

Traffic Car Parking and Access Assessment
Proposed Fast Lane Café
137 Coreen Avenue, Penrith

July 2018

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1 INTRODUCTION

gtk consulting pty ltd has been engaged by Yaringa Enterprises Pty Ltd to prepare a traffic, car parking and access assessment report to accompany a development application to Penrith City Council. The proposal is to establish a fast lane café within an existing factory/warehouse complex at 137 Coreen Street, Penrith (refer **Figure 1**). Ingress to the proposed development will be via an existing driveway on Coreen Avenue and egress, via an existing driveway on Coombes Street.

This application will not require referral to Roads and Maritime Services (RMS) as the proposal has access via the existing driveway on Coreen Avenue which is a non-classified regional arterial road (RR 7289) under the care and control of Penrith City Council.

This report will:

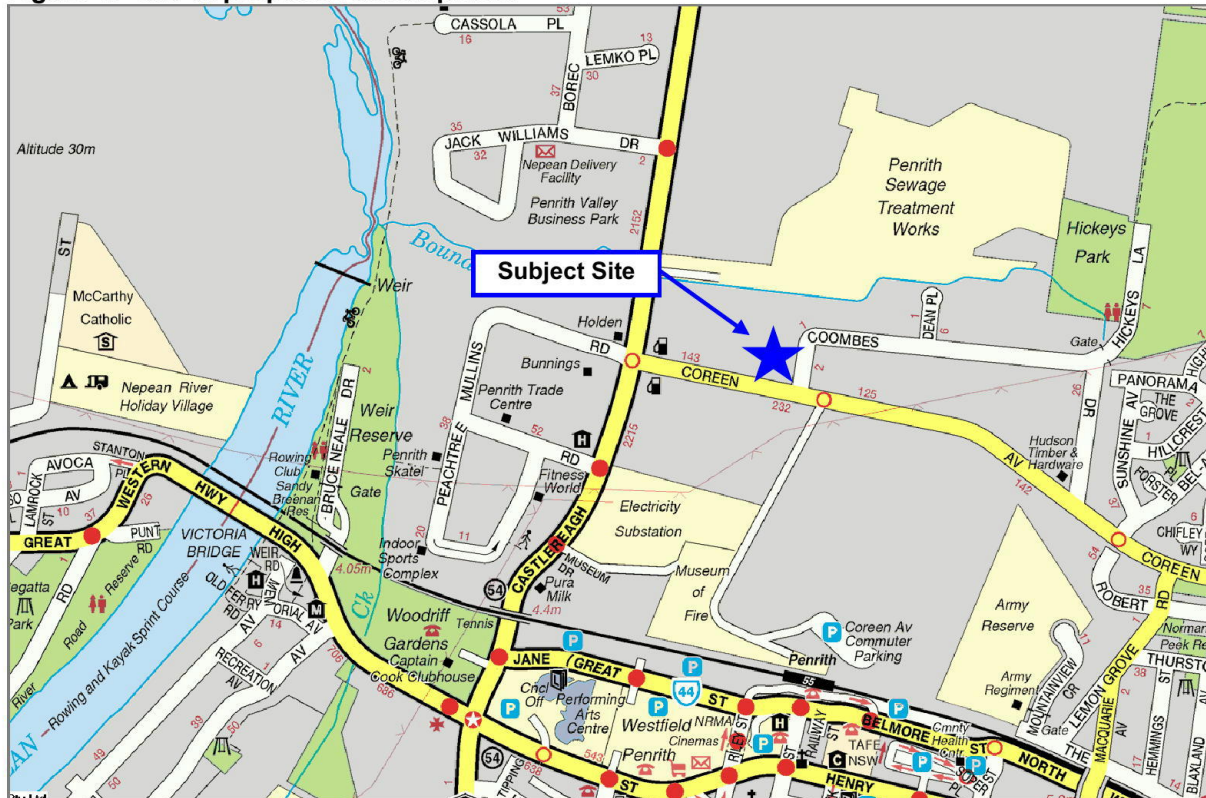
- Describe the site and surrounding land use.
- Describe the road network serving the site.
- Describe the proposed development.
- Assess the proposed car parking.
- Assess the potential traffic implications of the development.
- Assess the adequacy of the proposed vehicle access and internal circulation arrangements.

The assessment was undertaken by Garry Kennedy, Director gtk consulting pty ltd. Garry has extensive (44 years) experience in Traffic Engineering, Road Safety and Car Parking. Garry chaired a Local Traffic Committee for seventeen years at a major metropolitan Council. In 2006 Garry established gtk consulting and since that time has undertaken many traffic and car parking assessments and studies for Local and State Government Agencies and private developers.

Garry provides expert evidence in the NSW Land and Environment Court, Local Magistrates Court and District Court. Garry's court experience covers a wide range of traffic activities, such as, the suitability of development proposals, heavy vehicle prosecutions, parking offences and many other offences under the *Local Government Act* and the *Roads Act*.

This assessment has been prepared using information provided by ArkExpress Design Pty Ltd, Yaringa Enterprises Pty Ltd and site assessment by the author.

Figure 1: Site of proposed development



Source: UBD Australian City Streets v7.0 (licensed to gtk consulting)

2 THE SITE AND SURROUNDING LAND USE

The site (**Figure 2**), located 270 metres east of the intersection with Castlereagh Road, is zoned IN1 General Industrial under the *Penrith Local Environmental Plan 2010*. It is situated within an industrial complex comprising five adjoining units. Currently, Beaumont Tiles operates from the southernmost unit (Area 1) and the remaining four units are vacant. The property immediately west of the site is occupied by a Tradelink Plumbing Centre and the property to the north, by a concrete batching plant (Western Concrete).

Areas further to the east and west are industrial with some ancillary retail and office activities. A vacant historic homestead and gardens is located on the southern side of Coreen Avenue opposite the site. There are no vehicle access points on the southern side of Coreen Avenue for some distance either side of the access driveway to the proposed fast lane café.

Figure 2: Aerial view of site



Source: NSW Land and Property Information 2018

3 THE EXISTING ROAD NETWORK

The road network servicing the site comprises:

- *Castlereagh Road* – a State Arterial Road (MR 155) under the care, control and responsibility of Roads and Maritime Services. It provides a significant transport corridor from areas to the north and south, e.g. Cranebrook, Richmond, Penrith CBD and M4 Motorway.
- *Parker Street/Richmond Road* – a State Arterial Road (MR 154) under the care, control and responsibility of Roads and Maritime Services. It provides a significant transport corridor from areas to the north and south, e.g. Cranebrook, Windsor, the M4 Motorway and Campbelltown.
- *Coreen Avenue* – an unclassified regional road (RR 7289) under the care, control and responsibility of Penrith City Council and links Castlereagh Road to Parker Street/Richmond Road.

The physical features of the streets surrounding the site are described in **Table 1**:

Table 1: Description of streets serving the site

Street Name	Street Configuration
Castlereagh Road	Divided 4 lane/two-way.
Parker Street/Richmond Road	Divided two lane/two-way in front of site.
Coreen Avenue	Undivided two lane/two-way.

Source: gtk consulting 2018

4 THE PROPOSAL

The proposed development is to establish a fast lane café within an existing industrial complex at 137 Coreen Avenue, Penrith. The legal description of the site is Lot 301 in DP 860777. The proposed development includes:

- The construction of a café building on the southern side of the existing car parking area.
- A total of three (3) staff will operate the site, however, only 2 will be present at any one time.
- Removal of an existing car parking space (number 11) to provide appropriate circulating lane width within the existing car park following establishment of the fast lane café.
- Two (2) on-site car parking spaces for employees will be allocated within the existing main car park on site, i.e. space numbers 12 and 13.
- Seven (7) new car parking spaces will be established on the site to the north of Area 5.
- The proposed facility will operate 5.00am to 5.00pm seven days per week.
- Vehicles will enter the existing driveway on Coreen Avenue and exit via the existing driveway on Coombes Drive.

A site layout plan of the proposal has been prepared by ArkExpress Pty Ltd (**Appendix 1**)

5 CAR PARKING

The proposed fast lane café does not provide any seating or indoor dining facilities. Customers are car based and do not leave their vehicle while ordering coffee. As such, there is no customer demand for car parking spaces. There will be a maximum of 2 employees operating the café at any one time.

5.1 PARKING PROVISION

Penrith City Council's Development Control Plan 2014 'C10 Transport Access and Parking' specifies a range of car parking rates for various land uses. The proposed fast lane café has no seating as customers do not leave their vehicles to be served. The number of staff (2) required to service the facility is low. The car parking rates for restaurants is appropriate to determine the number of spaces required and is set out in **Table 2**:

Table 2: Car parking requirements

Car parking type	Car Parking Rate	Number	Spaces Required
Employee	1.0 space/employee	2 employees	2 spaces
TOTAL			2 parking spaces

Source: gtk consulting 2018

The proposed development will allocate 2 on-site car parking spaces located in the main car park fronting Coombes Drive, i.e. spaces numbered 12 & 13. In addition, 7 new spaces will be established on the northern side of Area 5.

5.2 ACCESS AND PARKING DESIGN DIMENSIONS

The access lane within the site from Coreen Avenue is 3.6 metres in width for one-way traffic. Car parking spaces for employees are a minimum 2.4 metres wide and 5.4 metres long. These dimensions comply with the requirements of AS 2890.1:2004 and *RMS Guide to Traffic Generating Developments*. A waiting bay will be provided for customers whose orders may take a little longer and this area will be used infrequently for small delivery vehicles. Service vehicles will deliver at times outside peak periods and managed accordingly.

6 TRAFFIC GENERATION

Roads and Maritime Services (RMS) provide average traffic generation rates for a range of different land uses in their publication *Guide to Traffic Generating Developments* 2002. The rates are based on extensive surveys undertaken throughout the Sydney Metropolitan and Regional Areas. RMS conducted surveys of drive through coffee outlets in 2015 to include these rates in the *Guide to Traffic Generating Developments*. The 2015 surveys revealed an average AM peak hour vehicle trip (phvt) generation of between 70 and 130 phvt with an average of 105 phvt. The surveys also found that an average of 83% of these trips are passing traffic, i.e. traffic already travelling within the road network.

Coreen Avenue is not a major arterial road and, therefore, the expected traffic generation is anticipated to be at the lower end of the trip generation range, i.e. 70 phvt.

The additional peak hour vehicle trips for the proposed development are, therefore:

- $70 \times 0.17 = 12$ phvt in the AM peak

Additional traffic volumes of this magnitude:

- Are minimal and will have no impact on existing traffic flows, intersection capacities or neighbourhood amenity.
- Will not present any unsatisfactory traffic safety or capacity issues on the surrounding road network.

7 ACCESS AND INTERNAL CIRCULATION

7.1 ACCESS

Vehicular access to the proposed development is via an existing driveway on Coreen Avenue (refer **Photo 1**) and vehicles will exit the fast lane café via the existing driveway on Coombes Drive (**Photo 2**). The minimum requirement in assessing the safety of the existing driveway is the need to provide sufficient sight distance for drivers to observe a possible conflict with other vehicles and allow for sufficient time to take evasive action should it be required.

An accepted approach to calculating the provision of safe and efficient access to and from a development is to ensure that there is sufficient sight distance to enable non-priority traffic (i.e. traffic turning into and out of the site) to carry out their turning movements without unduly interfering with mainstream traffic flow.

AS 2890.1:2004 *Parking facilities – Off-street car parking* sets out the sight distance requirements for access driveways.

The existing exit driveway is located on a straight and level section of Coombes Drive, providing excellent sight distance.

The speed zone is 50 km/h and sight distance from the location of the egress driveway is set out in **Table 3**:

Table 3: Sight distance requirements

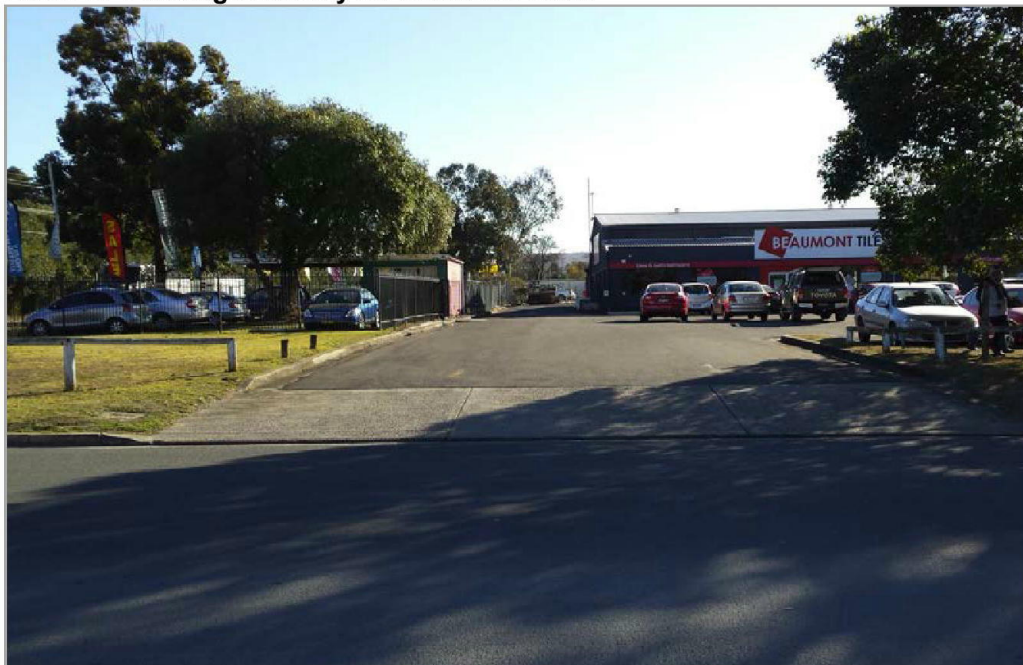
Source	Sight Distance Required	Sight Distance Available
AS 2890.1:2004 (5 sec gap)	69 metres (north)	To intersection Coreen Avenue
	69 metres (south)	>100 metres

Source: AS 2890.1: 2004 and gtk consulting 2018

The sight distance to the south from the existing driveway on Coombes Drive, therefore, exceeds the requirement of AS 2890.1:2004 and sight distance to the north extends to the intersection of Coreen Avenue.

Photo 1: Existing driveway on Coreen Avenue

Source: gtk consulting 2018

Photo 2: Existing driveway on Coombes Drive

Source: gtk consulting 2018

7.2 INTERNAL CIRCULATION

Entrance to the fast lane café is via the existing driveway on Coreen Avenue. Vehicles will then be directed by signage to turn right into the access lane which has a minimum width of 3.6 metres for one-way traffic flow. The remaining lane width of 3.05 metres will be used for occasional access by a forklift to the rear of the Beaumont Tiles site (Area 1). The café lane and forklift access will be separated by traffic bollards spaced at 3.0 metre intervals.

Vehicles will enter the fast lane café operation from Coreen Avenue, and proceed to the service window where drivers will place their coffee orders. Drivers then continue to the next service window to pick up their order and leave the site via the existing driveway on Coombes Drive. The access lane will allow for queuing of up to 10 cars from the ordering window.

The circulation, manoeuvring and unloading arrangements comply with the requirements of AS 2890.1:2004 and the RMS *Guide to Traffic Generating Developments*.

7.3 POTENTIAL FOR QUEUEING

The 2015 surveys undertaken by RMS indicate that:

“The maximum queue lengths ranged from 2 to 11 (vehicles), although only one outlet’s maximum queue was 2, two outlets maximum queue was 11 and the remaining seven outlet’s maximum queue was between 5 and 7 with an overall average for all outlets of 6.7 vehicles.”

The proposed site has the capacity to queue 10 vehicles along the lane which is considered more than adequate having regard to the function of Coreen Avenue.

8 CONCLUSION

The proposed fast lane café to be established within the existing industrial complex at 137 Coreen Avenue, Penrith has been assessed to determine the likely traffic impacts and compliance with the relevant Australian Standard, *RMS Guide to Traffic Generating Developments* and Penrith City Council's *Development Control Plan 2014*.

Assessment of the proposal indicates that:

- The café is a drive through facility, therefore, no car parking is required for customers.
- The number of staff required to service the proposed café is low (2 staff at any one time). The proposed on-site car parking provision is considered adequate for the development in accordance with the intentions of *Penrith City Council's Development Control Plan 2014*.
- The proposed internal layout meets the requirements of AS 2890.1:2004 and *RMS Guide to Traffic Generating Developments*.
- 83% of the traffic generated by the proposed café is passing traffic already within the existing road network.
- The additional 12 phvt generated by the proposal will not present any unsatisfactory traffic safety or capacity issues on the surrounding road network.
- The sight distance for vehicles exiting Coombes Drive from the existing driveway meets the requirements of AS 2890.1:2004.

This assessment concludes that the traffic, road safety and car parking elements of the proposed fast lane café are in accordance with the relevant standards and guidelines for such developments and is worthy of approval.

Garry Kennedy



Director

APPENDIX 1 SITE LAYOUT PLAN

Figure A1.1: Site Plan

