

824-928 Greenbank Road North Maclean

Traffic Impact Assessment



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CONTENTS

	Page
1. INTRODUCTION	1
1.1 Overview	1
1.2 Scope	1
2. EXISTING CONDITIONS	2
2.1 Existing Site	2
2.2 Planning Context	2
2.2.1 Development Charges and Offset Plan (DCOP)	2
2.2.2 North Maclean Context Area	3
2.2.3 820 Greenbank Road Development Approval	3
2.2.4 806-818 Greenbank Road	5
2.3 Public and Active Transport	5
3. PROPOSED DEVELOPMENT	6
4. TRAFFIC ASSESSMENT	7
4.1 Traffic Surveys	7
4.2 Traffic Growth	7
4.3 Development Traffic	7
4.4 Design Traffic	8
4.5 Intersection Analysis	8
5. ROAD NETWORK & ACCESS ASSESSMENT	10
5.1 Proposed Road Network	10
5.2 Lot Access	11
6. CONCLUSION	12

Tables

Table 2.1: Surrounding Road Network

Table 4.1: Adopted Traffic Generation rates

Table 4.2: Development Traffic Directionality

Table 4.3: Mount Lindesay Rd / Greenbank Rd SIDRA Result Summary

Table 5.1: Proposed Road Type Characteristics

Figures

Figure 1.1: Location of Subject Site

Figure 2.1: North Maclean DCOP Transport Map

Figure 2.2: Endorsed Context Area Plan

Figure 2.3: 820 Greenbank Road Endorsed Subdivision Layout

Figure 2.4: Greenbank Road / Willowbrook Road Endorsed Functional Layout Plan

Figure 2.5: 806-818 Greenbank Road Development Plan

Figure 3.1: Proposed Development Concept Plan

Figure 4.1: Greenbank Road / Willowbrook Road SIDRA Intersection Summary

Figure 5.1: Proposed Road Hierarchy

Figure 5.2: Logan City Council Industrial Access Cross-Section

Appendices

Appendix A: Development Plans

Appendix B: Traffic Surveys

Appendix C: Network Diagrams

Appendix D: SIDRA Results

Appendix E: Swept Path Diagram

1. INTRODUCTION

1.1 Overview

Bitzios Consulting (Bitzios) has been commissioned to prepare a Traffic Impact Assessment (TIA) for a proposed industrial subdivision development located at 824-908 Greenbank Road, North Maclean (subject site).

The subject site is presently an underdeveloped site formally described as Lot 1 on RP121663 and is located within the Logan City Council (Council) Local Government Area and the Greater Flagstone Priority Development Area (PDA). The site has frontage to Greenbank Road and Willowbrook Road (yet to be constructed).

The location of the subject site is illustrated in Figure 1.1.



Aerial Source: Queensland Globe (edited by Bitzios)

Figure 1.1: Location of Subject Site

1.2 Scope

The scope for the assessment is detailed below:

- Review of the existing and planned transport network in the vicinity of the subject site with consideration to other relevant approvals and PDA planning documents
- Estimation of the proposed development's traffic generation and distribution to the external road network
- Detailed assessment of the development's traffic impact on the surrounding road network
- Assessment of the layout of proposed internal roads against the relevant Economic Development Queensland (EDQ) and Council standards
- Review of access arrangements to proposed allotments for general and service vehicle traffic.

2. EXISTING CONDITIONS

2.1 Existing Site

The subject site currently exists as a rural property containing a single residential dwelling with vehicle access via Greenbank Road.

Details of the existing surrounding road network are provided in Table 2.1.

Table 2.1: Surrounding Road Network

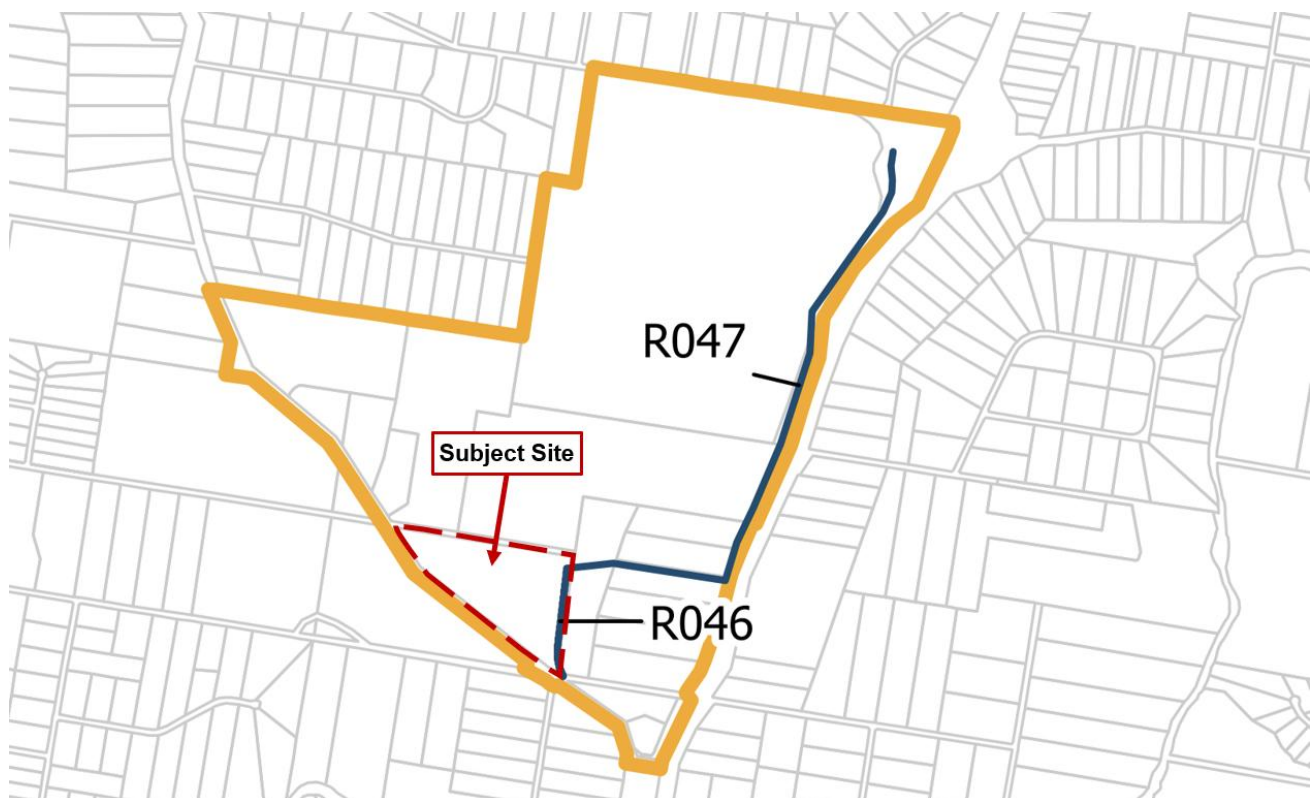
Road Name	Jurisdiction	Hierarchy	Lanes	Divided	Posted Speed
Greenbank Rd	Council	Arterial	2	No	80km/h
Scott Ln	Council	Rural Collector	2	No	80km/h
Mount Lindesay Highway	State	Highway	2	No	80km/h

2.2 Planning Context

2.2.1 Development Charges and Offset Plan (DCOP)

Surrounding planned trunk road network infrastructure has been identified in the EDQ Development Charges and Offset Plan (DCOP) which outlines trunk infrastructure required to service the PDA, including the relevant charges and their calculations.

Figure 2.1 shows the site's location with respect to trunk roads R046 and R047 identified in the DCOP transport map.



Source: DCOP Transport (roads) - Trunk Infrastructure Map

Figure 2.1: North Maclean DCOP Transport Map

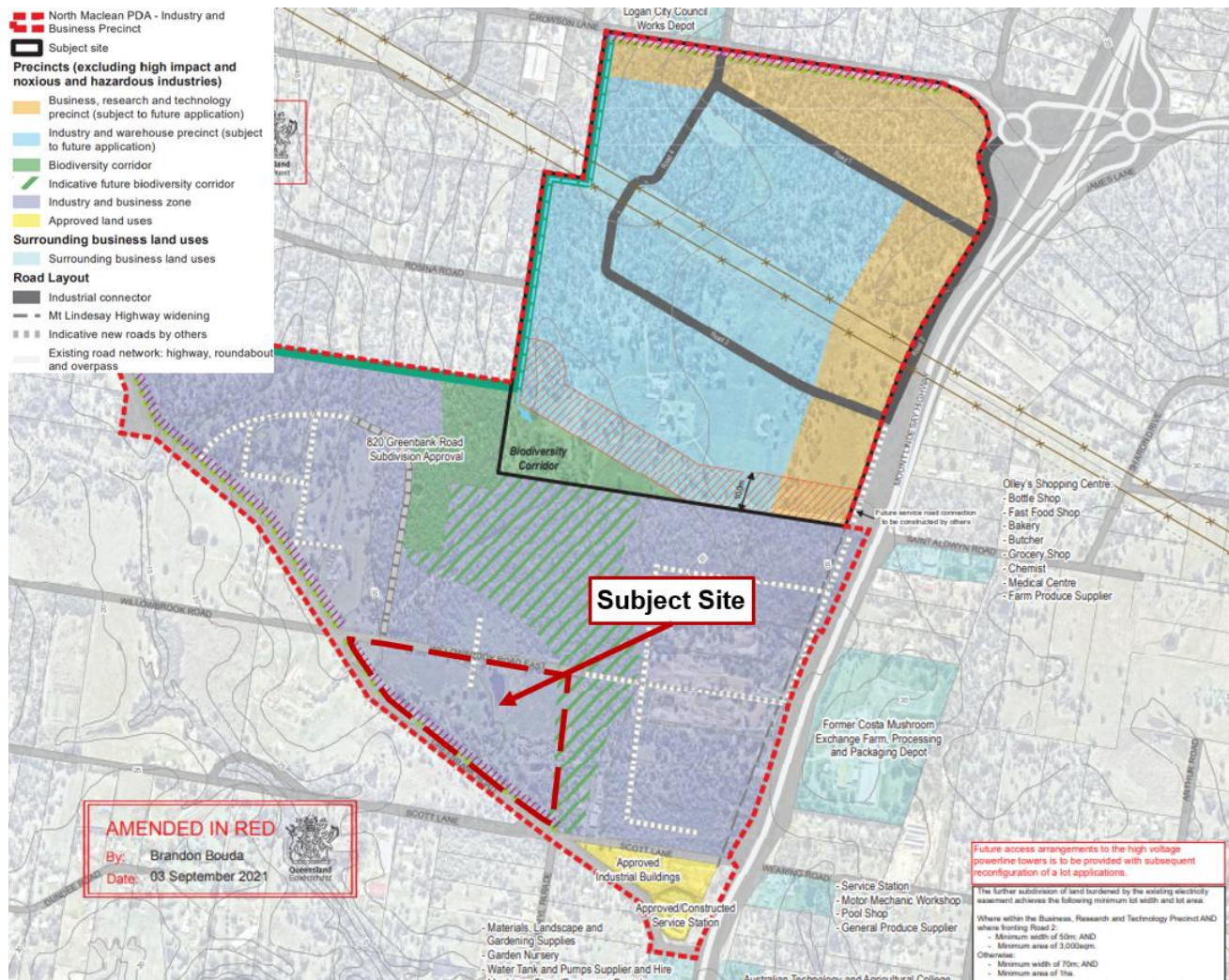
DCOP mapping currently shows the R046 trunk road on the eastern boundary of the subject site. However, a prelodgement meeting was held with EDQ in March 2026 (PRE-2026-FLA-4492). In this meeting it was advised that:

- Willowbrook Road is intended to be extended further east to connect to the service road on Mount Lindesay Highway and will function as the primary collector for this precinct; and
- The eastern boundary road shown in the DCOP is replaced by Willowbrook Road as the primary collector.

Based on the advice provided by EDQ it is understood that there should be no trunk connector road on the eastern boundary of the site and instead, Willowbrook Road shall be delivered as a 24m trunk connector road on the site's northern boundary.

2.2.2 North Maclean Context Area

The subject site forms a portion of the southern end of the North Maclean Context Area within the Greater Flagstone PDA. The endorsed context area plan is shown in Figure 2.2.



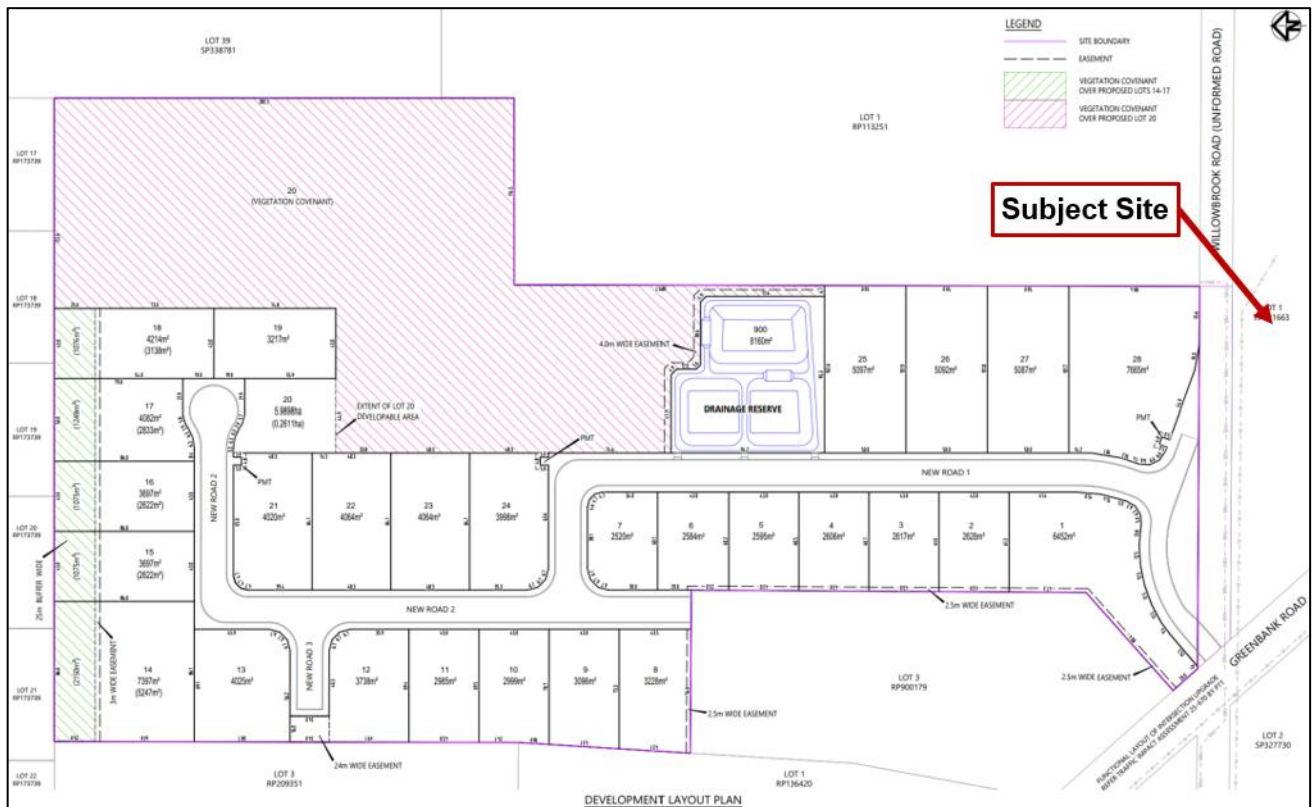
Source: North Maclean Context Area Plan (edited by Bitzios)

Figure 2.2: Endorsed Context Area Plan

As shown, the subject site is approved for development as an industry and business zone. The northern side of the subject site is bounded by Willowbrook Road. Subject to implications associated with the biodiversity corridor, the context area plan demonstrates that Willowbrook Road is ultimately planned to provide an east-west road connection between Greenbank Road and a future Mount Lindesay Highway service road, servicing industrial developments within the context area.

2.2.3 820 Greenbank Road Development Approval

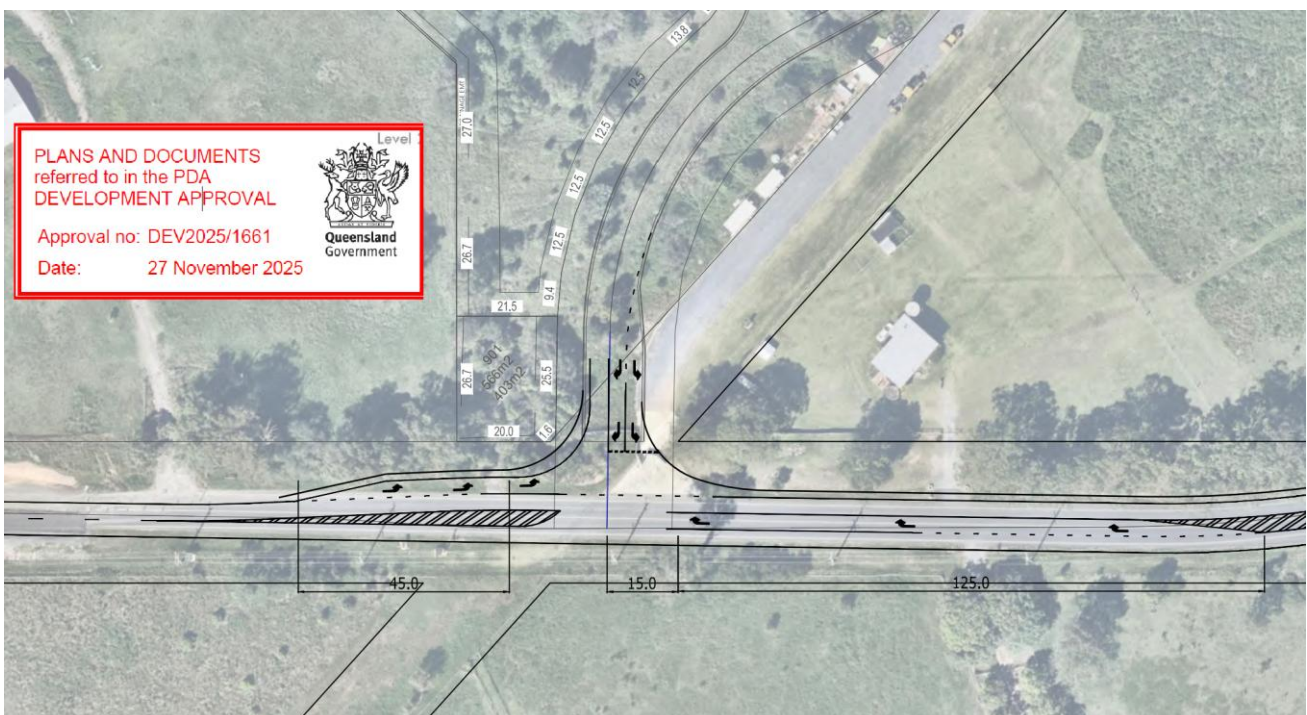
An existing approval is also in place for the subdivision of 820 Greenbank Road, North Maclean (DEV2025/1661). The endorsed Flagstone Industrial Park development layout plan for this address is shown at Figure 2.3.



Source: 820 Greenbank Road, North Maclean – Development Layout Plan, prepared by Michael Bale & Associates (edited by Bitzios)

Figure 2.3: 820 Greenbank Road Endorsed Subdivision Layout

To facilitate the delivery of the 820 Greenbank Road subdivision, the westernmost portion of Willowbrook Road will be delivered as a part of this development as well as a priority-controlled Greenbank Road / Willowbrook Road intersection. The endorsed functional layout plan of the intersection is shown at Figure 2.4.



Source: 820 Greenbank Road, North Maclean – Functional Layout Plan, prepared by PTT

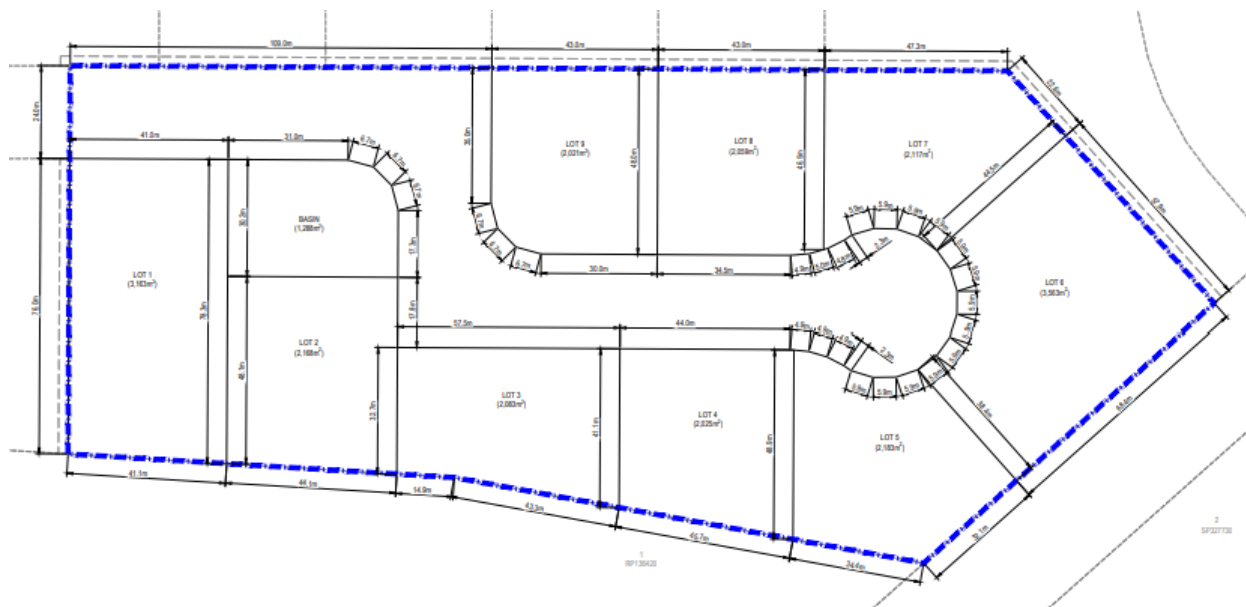
Figure 2.4: Greenbank Road / Willowbrook Road Endorsed Functional Layout Plan

Development of 820 Greenbank Road will precede the proposed development of the subject site. As such, the road network delivered as a part of the proposed development will tie into the above and the following traffic assessment will be undertaken assuming construction of the Greenbank Road / Willowbrook Road intersection has occurred in accordance with the endorsed functional layout plan.

2.2.4 806-818 Greenbank Road

An additional development application has also been submitted for the subdivision of 806-818 Greenbank Road. While this development is not yet approved, traffic impacts associated with this development will also be considered as a part of the following assessment. This development is proposed to tie into the approved 820 Greenbank Road development.

Proposed subdivision plan for the industrial development of 806-818 Greenbank Road is illustrated in Figure 2.5.



Source: ROL Layout Plan Prepared by Burchills Engineering Solutions

Figure 2.5: 806-818 Greenbank Road Development Plan

2.3 Public and Active Transport

No footpath or cycle paths are currently present on Greenbank Road or other roads in the vicinity of the subject site. The nearest bus stop to the subject site is the Trace Road at Wearing Road bus stop pair located approximately 1km to the east, servicing bus route 540. This low level of active transport facilities is consistent with the current rural nature of the site and surrounds.

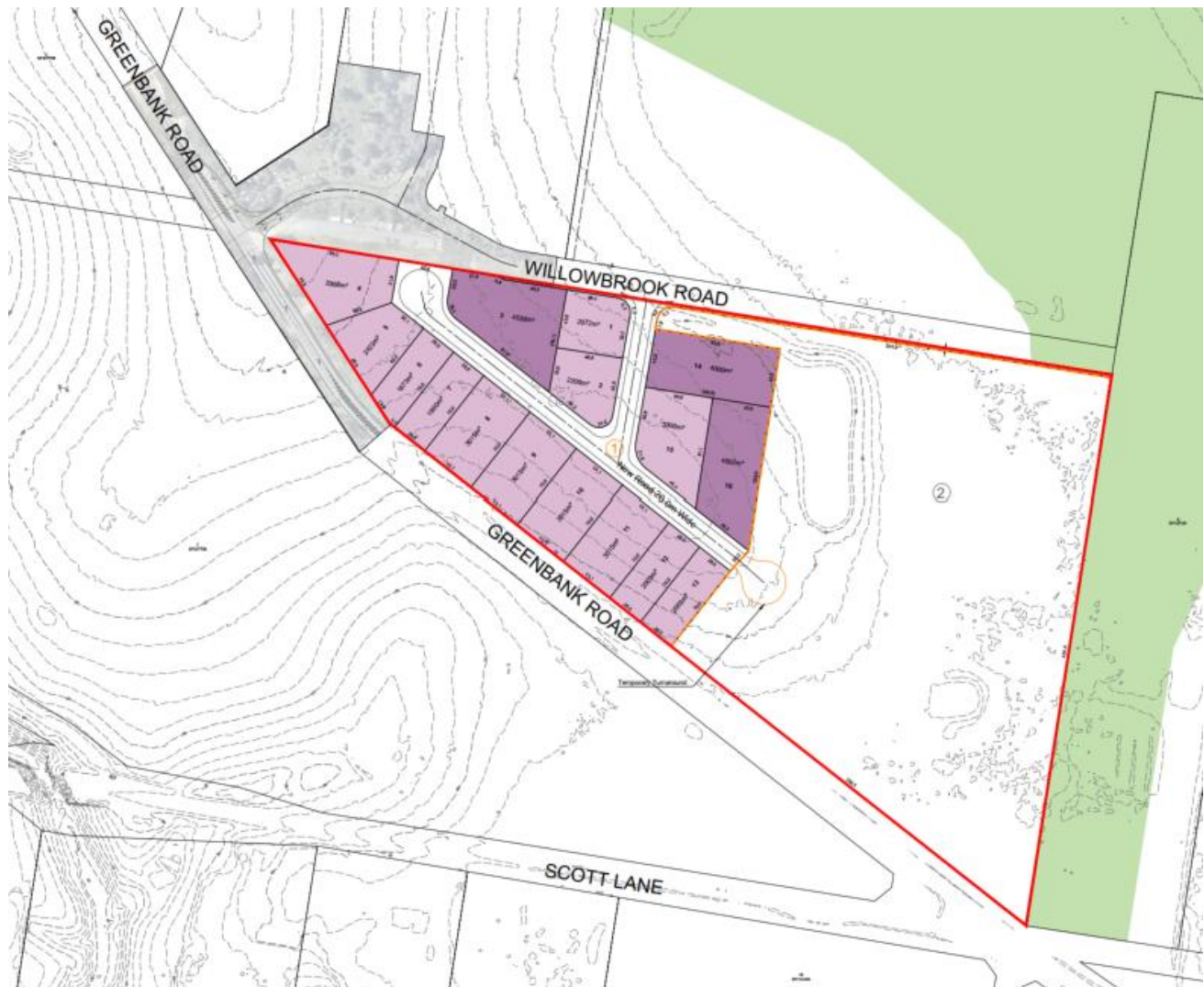
However, with ongoing development of the North Maclean Context Area, active transport connections will be provided along new roads in accordance with relevant design standards and future public transport services are expected to service employment areas within the context area.

3. PROPOSED DEVELOPMENT

The proposed subdivision comprises of:

- 16 industrial lots with a total developable lot area of 4.585ha
- The extension of Willowbrook Road to the intersection with the proposed internal road within the development
- Construction of an industrial access street internal to the development to provide access to proposed allotments.

The concept plan for the proposed development is provided at Appendix A and shown in Figure 3.1.



Source: 824-908 Greenbank Road, North Maclean Concept Plan prepared by Saunders Havill

Figure 3.1: Proposed Development Concept Plan

The eastern portion of the site has potential for development in the future. However, this portion of the subject site is highly constrained by environmental factors. As such, this development application considered the western portion of the site only, as shown on the concept plan above.

4. TRAFFIC ASSESSMENT

4.1 Traffic Surveys

Seven-day automatic tube count data was collected on Greenbank Road fronting the subject site from the 20th to the 27th of May 2026. A copy of the traffic survey data is provided at **Appendix B**. Based on the average bi-directional weekday volumes collected, peak hours on Greenbank Road are as follows:

- AM Peak: 7:30-8:30am
- PM Peak: 3:30-4:30pm.

Peak hour traffic survey data at the future Greenbank Road / Willowbrook Road intersection location is therefore provided at **Appendix C** (Sheet 1).

4.2 Traffic Growth

Background traffic growth for Greenbank Road was determined using traffic data from the nearby permanent traffic count site located on the Mount Lindesay Highway, north of Chambers Flat Road (Site ID 10098). From this data an annual growth rate of 1.66% per annum was derived.

This growth rate was applied to 2026 surveyed traffic volumes to determine Greenbank Road traffic volumes at the development's expected year of opening (2030) and 10-year design horizon (2040), as shown at **Appendix C** (Sheet 2 & Sheet 3).

4.3 Development Traffic

Traffic generation rates for the proposed industry and business zone are sourced from the QLD Open Data Portal Traffic Generation Data – Site Summary for an 'industrial estate'. The industrial traffic generation rate from this survey data is 0.355 per 100m² of GFA. With consideration to typical setback and vehicle manoeuvring / parking requirements, floor area is typically capped at approximately 60% of the developable site area.

Development of 820 Greenbank Road is planned to precede construction of the subject site and as such, traffic generation of this site shall also be considered in the assessment of the Greenbank Road / Willowbrook Road intersection. Subject to a separate, future development application and environmental constraints, further development of the eastern portion of the subject site is also expected to occur as a planned industrial area in the context area. It is estimated that this eastern portion of the subject site could provide a further 45,000m² developable area. As such, while development of the eastern portion of the site is not part of this development application, this traffic assessment will also consider a scenario analysing impacts of full development of the subject site.

Expected traffic generation of the subject site and adjacent 820 Greenbank Road development is therefore shown in Table 4.1.

Table 4.1: Adopted Traffic Generation rates

Location	Developable Area	Site Cover	Estimated GFA	Peak Hour Trip Rate	Peak Hour Trips
820 Greenbank Road	103,450m ²	60%	62,070m ²	0.355 per 100m ² GFA	221
806-818 Greenbank Road	21,382m ²		18,829m ²		67
Proposed Development	45,850m ²		27,510m ²		98
Potential Additional Development	45,000m ²		27,000m ²		96

As shown the proposed development is anticipated to generate in the order of 98 peak hour development trips. Adjacent 806-818 and 820 Greenbank Road developments are also expected to generate in the order of 67 and 221 peak hour development trips respectively. Should the eastern portion of the site be delivered, it is expected that this area will generate an additional 96 vehicle trips.

For the purposes of this assessment, it is conservatively assumed that development peak volumes will occur in both the AM and PM network peak hours. Development traffic directionality is subsequently detailed in Table 4.2.

Table 4.2: Development Traffic Directionality

Location	AM Peak		PM Peak		AM Peak		PM Peak	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
820 Greenbank Road	65%	35%	35%	65%	143	77	77	143
806-818 Greenbank Road	65%	35%	35%	65%	44	23	23	44
Proposed Development	65%	35%	35%	65%	64	34	34	64
Potential Additional Development	65%	35%	35%	65%	62	34	34	62

It is expected that the majority of development traffic will travel to / from the subject site via the Mount Lindesay Highway to the east. Development traffic distribution is therefore shown in **Appendix C** (Sheet 4).

4.4 Design Traffic

Assessed peak hour traffic volumes at the expected year of opening (2030) and 10-year design horizon (2040) are subsequently shown at **Appendix C** for the following scenarios:

- Background (surveyed volumes + traffic growth + adjacent development trips)
- Design (background + proposed development trips)
- Full subject site (design + potential additional development trips).

4.5 Intersection Analysis

SIDRA Intersection 10 was used to assess the Greenbank Road / Willowbrook Road intersection for all design scenarios. The intersection form of the Greenbank Road / Willowbrook Road as assessed in SIDRA, and consistent with the functional layout plan for the intersection, is shown in Figure 4.1

5. ROAD NETWORK & ACCESS ASSESSMENT

5.1 Proposed Road Network

The proposed road hierarchy to service the development is illustrated in Figure 5.1.

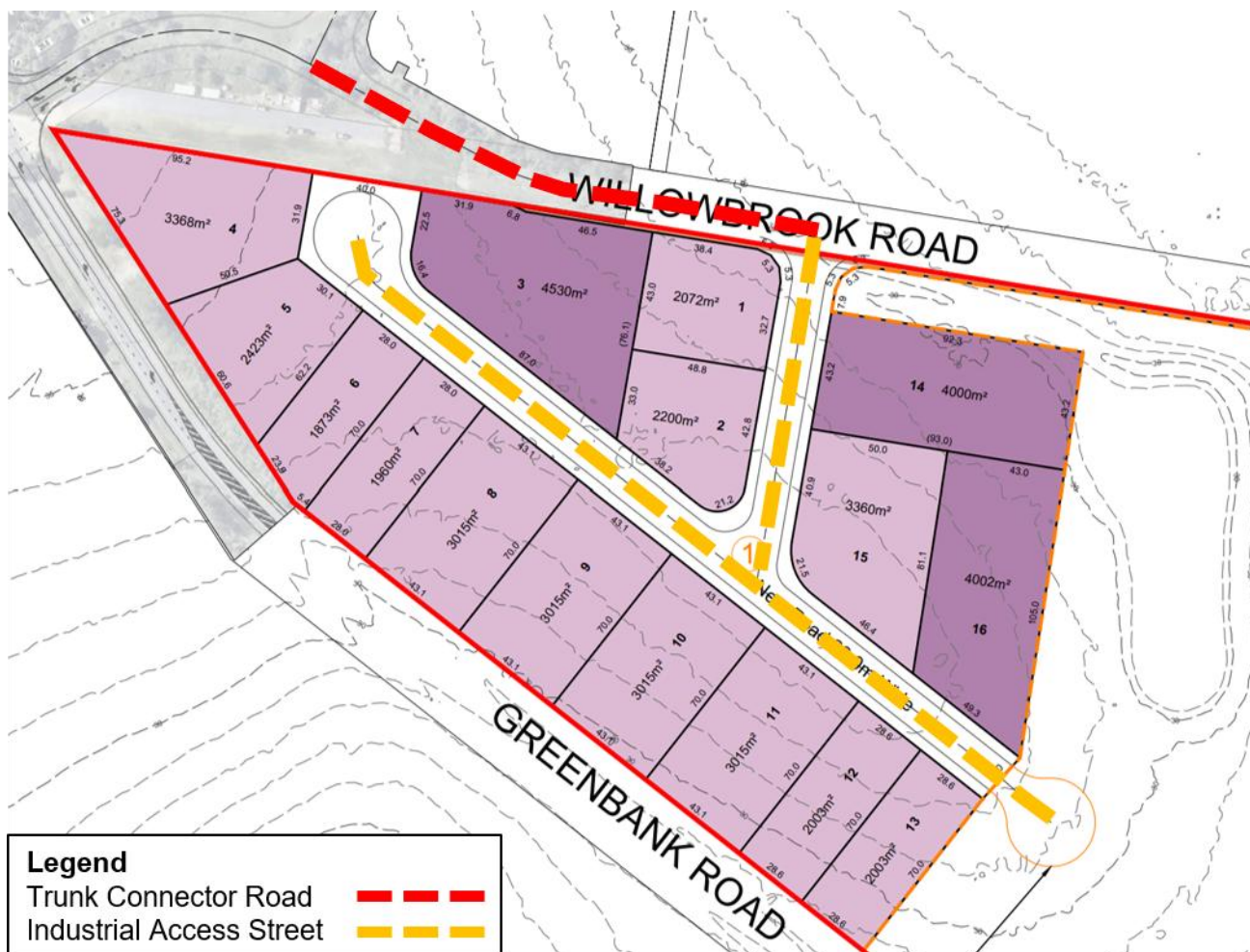


Figure 5.1: Proposed Road Hierarchy

Details of proposed road types are outlined in Table 5.1.

Table 5.1: Proposed Road Type Characteristics

Road Hierarchy	Reserve	Pavement	Lanes	Parking	Footpath	Cycle	Trunk
Trunk Connector Road	24m	16m	2	Yes	1.5m One Side	No	Yes
Industrial Access	20m	12m	2	Yes	1.5m One Side	No	No

As per prelodgement advice provided by EDQ, the extension of Willowbrook Road is proposed as a 24m wide trunk connector road comprising of a 16m carriageway with 4m verges and a 1.5m footpath on one side, consistent with the Logan City Council profile for an industrial connector (LCC 8-00382).

It is proposed that the internal access street within the development be constructed as per the Logan City Council industrial access standard shown in Figure 5.2.

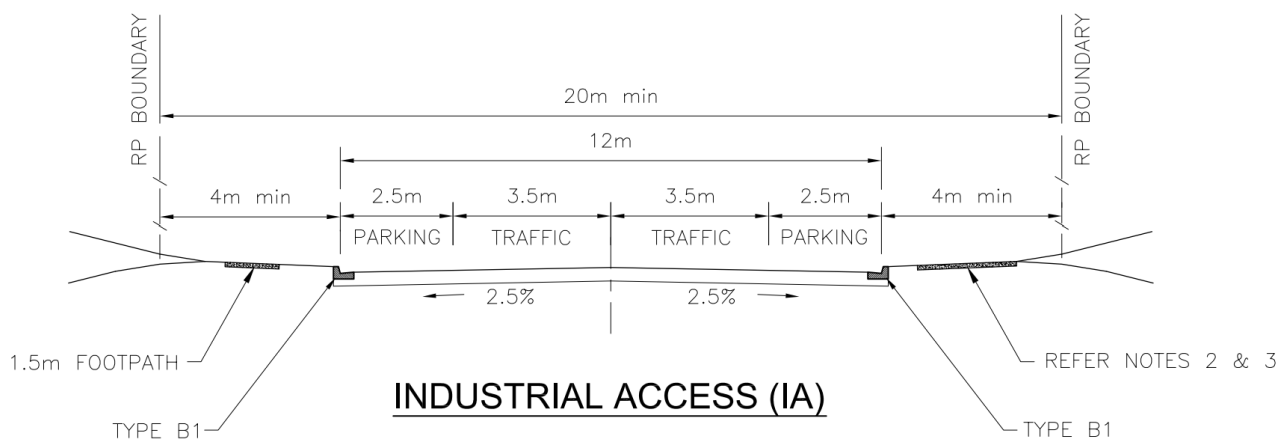


Figure 5.2: Logan City Council Industrial Access Cross-Section

Compared to the industrial access street cross-section specified in the EDQ Street and Movement Network Guideline, the total road reserve width is 2m narrower owing to:

- Verge width reduction of 0.5m on each side of the road
- Travel lane width reduction of 0.5m.

A swept path assessment of design vehicle manoeuvring on proposed internal roads is provided at **Appendix E** to demonstrate suitable design vehicle manoeuvring on industrial access roads, regardless of the reduced travel lane width. Verge widths and active transport provisions on the proposed industrial access roads are also consistent with the advised requirements for Willowbrook Road. It is further noted that the proposed internal roads service only the proposed development with no potential for through traffic. As such, modification of the proposed access street cross-section has no adverse impact on road users accessing the wider context area. The proposed industrial access road cross-section is therefore considered appropriate for the internal access roads within the subject site servicing the proposed development.

A 15m radius cul-de-sac shall be constructed at the western end of the internal road network as well as a temporary turnaround cul-de-sac at the eastern end of the internal road network. The radius of these turnaround areas exceeds the minimum requirements for a cul-de-sac in an industrial area as specified in the Logan Planning Scheme and is consistent with advice provided by EDQ. The temporary turnaround treatment at the eastern end of the road shall be removed following any further potential development to the east as a part of a future application.

5.2 Lot Access

The design of vehicle crossovers to individual lots shall be subject to future development applications addressing specific uses proposed on each lot to be developed. However, vehicle accesses to proposed lots shall be located to maximise separation to intersections. Where located sufficiently clear of intersections in accordance with the requirements of AS2890 sufficient sight lines are achievable for potential lot access locations for all lots. The Lot 10 vehicle access should be located at the westernmost point of the lot frontage as to not effectively form a 4-way intersection with the internal road intersection proposed.

6. CONCLUSION

The key findings of the traffic impact assessment for the proposed development are as follows:

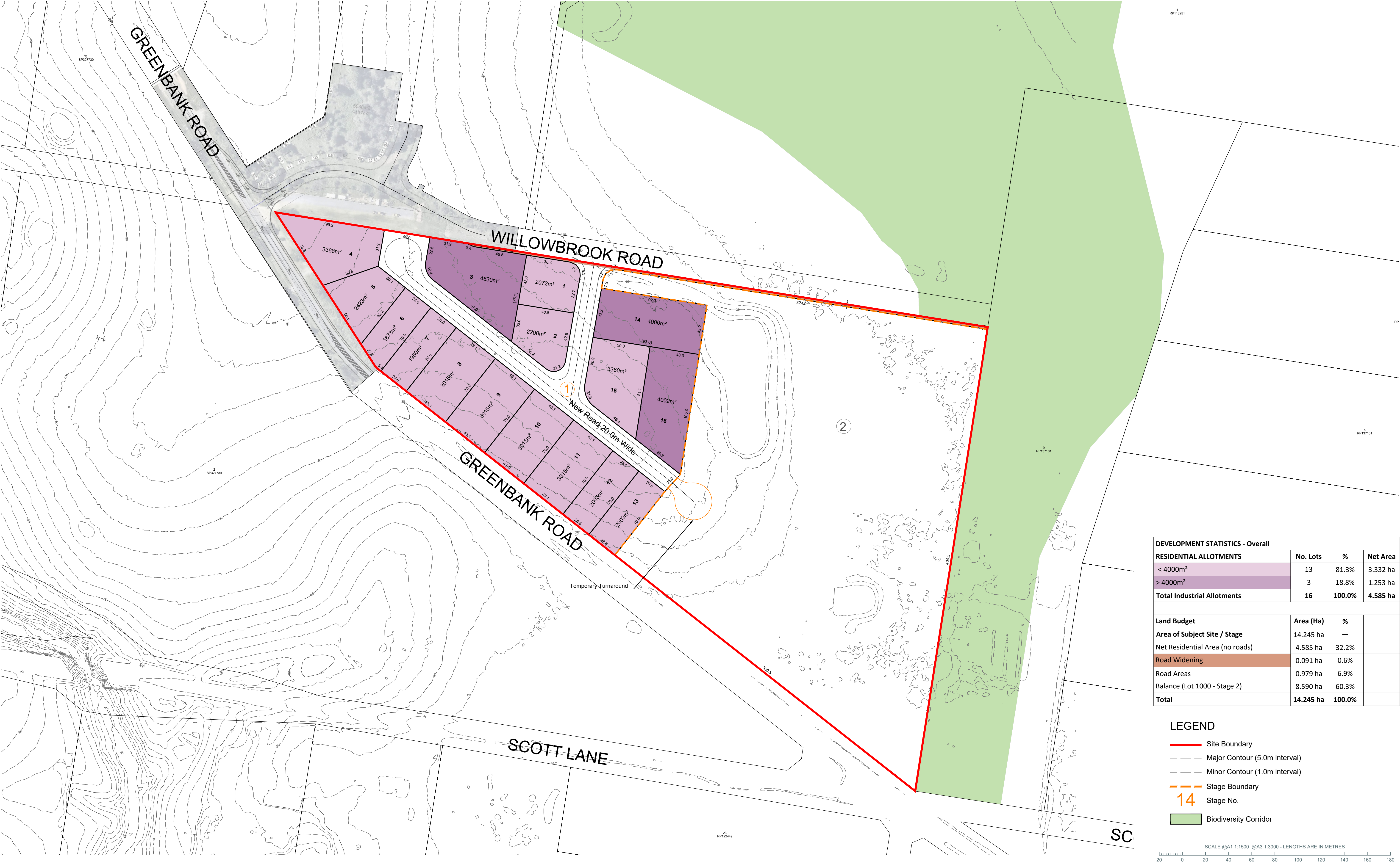
- The proposed industrial development is located within the industry and business zoning identified in the North Maclean Context Area Plan, part of the Greater Flagstone PDA
- The proposed development comprises of 16 industrial lots with a total developable lot area of 4.585ha as well as the construction of an industrial access street and extension of Willowbrook Road to tie into the road network proposed to be constructed as a part of the adjacent 820 Greenbank Road approval
- The proposed development is expected to generate in the order of 98 peak hour vehicle trips
- SIDRA assessment demonstrates that the Greenbank Road / Willowbrook Road intersection form, as shown on approved functional layout plans, can cater for expected traffic generated by the proposed development, adjacent developments and potential future development of the eastern portion of the subject site
- Willowbrook Road is proposed to be extended from the length of road provided as a part of the adjacent development, to the intersection of the industrial access street servicing the proposed development. Consistent with advice provided by EDQ, Willowbrook Road is proposed as a 24m trunk connector road
- The industrial access street internal to the development is proposed to be delivered as per the Logan City Council industrial access standard. While narrower than the typical EDQ industrial access, the proposed road cross-section is considered appropriate for the internal access roads within the subject site
- The design of vehicle crossovers to individual lots shall be subject to future development applications addressing specific uses proposed on each lot to be developed. However, vehicle accesses to proposed lots shall be located to maximise separation to intersections.

Based on the above assessment, it is concluded that there are no significant traffic or transport impacts associated with the proposed development to preclude its approval and relevant conditioning on transport planning grounds.

Appendix A: Development Plans



CONCEPT PLAN



DEVELOPMENT STATISTICS - Overall			
RESIDENTIAL ALLOTMENTS	No. Lots	%	Net Area
< 4000m²	13	81.3%	3.332 ha
> 4000m²	3	18.8%	1.253 ha
Total Industrial Allotments	16	100.0%	4.585 ha
Land Budget	Area (Ha)	%	
Area of Subject Site / Stage	14.245 ha	—	
Net Residential Area (no roads)	4.585 ha	32.2%	
Road Widening	0.091 ha	0.6%	
Road Areas	0.979 ha	6.9%	
Balance (Lot 1000 - Stage 2)	8.590 ha	60.3%	
Total	14.245 ha	100.0%	

LEGEND

- Site Boundary
- Major Contour (5.0m interval)
- Minor Contour (1.0m interval)
- Stage Boundary
- 14 Stage No.
- Biodiversity Corridor



Appendix B: Traffic Surveys



Site Summary

Volume Summary

Class Summary

Speed Summary

Daily Speed Summary

Volume Graph

Class Graph

Speed Graph

Daily Speed Graph

ATC 1. Greenbank Road, North Maclean, Between Willowbrook Rd

▼

Northbound

Southbound

Bidirectional

Vehicle Volume Summary - Northbound (Headway >= 0s)									
15Min Period	Day of Week							Weekday Average	7-Day Average
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	25-May	26-May	20-May	21-May	22-May	23-May	24-May		
AM Peak	48	39	37	44	43	57	51	38	36
PM Peak	43	52	67	71	60	61	51	56	51
07:00-19:00	1491	1473	1477	1620	1673	1797	1511	1533	1547
06:00-22:00	1686	1682	1707	1876	1962	2033	1651	1765	1759
06:00-24:00	1706	1702	1746	1900	2007	2094	1673	1793	1791
00:00-24:00	1917	1920	1900	2108	2222	2182	1734	1988	1948
0:00	2	0	2	1	1	0	8	1	2
0:15	1	1	2	0	3	8	2	1	2
0:30	1	1	0	1	1	2	7	0	1
0:45	2	1	0	0	0	3	4	1	1
1:00	2	2	0	1	1	1	1	1	1
1:15	1	3	0	0	3	4	1	2	1
1:30	1	2	1	2	1	1	2	1	1
1:45	2	3	2	0	1	4	0	1	2
2:00	0	0	1	1	1	0	9	0	1
2:15	1	1	0	2	4	1	2	1	1
2:30	0	2	1	1	4	0	1	2	1
2:45	1	3	3	1	4	1	0	2	2
3:00	4	3	1	4	2	2	0	3	3
3:15	2	2	1	1	3	2	1	2	2
3:30	5	4	4	1	5	2	2	3	3
3:45	3	1	5	4	6	0	1	4	2
4:00	9	6	5	9	5	4	0	7	5
4:15	6	10	9	13	9	3	1	9	7
4:30	16	12	13	14	13	5	1	13	10
4:45	17	26	11	18	19	5	5	18	14
5:00	26	31	25	28	24	10	0	26	20
5:15	29	32	20	28	31	11	4	28	22
5:30	48	33	23	39	34	12	5	35	27
5:45	32	39	25	39	40	7	4	34	26
6:00	19	29	28	38	33	12	9	29	24

6:15	19	26	26	32	31	16	2	26	21
6:30	27	26	23	33	26	19	10	26	22
6:45	23	19	26	27	30	10	11	25	20
7:00	30	36	28	27	35	12	14	31	26
7:15	29	22	18	22	21	21	14	21	19
7:30	26	23	35	25	29	22	20	27	26
7:45	30	18	19	34	26	26	25	26	26
8:00	21	24	33	31	31	34	25	28	29
8:15	47	36	25	35	43	29	33	37	35
8:30	32	35	37	43	38	33	22	37	33
8:45	45	34	35	44	37	38	26	38	36
9:00	27	31	30	31	26	32	19	28	28
9:15	34	35	24	33	27	29	23	30	28
9:30	28	30	23	15	32	44	26	26	28
9:45	21	22	25	24	31	44	37	25	28
10:00	45	28	30	37	27	35	42	33	34
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20:00	8	8	15	9	16	15	12	12	11
20:15	12	11	11	13	15	22	14	12	14
20:30	5	13	12	15	11	12	5	11	10
20:45	12	5	12	7	28	16	5	13	12

21:00	3	5	13	6	11	14	14	8	9
21:15	4	9	8	7	14	17	5	8	8
21:30	5	6	5	8	13	16	9	7	8
21:45	5	4	4	10	11	3	7	6	6
22:00	5	6	14	5	7	6	6	7	7
22:15	4	2	4	6	6	13	1	4	5
22:30	2	0	6	3	9	10	3	4	5
22:45	3	3	2	2	8	5	7	3	4
23:00	2	1	6	3	7	9	3	4	4
23:15	2	3	4	2	3	6	0	3	3
23:30	0	3	2	2	4	9	2	2	3
23:45	2	2	1	1	1	3	0	1	1

Site Summary

Volume Summary

Class Summary

Speed Summary

Daily Speed Summary

Volume Graph

Class Graph

Speed Graph

Daily Speed Graph

ATC 1. Greenbank Road, North Maclean, Between Willowbrook Rd

▼

Northbound

Southbound

Bidirectional

Vehicle Volume Summary - Southbound (Headway >= 0s)									
15Min Period	Day of Week							Weekday Average	7-Day Average
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	25-May	26-May	20-May	21-May	22-May	23-May	24-May		
AM Peak	66	48	49	52	59	61	50	54	46
PM Peak	55	64	58	60	66	55	41	53	49
07:00-19:00	1704	1744	1657	1761	1917	1876	1423	1734	1709
06:00-22:00	1937	2007	1900	2056	2232	2140	1576	1999	1954
06:00-24:00	1971	2037	1927	2086	2280	2209	1601	2032	1990
00:00-24:00	2107	2190	2036	2215	2411	2285	1652	2155	2096
0:00	1	2	2	2	0	1	4	1	2
0:15	2	0	2	4	4	3	4	2	3
0:30	0	1	3	3	2	1	0	2	1
0:45	0	2	2	0	1	1	5	1	2
1:00	0	3	2	1	2	3	2	1	2
1:15	3	1	0	0	1	3	0	1	1
1:30	1	3	1	1	1	2	5	1	2
1:45	1	1	1	1	0	3	0	1	1
2:00	0	0	0	1	0	1	2	0	0
2:15	2	1	1	3	2	2	2	2	2
2:30	0	1	1	1	1	1	0	1	1
2:45	0	1	0	0	2	3	1	0	1
3:00	1	3	0	2	0	0	2	1	1
3:15	1	0	1	2	1	4	3	1	2
3:30	2	2	1	1	1	1	2	1	1
3:45	2	1	1	5	2	2	0	2	1
4:00	5	2	2	3	3	1	1	3	2
4:15	6	5	6	10	3	1	0	5	4
4:30	5	5	9	3	5	3	2	5	3
4:45	11	12	5	5	6	3	1	8	5
5:00	15	19	8	9	9	8	2	11	10
5:15	21	18	17	20	19	7	2	18	13
5:30	29	27	24	28	34	10	9	27	23
5:45	28	43	20	24	32	12	2	28	23
6:00	27	31	27	42	27	19	3	30	24

6:15	24	15	28	25	28	19	11	24	22
6:30	33	34	37	31	34	16	9	34	27
6:45	35	37	27	25	34	14	6	31	25
7:00	37	43	32	33	36	20	7	36	30
7:15	48	40	39	41	35	21	8	40	33
7:30	41	45	48	50	55	25	15	48	41
7:45	66	48	49	52	59	39	14	54	46
8:00	41	45	31	43	41	47	25	39	38
8:15	41	32	29	39	31	44	28	34	34
8:30	35	29	41	27	32	40	29	32	34
8:45	30	27	37	30	29	35	34	29	30
9:00	25	26	20	25	37	50	22	27	29
9:15	35	25	34	39	31	56	32	33	35
9:30	27	34	32	25	32	61	36	30	35
9:45	25	36	30	38	28	37	38	30	32
10:00	32	32	24	24	38	59	35	29	34
10:15	38	36	32	21	37	42	42	33	35
10:30	28	29	21	21	36	46	41	27	31
10:45	29	27	22	34	32	46	42	29	33
11:00	37	27	27	29	33	47	31	29	33
11:15	31	29	20	28	30	57	49	26	34
11:30	35	37	29	31	33	41	50	32	35
11:45	30	24	28	33	31	58	41	28	34
12:00	33	25	28	33	47	55	41	32	38
12:15	42	31	20	23	37	52	35	31	34
12:30	26	25	28	23	34	47	27	27	29
12:45	20	41	23	33	36	27	31	30	30
13:00	33	33	42	28	36	43	32	33	35
13:15	22	45	29	31	41	34	34	34	34
13:30	35	36	44	30	34	36	33	34	34
13:45	28	36	37	41	41	37	26	36	35
14:00	35	29	43	42	42	34	25	37	35
14:15	31	44	39	48	48	37	36	43	40
14:30	52	49	48	58	61	40	41	53	49
14:45	50	49	48	50	54	35	26	50	45
15:00	33	43	39	45	66	29	31	45	40
15:15	39	51	32	39	44	39	32	41	40
15:30	44	38	57	46	50	34	35	46	43
15:45	37	45	47	40	36	30	24	42	36
16:00	45	42	40	40	43	39	25	42	39
16:15	55	64	58	41	45	29	34	51	46
16:30	40	58	43	60	41	40	39	48	46
16:45	40	38	45	51	50	32	23	45	40
17:00	45	43	42	51	54	47	34	46	44
17:15	52	36	36	41	44	41	30	42	40
17:30	37	36	38	48	51	41	33	41	41
17:45	38	39	28	32	51	42	19	38	36
18:00	26	36	31	37	41	19	13	34	29
18:15	23	18	32	32	26	23	16	26	24
18:30	21	22	21	35	31	16	16	26	24
18:45	11	21	14	20	17	27	13	16	17
19:00	23	23	12	27	20	14	10	21	18
19:15	17	12	16	14	21	21	14	15	16
19:30	8	19	12	12	24	24	10	14	15
19:45	8	16	10	26	14	19	15	15	15
20:00	5	12	16	20	17	11	15	14	13
20:15	6	5	4	16	15	11	10	9	9
20:30	7	14	11	9	11	16	11	10	11
20:45	7	11	6	10	21	13	8	11	10

21:00	4	5	8	10	12	18	8	8	9
21:15	13	10	8	10	15	23	7	11	12
21:30	9	11	7	10	11	9	8	9	9
21:45	7	8	14	8	11	17	8	9	10
22:00	7	7	5	5	11	9	6	7	7
22:15	5	3	6	7	7	15	3	5	6
22:30	2	7	5	4	3	10	4	4	5
22:45	4	2	5	2	7	7	3	4	4
23:00	3	2	0	4	7	8	4	3	4
23:15	7	6	2	2	5	7	2	4	4
23:30	2	2	2	3	5	5	3	3	3
23:45	4	1	2	3	3	8	0	3	3

Appendix C: Network Diagrams





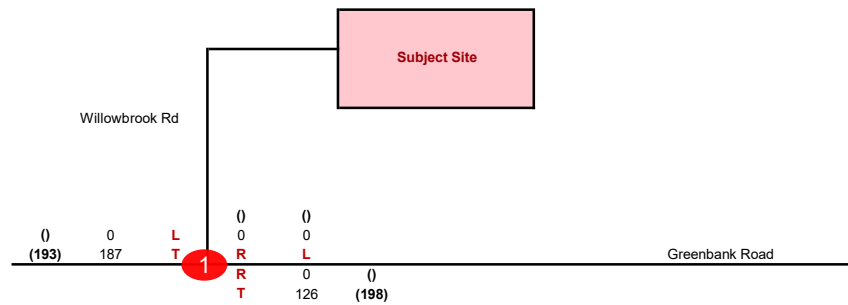
Document Control

Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		

Legend

##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
1	Intersection ID	R	Right Turn Movement

SCENARIO: 2026 SURVEY DATA



Document Control			
Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		
Legend			
##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
	Intersection ID	R	Right Turn Movement

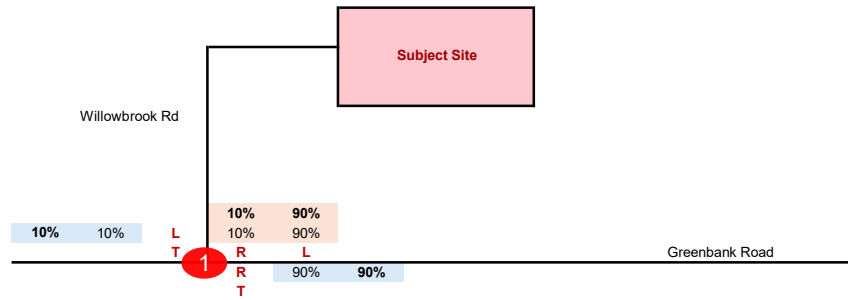
SCENARIO: 2030 BACKGROUND TRAFFIC VOLUMES



Document Control			
Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		

Legend			
##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
1	Intersection ID	R	Right Turn Movement

SCENARIO: 2040 BACKGROUND TRAFFIC VOLUMES



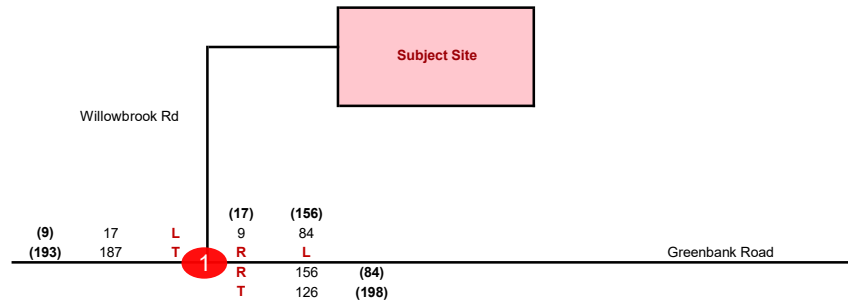
Document Control

Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		

Legend

##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
1	Intersection ID	R	Right Turn Movement

SCENARIO: DEVELOPMENT GENERATED TRAFFIC DISTRIBUTION



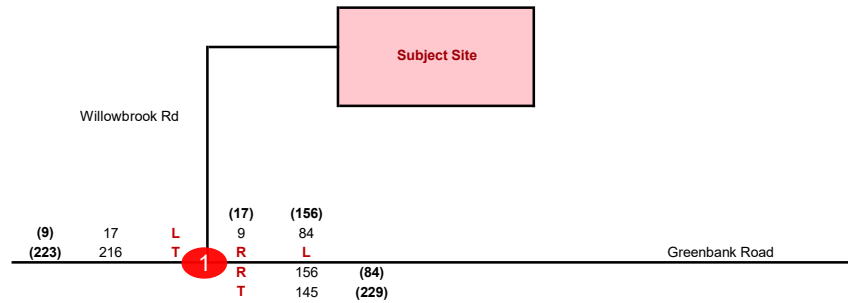
Document Control

Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		

Legend

##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
1	Intersection ID	R	Right Turn Movement

SCENARIO: 2030 BACKGROUND TRAFFIC VOLUMES + ADJACENT DEVELOPMENT VOLUMES



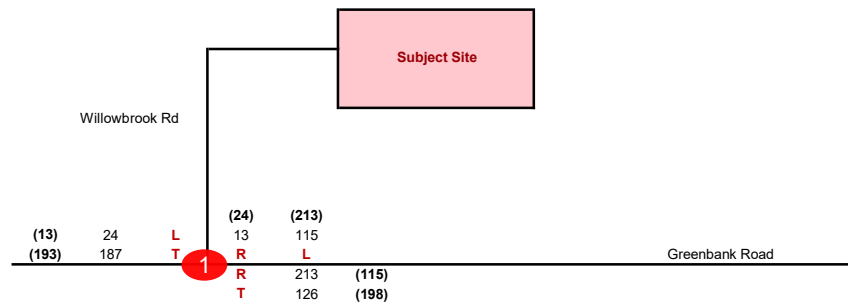
Document Control

Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		

Legend

##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
1	Intersection ID	R	Right Turn Movement

SCENARIO: 2040 BACKGROUND TRAFFIC VOLUMES + ADJACENT DEVELOPMENT VOLUMES



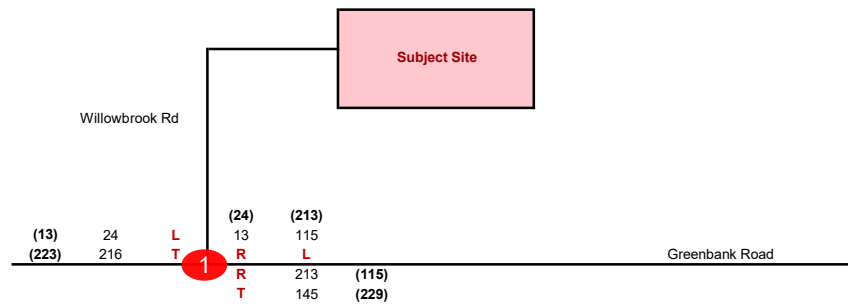
Document Control

Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		

Legend

##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
1	Intersection ID	R	Right Turn Movement

SCENARIO: 2030 BACKGROUND + ADJACENT DEVELOPMENT TRAFFIC + PROPOSED DEVELOPMENT TRAFFIC



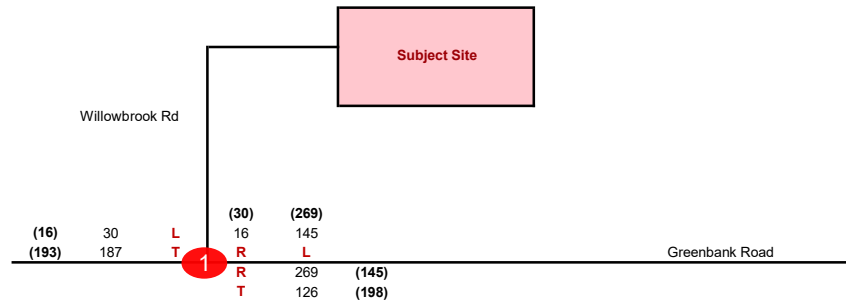
Document Control

Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		

Legend

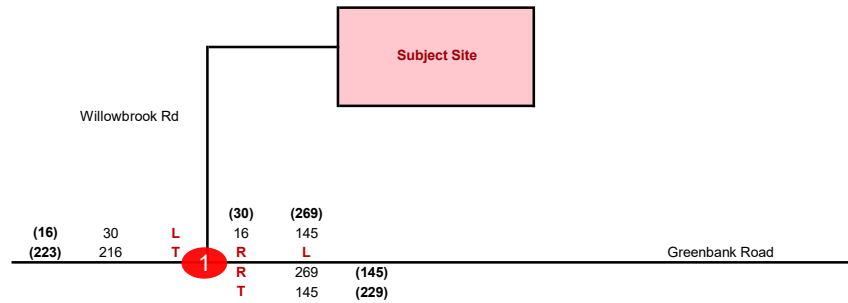
##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
1	Intersection ID	R	Right Turn Movement

SCENARIO: 2040BACKGROUND + ADJACENT DEVELOPMENT TRAFFIC + PROPOSED DEVELOPMENT TRAFFIC



Document Control			
Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		
Legend			
##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
	Intersection ID	R	Right Turn Movement

SCENARIO: 2030 BACKGROUND + ADJACENT DEVELOPMENT TRAFFIC + PROPOSED DEVELOPMENT TRAFFIC + POTENTIAL EASTERN DEVELOPMENT



Document Control			
Job Number:	P7575	Prepared Date:	11/08/2026
Prepared By:	TL	Reviewed Date:	11/08/2026
Reviewed By:	FJ		
Job Name:	824-908 Greenbank Road North Maclean TIA		

Legend			
##	AM Peak Period	L	Left Turn Movement
(##)	PM Peak Period	T	Through Movement
1	Intersection ID	R	Right Turn Movement

SCENARIO: 2040BACKGROUND + ADJACENT DEVELOPMENT TRAFFIC + PROPOSED DEVELOPMENT TRAFFIC + POTENTIAL EASTERN DEVELOPMENT

Appendix D: SIDRA Results



SITE LAYOUT

 **Site: [1 (3)] 2030 AM BG** (Greenbank Rd / Willowbrook Rd)

P7575

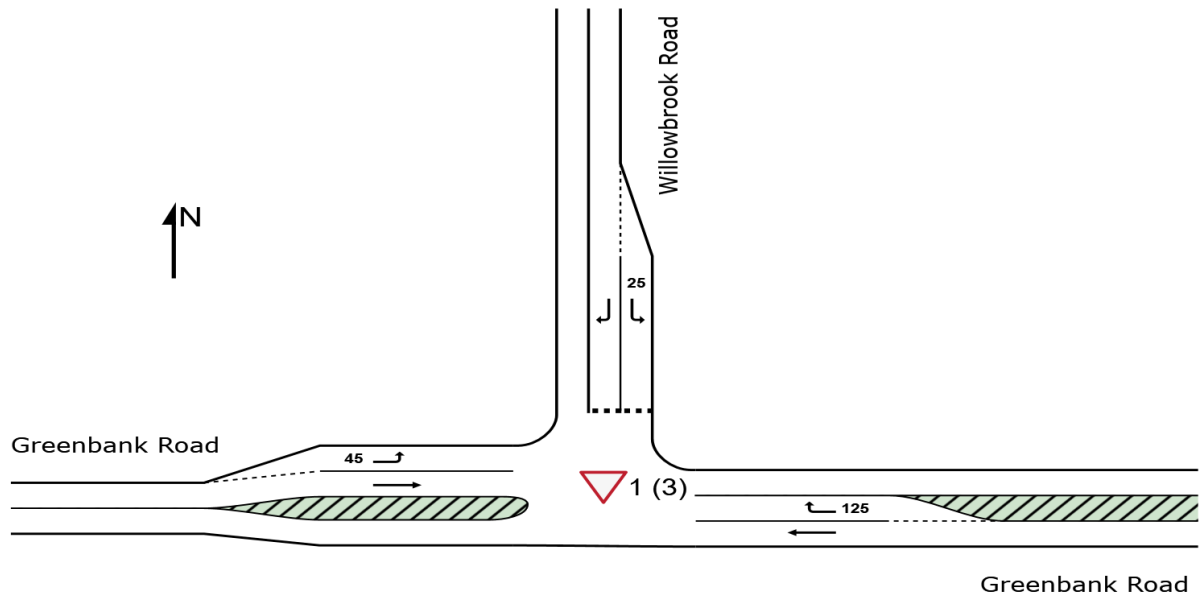
824-908 Greenbank Road North Maclean TIA

Site Category: (None)

Give-Way (Two-Way)

Site Scenario: 1 | Local Volumes

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



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Organisation: BITZIOS CONSULTING | Licence: PLUS / FLOATING | Created: Tuesday, 11 August 2026 4:26:29 PM

Project: P:\P7575 824_908 Greenbank Road North Maclean TIA\Technical\Models\SIDRA\P7575.001M Greenbank Road SIDRA.sipx

MOVEMENT SUMMARY

Site: [1 (3)] 2030 AM BG (Greenbank Rd / Willowbrook Rd)
Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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 Cycles Rate to Depart	Number of Cycles	Aver. Speed
			Flows		Flows					[Veh. Dist]					
			[Total HV] veh/h	%	[Total HV] veh/h	%				veh	m				
East: Greenbank Road															
5	T1	All MCs	133	12.7	133	12.7	0.074	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	80.0
6	R2	All MCs	164	7.0	164	7.0	0.148	8.0	LOS A	0.6	4.6	0.35	0.64	0.35	56.6
Approach			297	9.6	297	9.6	0.148	4.4	NA	0.6	4.6	0.19	0.36	0.19	65.1
North: Willowbrook Road															
7	L2	All MCs	88	7.0	88	7.0	0.084	6.5	LOS A	0.3	2.3	0.30	0.59	0.30	55.2
9	R2	All MCs	9	7.0	9	7.0	0.018	10.2	LOS B	0.1	0.5	0.54	0.69	0.54	52.6
Approach			98	7.0	98	7.0	0.084	6.9	LOS A	0.3	2.3	0.33	0.60	0.33	54.9
West: Greenbank Road															
10	L2	All MCs	18	7.0	18	7.0	0.010	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	197	7.4	197	7.4	0.106	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			215	7.4	215	7.4	0.106	0.6	NA	0.0	0.0	0.00	0.05	0.00	78.1
All Vehicles			609	8.4	609	8.4	0.148	3.5	NA	0.6	4.6	0.15	0.29	0.15	67.0

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

MOVEMENT SUMMARY

▼ Site: [1 (4)] 2030 PM BG (Greenbank Rd / Willowbrook Rd)
Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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 Cycles Rate to Depart	Number of Cycles	Aver. Speed
			Flows		Flows					[Veh. veh	Dist] m				
			[Total HV] veh/h	%	[Total HV] veh/h	%									
East: Greenbank Road															
5	T1	All MCs	208	12.4	208	12.4	0.115	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	88	7.0	88	7.0	0.080	7.9	LOS A	0.3	2.4	0.33	0.63	0.33	56.7
Approach			297	10.8	297	10.8	0.115	2.4	NA	0.3	2.4	0.10	0.19	0.10	71.2
North: Willowbrook Road															
7	L2	All MCs	164	7.0	164	7.0	0.158	6.7	LOS A	0.6	4.5	0.33	0.60	0.33	55.1
9	R2	All MCs	18	7.0	18	7.0	0.035	10.4	LOS B	0.1	0.9	0.55	0.72	0.55	52.4
Approach			182	7.0	182	7.0	0.158	7.0	LOS A	0.6	4.5	0.35	0.61	0.35	54.8
West: Greenbank Road															
10	L2	All MCs	9	7.0	9	7.0	0.005	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	203	8.8	203	8.8	0.110	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			213	8.8	213	8.8	0.110	0.3	NA	0.0	0.0	0.00	0.03	0.00	78.9
All Vehicles			692	9.2	692	9.2	0.158	3.0	NA	0.6	4.5	0.13	0.25	0.13	67.9

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

MOVEMENT SUMMARY

Site: [1 (5)] 2040 AM BG (Greenbank Rd / Willowbrook Rd)
Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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 Cycles Rate to Depart	Number of Cycles	Aver. Speed
			Flows		Flows					[Veh. Dist]					
			[Total HV] veh/h	%	[Total HV] veh/h	%				v/c	sec				
East: Greenbank Road															
5	T1	All MCs	153	12.7	153	12.7	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	80.0
6	R2	All MCs	164	7.0	164	7.0	0.154	8.2	LOS A	0.6	4.8	0.38	0.66	0.38	56.5
Approach			317	9.8	317	9.8	0.154	4.3	NA	0.6	4.8	0.20	0.34	0.20	65.8
North: Willowbrook Road															
7	L2	All MCs	88	7.0	88	7.0	0.087	6.7	LOS A	0.3	2.3	0.33	0.60	0.33	55.1
9	R2	All MCs	9	7.0	9	7.0	0.020	10.9	LOS B	0.1	0.5	0.56	0.71	0.56	52.0
Approach			98	7.0	98	7.0	0.087	7.1	LOS A	0.3	2.3	0.35	0.61	0.35	54.8
West: Greenbank Road															
10	L2	All MCs	18	7.0	18	7.0	0.010	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	227	7.4	227	7.4	0.122	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			245	7.4	245	7.4	0.122	0.5	NA	0.0	0.0	0.00	0.05	0.00	78.3
All Vehicles			660	8.5	660	8.5	0.154	3.3	NA	0.6	4.8	0.15	0.27	0.15	67.8

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

MOVEMENT SUMMARY

▼ Site: [1 (6)] 2040 PM BG (Greenbank Rd / Willowbrook Rd)
Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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 Rate to Depart	Number of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh.]	[Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
East: Greenbank Road															
5	T1	All MCs	241	12.4	241	12.4	0.134	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	88	7.0	88	7.0	0.083	8.1	LOS A	0.3	2.4	0.36	0.64	0.36	56.6
Approach			329	10.9	329	10.9	0.134	2.2	NA	0.3	2.4	0.10	0.17	0.10	71.9
North: Willowbrook Road															
7	L2	All MCs	164	7.0	164	7.0	0.164	6.9	LOS A	0.6	4.7	0.36	0.62	0.36	55.0
9	R2	All MCs	18	7.0	18	7.0	0.039	11.4	LOS B	0.1	1.0	0.57	0.75	0.57	51.7
Approach			182	7.0	182	7.0	0.164	7.3	LOS A	0.6	4.7	0.38	0.63	0.38	54.7
West: Greenbank Road															
10	L2	All MCs	9	7.0	9	7.0	0.005	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	235	8.8	235	8.8	0.127	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			244	8.8	244	8.8	0.127	0.3	NA	0.0	0.0	0.00	0.02	0.00	79.1
All Vehicles			756	9.3	756	9.3	0.164	2.8	NA	0.6	4.7	0.13	0.24	0.13	68.7

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

MOVEMENT SUMMARY

Site: [1 (7)] 2030 AM DES (Greenbank Rd / Willowbrook Rd)
Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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] veh/h	%									
East: Greenbank Road															
5	T1	All MCs	133	12.7	133	12.7	0.074	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	80.0
6	R2	All MCs	224	7.0	224	7.0	0.204	8.1	LOS A	0.9	6.7	0.37	0.65	0.37	56.5
Approach			357	9.1	357	9.1	0.204	5.1	NA	0.9	6.7	0.24	0.41	0.24	63.4
North: Willowbrook Road															
7	L2	All MCs	121	7.0	121	7.0	0.115	6.6	LOS A	0.4	3.2	0.31	0.59	0.31	55.2
9	R2	All MCs	14	7.0	14	7.0	0.030	11.2	LOS B	0.1	0.8	0.57	0.73	0.57	51.8
Approach			135	7.0	135	7.0	0.115	7.1	LOS A	0.4	3.2	0.34	0.61	0.34	54.8
West: Greenbank Road															
10	L2	All MCs	25	7.0	25	7.0	0.014	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	197	7.4	197	7.4	0.106	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			222	7.4	222	7.4	0.106	0.8	NA	0.0	0.0	0.00	0.07	0.00	77.4
All Vehicles			714	8.2	714	8.2	0.204	4.1	NA	0.9	6.7	0.18	0.34	0.18	65.2

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

MOVEMENT SUMMARY

Site: [1 (8)] 2030 PM DES (Greenbank Rd / Willowbrook Rd)
Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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
East: Greenbank Road															
5	T1	All MCs	208	12.4	208	12.4	0.115	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	121	7.0	121	7.0	0.110	8.0	LOS A	0.4	3.3	0.34	0.64	0.34	56.6
Approach			329	10.4	329	10.4	0.115	3.0	NA	0.4	3.3	0.13	0.23	0.13	69.4
North: Willowbrook Road															
7	L2	All MCs	224	7.0	224	7.0	0.216	6.7	LOS A	0.9	6.5	0.35	0.61	0.35	55.0
9	R2	All MCs	25	7.0	25	7.0	0.053	11.0	LOS B	0.2	1.4	0.56	0.75	0.56	52.0
Approach			249	7.0	249	7.0	0.216	7.2	LOS A	0.9	6.5	0.37	0.62	0.37	54.7
West: Greenbank Road															
10	L2	All MCs	14	7.0	14	7.0	0.008	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	203	8.8	203	8.8	0.110	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			217	8.7	217	8.7	0.110	0.5	NA	0.0	0.0	0.00	0.04	0.00	78.5
All Vehicles			796	8.9	796	8.9	0.216	3.6	NA	0.9	6.5	0.17	0.30	0.17	65.9

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

MOVEMENT SUMMARY

▼ Site: [1 (9)] 2040 AM DES (Greenbank Rd / Willowbrook Rd)
Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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. Dist]					
			[Total HV] veh/h	%	[Total HV] veh/h	%				veh	m				
East: Greenbank Road															
5	T1	All MCs	153	12.7	153	12.7	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	80.0
6	R2	All MCs	224	7.0	224	7.0	0.212	8.3	LOS A	0.9	6.9	0.40	0.66	0.40	56.4
Approach			377	9.3	377	9.3	0.212	5.0	NA	0.9	6.9	0.24	0.39	0.24	64.1
North: Willowbrook Road															
7	L2	All MCs	121	7.0	121	7.0	0.119	6.8	LOS A	0.4	3.3	0.34	0.61	0.34	55.1
9	R2	All MCs	14	7.0	14	7.0	0.032	12.0	LOS B	0.1	0.8	0.59	0.76	0.59	51.2
Approach			135	7.0	135	7.0	0.119	7.3	LOS A	0.4	3.3	0.36	0.62	0.36	54.7
West: Greenbank Road															
10	L2	All MCs	25	7.0	25	7.0	0.014	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	227	7.4	227	7.4	0.122	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			253	7.4	253	7.4	0.122	0.7	NA	0.0	0.0	0.00	0.06	0.00	77.7
All Vehicles			764	8.3	764	8.3	0.212	4.0	NA	0.9	6.9	0.18	0.33	0.18	65.9

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

MOVEMENT SUMMARY

Site: [1 (10)] 2040 PM DES (Greenbank Rd / Willowbrook Rd)
Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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 Rate to Depart	Number of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Greenbank Road															
5	T1	All MCs	241	12.4	241	12.4	0.134	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	121	7.0	121	7.0	0.114	8.2	LOS A	0.5	3.4	0.37	0.65	0.37	56.5
Approach			362	10.6	362	10.6	0.134	2.8	NA	0.5	3.4	0.12	0.22	0.12	70.2
North: Willowbrook Road															
7	L2	All MCs	224	7.0	224	7.0	0.224	7.0	LOS A	0.9	6.7	0.38	0.62	0.38	54.9
9	R2	All MCs	25	7.0	25	7.0	0.059	12.1	LOS B	0.2	1.5	0.60	0.79	0.60	51.2
Approach			249	7.0	249	7.0	0.224	7.5	LOS A	0.9	6.7	0.40	0.64	0.40	54.5
West: Greenbank Road															
10	L2	All MCs	14	7.0	14	7.0	0.008	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	235	8.8	235	8.8	0.127	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			248	8.7	248	8.7	0.127	0.4	NA	0.0	0.0	0.00	0.03	0.00	78.7
All Vehicles			860	9.0	860	9.0	0.224	3.4	NA	0.9	6.7	0.17	0.29	0.17	66.7

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

MOVEMENT SUMMARY

▼ Site: [1 (11)] 2030 AM DES + Eastern Portion of Site
(Greenbank Rd / Willowbrook Rd)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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 Rate to Depart	Number of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] m				km/h
East: Greenbank Road															
5	T1	All MCs	133	12.7	133	12.7	0.074	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	80.0
6	R2	All MCs	283	7.0	283	7.0	0.260	8.3	LOS A	1.2	8.9	0.40	0.65	0.40	56.4
Approach			416	8.8	416	8.8	0.260	5.6	NA	1.2	8.9	0.27	0.44	0.27	62.3
North: Willowbrook Road															
7	L2	All MCs	153	7.0	153	7.0	0.145	6.6	LOS A	0.6	4.1	0.32	0.60	0.32	55.1
9	R2	All MCs	17	7.0	17	7.0	0.041	12.3	LOS B	0.1	1.0	0.61	0.78	0.61	51.0
Approach			169	7.0	169	7.0	0.145	7.2	LOS A	0.6	4.1	0.35	0.62	0.35	54.7
West: Greenbank Road															
10	L2	All MCs	32	7.0	32	7.0	0.018	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	197	7.4	197	7.4	0.106	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			228	7.4	228	7.4	0.106	1.0	NA	0.0	0.0	0.00	0.09	0.00	76.9
All Vehicles			814	8.0	814	8.0	0.260	4.7	NA	1.2	8.9	0.21	0.38	0.21	63.8

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

MOVEMENT SUMMARY

▼ Site: [1 (12)] 2030 PM DES + Eastern Portion of Site
(Greenbank Rd / Willowbrook Rd)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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] veh/h	%									v/c
East: Greenbank Road															
5	T1	All MCs	208	12.4	208	12.4	0.115	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	153	7.0	153	7.0	0.139	8.1	LOS A	0.6	4.3	0.36	0.64	0.36	56.6
Approach			361	10.1	361	10.1	0.139	3.4	NA	0.6	4.3	0.15	0.27	0.15	68.1
North: Willowbrook Road															
7	L2	All MCs	283	7.0	283	7.0	0.272	6.8	LOS A	1.2	8.6	0.36	0.61	0.36	55.0
9	R2	All MCs	32	7.0	32	7.0	0.069	11.5	LOS B	0.2	1.8	0.58	0.78	0.58	51.6
Approach			315	7.0	315	7.0	0.272	7.3	LOS A	1.2	8.6	0.38	0.63	0.38	54.6
West: Greenbank Road															
10	L2	All MCs	17	7.0	17	7.0	0.010	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	203	8.8	203	8.8	0.110	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			220	8.7	220	8.7	0.110	0.6	NA	0.0	0.0	0.00	0.05	0.00	78.2
All Vehicles			896	8.7	896	8.7	0.272	4.1	NA	1.2	8.6	0.20	0.34	0.20	64.5

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

MOVEMENT SUMMARY

Site: [1 (13)] 2040 AM DES + Eastern Portion of Site
(Greenbank Rd / Willowbrook Rd)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

Site Category: (None)
Give-Way (Two-Way)
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
East: Greenbank Road															
5	T1	All MCs	153	12.7	153	12.7	0.085	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	80.0
6	R2	All MCs	283	7.0	283	7.0	0.269	8.5	LOS A	1.2	9.2	0.43	0.67	0.43	56.3
Approach			436	9.0	436	9.0	0.269	5.5	NA	1.2	9.2	0.28	0.43	0.28	62.8
North: Willowbrook Road															
7	L2	All MCs	153	7.0	153	7.0	0.151	6.8	LOS A	0.6	4.3	0.35	0.61	0.35	55.0
9	R2	All MCs	17	7.0	17	7.0	0.044	13.2	LOS B	0.2	1.1	0.64	0.81	0.64	50.4
Approach			169	7.0	169	7.0	0.151	7.4	LOS A	0.6	4.3	0.38	0.63	0.38	54.5
West: Greenbank Road															
10	L2	All MCs	32	7.0	32	7.0	0.018	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	227	7.4	227	7.4	0.122	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			259	7.4	259	7.4	0.122	0.9	NA	0.0	0.0	0.00	0.08	0.00	77.3
All Vehicles			864	8.1	864	8.1	0.269	4.5	NA	1.2	9.2	0.21	0.37	0.21	64.5

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

MOVEMENT SUMMARY

▼ Site: [1 (14)] 2040 PM DES + Eastern Portion of Site
(Greenbank Rd / Willowbrook Rd)

Output produced by SIDRA INTERSECTION Version: 10.0.9.250

P7575
824-908 Greenbank Road North Maclean TIA

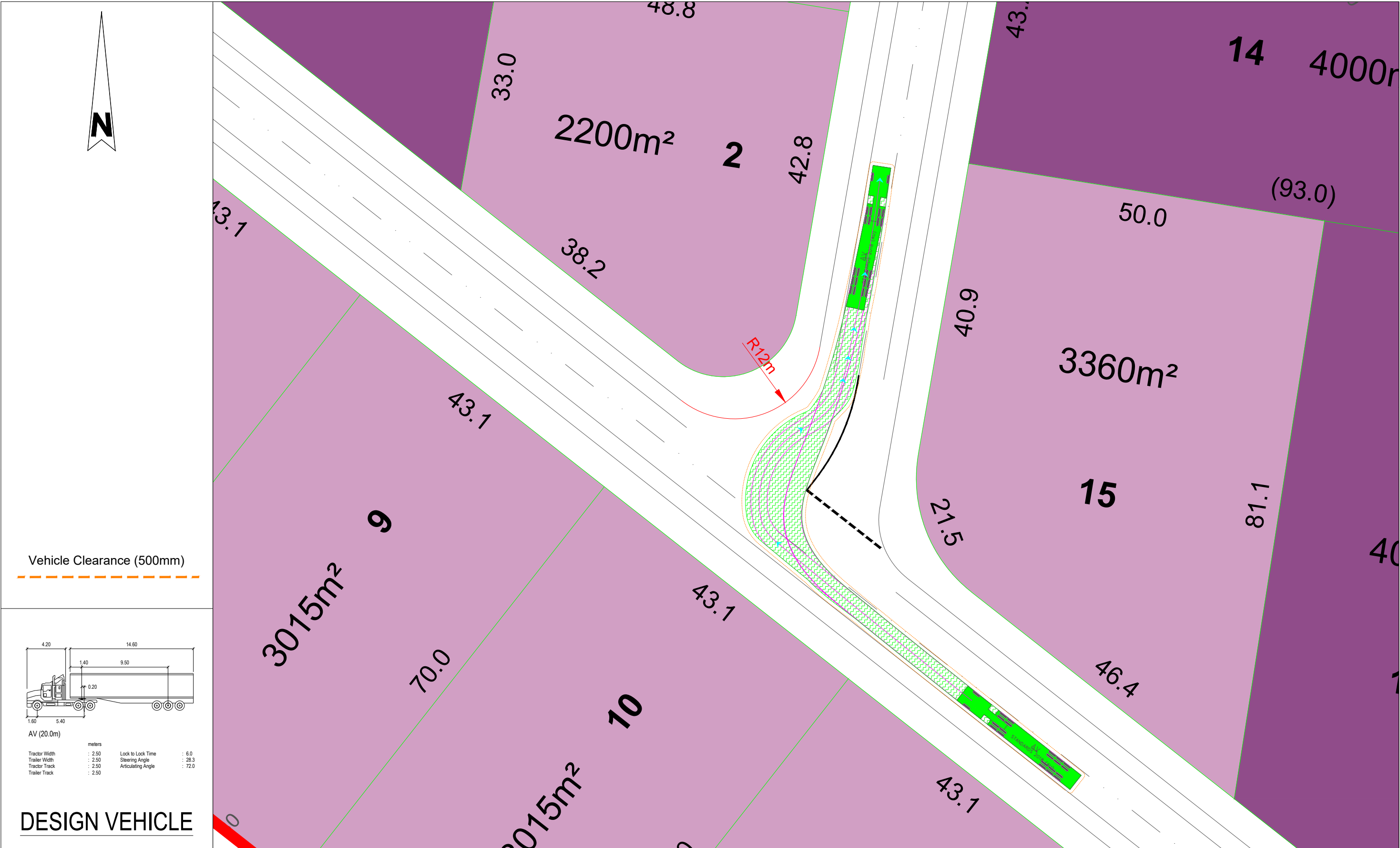
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

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: Greenbank Road															
5	T1	All MCs	241	12.4	241	12.4	0.134	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	153	7.0	153	7.0	0.144	8.2	LOS A	0.6	4.5	0.38	0.66	0.38	56.5
Approach			394	10.3	394	10.3	0.144	3.2	NA	0.6	4.5	0.15	0.26	0.15	68.8
North: Willowbrook Road															
7	L2	All MCs	283	7.0	283	7.0	0.282	7.1	LOS A	1.2	8.9	0.39	0.63	0.39	54.9
9	R2	All MCs	32	7.0	32	7.0	0.077	12.7	LOS B	0.3	2.0	0.62	0.83	0.62	50.7
Approach			315	7.0	315	7.0	0.282	7.6	LOS A	1.2	8.9	0.42	0.65	0.42	54.4
West: Greenbank Road															
10	L2	All MCs	17	7.0	17	7.0	0.010	7.1	LOS A	0.0	0.0	0.00	0.63	0.00	62.3
11	T1	All MCs	235	8.8	235	8.8	0.127	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
Approach			252	8.7	252	8.7	0.127	0.5	NA	0.0	0.0	0.00	0.04	0.00	78.4
All Vehicles			960	8.8	960	8.8	0.282	3.9	NA	1.2	8.9	0.20	0.33	0.20	65.3

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

Appendix E: SIDRA Results





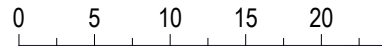


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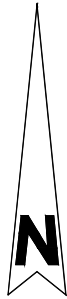
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Sydney
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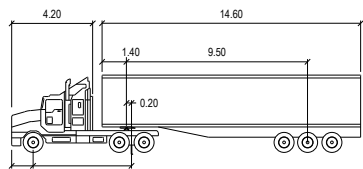
REVISIONS		Drawn	Date
Issue	Revisions/Descriptions		
001	Swept Path Assessment	A.P	06.08.26

Scale @ A3  1:500

Project	Design	Drawn	Checked
824-908 Greenbank Road, North Maclean	M.D2	M.D2	A.P
Title	CONCEPT ONLY		Date
	Swept Path Assessment 20m Articulate Vehicle Internal Intersection		06.08.2026
Project Number	Sheet Number	Issue	
P7575	1	001	



Vehicle Clearance (500mm)



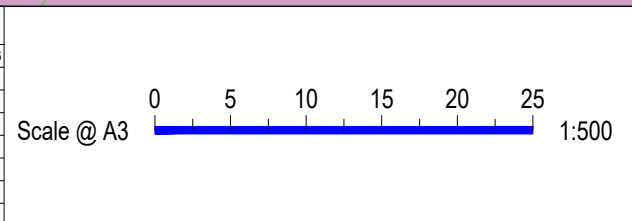
AV (20.0m)			
meters			
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE

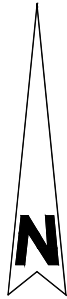


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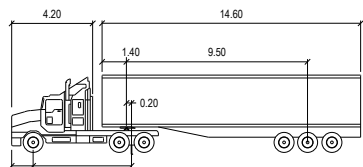
REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	Swept Path Assessment	A.P	06.08.26



Project 824-908 Greenbank Road, North Maclean	Design M.D2	Drawn M.D2	Checked A.P
	CONCEPT ONLY		
	Project Number P7575	Sheet Number 2	Date 06.08.2026
Title Swept Path Assessment 20m Articulate Vehicle Internal Intersection		Issue 001	



Vehicle Clearance (500mm)



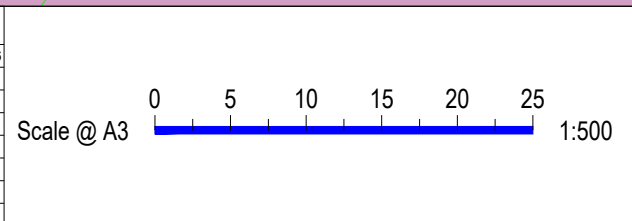
meters			
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE

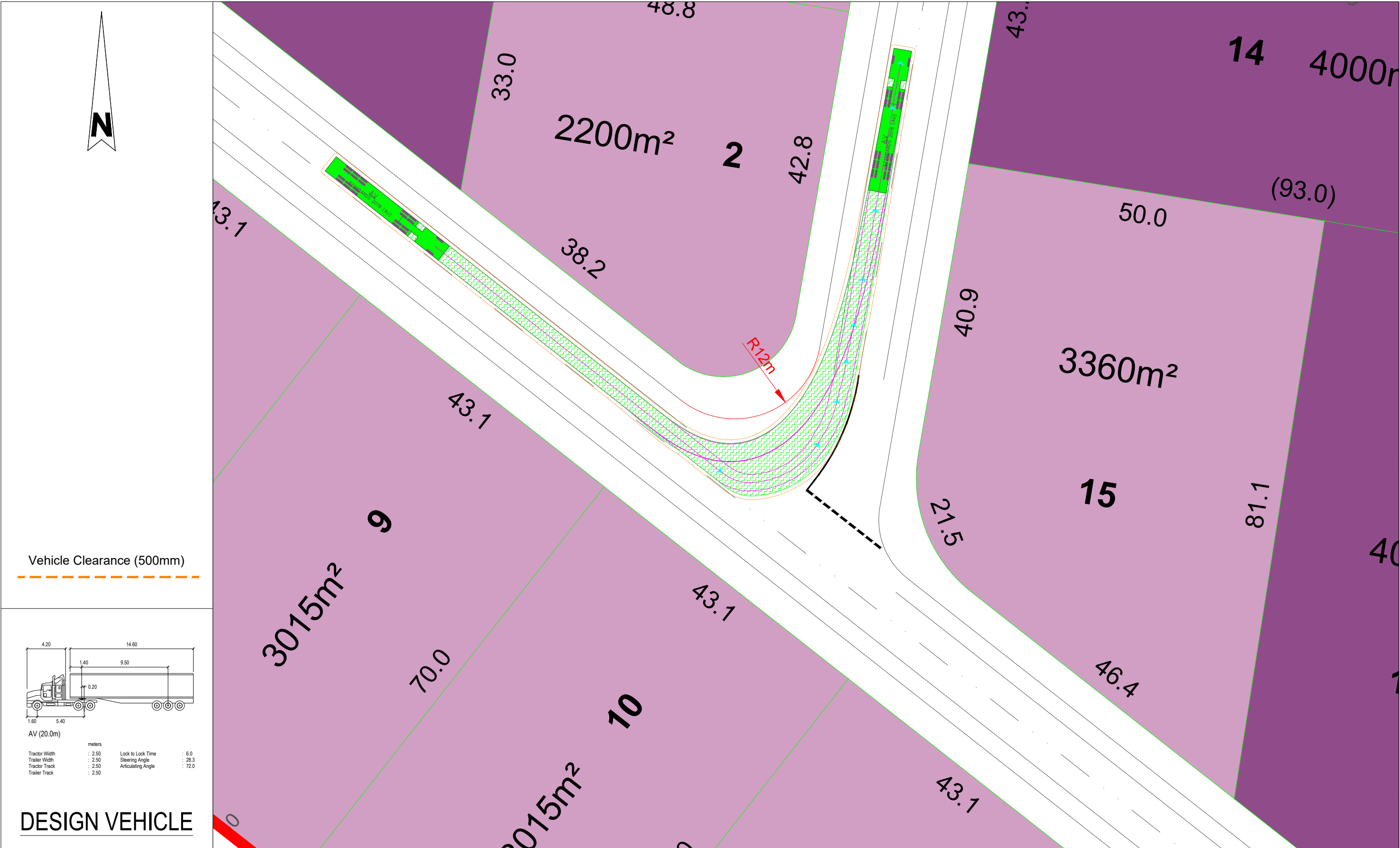


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Issue	Revisions/Descriptions	Drawn	Date
001	Swept Path Assessment	A.P	06.08.26



Project 824-908 Greenbank Road, North Maclean		Design M.D2	Drawn M.D2	Checked A.P
Title Swept Path Assessment 20m Articulate Vehicle Internal Intersection		CONCEPT ONLY		
		Project Number P7575	Sheet Number 3	Date 06.08.2026 Issue 001





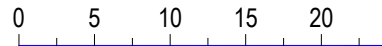
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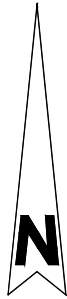
REVISIONS		Drawn	Date
Issue	Revisions/Descriptions		
001	Swept Path Assessment	A.P	06.08.26

Scale @ A3

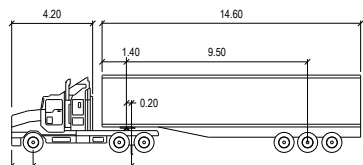


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Project	Design	Drawn	Checked
824-908 Greenbank Road, North Maclean	M.D2	M.D2	A.P
Title	CONCEPT ONLY		Date
	Swept Path Assessment 20m Articulate Vehicle Internal Intersection		06.08.2026
Project Number	Sheet Number	Issue	
P7575	4	001	



Vehicle Clearance (500mm)



AV (20.0m)			
meters			
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Tractor Track	: 2.50	Steering Angle	: 28.3
Tractor Wheelbase	: 2.50	Articulating Angle	: 72.0

DESIGN VEHICLE

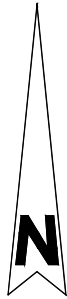


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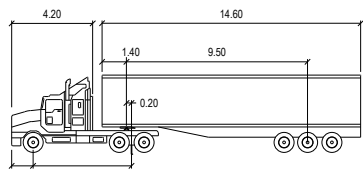
REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	Swept Path Assessment	A.P	06.08.26

Scale @ A3  1:400

Project 824-908 Greenbank Road, North Maclean	Design M.D2	Drawn M.D2	Checked A.P
	CONCEPT ONLY		
	Project Number P7575	Sheet Number 5	Date 06.08.2026
Title Swept Path Assessment 20m Articulated Vehicle Cul-de-sac Turnaround		Issue 001	



Vehicle Clearance (500mm)



AV (20.0m)

	meters	
Tractor Width	: 2.50	Lock to Lock Time
Trailer Width	: 2.50	Steering Angle
Tractor Track	: 2.50	Articulating Angle
Trailer Track	: 2.50	

DESIGN VEHICLE



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REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	Swept Path Assessment	A.P	06.08.26

Scale @ A3  1:400

Project 824-908 Greenbank Road, North Maclean	Design M.D2	Drawn M.D2	Checked A.P
	CONCEPT ONLY		
	Title Swept Path Assessment 20m Articulated Vehicle Temporary Turnaround	Project Number P7575	Sheet Number 6
		Date 06.08.2026	Issue 001

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