Premise

LIBERTY OIL CONVENIENCE PTY LTD

Liberty Oil Service Station 1-3 Quambone Road Coonamble

TRAFFIC IMPACT ASSESSMENT

Report No: 123070_TIA_001
Rev: E
4 April 2023

TRAFFIC IMPACT ASSESSMENT

LIBERTY OIL SERVICE STATION

1 – 3 QUAMBONE ROAD COONAMBLE

PREPARED FOR:

LIBERTY OIL CONVENIENCE PTY LTD

APRIL 2023

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Client:	*Liberty Oil Convenience Pty Ltd*
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The preparation of this report has been in accordance with the project brief provided by the client and has relied upon the information, data and results provided or collected from the sources and under the conditions outlined in the report.

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1.0 INTRODUCTION

1.1 BACKGROUND

Liberty Oil Convenience Pty Ltd has commissioned Premise to prepare a Traffic Impact Assessment (TIA) in support of a Development Application lodged with Coonamble Shire Council for the use and development of a service station on land at the intersection for Aberford Street and Quambone Road in Coonamble.

Coonamble Shire has previously issued its Development Consent (DA029/017) dated 5 December 2017 for the development of a service station on the subject site. The proposed service station would have provided refuelling opportunities for the general public seven days per week. This Development Consent has now expired.

The proponent now seeks to submit a new development application which seeks approval for a service station that will include the installation of two above-ground self-bunded diesel fuel tanks and minor associated works to the site. The proposed service station will mostly provide deliveries to the farming community within an approximate 120km range of Coonamble.

The proposed service station layout will allow fuel delivery and fuel dispatch vehicles to travel in one direction only accessing the site from Aberford Street and exiting to Quambone Road.

A s4.55(1A) application was lodged with Council on 3 May 2022 (DA 0007/2022). The application was referred to Transport for NSW (TfNSW) for review and comment pursuant to Section 2.121 of State Environmental Planning Policy (Transport and Infrastructure) 2021. TfNSW provided a response on 6 June 2022 requesting the preparation of a Traffic Impact Assessment for the proposed works. The application was subsequently withdrawn and a TIA undertaken to address TfNSW requirements.

The TfNSW correspondence to Council is attached in **Appendix A**.

This Traffic Impact Assessment has been prepared in support of a development application to Council and addresses the issues raised by TfNSW.

1.2 SITE LOCATION

The proposed Liberty Oil Convenience Pty Ltd service station is located on Lot 2 in DP831655 on the south eastern corner of the intersection of Aberford Street and Quambone Road.

Aberford Street is also the route of the Castlereagh Highway (B55) through Coonamble and Quambone Road is also a classified road, being MR129.

A previous use of the subject site was as a Shell fuel depot. Existing infrastructure supporting the previous use of the site including a large shed and a tile roofed office building and two (2) concrete driveways off Aberford Street and off Quambone Road are still on the site.

A Caltex fuel depot (mainly bulk fuel supply and some retail) is located on Lot 1 in DP831655 to the south of the subject site. A rail siding is located to the east of the subject site.

To the east of the rail siding, the Tyreright wheel retailer and service facility and Landmark agricultural services have existing access to and from Aberford Street.

The location of the proposed service station site is indicated on **Drawing TS01** included in the **Drawings** Section of this Report.

The existing facilities and infrastructure on the site is indicated on **Drawing TS02** included in the **Drawings** Section of this Report.

1.3 STATE ENVIRONMENTAL PLANNING POLICY (TRANSPORT AND INFRASTRUCTURE) 2021

Schedule 3 of *State Environmental Planning Policy (Transport and Infrastructure) 2021* classifies developments based upon the potential to generate additional traffic onto the surrounding road network.

Developments listed in Schedule 3 of SEPP (Transport and Infrastructure) require referral to Transport for NSW (TfNSW) by the consent authority. The consent authority is required to take into consideration any submission that TfNSW provides in response to the notice of the development.

In addition, the consent authority must consider, pursuant to Clause 2.122 of SEPP (Transport and Infrastructure), the accessibility of the site and any potential traffic safety, road congestion or parking implications of the proposed development.

Under the ISEPP, the development of the service station is classified in accordance with the requirements set out in Schedule 3 of the ISEPP.

Schedule 3 requires the preparation of a Traffic Impact Assessment for a development with a connection to any road or any road with a connection 90m from a Classified Road for the following category:

Service Stations with Heavy Vehicle Refuelling	*Any Size or Capacity*

The objectives of Clause 2.122 of the ISEPP are to ensure new development does not compromise the effective and ongoing operation and function of a classified road and to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to a classified road. The subject site has frontage to both the Castlereagh Highway (B55) and Quambone Road (MR129).

The proposed service station development is therefore subject to Column 3 of Schedule 3 of the ISEPP

Clause 2.119 also stipulates the consent authority must not grant consent to development on a site which has a frontage to a classified road unless it is satisfied:

a) *Where practicable and safe, vehicular access to the land is provided by a road other than the classified road, and*

b) *The safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of:*

   i. *The design of the vehicular access to the land, or*

   ii. *The emission of smoke or dust from the development, or*

   iii. *The nature, volume or frequency of vehicles using the classified road to gain access to the land, and*

c) *The development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.*

Given access arrangements to the service station are from and to a classified road and requires compliance with the provisions of Clause 2.122 of the ISEPP, a Traffic Impact Assessment (TIA) is required and this Report has been prepared to address the following:

- Existing traffic and roadway conditions.
- Traffic generated by the service station.
- Details of proposed access arrangements.
- Impacts of proposed operating conditions, including impacts on the efficiency and safety of the surrounding road network.
- Mitigation measures to minimise impacts of the proposed development.

The methodology for the preparation of the Traffic Impact Assessment is outlined in the following Section of the Report.

1.4 TRAFFIC ASSESSMENT

The development of the service station in Coonamble is classified in accordance with the requirements set out in Schedule 3 of State Environmental Planning Policy SEPP (Transport and Infrastructure) 2021.

Therefore, a Traffic Impact Assessment is required to be prepared to assess whether potential impacts may occur due to the operation of the proposed service station.

This Traffic Impact Assessment has been prepared to assist in the planning approval process for the development and the Traffic Assessment will address the following issues:

- Traffic generated by the proposed service station development.
- Access to and from the development via the Castlereagh Highway (Aberford Street) and Quambone Road.
- Impact on the operation, safety and amenity of the surrounding road network.

This Traffic Impact Assessment has been prepared in accordance with the requirements outlined in the NSW Roads and Traffic Authority's (RTA) *Guide to Traffic Generating Developments*.

In carrying out the preparation of this Traffic Impact Assessment for the development of the service station, three (3) broad issues will need to be addressed as outlined below:

(a) Existing Site and Traffic Conditions

- Development location;
- Road network hierarchy surrounding the development;
- Existing site access;
- Existing roadway capacity; and
- Existing traffic flows.

(b) Proposed Service Station Development

- Service station development concepts;
- Vehicle parking and external traffic design principles; and
- Connectivity to the surrounding road network.

(c) Traffic Impact of the Proposed Development

- Traffic generation from the proposed service station;
- Carparking requirements for the development.
- Traffic access and vehicle movements within the development.
- Traffic distribution external to the development and access to and from Aberford Street and Quambone Road; and
- Impact of the traffic generated from the development on existing traffic parameters;

In summary, this Traffic Impact Assessment provides an overview of the existing traffic movements on the road network surrounding the development site, the expected traffic volumes generated by the proposed service station, the effect of the generated traffic on the surrounding road network and the determination of a safe and efficient means of providing access to the development to cater for the determined traffic volumes.

2.0 EXISTING TRAFFIC CONDITIONS

2.1 ROAD NETWORK HIERARCHY

The Roads and Traffic Authority proposes four basic road classes as the basis for the functional hierarchy of a road network.

A functional classification takes into account the relative balance of the traffic mobility function and amenity/access functions of streets and roads and defines the purpose of a road within the context of a road network.

The four road classes are arterial, sub-arterial, collector and local roads and are defined below.

- **Arterial Roads**

  Roads whose main function is to carry through traffic from one region to another forming the principal means of communication for major traffic movements.

- **Sub-Arterial Roads**

  Those roads which supplement the arterial roads in providing for through traffic movement to an individually determined limit that is sensitive to both roadway characteristics and adjoining land uses.

- **Collector Roads**

  Roads that distribute traffic between the arterial roads and the local street system and provide access to adjoining property.

- **Local Roads**

  Subdivisional roads whose main traffic function is to provide access to adjoining property.

An assessment of the classification of the roads leading to and surrounding the service station development site is indicated in **Table 2.1**.

Table 2.1 Existing Road Classification

Road	Classification
Aberford Road (Castlereagh Highway)	Arterial Road
Quambone Road	Collector Road

2.2 EXISTING ROADWAY CONDITIONS

Entry only access to the proposed Liberty Oil service station will be from Aberford Street with the exit from the facility onto Quambone Road.

Aberford Street is a two lane two way road generally consisting of a kerb and guttered carriageway approximately 12m wide, with centreline and edgeline marking providing a travel lane and parking lane on each side of the roadway. Aberford Street forms the Castlereagh Highway (B55) through Coonamble.

Aberford Street is speed limited at 50km/hr.

Quambone Road is partially kerb and guttered at its approach to the intersection with Aberford Street. The roadway at the intersection has double barrier lines.

Quambone Road adjacent to the Liberty Oil service station site is speed limited at 50km/hr.

Quambone Road also provides access via Back Gular Road to the Coonamble Shire Council's works depot and GrainCorp's Coonamble grain handling and silo facility.

To the west of the intersection with Back Gular Road, Quambone Road is a two way two lane rural road approximately 6.0m to 6.5m wide with minimal gravel shoulders.

The intersection of Aberford Street and Quambone Road forms a Tee intersection and is controlled by Give Way signs on the Quambone Road leg.

Offset to the intersection of Aberford Street and Quambone Road, to the north, Wingadee Street provides access to a number of residential dwellings.

2.3 EXISTING ROADWAY CAPACITY

The provision of roads within an urban area provides four main functions:

i) to cater for moving vehicles;
ii) to cater for parked vehicles;
iii) to cater for pedestrians and bicycle traffic; and
iv) to allow for development and to provide access to adjoining property.

In carrying out the above functions, a road must also be capable of handling the traffic demands placed on it. Roads have varying capacities dependent on the function they are performing. AUSTROADS *Guide to Traffic Management* defines capacity as:

> *"Capacity is the maximum number of vehicles which has a reasonable expectation of passing over a given section of a lane or roadway in one direction (or in both directions for a two-lane or three-lane highway) during a given time period under prevailing roadway and traffic conditions."*

The physical characteristics of a roadway such as lane width, alignment, frequency of intersections etc make up the prevailing roadway conditions.

Based upon its capacity and a driver's expectations of the operational characteristics of a traffic stream is a qualitative measure denoted as the level of service of a road.

Level of service definitions combine such factors as speed, travel time, safety, convenience and traffic interruptions and fall into six levels of service categories ranging from A down to F.

The *AUSTROADS Guide to Traffic Engineering Practice* describes Level of Service A as:

> *"A condition of a free flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to manoeuvre within the traffic stream is extremely high and the general level of comfort and convenience provided is excellent."*

The categories are graduated from Level of Service A down through six levels to Level of Service F that is a zone of forced flow. The amount of traffic approaching the point under consideration exceeds that which can pass it. Flow breakdowns occur and queuing and delays result.

Based on the physical configuration of Aberford Street and Quambone Road providing access to the service station site, observations of traffic movements and the methodology outlined in Part 2 *Roadway Capacity* of *AUSTROADS Guide to Traffic Engineering Practice*, the capacity and Level of Service of the surrounding roads can be determined as:

- Aberford Street – Level of Service B with a two way capacity of 1,800 vehicles per hour and an AADT of 10,000 vehicles per day.
- Quambone Road – Level of Service B with a two way capacity of 1,200 vehicles per hour and an AADT of 6,000 vehicles per day.

2.4 ANNUAL AVERAGE DAILY TRAFFIC

Annual Average Daily Traffic (AADT) is defined as the total volume of traffic passing a roadside observation point over a period of a year divided by the number of days in a year.

A number of sources were reviewed to determine available traffic data on the roads surrounding the service station site. Transport for NSW has traffic volume data on Aberford Street (Castlereagh Highway) to the east of its intersection with Quambone Road. The latest available data is from a series of traffic counts undertaken in 2009 for Recording Station ID 96349.

There is no available traffic data on Quambone Road.

The available AADT traffic volume data for Aberford Street recorded in 2009 is:

Recording Station ID 96349: 6,190 vehicles per day

There is no information available regarding the proportional split between light and heavy vehicles recorded by the 2009 traffic count.

The available traffic data was recorded several years ago and if the data is to be used for current assessment purposes, the traffic data will need to be extrapolated to estimate the Year 2023 traffic volumes on Aberford Street.

The Year 2023 will be used as this will likely see the completion of the Liberty Oil service station for operational use.

The available traffic data will be extrapolated to estimate the Year 2023 traffic data by the application of a growth factor to take into account the natural growth in traffic that occurs over time on roads. The natural growth factor will be assumed to inflate traffic volumes on Aberford Street by 2% per annum.

The estimated Year 2023 AADT traffic data for Aberford Street can be estimated as 8,168 vehicles per day.

The estimated AADT traffic volumes on Aberford Street for the Year 2023 have been used for the assessment of the potential impacts of traffic generated from the proposed service station development on the surrounding road network.

2.5 PEAK HOUR TRAFFIC VOLUME

Peak hour traffic data is not available for any roads surrounding service station development site. In the absence of peak hour data, an accepted TfNSW practice is to estimate the peak hour traffic volume as 15% of the AADT traffic volume on a given road.

For an AADT of 8,168, the estimated Year 2023 peak hour traffic volume on Aberford Street can be calculated as 1,225 vehicles per hour. It will be assumed that the nominal peak hour traffic volume is equally split in direction to the east and west of the development site.

The estimated peak hour traffic volumes on Aberford Street for the Year 2023 have been used for further assessment of the potential impacts of traffic generated from the proposed development on the surrounding road network.

3.0 TRAFFIC IMPACT OF THE PROPOSED DEVELOPMENT

3.1 PROPOSED LIBERTY OIL SERVICE STATION

The proposed Liberty Oil Convenience service station is to be developed at the intersection of Aberford Street and Quambone Road in Coonamble. Vehicles are to travel in one direction entering from the Aberford Street access to the exit onto Quambone Road.

Coonamble Shire has previously issued its Development Consent (DA029/017) dated 5 December 2017 for the development of a service station on the subject site. The proposed service station would have provided refuelling opportunities for the general public seven days per week.

The general layout of the approved service station on the site is indicated on **Drawing TS03** included in the **Drawings** Section of this Report.

The development application now seeks approval for a service station on the site. As part of this application, an existing shed on the site will be demolished to allow the construction of the concrete hardstand area for the fuel tanks and fuel bowsers.

An existing tiled roof administration/office building will remain on site and be used in conjunction with the operation of the service station.

The hardstand area will accommodate 2 x 110kL self-bunded diesel tanks and 5kL self-bunded AdBlue tank. The bunded area will be protected by an 8kL underground SPEL Puraceptor.

Provision for refuelling heavy vehicles will include:

- High flow diesel bowsers
- AdBlue bowser
- Air point.

Parking for up to 3 passenger vehicles will be provided for the administration/office building whilst a parking area will also be provided for heavy vehicles.

Entry only access to the service station will be off Aberford Street and will consist of a reinforced concrete driveway with a width to cater for the entry of a B-Triple design vehicle. The existing eastern driveway off Aberford Street will be modified to accommodate the swept path of the design vehicle whilst the redundant western driveway off Aberford Street will be demolished and removed.

The exit only to Quambone Road will consist of a reinforced concrete driveway with a width to cater for the exit of a B-Triple design vehicle. The existing driveway to Quambone Road will be modified to accommodate the swept path of the design vehicle.

It is expected that heavy vehicles accessing the site will be travelling westbound on Aberford Street and will turn left to enter the service station.

Heavy vehicles exiting the site to Quambone Road can ether turn left to travel towards Quambone or turn right towards the intersection with Aberford Street where a right or left turn into Aberford Street can be made.

The general operation of the Liberty Oil Convenience service station will include:

- Delivery of fuel by a 55kl fuel tanker from Sydney on a daily basis.
- Smaller distribution tankers delivering to on farm fuel tanks.
- The service area for the distribution of on farm fuel deliveries to the farming community is an approximate 120km radius of Coonamble.

There will be no refuelling available to the general public from the Liberty Oil Convenience service station. Although authorised farming customers with Coonamble Liberty Oil Accounts may be allowed to refill using BYO portable tankers if required under extreme circumstances.

The general layout of the proposed service station is indicated on **Drawing TS04** included in the **Drawings** Section of this Report.

3.2 TRAFFIC GENERATION

Whilst the RTA's *Guide to Traffic Generating Developments* publishes data on the traffic generating potential of various developments ranging from subdivisions, commercial premises, retail premises and residential developments, the traffic generation information provided in the Guide is not relevant to the proposed operation of the service station.

Based on the general operation of service station outlined in the previous Section of this Report, the proponent has advised that the expected maximum daily traffic generation from the site will include:

- One (1) x 25m long 55kL fuel tanker delivery each day from Sydney;
- Four (4) x 12.5m tankers per day making on farm deliveries to the local area; and
- Three (3) staff vehicles per day.

- Authorised farming customers with BYO portable tankers in extreme circumstances, approximately 6 to 8 times per year.

Based on the above information, the maximum daily trip generation is as follows, noting that the arrival and departure of a vehicle constitutes 2 trips:

Heavy vehicles:	10 trips per day
Passenger vehicles:	6 trips per day
Additional passenger vehicles:	4 trips per day
Total daily vehicle trips:	**20 trips per day**

Given the limited scope of authorised farming customers to use the service station, the minor instances when this may occur will not be included in either the daily or peak hour traffic generation for the facility.

The peak hour trip generation would be expected to include the arrival of the 3 staff vehicles and possibly the arrival and departure of one of the delivery or distribution tankers.

Therefore, the maximum peak hour trip generation would be:

Passenger vehicles:	3 trips per hour
Fuel tanker:	2 trips per hour
Total peak hour vehicle trips:	**5 trips per hour**

3.3 POTENTIAL IMPACTS OF THE PROPOSED DEVELOPMENT

The impact of the additional traffic generated by the proposed Liberty Oil Convenience service station on the surrounding road network has been assessed in terms of:

i) Traffic Volume;

ii) Site Access; and

iii) Site manoeuvrability.

The increase in AADT and peak hour traffic on Aberford Street is evaluated and the assessment of the operation of heavy vehicles within the site has also been carried out.

3.3.1 Traffic Volume

The additional traffic generated by the operation of the proposed service station has been assessed to determine potential impacts on the traffic volumes on Aberford Street. The post development traffic volumes has been assessed for both AADT and peak hour volumes.

It should be noted that the maximum daily traffic generation of 20 trips per day and peak hour trips of 5 per hour are significantly less than the expected traffic generation from the service station that had been previously approved for the site under Council's Development Consent DA029/2017.

However, the assessment of the Year 2023 daily and peak hour traffic volumes generated by the service station for Aberford Street is indicated in **Table 3.1**.

Table 3.1 Comparison of the Year 2023 and Post Development Traffic Volumes

Road	Estimated Year 2023 Traffic Volume	Post Development Traffic Volume	Percentage Increase
Aberford Street Daily Traffic Volume	8,168 veh/day	8,188 veh/day	0.24%
Aberford Street Peak Hour Traffic Volume	1,225 veh/hour	1,230 veh/hour	0.41%

The percentage increase in AADT (0.24%) and peak hour traffic (0.41%) on Aberford Street are not significant.

The additional traffic generated by the development and operation of the Liberty Oil Convenience service station will have little impact on the operation of Aberford Street.

The increase in traffic volumes generated by the proposed development would be easily absorbed into the surrounding road network with minimal impact on the capacity of the existing traffic streams using the road system.

3.3.2 Vehicle Access and Site Manoeuvrability

Entry only access to the service station will be off Aberford Street and will consist of a reinforced concrete driveway with a width to cater for the entry of a B-Triple design vehicle. The existing eastern driveway off Aberford Street will be modified to accommodate the swept path of the design vehicle whilst the redundant western driveway off Aberford Street will be demolished and removed.

The exit only to Quambone Road will consist of a reinforced concrete driveway with a width to cater for the exit of a B-Triple design vehicle. The existing driveway to Quambone Road will be modified to accommodate the swept path of the design vehicle.

The driveway crossovers will be provided with flaring to accommodate the swept paths of the design vehicles accessing the site.

The existing driveway crossovers providing entry and exits to the service station are indicated on **Drawing TS04** included in the **Drawings** Section of this Report.

Swept turning paths for a B-Triple heavy vehicle have been assessed for operation for entry into, around and exiting the site. It is noted that the B-Triple vehicle is larger than the expected fuel delivery and distribution vehicles using the facility, however the future operation of the larger design vehicle has been allowed for.

The vehicle turning paths for the operation of the service station are indicated on **Drawing TS05** indicated in the **Drawings** Section of this Report.

The operation of heavy vehicles accessing the site and vehicle manoeuvrability around the service station is satisfactorily achieved.

3.3.3 Vehicle Parking

It is expected that up to three (3) employees will be required to staff the administration/office facility on the site.

Three (3) carparking spaces will be provided adjacent to the building for employee parking.

The dimensions of the passenger vehicle parking will be provided in accordance with the requirements of AS2890.1 *Parking Facilities – Off Street Carparking*.

A truck parking bay will also be provided on site in the unlikely scenario that a fuel delivery vehicle or a distribution vehicle are on the site at the same time.

The proposed parking facilities to be provided on site are satisfactory for the operation of the Liberty Oil Convenience service station.

3.4 MITIGATION MEASURES

The surrounding road network to and from the central area of Coonamble and to and from the service station site in Aberford Street is well regulated and includes the provision of the following features as appropriate:

- Stop signs
- Give Way signs
- Priority at intersections for the Castlereagh Highway traffic travelling through town

However, the following additional mitigation measures are proposed to improve traffic management on the road network:

- Install No Entry signage on the proposed driveway on Quambone Road.
- Install No Exit signage inside the site on the proposed driveway from Aberford Street.

4.0 SUMMARY AND RECOMMENDATIONS

4.1 SUMMARY

The impact of the additional traffic generated by the proposed Liberty Oil Convenience service station on the surrounding road network has been assessed in terms of:

i) Traffic Volume;

ii) Site Access; and

iii) Site manoeuvrability.

The increase in AADT and peak hour traffic on Aberford Street has been evaluated and the assessment of the operation of heavy vehicles within the site has also been carried out.

The maximum daily traffic generation from the facility is 20 trips per day and the peak hour traffic generation is 5 trips per day.

The percentage increase in post development AADT (0.24%) and peak hour traffic (0.41%) on Aberford Street are not significant. The additional traffic generated by the development and operation of the Liberty Oil Convenience service station will have little impact on the operation of Aberford Street.

The increase in traffic volumes generated by the proposed development would be easily absorbed into the surrounding road network with minimal impact on the capacity of the existing traffic streams using the road system.

It should be noted that the maximum daily traffic generation of 20 trips per day and peak hour trips of 5 per hour are significantly less than the expected traffic generated from the service station that had been previously approved for the site under Council's Development Consent DA029/2017.

The operation of heavy vehicles accessing the site and vehicle manoeuvrability around the service station is satisfactorily achieved.

The proposed parking facilities to be provided on site are satisfactory for the operation of the Liberty Oil Convenience service station.

4.2 RECOMMENDATIONS

The potential impacts of the traffic generated by the development of the service station on Aberford Street have been assessed and the following recommendations are made:

- The increase in traffic volumes on the Aberford Street, Quambone Road and the surrounding road network will not change the classification of the roads under a functional road hierarchy.
- The percentage increase in post development AADT and peak hour traffic volumes on the Aberford Street are not significant.
- The intersection of the Aberford Street and Quambone Road will continue to operate satisfactorily under Give Way control.
- Onsite carparking for 3 passenger vehicles and a heavy vehicle parking bay have been provided in the site plan for the service station.

This Traffic Impact Assessment has determined that the development of the Liberty Oil Convenience service station will see the operation of the service station with minimal impact on the surrounding road network.

Drawings

ISSUED FOR REPORT

DATE	REV	DESCRIPTION	REC	APP
04/04/2023	C	ISSUED FOR REPORT	JE	SJH
27/03/2023	B	ISSUED FOR REPORT	BW	SJH
12/12/2022	A	ISSUED FOR REPORT	JE	SJH

REVISIONS

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ENGINEERING CERTIFICATION
04/04/2023
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SCALE
NOT TO SCALE
ORIGINAL SHEET SIZE A1

CLIENT: LIBERTY OIL CONVENIENCE PTY LTD

PROJECT: TRAFFIC IMPACT ASSESSMENT

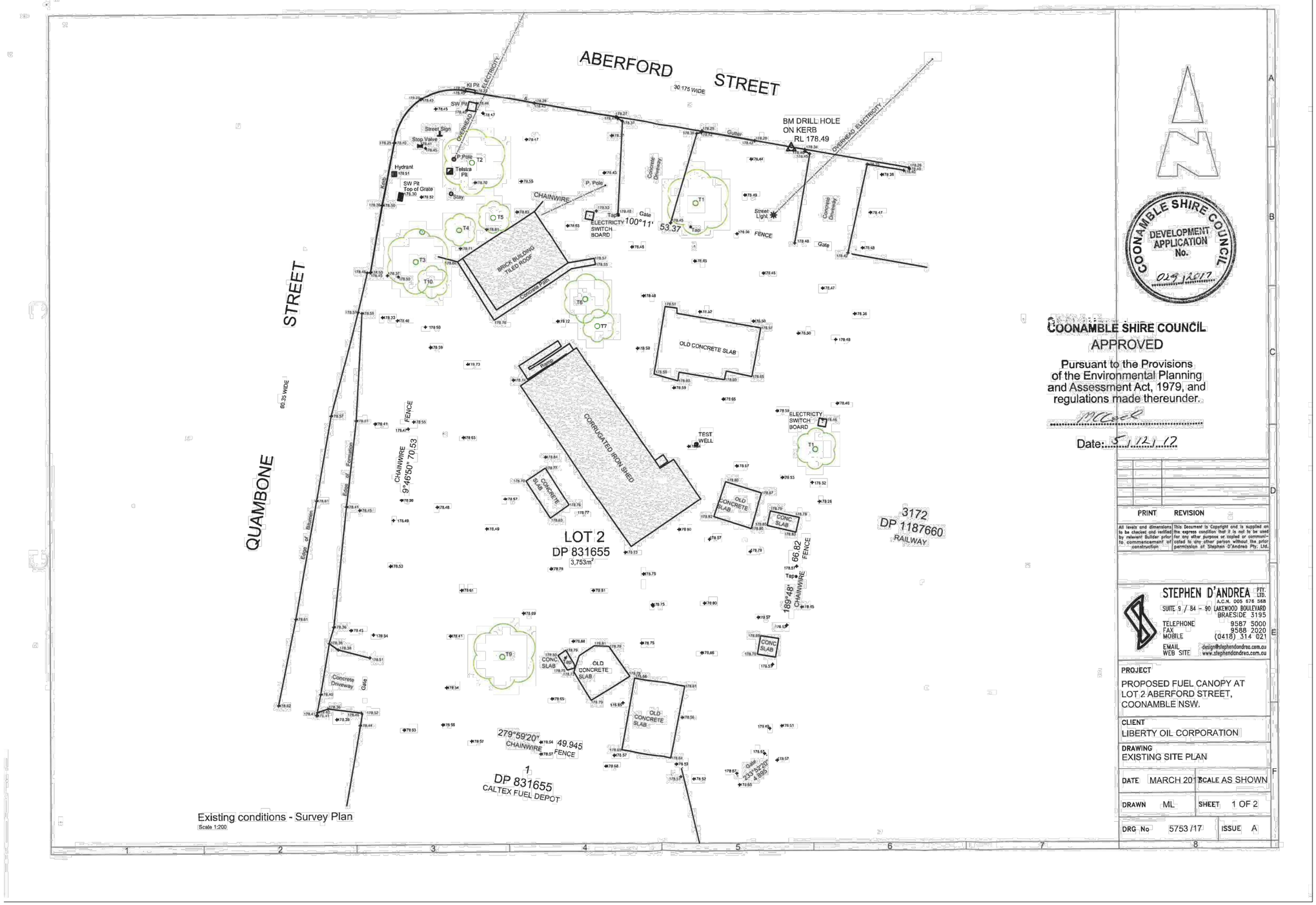
LOCATION: CNR ABERFORD STREET AND QUAMBONE ROAD, COONAMBLE

SHEET TITLE: SITE LOCALITY

JOB CODE: 123070_01

SHEET NUMBER: TS01

REV: C



COONAMBLE SHIRE COUNCIL
DEVELOPMENT APPLICATION No.
029/2017

COONAMBLE SHIRE COUNCIL
APPROVED

Pursuant to the Provisions of the Environmental Planning and Assessment Act, 1979, and regulations made thereunder.

MCook

Date: 5/12/17

PRINT REVISION

All levels and dimensions to be checked and verified by relevant Builder prior to commencement of construction

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PROJECT
PROPOSED FUEL CANOPY AT LOT 2 ABERFORD STREET, COONAMBLE NSW.

CLIENT
LIBERTY OIL CORPORATION

DRAWING
EXISTING SITE PLAN

DATE MARCH 2017 | SCALE AS SHOWN
DRAWN ML | SHEET 1 OF 2
DRG No 5753 /17 | ISSUE A

ISSUED FOR REPORT

DATE	REV	DESCRIPTION	REC	APP
04/04/2023	C	ISSUED FOR REPORT	JE	SJH
27/03/2023	B	ISSUED FOR REPORT	BW	SJH
12/12/2022	A	ISSUED FOR REPORT	JE	SJH

REVISIONS

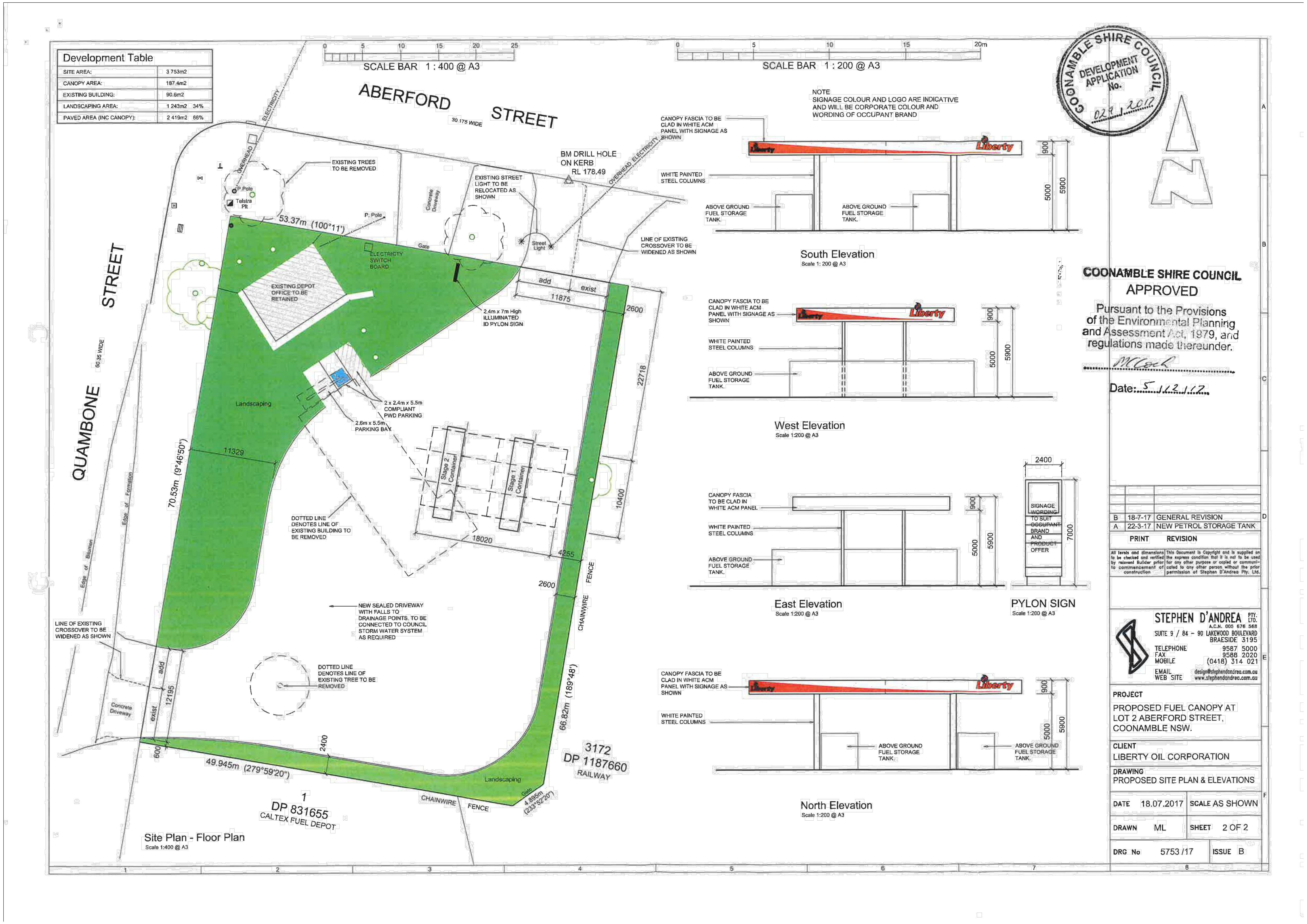
Premise
DUBBO OFFICE
1ST FLOOR
62 WINGEWARRA STREET
DUBBO, NSW 2830
PH: (02) 6887 4500
WEB: www.premise.com.au

SURVEYED
CHECKED
PROJECT MANAGER STEPHEN J HOYNES
ENGINEERING CERTIFICATION 04/04/2023 STEPHEN J HOYNES

SCALE NOT TO SCALE
ORIGINAL SHEET SIZE A1

CLIENT LIBERTY OIL CONVENIENCE PTY LTD
PROJECT TRAFFIC IMPACT ASSESSMENT
LOCATION CNR ABERFORD STREET AND QUAMBONE ROAD, COONAMBLE
SHEET TITLE EXISTING SITE LAYOUT

JOB CODE 123070_01
SHEET NUMBER TS02 | REV C



Development Table
SITE AREA: 3 753m2
CANOPY AREA: 187.4m2
EXISTING BUILDING: 90.6m2
LANDSCAPING AREA: 1 243m2 34%
PAVED AREA (INC CANOPY): 2 419m2 66%
SCALE BAR 1 : 400 @ A3
SCALE BAR 1 : 200 @ A3
ABERFORD STREET
QUAMBONE STREET
NOTE
SIGNAGE COLOUR AND LOGO ARE INDICATIVE AND WILL BE CORPORATE COLOUR AND WORDING OF OCCUPANT BRAND
COONAMBLE SHIRE COUNCIL DEVELOPMENT APPLICATION No.
COONAMBLE SHIRE COUNCIL
APPROVED
Pursuant to the Provisions of the Environmental Planning and Assessment Act, 1979, and regulations made thereunder.
Date: 5/12/17
BM DRILL HOLE ON KERB RL 178.49
EXISTING TREES TO BE REMOVED
EXISTING STREET LIGHT TO BE RELOCATED AS SHOWN
LINE OF EXISTING CROSSOVER TO BE WIDENED AS SHOWN
EXISTING DEPOT OFFICE TO BE RETAINED
2.4m x 7m High ILLUMINATED ID PYLON SIGN
2 x 2.4m x 5.5m COMPLIANT PWD PARKING
2.6m x 5.5m PARKING BAY
DOTTED LINE DENOTES LINE OF EXISTING BUILDING TO BE REMOVED
NEW SEALED DRIVEWAY WITH FALLS TO DRAINAGE POINTS, TO BE CONNECTED TO COUNCIL STORM WATER SYSTEM AS REQUIRED
DOTTED LINE DENOTES LINE OF EXISTING TREE TO BE REMOVED
Landscaping
53.37m (100°11')
70.53m (9°46'50")
66.82m (189°48')
49.945m (279°59'20")
3172 DP 1187660 RAILWAY
1 DP 831655 CALTEX FUEL DEPOT
Site Plan - Floor Plan
Scale 1:400 @ A3
CANOPY FASCIA TO BE CLAD IN WHITE ACM PANEL WITH SIGNAGE AS SHOWN
WHITE PAINTED STEEL COLUMNS
ABOVE GROUND FUEL STORAGE TANK.
South Elevation
Scale 1: 200 @ A3
West Elevation
Scale 1:200 @ A3
East Elevation
Scale 1:200 @ A3
PYLON SIGN
Scale 1:200 @ A3
North Elevation
Scale 1:200 @ A3
B 18-7-17 GENERAL REVISION
A 22-3-17 NEW PETROL STORAGE TANK
PRINT REVISION
STEPHEN D'ANDREA PTY. LTD.
PROJECT
PROPOSED FUEL CANOPY AT LOT 2 ABERFORD STREET, COONAMBLE NSW.
CLIENT
LIBERTY OIL CORPORATION
DRAWING
PROPOSED SITE PLAN & ELEVATIONS
DATE 18.07.2017 SCALE AS SHOWN
DRAWN ML SHEET 2 OF 2
DRG No 5753 /17 ISSUE B

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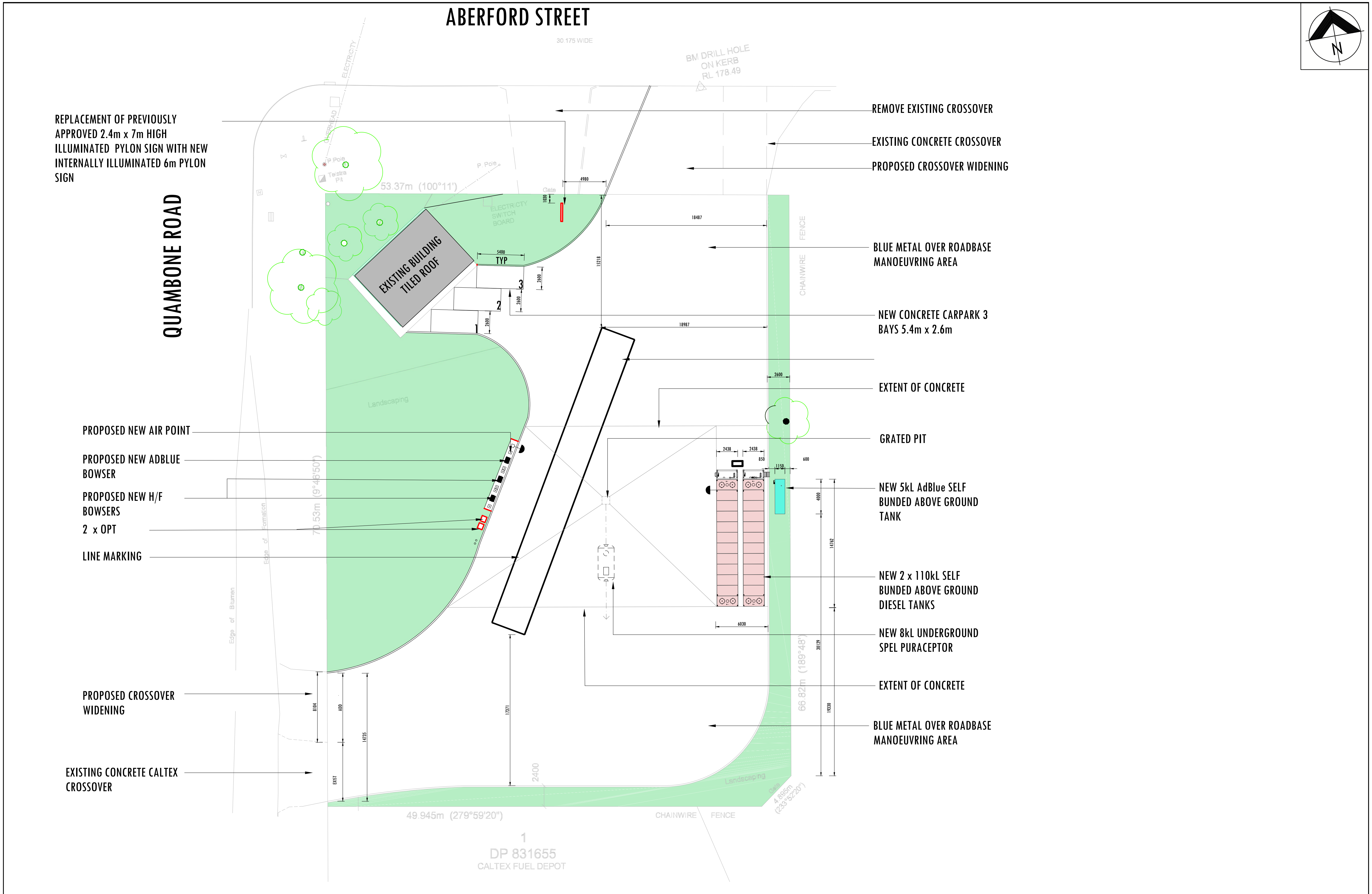
PROJECT MANAGER: STEPHEN J HOYNES
ENGINEERING CERTIFICATION: 04/04/2023
STEPHEN J HOYNES

SCALE: NOT TO SCALE
ORIGINAL SHEET SIZE A1

CLIENT: LIBERTY OIL CONVENIENCE PTY LTD
PROJECT: TRAFFIC IMPACT ASSESSMENT
LOCATION: CNR ABERFORD STREET AND QUAMBONE ROAD, COONAMBLE
SHEET TITLE: EXISTING APPROVED SERVICE STATION LAYOUT

JOB CODE: 123070_01
SHEET NUMBER: TS03
REV: C


ABERFORD STREET
QUAMBONE ROAD
REPLACEMENT OF PREVIOUSLY APPROVED 2.4m x 7m HIGH ILLUMINATED PYLON SIGN WITH NEW INTERNALLY ILLUMINATED 6m PYLON SIGN
REMOVE EXISTING CROSSOVER
EXISTING CONCRETE CROSSOVER
PROPOSED CROSSOVER WIDENING
BLUE METAL OVER ROADBASE MANOEUVRING AREA
NEW CONCRETE CARPARK 3 BAYS 5.4m x 2.6m
EXTENT OF CONCRETE
GRATED PIT
NEW 5kL AdBlue SELF BUNDED ABOVE GROUND TANK
NEW 2 x 110kL SELF BUNDED ABOVE GROUND DIESEL TANKS
NEW 8kL UNDERGROUND SPEL PURACEPTOR
EXTENT OF CONCRETE
BLUE METAL OVER ROADBASE MANOEUVRING AREA
EXISTING BUILDING TILED ROOF
PROPOSED NEW AIR POINT
PROPOSED NEW ADBLUE BOWSER
PROPOSED NEW H/F BOWSERS
2 x OPT
LINE MARKING
PROPOSED CROSSOVER WIDENING
EXISTING CONCRETE CALTEX CROSSOVER
BM DRILL HOLE ON KERB RL 178.49
53.37m (100°11')
70.53m (9°46'50")
66.82m (189°48')
49.945m (279°59'20")
Landscaping
CHAINWIRE FENCE
1
DP 831655
CALTEX FUEL DEPOT
N

ISSUED FOR REPORT

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PROJECT MANAGER: STEPHEN J HOYNES
ENGINEERING CERTIFICATION: 04/04/2023
STEPHEN J HOYNES

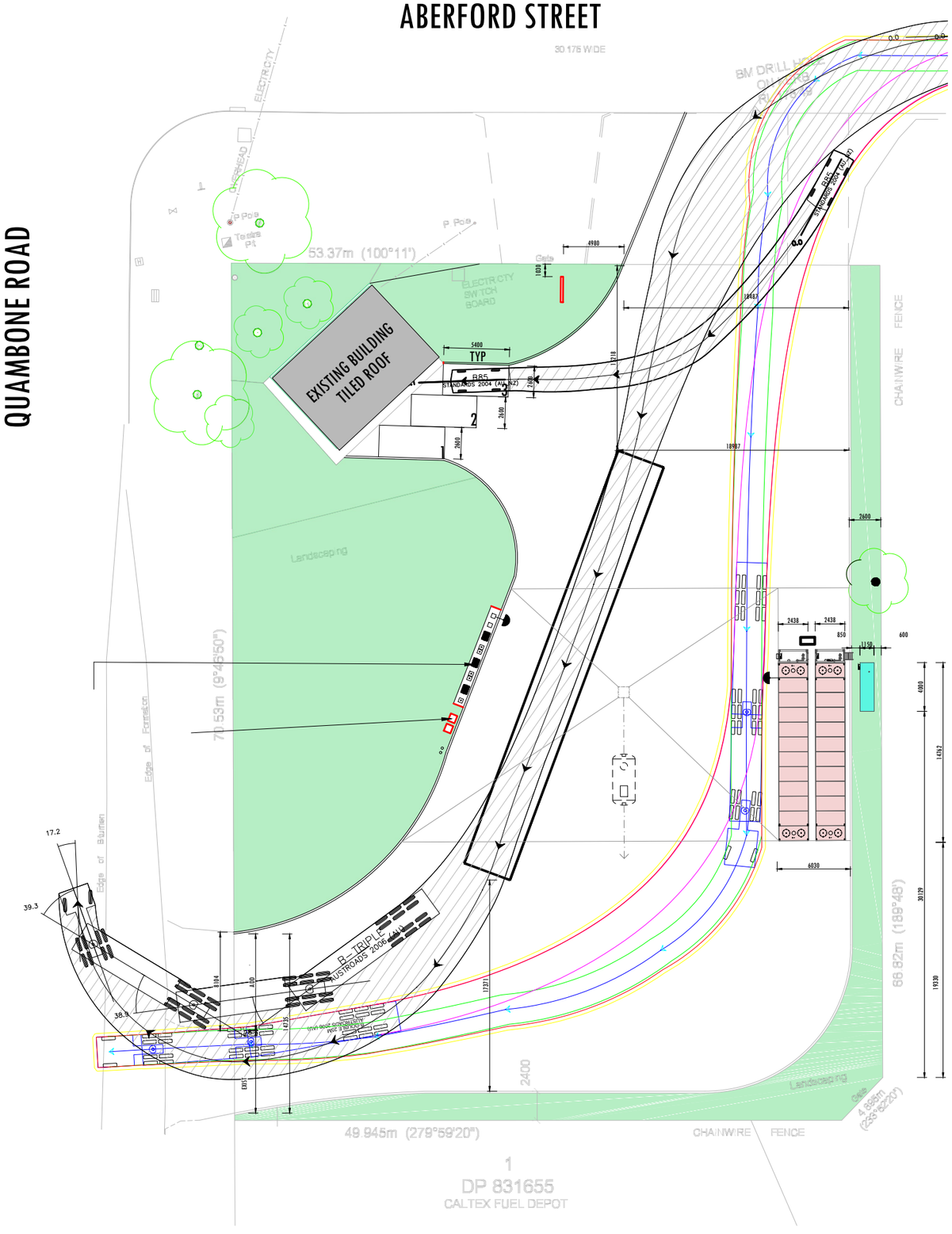
SCALE
SCALE 1:200 (A1)
0 4 8 12m
SCALE 1:400 (A3)
ORIGINAL SHEET SIZE A1

CLIENT: LIBERTY OIL CONVENIENCE PTY LTD
PROJECT: TRAFFIC IMPACT ASSESSMENT
LOCATION: CNR ABERFORD STREET AND QUAMBONE ROAD, COONAMBLE
SHEET TITLE: LIBERTY OIL SERVICE STATION LAYOUT

JOB CODE: 123070_01
SHEET NUMBER: TS04
REV: C

ABERFORD STREET

QUAMBONE ROAD



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STEPHEN J HOYNES

ENGINEERING CERTIFICATION
04/04/2023
STEPHEN J HOYNES

SCALE
SCALE 1:200 (A1)
0 4 8 12m
0 4 8 12m
SCALE 1:400 (A3)

ORIGINAL SHEET SIZE A1

CLIENT: LIBERTY OIL CONVENIENCE PTY LTD

PROJECT: TRAFFIC IMPACT ASSESSMENT

LOCATION: CNR ABERFORD STREET AND QUAMBONE ROAD, COONAMBLE

SHEET TITLE: TURNING PATHS FOR SITE ENTRY AND EXIT

JOB CODE: 123070_01

SHEET NUMBER: TS05

REV: C

Appendix A

TfNSW Letter to Coonamble Shire Council Dated 6 June 2022

6/06/2022

WST22/00105/01

Title General Manager
Coonamble Shire Council
PO Box 249
Coonamble NSW 2829

Attention: Teala Stephens

Dear Ms Stephens,

DA 0007/2022: Lot 2 DP831655; 1-3 Quambone Road Coonamble
S4.55(1A)- Modification to DA029/2017

Thank you for referral of DA0007/2022 via the NSW Planning Portal on 20 May 2022 inviting comment from Transport for NSW (TfNSW). The application to modify the DA has been referred to TfNSW pursuant to section 2.121 of *State Environmental Planning Policy (Transport & Infrastructure) 2021* (T&I SEPP). A review of the documents indicates the development proposes works requiring concurrence pursuant to section 138(2) of the *Roads Act 1993*.

TfNSW understands the proposed modification involves additions and alterations to a Retail Fuel Sales Facility approved under DA 029/2017. I note the submitted information is inconsistent and appears to be stamped approved plans relating to DA 029/2017. I also note DA029/17 is a development consent that was not referred to TfNSW or the former Roads and Maritime Services.

The submitted plans and documents have been reviewed and based on information provided TfNSW writes to advise concurrence pursuant to section 138(2) of the *Roads Act 1993* is withheld, and pursuant to section 2.121 of T&I SEPP, TfNSW does not support the proposal as submitted.

TfNSW is willing to review its position subject to the provision of additional information to allow proper assessment of the impact of the development on the safety and efficiency of both Castlereagh Highway (HW18) and Quambone Road (MR129).

To enable a review, the following additional information is required to be provided:

- A detailed description of the development clearly outlining what works are proposed as part of the development and how the development will operate, compared to that which was previously approved by Council.
- A site plan, drawn to scale, that accurately depicts the approved components, and the additions and alterations proposed. All components of the development proposed to be changed, including use, from the existing approved development, are to be clearly articulated within the Statement of Environmental Effects and associated plans.
- The DA is to be accompanied by a Traffic Impact Assessment (TIA) prepared by a suitably qualified person in accordance with the *Austroads Guide to Traffic Management* Part 12, Roads and Maritime Supplements to Austroads and the *RTA Guide to Traffic Generating Developments*. The TIA is to include, but limited to, the following information
    - Project details, including:
        - Days and hours of operation

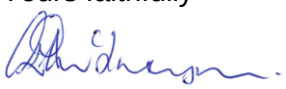
- Phases and stages of the project, including construction and operation
- Staffing numbers
- Servicing/delivery requirements

- Traffic Volumes, including:
  - Existing background traffic
  - Project related traffic for each stage of the development
  - Projected cumulative traffic at commencement of operation and a 10 year horizon post commencement.
- Traffic Characteristics, including:
  - Number and ratio of heavy vehicles to light vehicles,
  - Peak times for existing traffic,
  - Peak times for project-related traffic, including commuter periods
  - Proposed hours for servicing vehicles.
- Assessment of the need for improvements to the road network, and the improvements proposed such as road widening and intersection treatments, to cater for and mitigate the impact of project related traffic. Any vehicular access connection to the classified road network must comply with Austroads provision including but not limited to:
  - Part 7.2 Austroads Guide to Road Design Part 4 – Intersections and Crossing – General (ARGD Part 4) any proposed access to Castlereagh Highway is to be designed as a road intersection including the provision of adequate area to provide necessary deceleration and turn treatments outside the intersection's functional area. The assessment of intersection treatments is to be carried out in accordance with *Austroads Guide to Traffic Management* Part 6 Intersections, Interchanges and Crossings Management (AGRD Part 6) for a design speed of 60km/h which requires a deceleration length of 50m.
  - Part 7.2 of AGRD Part 4 any vehicular access connection to the Castlereagh Highway is to be located outside the functional area of the Castlereagh Highway/Quambone Road intersection.
  - Confirmation that Safe Intersection Sight Distance (SISD), Approach Sight Distance and Gap Sight Distance is available and/or can be provided for the largest design vehicle and the largest through traffic on the classified road network.
- The layout of the internal road network, parking facilities and infrastructure, ensuring compliance with AS2890.1, AS2890.2, and AS2890.6.
- Review of existing crash data for the vicinity of the site and consideration of the development's impact on such history.
- Swept path diagrams demonstrating the following:
  - The width of the access and egress intersection with the classified roads can accommodate the swept path of the largest vehicle required to access the site.
  - All vehicles can enter and exit the site in a forward direction and lane correct when ingressing/egressing the site and are able to do so consistent with traffic control road markings and road signage.
  - The design vehicle (largest vehicle permitted to access the site) can access the site with all parking spaces in use and will not interfere with the function of the road network or pedestrian access.

Please confirm with TfNSW that the DA will not be determined until TfNSW has had an opportunity to undertake a thorough assessment of the proposed development, following provision of the above-mentioned additional information.

If you wish to discuss this matter further, please contact Phoebe Wilkinson 0418 437 829.

Yours faithfully



Andrew McIntyre
Manager Development Services West
Regional and Outer Metropolitan