehicles			3366	7.5	3366	7.5	1.003	60.1	LOS E	33.3 ^{N8}	265.9 ^{N8}	0.98	1.06	1.25	14.4

MOVEMENT SUMMARY

Site: [1 (26)] 2037 Opt 2 - Stock Rd/Crossover 1 - AM (2037 LI)

Network: [5] 2037 Opt 2 - AM (2037 LI)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance																
Mov ID	Turn	Mov Class	Demand		Arrival		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed	
			Flows		Flows					[Veh. veh	Dist] m					
			[Total HV] veh/h	[Total HV] %	[Total HV] veh/h	[Total HV] %										v/c
South: Stock Rd																
2	T1	All MCs	319	6.9	319	6.9	0.197	0.2	LOS A	0.2	1.6	0.07	0.10	0.07	49.2	
6	R2	All MCs	23	2.0	23	2.0	0.197	6.2	LOS A	0.2	1.6	0.07	0.10	0.07	29.0	
Approach			342	6.6	342	6.6	0.197	0.6	NA	0.2	1.6	0.07	0.10	0.07	48.7	
East: Crossover 1																
7	L2	All MCs	20	2.0	20	2.0	0.046	1.7	LOS A	N7	N7	0.48	0.37	0.48	16.4	
6	R2	All MCs	8	2.0	8	2.0	0.046	4.5	LOS A	N7	N7	0.48	0.37	0.48	38.7	
Approach			28	2.0	28	2.0	0.046	2.6	LOS A	N7	N7	0.48	0.37	0.48	30.0	
North: Stock Rd																
7	L2	All MCs	14	2.0	14	2.0	0.247	4.7	LOS A	N7	N7	0.00	0.02	0.00	43.5	
8	T1	All MCs	437	6.7	437	6.7	0.247	0.1	LOS A	N7	N7	0.00	0.02	0.00	49.7	
Approach			451	6.6	451	6.6	0.247	0.2	NA	N7	N7	0.00	0.02	0.00	49.5	
All Vehicles			821	6.4	821	6.4	0.247	0.5	NA	N7	N7	0.05	0.06	0.05	48.7	

MOVEMENT SUMMARY

Site: [1 (27)] 2037 Opt 2 - Canning Hwy/Crossover 2 - AM (2037 LI)

Network: [5] 2037 Opt 2 - AM (2037 LI)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes

Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV] veh/h	[Total HV] %	[Total HV] veh/h	[Total HV] %				[Veh. veh	Dist] m				km/h
East: Canning Hwy															
8	T1	All MCs	1137	8.0	1137	8.0	0.214	0.1	LOS A	_N7	_N7	0.00	0.00	0.00	59.9
Approach			1137	8.0	1137	8.0	0.214	0.1	NA	_N7	_N7	0.00	0.00	0.00	59.9
West: Canning Hwy															
10	L2	All MCs	7	2.0	7	2.0	0.004	3.9	LOS A	0.0	0.0	0.00	0.55	0.00	31.3
2	T1	All MCs	1161	7.6	1161	7.6	0.326	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach			1168	7.6	1168	7.6	0.326	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.7
All Vehicles			2305	7.8	2305	7.8	0.326	0.0	NA	_N7	_N7	0.00	0.00	0.00	59.8

MOVEMENT SUMMARY

 Site: [1 (28)] 2037 Opt 2 - Canning Hwy/Stock Rd - PM (2037 LI)

Network: [6] 2037 Opt 2 - PM (2037 LI)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 113.0 seconds (Site User-Given Phase Times)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
South: Stock Rd															
4	L2	All MCs	291	6.9	291	6.9	0.335	39.1	LOS D	8.5	66.9	0.63	0.91	0.63	42.3
2	T1	All MCs	209	6.9	209	6.9	* 0.823	76.9	LOS E	12.4	98.0	1.00	0.94	1.20	20.8
6	R2	All MCs	197	6.9	197	6.9	0.816	63.1	LOS E	11.6	92.0	1.00	0.91	1.20	19.9
Approach			697	6.9	697	6.9	0.823	57.2	LOS E	12.4	98.0	0.85	0.92	0.96	25.5
East: Canning Hwy															
7	L2	All MCs	182	8.0	182	8.0	0.969	74.4	LOS E	45.3 ^{N8}	361.5 ^{N8}	1.00	1.16	1.38	18.3
8	T1	All MCs	1056	8.0	1056	8.0	0.969	70.3	LOS E	46.0 ^{N8}	366.6 ^{N8}	1.00	1.18	1.38	19.5
6	R2	All MCs	49	8.0	49	8.0	0.184	49.1	LOS D	2.4	19.2	0.90	0.74	0.90	4.7
Approach			1287	8.0	1287	8.0	0.969	70.0	LOS E	46.0 ^{N8}	366.6 ^{N8}	1.00	1.16	1.36	19.1
North: Stock Rd															
7	L2	All MCs	36	6.7	36	6.7	0.809	32.1	LOS C	10.5	82.5	1.00	1.10	1.20	4.4
8	T1	All MCs	261	6.7	261	6.7	* 0.809	62.8	LOS E	10.5	82.5	1.00	1.04	1.20	22.2
9	R2	All MCs	63	6.7	63	6.7	0.809	64.5	LOS E	10.4	81.8	1.00	0.95	1.21	20.7
Approach			360	6.7	360	6.7	0.809	60.1	LOS E	10.5	82.5	1.00	1.03	1.20	20.2
West: Canning Hwy															
10	L2	All MCs	81	7.6	81	7.6	1.016	98.8	LOS F	54.2	431.5	1.00	1.39	1.56	15.0
2	T1	All MCs	1080	7.6	1080	7.6	* 1.016	105.3	LOS F	54.2	431.5	1.00	1.41	1.59	14.7
3	R2	All MCs	229	7.6	229	7.6	* 1.058	159.3	LOS F	20.9	166.2	1.00	1.31	1.94	17.9
Approach			1391	7.6	1391	7.6	1.058	113.8	LOS F	54.2	431.5	1.00	1.40	1.64	14.4
All Vehicles			3735	7.5	3735	7.5	1.058	83.0	LOS F	54.2 ^{N8}	431.5 ^{N8}	0.97	1.19	1.38	18.0

MOVEMENT SUMMARY

▽ Site: [1 (29)] 2037 Opt 2 - Stock Rd/Crossover 1 - PM (2037 LI)

Network: [6] 2037 Opt 2 - PM (2037 LI)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number Rate to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Stock Rd															
2	T1	All MCs	303	6.9	302	6.9	0.195	0.2	LOS A	0.3	2.2	0.08	0.12	0.08	49.0
6	R2	All MCs	37	2.0	37	2.0	0.195	5.5	LOS A	0.3	2.2	0.08	0.12	0.08	28.6
Approach			340	6.4	339	6.4	0.195	0.8	NA	0.3	2.2	0.08	0.12	0.08	48.2
East: Crossover 1															
7	L2	All MCs	54	2.0	54	2.0	0.102	1.2	LOS A	0.3	2.3	0.43	0.32	0.43	17.2
6	R2	All MCs	24	2.0	24	2.0	0.102	3.6	LOS A	0.3	2.3	0.43	0.32	0.43	39.2
Approach			78	2.0	78	2.0	0.102	1.9	LOS A	0.3	2.3	0.43	0.32	0.43	31.1
North: Stock Rd															
7	L2	All MCs	20	2.0	20	2.0	0.244	4.7	LOS A	0.0	0.0	0.00	0.03	0.00	43.3
8	T1	All MCs	306	6.7	306	6.7	0.244	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	49.5
Approach			326	6.4	326	6.4	0.244	0.4	NA	0.0	0.0	0.00	0.03	0.00	49.0
All Vehicles			744	5.9	743	5.9	0.244	0.7	NA	0.3	2.3	0.08	0.10	0.08	47.3

MOVEMENT SUMMARY

▽ Site: [1 (30)] 2037 Opt 2 - Canning Hwy/Crossover 2 - PM (2037 LI)

Network: [6] 2037 Opt 2 - PM (2037 LI)

Output produced by SIDRA INTERSECTION Version: 11.0.3.112

Give-Way (Two-Way)

Network Scenario: 1 | Local Volumes Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number Rate to Depart	Aver. Speed
			[Total HV]	[Total HV]						[Veh.	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
East: Canning Hwy															
8	T1	All MCs	1288	8.0	1288	8.0	0.242	0.1	LOS A	 					



Appendix H

PRE-LODGEEMENT MEETING MINUTUES

(MAIN ROADS WA)

OFFICIAL



Prelodgement Meeting Minutes

Date:	17/06/2026	Time:	14:30 PM	Location:	Online - Teams
--------------	------------	--------------	----------	------------------	----------------

In Attendance

Felly Dhlwayo	MRWA	Behnam Bordbar	Transcore
Jana Jegathesan	MRWA	Waihin Tun	Transcore
Chris Fudge	MRWA	Cameron Hayes	Western Corporate
Trent Will	TBB Planning		

APPLICANT AND SITE DETAILS

Applicant	Behnam Bordbar
Land Owner	Melville Road Board, Benjamin Bradley, and Isabel Fernandez
Local Government Area	City of Melville
Site Address	Lots 14 (410), 13 (412), 5 (414) Canning Highway and Lot 15 (168) Stock Road Attadale
Local Planning Scheme and Zone	Local Planning Scheme No. 6 Lots 13, 14 & 15 - Centre C2, Primary Regional Roads Lot 5 - Mixed Use (R-AC0), Primary Regional Roads
Metropolitan Region Scheme Zone	Urban
TRIM Reference	26/3371 (External ID – Behnam Bordbar)

Details of Proposal

Development Application

Proposed mixed use commercial development across four lots as follows:

- a supermarket, three commercial tenancies and 44 retail car bays on the ground floor;
- medical suites on the first floor;
- residential apartments on the second, third, fourth and fifth floor.
- Basement parking – 40 retail bays and 53 residential bays.

Access to the development is proposed via a full movement access on Stock Road and a left-in left-out access on Canning Highway.

A concurrent proposed scheme amendment proposes to rezone Lot 5 (414) Canning Highway from Mixed Use to Centre C2 zone to be consistent with the zoning of the remainder of the land in the development site (Lots 13, 14 and 15).

MEETING REQUEST TRIM #			D26#623801		
TRIM #	PLAN TITLE	PROJECT NO.	DRAWING NO.	REVISION NO.	PREPARED BY
D26#623955	Landowner Consent Form	N/A	N/A	N/A	City of Melville

OFFICIAL

D26#623955	Development Plans	N/A	A01-A06	N/A	ZARQ Architects
------------	-------------------	-----	---------	-----	-----------------

KEY ISSUES DISCUSSED:

- Access
- Road upgrades
- Swept Paths
- Transport Impact Assessment required
- Building integration with road reserve.
- Waste collection.
- Potential road noise impacts on the proposed sensitive land uses.

MEETING OUTCOME:

The proposed left-in left-out access on Canning Highway conflicts with WAPC Development Control Policy 5.1 – Regional Roads (Vehicular access) which has an expectation that no new driveways will be created on regional roads and vehicle access will be achieved from side streets.

Detailed information should be provided to demonstrate why the development cannot function with access from a local road only (Stock Road). Justification to be provided for the proposed access arrangements.

Recommend that a draft Traffic Impact Assessment (TIA) be provided for review by Main Roads prior to the submission of a Development Application. Key matters to be addressed are outlined in the advice below:

ADVICE PROVIDED:

1. A **Transport Impact Statement** (TIA) prepared in accordance with Transport Impact Assessment Guidelines (August 2016) and electronic SIDRA Intersection files (.sip) in Version 10 is required to be submitted. See comments below:
 - Detail the existing and proposed development conditions and traffic volumes;
 - Assess various scenarios for access arrangements, including left-in only, left-in/left-out and no access from Canning Highway. The site operation should be evaluated against available alternative access arrangements for the site.
 - Consideration of reducing the median on Canning Highway to increase capacity of the right turn lane.
 - Trip generation rates to be provided for the different land uses.
 - Details to be provided on how the interface of the basement level and access from Stock Road will work during peak periods given basement parking includes residential and commercial parking.
2. An **on-site sightline assessment** is required at all access points to confirm Safe Intersection Sight Distance is achieved for safe turning movement. The sightline assessment is required to consider any existing large trees, any proposed signs and allowances for pedestrian crossings at entrances and exits.
3. A vehicle swept path / turning movement diagram is required, preferably CAD drawings (.dwg format) and drawn to scale demonstrating:
 - the largest vehicle used on site can enter and exit in forward gear.
 - Swept paths for the largest service vehicle to access the site must be shown for all expected movements at the intersections of Canning Highway and Stock Road to confirm feasibility within the existing intersection.
 - Simultaneous turn movements of vehicles entering and exiting will not obstruct each other for all access points.
4. A **Concept 15% Design Plan** of proposed road upgrades and access points onto Canning Highway to be provided.

OFFICIAL

5. **Development Plans** should clearly show the extent of the Primary Regional Road Reservation, including the future road widening.
6. **Acoustic report** prepared in accordance with *State Planning Policy 5.4 Road and Rail Noise* and the associated WAPC Guidelines.
7. **Proposed Signage**- details to be provided with the development application. All proposed signs must be within private property and not overhang the PRRR.
8. **Waste Management Plan** detailing how waste disposal and collection shall occur onsite. No waste collection is permitted on Canning Highway.

Other Advice

1. The properties (Lots 14, 13, 5) are adjacent to Canning Highway, a Primary Regional Road (PRR), and are subject to land requirements for future road widening purpose under the Metropolitan Region Scheme.
2. Planning documents (Land Protection and Carriageway Pattern Plan) show future road upgrades including:
 - (a) Four lanes, dual carriageway.
 - (b) On-road cycle lane.
 - (c) Localised bus lane/queue jump
 - (d) 4.1m – 4.5m verge.These upgrades are anticipated to impact the properties.
3. The upgrading/widening of Canning Highway is not in Main Roads current 4-year forward estimated construction program and all projects not listed are subject to change without notice, and Main Roads assumes no liability for the information provided.
4. The applicant is required to submit an Application form to undertake works within Primary Regional Road Reservation prior to undertaking any works within the Canning Highway road reserve. Application forms and supporting information about the procedure can be found on the Main Roads website > Technical & Commercial > Working on Roads.
5. No permanent development is permitted within the land reserved for future road widening purposes.
6. Proposed signage to comply with Main Roads "Policy and Application Guidelines for Advertising Signs Within and Beyond State Road Reserves".
7. Enclosed extract of Land Protection Plan drawing no. 1.5104-2 and PP04-04310011 Rev C.

Delegate Signature	<i>FMDhliwayo</i>	Date	19 June 2026
--------------------	-------------------	------	--------------

DISCLAIMER:

The aim of a pre-lodgement meeting is to provide initial advice on nominated major issues relevant to a development/subdivision/access proposal to assist in the timely processing of applications. It cannot replace the in-depth investigation normally associated with the formal assessment of an application. While the advice is given in good faith, it in no way binds a recommendation to the Decision Maker.

The advice provided by Main Roads is limited to two (2) years from the date of this meeting.

Please note that this is a Main Roads document and is subject to the provisions of the *Freedom of Information Act 1992*.

OFFICIAL

LP05-1.5104-2



PP04-04310011 Rev C

