

A photograph of a gravel road curving through a rural landscape. In the background, there are several large white agricultural buildings, possibly a farm or equestrian center, under a cloudy sky.

TRAFFIC & PARKING ASSESSMENT

**MULTI DWELLING HOUSING DEVELOPMENT COMPRISING
31 DWELLINGS**

**PROPOSED LOT 1101 IN A SUBDIVISION OF
LOT 268 DP1271229
119 SPRINGFIELD DRIVE, LOCHINVAR**

PREPARED FOR: LOCHINVAR DOWNS PTY LTD

MAY 2024

REF:24/029

**TRAFFIC & PARKING ASSESSMENT
MULTIPLE DWELLING HOUSING
LOCHINVAR DOWNS PTY LTD****PROPOSED LOT 1101 IN A SUBDIVISION OF LOT 268 DP1271229
119 SPRINGFIELD DRIVE, LOCHINVAR**

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A	16/05/24	Draft	JG
B	18/05/24	Edit	JG
C	22/05/24	Amended Plan / Final Proof	JG
D	22/05/24	Approved	JG

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Date 22nd May 2024**Disclaimer**

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1. INTRODUCTION

Intersect Traffic Pty Ltd (Intersect Traffic) was engaged by Lochinvar Downs Pty Ltd to prepare a traffic and parking assessment (TPA) report for a proposed multi dwelling housing development at 119 Springfield Drive, Lochinvar (being proposed Lot 1101 in a subdivision of Lot 268 DP1271229). The proposal will provide 31 residential dwellings on the site accessed from Station Lane with on-site visitor car parking as shown in the concept site plan provided within **Appendix 1**. The report is required to support a development application to Maitland City Council for the development.

The aim of this assessment is to determine the likely impact of the development on the adjacent local road network due to the traffic generated by the development and compliance of the on-site car parking with Council and Australian Standard requirements. This report presents the findings of the assessment and includes the following:

1. An outline of the existing road network in the vicinity of the proposed development.
2. An assessment of the likely peak traffic generation from the development.
3. An assessment of the likely traffic impacts of the proposal on the adjacent road network, in particular in terms of the capacity of the existing road network linking to the sub-arterial road network.
4. An assessment of the proposed access and on-site parking.
5. Presentation of conclusions and any recommendations.

This assessment has been carried out with reference to the *RTA's Guide to Traffic Generating Developments*, *Austrroads Guide to Road Design Guidelines (2019)*, *Austrroads Guide to Traffic Management Guidelines (2020)* and Maitland City Council's DCP as well as utilising information provided by Toca Pty Ltd.

2. SITE DESCRIPTION

The subject site is located on the eastern side of Station Lane, Lochinvar approximately 1.13 km’s south of the New England Highway. The site only has road frontage to Station Lane. The site is approximately 650 metres south-west of the proposed Lochinvar Shopping Village and 960 metres south of Lochinvar Public School. It is also within 320 metres (easy walking distance) of the proposed Lochinvar commercial centre within the URA. The development site is currently vacant land being a super lot within the adjoining Lochinvar Downs residential estate. The proposed Station Lane / Springfield Drive signalised intersection will be constructed in the near future approximately 170 metres north of the site. Springfield Drive is the main collector road through the southern portion of the Lochinvar URA and will provide connection to the New England Highway via the existing signalised intersection to the north-east of the site and a future signalised intersection to the north-west of the site. The subject site is shown in **Figure 1** in context with the surrounding properties, and roads.

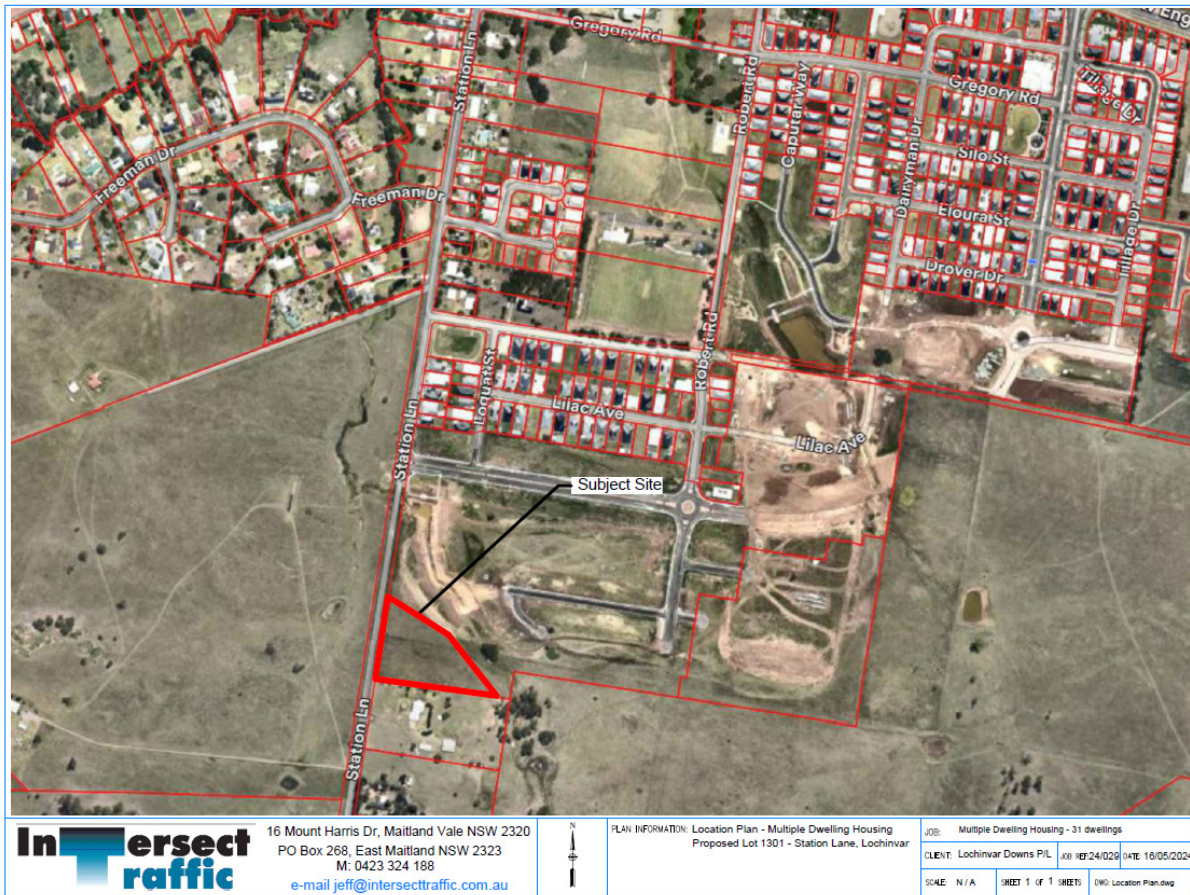


Figure 1 – Site Location Plan

The site has the following property descriptors:

- ◆ Formal title of proposed Lot 1101 in a subdivision of Lot 268 in DP 1271229.
- ◆ Address of 119 Springfield Drive, Lochinvar.
- ◆ Area of approximately 1.66 ha, and
- ◆ Zoning of R1 General Residential pursuant to the Maitland LEP (2011).

The site is within the southern section of the Lochinvar Urban Release Area and is within Stage 1 of the Lochinvar Staging Plan. The site currently has no formal vehicular access. **Photographs 1 & 2** below show the site from Station Lane and from the existing recently constructed Station Lane / Springfield Drive intersection respectively.



Photograph 1 – Site from Station Lane.



Photograph 2 – Site from Springfield Drive.

3. EXISTING ROAD NETWORK

3.1 New England Highway (A43)

The New England Highway is part of the classified State Highway network and is a major sub-arterial road in the region. It is currently under the care and control of Transport for NSW (TfNSW). With the opening of the Hunter Expressway, it now performs the function of a sub-arterial road connecting Maitland to the rural areas of Lochinvar, Greta, and Branxton. Through Lochinvar the New England Highway is generally a two-lane two-way sealed urban road constructed to highway standards however an overtaking lane for eastbound traffic is provided between Robert Street and east of Wyndella Road. Lane widths are in the vicinity of 3.4 to 3.8 metres and a 60 km/h speed limit applies to the section of the Highway near Cantwell Road except during school AM drop off and PM pick up times when the variable school speed zoning occurs, and a 40 km/h speed limit applies. At the time of inspection, the New England Highway was observed to be in good condition (**Photograph 3**).

3.2 Station Lane

Station Lane near the site is a local rural collector road under the care and control of Maitland City Council with its primary function providing access to the southern collector road as well as providing access for properties along its length. Near the site it is a sealed rural road approximately 6 to 7 metres wide with unsealed shoulders / verges allowing two-way traffic flow at normal speeds. A 50 km/h speed limit would apply to this section of road and at the time of inspection Station Lane was observed to be in fair to good condition. (See **Photographs 4 & 5**). In the future with the development of the Lochinvar URA, Station Lane will become a local urban road and will be upgraded and widened as development occurs as is the case near the New England Highway.



Photograph 3 – New England Highway near Station Lane intersection.



Photograph 4 – Station Lane south of site.



Photograph 5 – Station Lane along site frontage.

3.3 Springfield Drive

Springfield Drive is the major local collector road servicing the southern sections of the Lochinvar URA and it will be under the care and control of Maitland City Council. It is being constructed as part of the development works for the residential subdivisions within the Lochinvar URA. So far it has been constructed 600 metres south of the New England Highway within the Hereford Park residential estate and 700 metres east of Station Lane as part of Lochinvar Downs residential estate. The missing link of approximately 230 metres is within a third residential estate which is yet to commence construction. The developers of both the Hereford Park and Lochinvar Downs estates have been working together to provide a temporary link between both sections of the constructed Springfield Drive via other roads within the estates and neighbouring developments to ensure development traffic can still access the Springfield Drive connection to the New England Highway (existing traffic signals see **Photograph 6** below) from Station Lane. At the time of inspection, it was observed that an alternate temporary connection is already available via Springfield Drive, Robert Road, and Gregory Road.

Springfield Drive is being constructed as a two-way two-lane divided road with a central raised concrete median with parking lanes and on-road cycleways on both sides of the road. Lane widths are 3.5 metres for the travel lanes, 1.5 metres for the on-road cycleway and 2.3 metres for the parking lanes. A 50 km/h speed zoning will apply to Springfield Drive and at the time of inspection the newly constructed Springfield Drive was in excellent condition as shown in **Photographs 6 and 7** below.



Photograph 6 – Springfield Drive at New England Highway signalised intersection.



Photograph 7 – Springfield Drive near Station Lane.

4. ROAD NETWORK IMPROVEMENTS

Future upgrades to the road network will occur as the Lochinvar URA develops. The works that will impact on the development will be the upgrading of Station Lane to an urban local road standard from the New England Highway with an 8-metre-wide carriageway and roll kerb and gutter on both sides of the road, and the connection of Springfield Drive to the New England Highway east of the site. With major residential developments proposed adjacent to the site, it would be expected that the widening of Station Lane would occur in a 5--10year period.

5. TRAFFIC VOLUMES

Northern Transport Planning and Engineering undertook AM and PM traffic counts at the New England Highway / Station Lane / Cantwell Road intersection on Thursday 1st February 2024 to determine the peak hour traffic volumes at the intersection. The peak hour traffic periods were found to be between 8 am and 9 am and 3 pm and 4 pm coinciding with peak school traffic periods. The results of the traffic counts are provided in **Appendix 2** and the two-way mid-block traffic volumes on the road network extracted from this data is shown below in **Table 1**. Table 1 also shows the predicted 2034 two-way mid-block traffic volumes based on a background traffic growth rate of 3% per annum given the level of development in the area. The data in **Table 1** has been adopted in this assessment as the baseline traffic data for the assessment of the impacts of the development.

Table 1 – Baseline Existing and Future Road Network Peak Hour Traffic Volumes.

Road	Section	2024		2034 @ 3 % per annum	
		AM (vtph)	PM (vtph)	AM (vtph)	PM (vtph)
New England Highway	East of Station Lane	1366	1533	1836	2060
New England Highway	West of Station Lane	1559	1648	2095	2215
Station Lane	South of New England Highway	276	158	371	212

These existing and future traffic volumes have been adopted in this assessment.

6. ROAD CAPACITIES

The capacity of the road network is generally determined by the capacity of intersections. However, for urban roads *Table 4.3 of the RTA's Guide to Traffic Generating Developments*, reproduced below, provides some guidance on mid-block capacities for a level of service (LoS) C.

Table 4.3
Typical mid-block capacities for urban roads with interrupted flow

Type of Road	One-Way Mid-block Lane Capacity (pcu/hr)	
Median or inner lane:	Divided Road	1,000
	Undivided Road	900
Outer or kerb lane:	With Adjacent Parking Lane	900
	Clearway Conditions	900
	Occasional Parked Cars	600
4 lane undivided:	Occasional Parked Cars	1,500
	Clearway Conditions	1,800
4 lane divided:	Clearway Conditions	1,900

Source: - RTA's Guide to Traffic Generating Developments (2002).

Noting the New England Highway being a two-lane two-way undivided road it would have a one-way mid-block capacity of at least 900 vtpm and a two-way mid-block capacity of 1,800 vtpm for a LoS C. However, as the New England Highway is a major sub-arterial road it would still be acceptable for the road to operate with a LoS D with single lane capacities at least up to 1,200 vtpm for a 60 km/h speed zone. (*reference Austroads Guide to Traffic Management Part 3 – Traffic Studies and Analysis – Figure 3.1*).

Station Lane as a local road generally only servicing residential dwellings, requires consideration of the Environmental Capacity goals of TfNSW. The goals are listed below and sourced from *Table 4.6 of RTA's Guide to Traffic Generating Developments*.

Table 4.6
Environmental capacity performance standards on residential streets

Road class	Road type	Maximum Speed (km/hr)	Maximum peak hour volume (veh/hr)
Local	Access way	25	100
	Street	40	200 environmental goal 300 maximum
Collector	Street	50	300 environmental goal 500 maximum

Note: Maximum speed relates to the appropriate design maximum speeds in new residential developments. In existing areas maximum speed relates to 85th percentile speed.

Source: - RTA's Guide to Traffic Generating Developments (2002).

Based on Station Lane being a local collector street, a maximum peak environmental capacity traffic volume of 500 vph is considered appropriate. Therefore, the two-way mid-block road capacities adopted in this assessment are;

- ◆ New England Highway – 2,400 vph;
- ◆ Station Lane – 500 vph.

As the current and future traffic volumes on the New England Highway and Station Lane determined in **Section 5** above are less than the two-way mid-block road capacities determined above, it is concluded the local and state road network has spare capacity to cater for additional traffic generated by the proposed development subject to satisfactory intersection performance.

7. ALTERNATE TRANSPORT MODES

Hunter Valley Buses run public transport (bus) services in the area. Routes 179, 180, 401, 402 and 403 (Singleton to Maitland) run along the New England Highway through Lochinvar (see **Figure 2** below). The nearest bus stops are located on the New England Highway, east of Station Lane (see **Photograph 8** below) some 600 metres from the site i.e. within walkable distance. This provides a frequent and regular public transport service to the site servicing major retail, commercial and health services in Singleton, Rutherford, Maitland, and Greenhills, as well as connection to the heavy rail services at Maitland Railway Station. From there public transport connections (bus and rail) are available to all facilities in the Newcastle, Central Coast and Sydney areas.

As the Lochinvar URA further develops and a greater demand for public transport is established, a review of bus routes will need to occur with the southern collector road likely to be a future bus route. This is evidenced by the proposed bus stops near the proposed commercial centre within the URA shown on the current URA masterplan. This would be more convenient to the site however is only speculation until the demand is established and further discussions with Council, the bus companies and TfNSW occur.

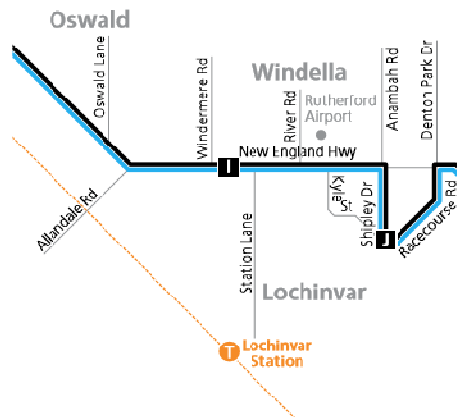


Figure 2 – Bus route map.

As part of the subdivision works associated with the approved Lochinvar Downs residential estate concrete pedestrian footpath will be constructed from Springfield Drive to the site which will connect to the pedestrian footpaths and shared off-road pathways on Springfield Drive (see **Photograph 7**), which subsequently connects through to the New England Highway. The pedestrian phases within the New England Highway / Springfield Drive / Wyndella Road allows safe crossing of the highway for access to nearby bus stops. On-road cycle lanes are provided on the New England Highway through the recently upgraded New England Highway / Station Lane / Cantwell Road intersection. On and off-road cycleways will continue to be constructed within the Lochinvar URA as land develops in the area in accordance with the latest structure plan.



Photograph 8 – Bus Stop on New England Highway near Station Lane.

8. PROPOSED DEVELOPMENT

The proposal involves the construction of a multi dwelling housing complex containing 31 dwellings. The proposed site master plan is shown in **Appendix 1**. Specifically, the development will include the provision of:

- ◆ 31 dwellings consisting of 28 two-bedroom dwellings with single garage and 3 one-bedroom dwellings with single garage.
- ◆ A combined entry / exit access crossing a minimum of 7.5 metres wide off Station Lane as well as 5.5 metre to 6 metre wide (2 way) internal driveways to access the dwellings.
- ◆ On-site visitor car parking with a total of 8 spaces including 2 accessible spaces spread throughout the site in centralised locations.
- ◆ A waste enclosure area located at the front of the development near the entrance; and
- ◆ Drainage and landscaping to Maitland City Council requirements.

Subdivision development works associated with the approved Lochinvar Downs residential estate will include half road construction of Station Lane to a local road standard as per Maitland City Council's Manual of Engineering Standards and will include a pedestrian footpath on the eastern side of Station Lane.

9. TRAFFIC GENERATION

In considering the traffic generating potential of the development reference is made to the recommended traffic generation rates within the TfNSW documents *RTA's Guide to Traffic Generating Developments (2002)*. As a medium density housing development, the relevant recommended traffic generation rate for assessment is as follows;

Smaller units and flats (up to two bedrooms):

Daily vehicle trips = 4-5 per dwelling

Weekday peak hour vehicle trips = 0.4-0.5 per dwelling.

Based on the above maximum rates and the proposed development the likely traffic generation for the proposed development is calculated as follows.

- ◆ Weekday daily vehicle trips = $31 \times 5 = 155$ **vehicle trips per day (vtpd)**; and
- ◆ Weekday peak hour vehicle trips = $31 \times 0.5 = 16$ **vehicle trips per hour (vtph)**.

These values have been adopted in this assessment.

This traffic is distributed through the road network using the following assumptions based on the type of development, likely origin / destinations, and existing traffic distributions. It is considered the majority of trips will be to and from Rutherford or Maitland which provides all the business, retail, health, and education services in the region while the origin / destinations to the west will include Singleton, Branxton, and connection to the Hunter Expressway.

- ◆ In the AM peak 80 % of traffic will be outbound while in the PM peak 70 % of traffic will be inbound.
- ◆ 70% of traffic will have an origin / destination east towards Rutherford and Maitland, using Springfield Drive to access the New England Highway, and 20 % will have an origin destination west towards Branxton and Singleton.
- ◆ 10% of traffic will travel along Station Lane to the New England Highway to access the local services, school, shops, hotel etc.

The resulting trip distribution on the local road network is therefore as shown graphically below in **Figure 3**.

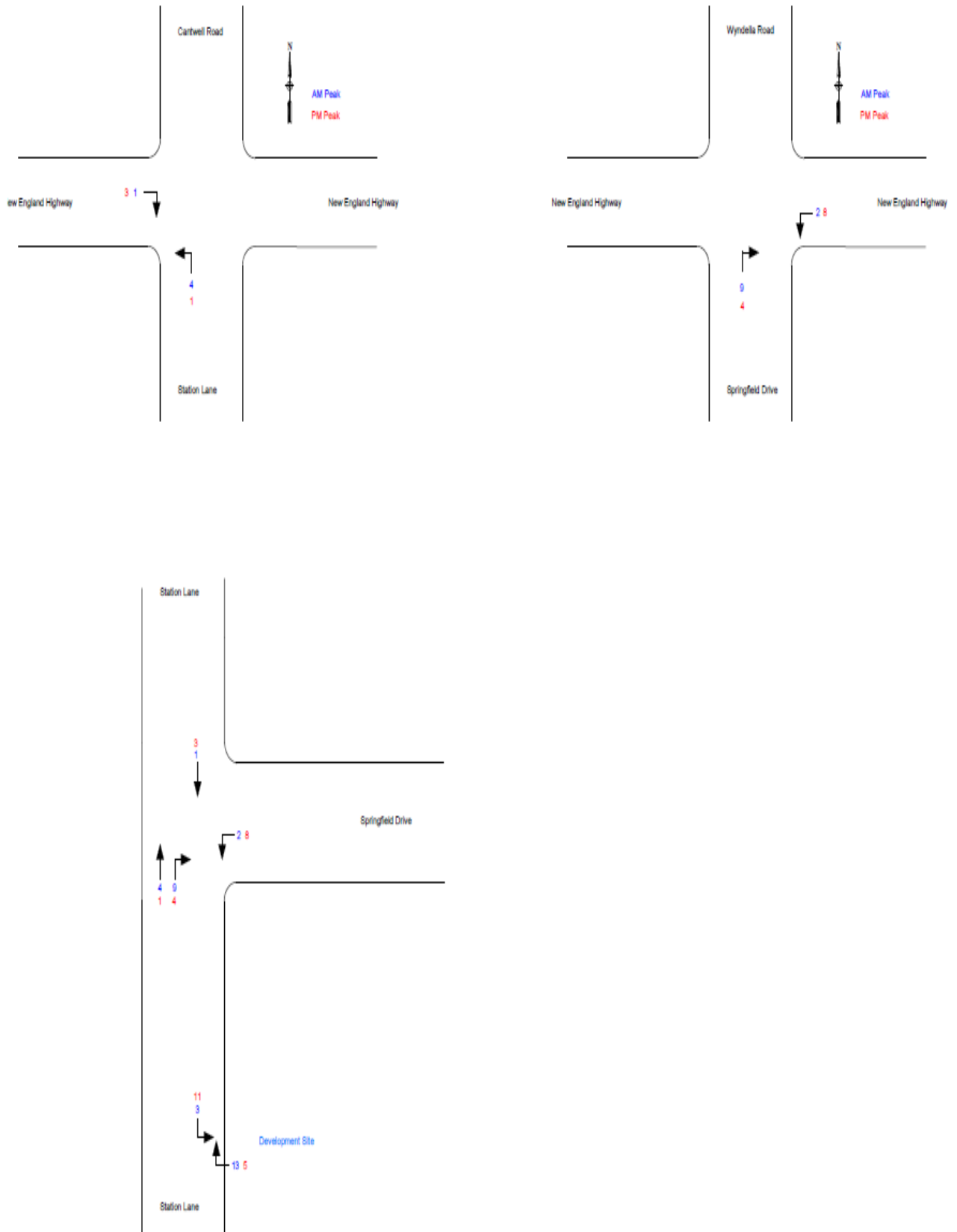


Figure 3 – Development Traffic Trip Distribution

10. TRAFFIC IMPACT ASSESSMENT

10.1 Road Network Capacity

This assessment has determined (**Section 6**) that the existing road network around the site is currently operating below its technical mid-block two-way capacity and has spare capacity to cater for additional traffic from the proposed development. **Section 9** of this report determined that the subject development is likely to generate 16 additional vehicle trips per hour during the road network peaks (AM & PM). The resulting additional traffic distributed as shown in **Figure 3** is not sufficient for the local and state road network to reach their respective two-way mid-block capacities as shown in **Table 2** below through to 2034.

Table 2 – Two-way mid-block road capacity check

Road	Section	2024 + development		2034 + development		Road Capacity	Development Traffic	
		AM (vtph)	PM (vtph)	AM (vtph)	PM (vtph)		AM	PM
New England Highway	East of Station Lane	1377	1545	1847	2072	2400	11	12
New England Highway	West of Station Lane	1564	1652	2100	2219	2400	5	4
Station Lane	South of New England Highway	281	162	376	216	1800	5	4

The site being within the Lochinvar URA was covered in the Lochinvar URA Traffic and Transport report by ARaP-TTW (September 2012). In this report the site was assumed to generate traffic at the rate of 12.9 lots per hectare so with an area of 1.66 ha and using the TfNSW rates for traffic generation for low density residential, the full development of the Lochinvar URA modelling would have assumed a traffic generation from the site of 18 vtph in the AM peak and 19 vtph in the PM peak. As the proposed development only generates up to 16 vtph it is reasonable to conclude, based on the conclusions of the Lochinvar URA Traffic and Transport report by ARaP-TTW (September 2012), that the development will also not adversely impact on the road network with full development of the Lochinvar URA.

Therefore overall, it is reasonable to conclude that the development will not adversely impact on the two-way mid-block levels of service experienced on the state and local road network.

10.2 Intersection Capacity

The intersection most likely to be impacted by this development is the New England Highway / Springfield Drive / Wyndella Road signalised intersection. This intersection is currently operating well within capacity as it has been designed to cater for full development of the Lochinvar URA based on the traffic assessment undertaken and reported in the Lochinvar URA Traffic and Transport Report (ARaP-TTW September 2012). Therefore, as the site is within the Lochinvar URA area and the proposal generates less traffic than was assumed in the Lochinvar URA Traffic and Transport Report (ARaP-TTW September 2012) it is reasonable to conclude that the proposal will not adversely impact on the future road network on the full development of the Lochinvar URA.

This also applies to the existing New England Highway / Station Lane / Cantwell Road intersection and the future Springfield Drive / Station Lane signalised intersection which will be impacted by traffic from the development. Therefore, it is also reasonable to conclude that this development will not adversely impact on the operation of these intersections on full development of the Lochinvar URA based on the findings of the Lochinvar URA Traffic and Transport Report (ARaP-TTW September 2012).

It is noted however, that the proposed New England Highway / Station Lane / Cantwell Road intersection on full development of the Lochinvar URA is proposed to be a left in and left out only intersection while currently it is only the right turn movement out of Station Lane that is physically prohibited. However, the impact of this development on this intersection is insignificant with likely additional traffic being only 5 vtph in the AM peak and 4 vtph in the PM peak. It is generally

considered by traffic experts that any increase in additional traffic on an intersection of less than 10 vtpd will not result in any impact on the operation of the intersection with no loss of level of service (LoS) occurring for any movement.

Overall based on the findings of the Lochinvar URA Traffic and Transport Report (ARaP-TTW September 2012) and noting the proposed development generates less traffic than allowed for in that report, the proposed development will not adversely impact on the operation of any existing or future intersections in the Lochinvar URA area.

10.3 On-Site Car Parking

The proposed development will generate an on-site parking demand. Therefore, on-site parking in accordance with the *Maitland DCP (2011)* is required: The requirements for multi dwelling housing within *Appendix A of Section C11 – Vehicular Access and Parking* within the DCP is as follows;

Resident Parking

1 space for each one- or two-bedroom dwelling or 2 spaces for each dwelling containing more than two bedrooms.

plus

Visitor Parking

1 visitor space for the first three dwellings and 1 space for every five thereafter or part thereof.

Accessible Parking

1 visitor accessible parking space per 100 sites for developments with more than 10 visitor spaces.

Noting that the development contains 31 one and two-bedroom dwellings, the following DCP on-site car parking requirement is calculated:

- ◆ Resident Parking – $31 \times 15 = 31$ spaces.
- ◆ Visitor Car Parking – $1 + 28 / 5 = 1 + 5.6 = 6.6$ say 7 visitor car parks
- ◆ Accessible Visitor Car Parking not required as less than 10 visitor car spaces.

On examination of the plans, it was found that the development proposes:

- ◆ 31 single garage car parking spaces (one per dwelling), and
- ◆ 8 visitor car parking spaces including 2 accessible spaces.

Therefore, it is concluded that the development provides sufficient on-site car parking to meet the requirements of the *Maitland DCP (2011)*.

Whilst the current plans do not provide any dimensions for the car parking, by scaling they comply with the minimum requirements of Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking* for residential and accessible parking being at least 2.4 metres wide x 5.4 metres long while the accessible spaces have a 2.4-metre-wide shared zone between them. It is noted that the visitor car spaces can also be conveniently accessed to ensure forward entry and exit from the site.

Overall, it is concluded that the development provides sufficient and suitable on-site car parking to meet the requirements of both Maitland City Council and Australian Standards.

10.4 Access

The proposed development involves the construction of a combined entry and exit access crossing 7.5 metres wide. This access would be required to meet the requirements of Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking*, and in this regard the following is noted.

- ◆ Access to the site containing between 25 and 100 on-site car spaces off a local road is required to be a category 2 access. A category 2 access is a combined entry / exit access 6 – 9 metres wide. By providing a median separated entry and exit access 7.5 metres wide, it is concluded that the access is compliant with AS2890.1-2004.
- ◆ The width of the internal driveways is a minimum 5.5 metres which is compliant with the Australian Standard for two-way traffic flow. It also facilitates convenient access to the single garages provided for each dwelling.
- ◆ Sight distance to both the north and south along Station Lane at the proposed access to the site exceeds the AS2890.1-2004 requirement of a desirable 69 metres for a 60 km/h speed zoning. Therefore, suitable sight distance exists at the development access to satisfy AS2890.1-2004.; and
- ◆ Pedestrian sight lines would be available at the access with the 7.5-metre-wide access crossing and appropriate design of the fencing and landscaping at the access.

Overall, it is considered that a suitably safe vehicular access to and within the development compliant with Maitland City Council and Australian Standard *AS2890.1-2004 Parking facilities Part 1: Off-street car parking* requirements is provided to the development.

10.5 Waste Collection.

Due to the size of the multiple dwelling housing complex the site has been designed for convenient waste collection internally, via a private contractor. The waste collection vehicle will enter the site during non-peak periods in a forward direction and then reverse into the loading area adjacent to the waste bin area at the front of the development for collection of waste before exiting the site in a forward direction. This waste collection strategy is considered suitably safe and convenient for the development.

10.6 Alternate Transport Modes

The development site is currently serviced by public transport services along the New England Highway. With further development of the Lochinvar URA, it is likely that amendments to the bus routes will occur as further demand for these services is created. However, at this stage the additional demand resulting from this development is not considered sufficient for there to be a nexus for the provision of additional or modified public transport services and infrastructure.

Similarly, the development is not expected to generate any significant additional demand for bicycle or pedestrian infrastructure; therefore, it is unreasonable to require the development to provide such infrastructure until such time as the infrastructure is provided with the development of the Lochinvar URA. There are already suitable pedestrian pathways and cycleways provided within the Lochinvar URA adjacent to the development to accommodate the expected additional demand resulting from the development.

11. CONCLUSIONS

This traffic impact assessment for a proposed multi dwelling housing development at 119 Springfield Drive, Lochinvar, being proposed Lot 1101 in a subdivision of Lot 268 DP1271229, has determined the following:

- ◆ The proposed development is predicted to generate approximately an additional 155 vtpd or 16 vtpm in the AM and PM peak hour periods on the local and state road network.
- ◆ The additional traffic generated by the development will not cause the adjacent state and local road network to reach their relevant two-way mid-block capacities through to 2034; therefore, subject to satisfactory intersection operation, the local and state road network has sufficient spare capacity to cater for the development.
- ◆ As the site is within the Lochinvar URA area and the proposal generates less traffic than was assumed in the Lochinvar URA Traffic and Transport Report (ARaP-TTW September 2012), the proposal will not adversely impact on the future road network on the full development of the Lochinvar URA.
- ◆ The development will not adversely impact on the operation of the current New England Highway / Station Lane / Cantwell Road give way priority-controlled intersection.
- ◆ The proposed development provides sufficient and suitable on-site car parking provision to meet the requirements of the *Maitland DCP (2011)* and *Australian Standards*.
- ◆ A suitably safe vehicular access to the development compliant with *Maitland City Council*, and Australian Standard *AS2890.1-2004 Parking facilities Part 1: Off-street car parking* is provided to the development.
- ◆ The proposed development can be conveniently serviced for waste collection on-site by a private contractor using the waste bin loading area at the front of the site during non-peak traffic periods.
- ◆ The development is unlikely to generate any significant demand for public transport services, therefore no nexus would exist for any change to the existing public transport services in the area.
- ◆ The development is not expected to generate any significant additional demand for bicycle or pedestrian infrastructure; therefore, it is unreasonable to require the development to provide such infrastructure until such time as the infrastructure is provided with the development of the Lochinvar URA. There are already suitable pedestrian pathways and cycleways provided within the Lochinvar URA adjacent to the development to accommodate the expected additional demand resulting from the development.

12. RECOMMENDATION

Having undertaken this traffic impact assessment for a proposed multi dwelling housing development at 119 Springfield Drive, Lochinvar, being proposed Lot 1101 in a subdivision of Lot 268 DP1271229, it is recommended that the proposal can be supported from a traffic impact perspective as the development will not have an adverse impact on the local and state road network. It also complies with all relevant requirements of *Maitland City Council*, *Australian Standards* and *TfNSW*.



JR Garry BE (Civil), Masters of Traffic
Director
Intersect Traffic Pty Ltd

APPENDIX 1

DEVELOPMENT MASTERPLAN



maitland
city council
Approved Plans
NO. DA 18-465
SECTION 4.55 AMENDMENT
16/02/2023

STAGE	LOT No	YIELD
1A	100	1
1B	102-127	26
2a	201-226	26
2b	227-237	11
2c	239-266	28
3	300-326	26
4	401-432	32
5	501-528	28
6	601-625	25
7	701-731	31
8	801-822	22
9	901-926	26
10	1001-1002	2+ PARK
11	1101	1
12	1201-1210	10
TOTAL		295

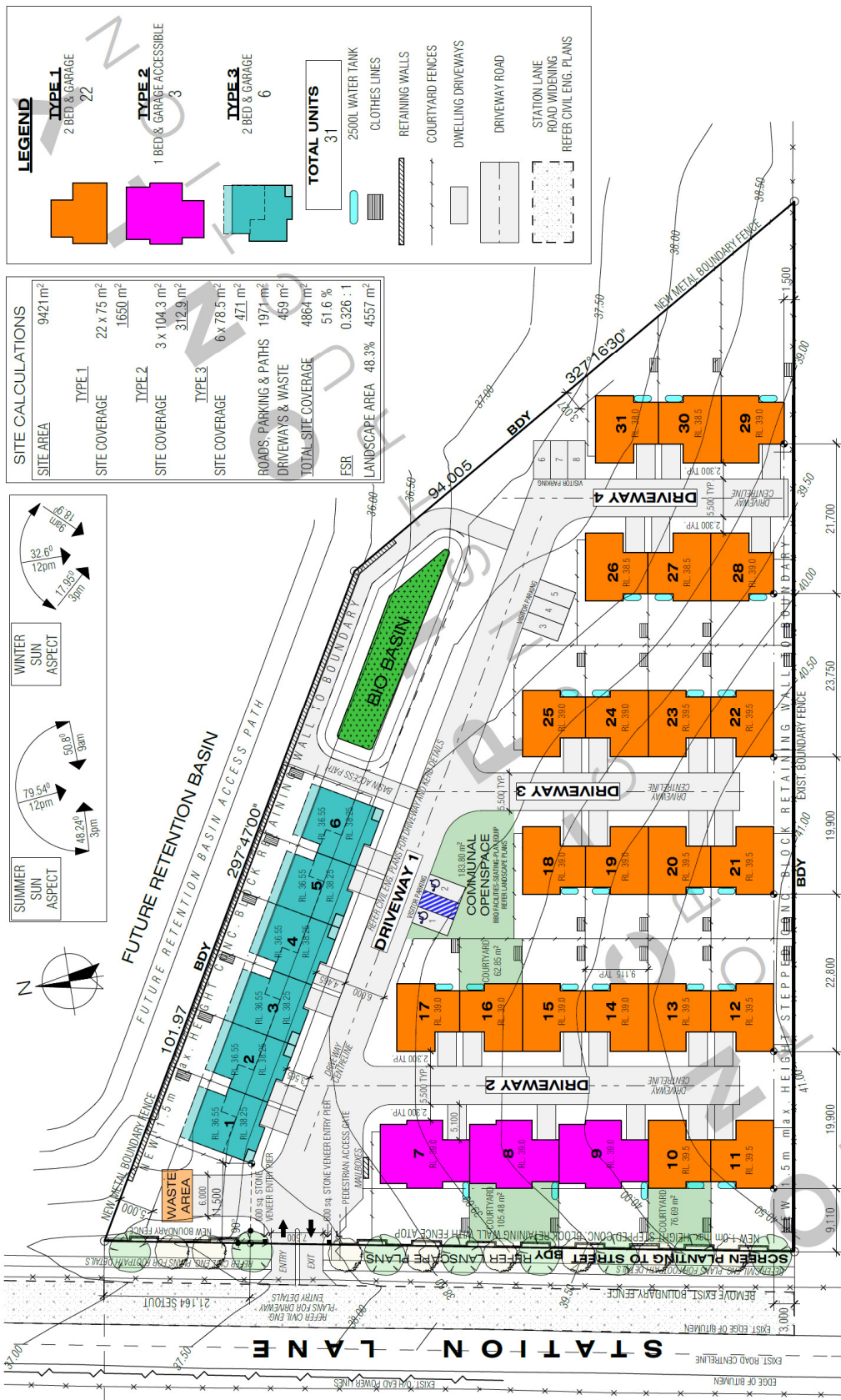
● PROPOSED BUS STOPS

--- PROPOSED LEAD IN SEWER

Date: 26.11.12	Scale: 1:2500 A3	Designed: KU	Project No: HD176
Cad Ref: HD176-r34		KU	Revision: HD02 34
		KU	Revision: HD02 34
		KU	Revision: HD02 34
No	Amendment	Drawn	Date

High Definition Design Pty Ltd
KEVIN URANE 0412008931

TITLE: PROPOSED SUBDIVISION
STATION LANE AND CHRISTOPHER ROAD
LOCHINVAR
LOCHINVAR RIDGE
STAGING PLAN



SITE CALCULATIONS

SITE AREA	TYPE 1	TYPE 2	TYPE 3
9421 m ²	22 x 75 m ²	1650 m ²	312.9 m ²
SITE COVERAGE	22 x 75 m ²	3 x 104.3 m ²	6 x 78.5 m ²
ROADS, PARKING & PATHS	1977 m ²	459 m ²	4864 m ²
DRIVEWAYS & WASTE	51.6 %	0.326 : 1	48.3 %
TOTAL SITE COVERAGE	48.3 %		

LEGEND

- TYPE 1** 2 BED & GARAGE 22
- TYPE 2** 1 BED & GARAGE ACCESSIBLE 3
- TYPE 3** 2 BED & GARAGE 6
- TOTAL UNITS** 31
- 2500L WATER TANK
- CLOTHES LINES
- RETAINING WALLS
- COURTYARD FENCES
- DWELLING DRIVEWAYS
- DRIVEWAY ROAD
- STATION LANE ROAD WIDENING REFER CIVIL ENG. PLANS

SITE PLAN
SCALE 1:500

PROJECT	RESIDENTIAL UNIT DEVELOPMENT	CLIENT	TOCAE	DRAWN	MLB	DATE	01/04/24	ISSUE	003 / 015	AMENDMENT	
LOCATION	No. 30 LOT 1301 STATION LANE, LOCHINVAR	DRAWING	SITE PLAN	SCALE	AS SHOWN	ISSUE	DA	JOB NO.	21 01		
PROJECT	BACK DRAFT	CLIENT	TOCAE	DRAWN	MLB	DATE	01/04/24	ISSUE	003 / 015	AMENDMENT	
LOCATION	No. 30 LOT 1301 STATION LANE, LOCHINVAR	DRAWING	SITE PLAN	SCALE	AS SHOWN	ISSUE	DA	JOB NO.	21 01		

APPENDIX 2

TRAFFIC VOLUME DATA

