Proposed Warehouse Development

54 Tyrone Place, Erskine Park

TRAFFIC AND PARKING ASSESSMENT REPORT

3 March 2016

Ref 15254

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1. INTRODUCTION

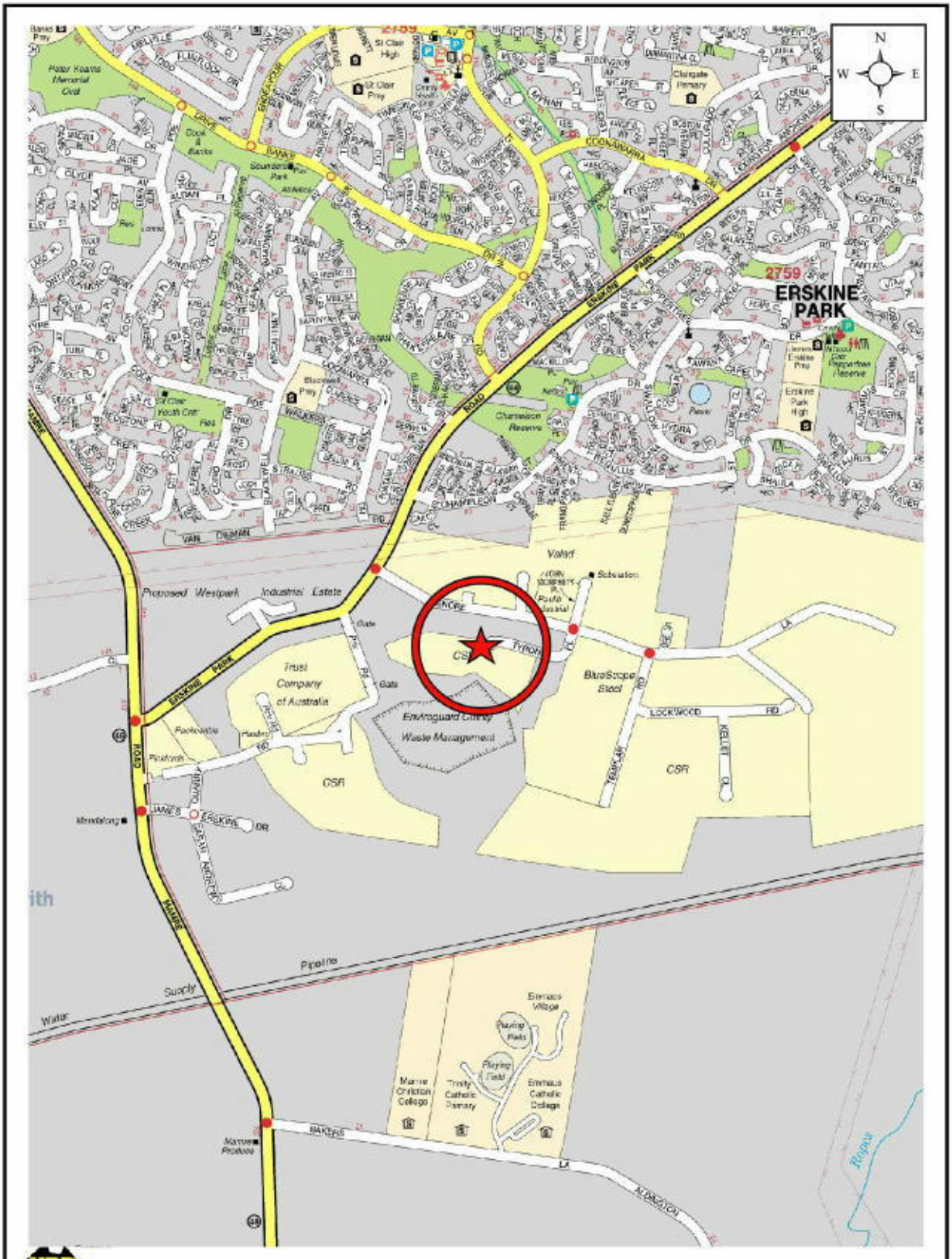
This report has been prepared to accompany a development application to Penrith City Council for a warehouse development proposal to be located at 54 Tyrone Place, Erskine Park (Figures 1 and 2).

The proposed development involves the construction of a new warehouse with ancillary office space and a wash bay. Off-street parking is to be provided in a new outdoor car parking area in accordance with Council's requirements.

The new warehouse is to be operated by *Loscam*, a company which provides returnable packaging solutions and equipment used to store and move products through the supply chain: products such as produce bins, bulk containers, special care containers and traditional pallets.

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site
- estimates the traffic generation potential of the development proposal
- assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking and loading provided on the site.



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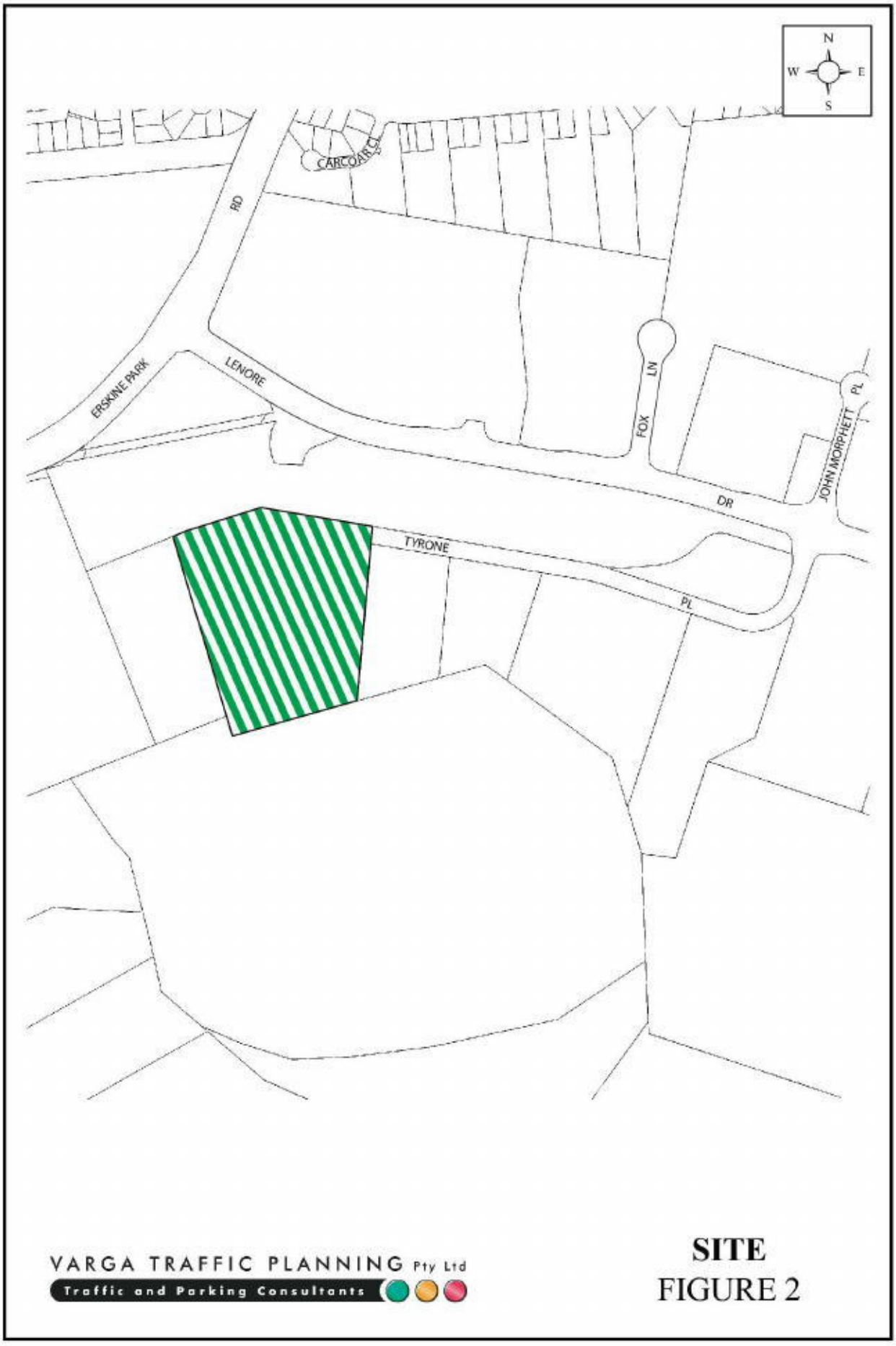
LOCATION
FIGURE 1



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SITE
FIGURE 2

2. PROPOSED DEVELOPMENT

Site

The subject site is located at the far western end of the Tyrone Place cul-de-sac, and occupies an area of approximately 4.164 hectares.

The subject site is currently vacant.

Proposed Development

The proposed development involves the construction of a new warehouse development on the eastern portion of the site which includes ancillary office space and a wash bay. Floor areas for the proposed new building are as follows:

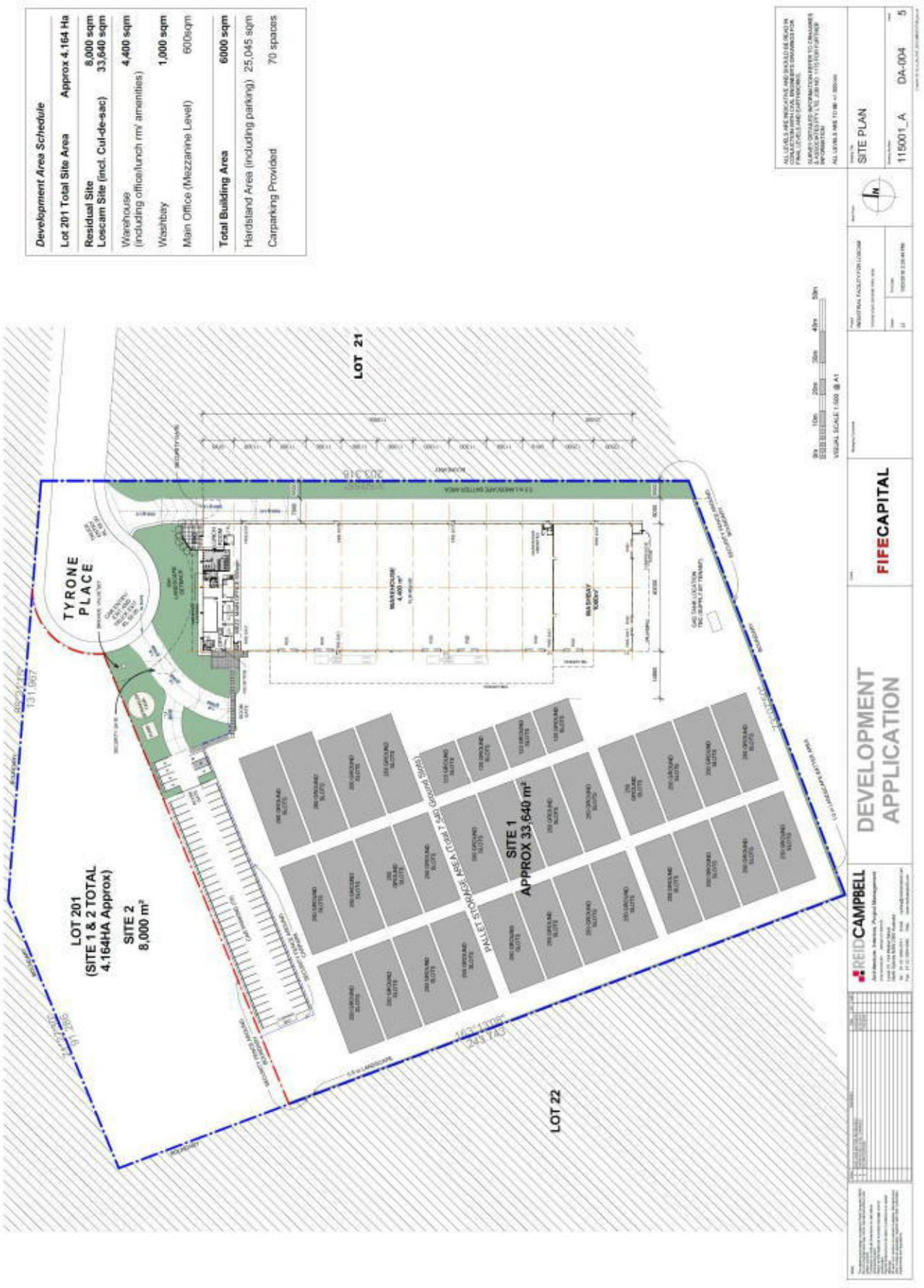
Warehouse:	4,400m^2
Ancillary Office:	600m^2
Wash Bay:	1,000m^2
TOTAL BUILDING AREA:	**6,000m^2**

The western, southern and central portions of the site are to be used as a carefully arranged outdoor pallet storage area, comprising 7,540 "ground slots".

Off-street parking is proposed for a total of 70 cars in a new open car parking area to be located on the northern portion of the site. Vehicular access to the car parking facilities is to be provided via a new entry/exit driveway located at the far western end of the Tyrone Place cul-de-sac.

Loading/servicing for the proposed development is expected to be undertaken by a variety of commercial vehicles including small/medium/large rigid trucks, up to and including 19m long semi-trailers. Commercial vehicle access is to be provided via separate entry and exit service driveways also located in the Tyrone Place cul-de-sac.

Plans of the proposed development have been prepared by *Reid Campbell Architect* and are reproduced in the following pages.



3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3.

Erskine Park Road is classified by the RMS as a *State Road* and provides the key north-south road link the area, linking Mamre Road and M4 Western Motorway. It typically carries two traffic lanes in each direction with opposing traffic flows separated by a central median island, and narrows to one traffic lane in each direction north of Lenore Drive. Turning bays are provided at key locations.

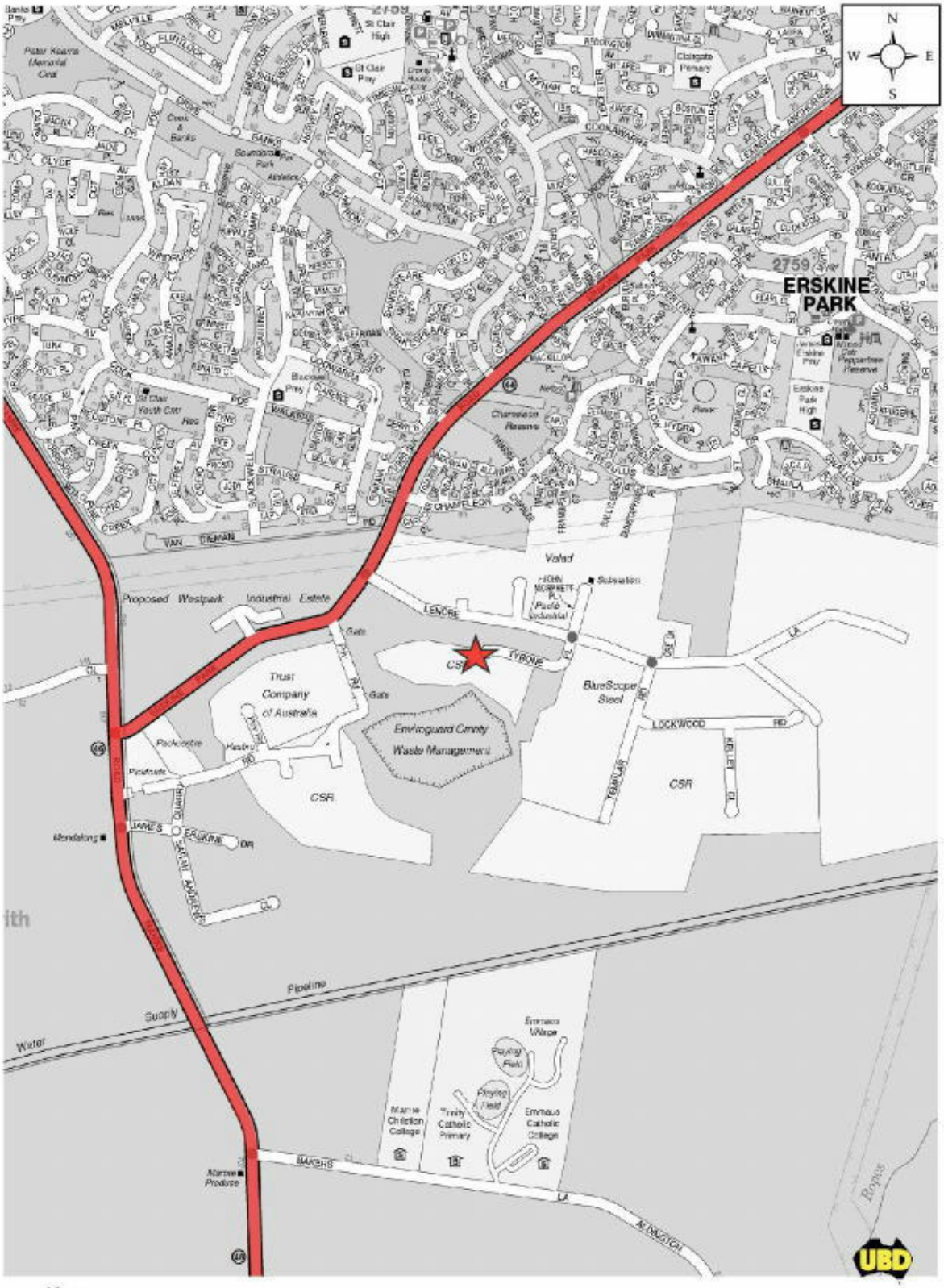
Lenore Drive is a local, unclassified road which functions as an east-west *collector route*, linking Erskine Park Road and Old Wallgrove Road. It typically carries two traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island.

Tyrone Place is a local, unclassified road which is primarily used to provide vehicular access to frontage properties. The road terminates at its western end with a cul-de-sac. Kerbside parking is generally permitted on both sides of the road.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 70 km/h SPEED LIMIT which applies to Erskine Park Road
- a 80 km/h SPEED LIMIT which applies to Lenore Drive
- TRAFFIC SIGNALS in Lenore Drive where it intersects with Erskine Park Road and also Tyrone Place, with all turning movements permitted at both intersections.



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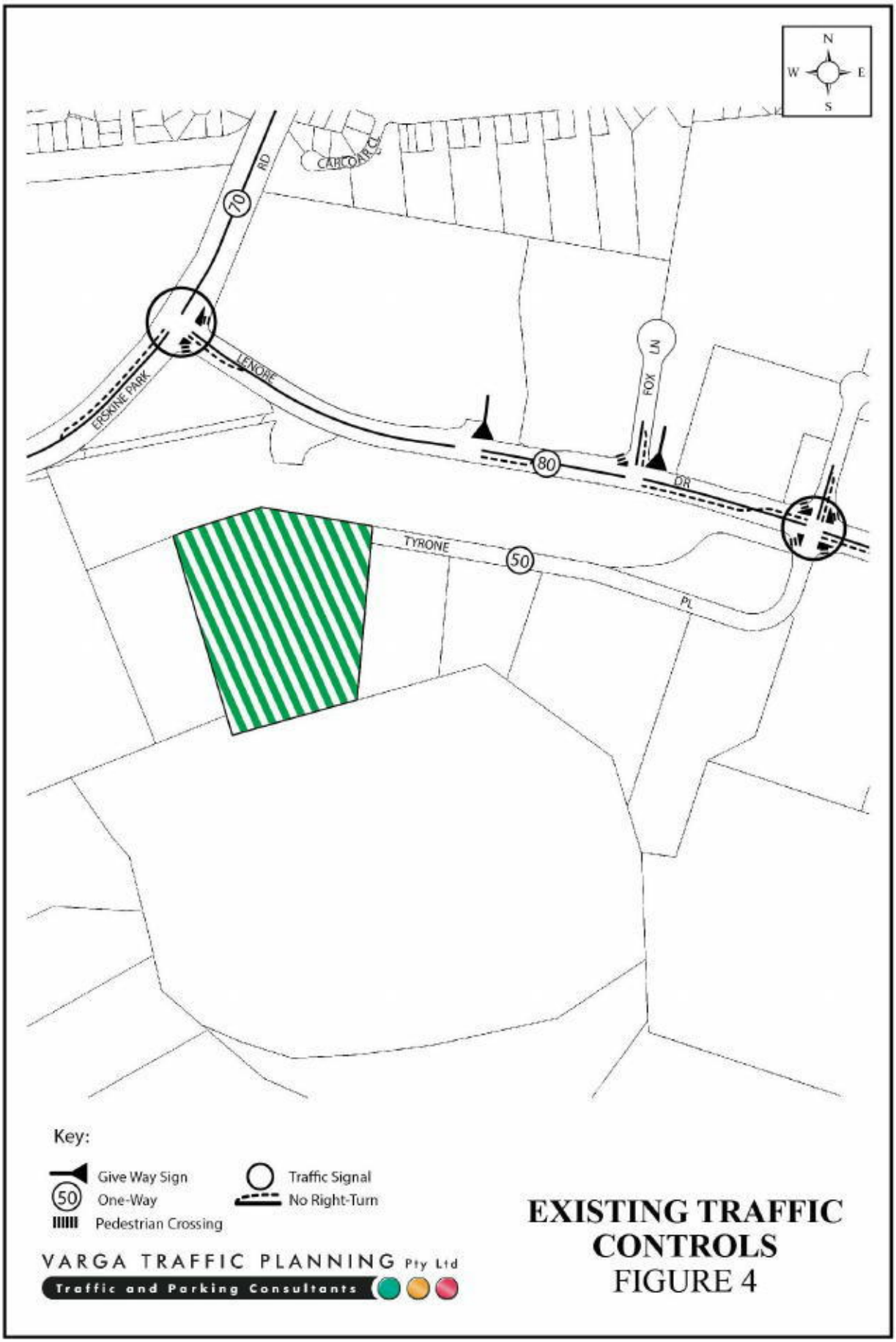
ROAD HIERARCHY
FIGURE 3



Projected Traffic Generation

The traffic implications of development proposals primarily concern the effects of the *additional* traffic flows generated as a result of a development and its impact on the operational performance of the adjacent road network.

An indication of the traffic generation potential of the proposed development is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002).*

The RMS *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the development proposal:

Warehouses
0.5 peak hour vehicle trip per 100m^2 GFA

Application of the above traffic generation rate to the cumulative warehouse/office floor area of 5,000m^2 outlined in the development proposal yields a traffic generation potential of approximately 25 vehicle trips per hour during commuter peak periods.

That projected increase in traffic activity as a consequence of the development proposal is *minimal*, consistent with the land zoning objectives of the site and will clearly not have any unacceptable traffic implications in terms of road network capacity.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

Given the industrial nature of the local area and Tyrone Place being a cul-de-sac, there are generally no kerbside parking restrictions which apply along both sides of Tyrone Place.

Off-Street Car Parking Provisions

The off-street car parking requirements applicable to the development proposal are specified in the *Penrith Development Control Plan 2014, Part C10: Transport Access and Parking* document in the following terms:

> **Warehouses, including Ancillary Office**
> 1 space per 100m^2 GFA

Application of the above car parking requirements to the cumulative warehouse/office floor area of 5,000m^2 outlined in the development proposal yields an off-street car parking requirement of 50 spaces.

The proposed development makes provision for a total of 70 off-street car parking spaces, thereby comfortably satisfying Council's car parking requirements.

The geometric design layout of the proposed car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1* and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6* in respect of parking bay dimensions, ramp gradients and aisle widths.

Loading/Servicing Provisions

The proposed new warehouse building is expected to be serviced by a variety of commercial vehicles including small/medium/large rigid trucks up to and including 19m long semi-trailers. The manoeuvring area has been designed to accommodate the swept turning path

requirements of these 19m semi-trailers, allowing them to circulate the site without difficulty and to enter/exit in a forward direction at all times, as demonstrated by the attached *swept turning path* diagrams.

The geometric design layout of the proposed loading facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2 - Off-Street Commercial Vehicle Facilities AS2890.2* in respect of ramp gradients and service area requirements.

In summary, the proposed parking and loading facilities satisfy the relevant requirements specified in both Council's requirements as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking or loading implications.

TAL
ox)

BOUNDARY

131.967

TYRONE PLACE

BRIGADE VALVE SET

TRUCK ENTRY RL 55.00

CAR ENTRY/ EXIT AND TRUCK EXIT RL 55.00

RL 55.070

SECURITY GATE

PUMP

SPRINKLER TANK

1:5 @8000

1:6 @10000

10m LANDSCAPE SETBACK

SECURITY GATE

BOOM GATE

AMENITIES /LOCKERS

BBQ

OFFICE

LUNCH ROOM

MEZZ. MAIN OFFICE 600sqm

BOOM GATE

RECEPTION

FIRE EXIT

FIRE EXIT

9780

11300

RSD

7000

5500

RSD

FIRE EXIT

FIRE EXIT

280 GROUND SLOTS

280 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

120 GROUND SLOTS

GE AREA (Total 7,540 Ground Slots)

250 GROUND SLOTS

120 GROUND SLOTS

WAREHOUSE
4,400 m²

RL 59.000±0.500

RSD

FIRE EXIT

RSD

10M AWNING

3°50'55"

5.5 m LANDSCAPE BATTER AREA

BOUNDARY

110000

LOT 21

SITE 1
PPROX 33,640 m²

120 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

120 GROUND SLOTS

RSD

WAREHOSUE AMENITIES

FIRE EXIT

5M AWNING

RSD

WASHBAY
1000m²

FIRE EXIT

FIRE EXIT RSD

RSD

5M AWNING

COMPRESSOR ROOM

12500

25000

12500

9810

14860

40000

8000

5500

250 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

250 GROUND SLOTS

GAS TANK LOCATION
TBC (SUPPLY BY TENANT)

SECURITY FENCE AROUND BOUNDARY

BOUNDARY

73°07'50"

19m Semi-Trailer Circulation

0m 25m 50m

Scale 1:600 @ A3 Size