

Traffic Solutions Pty Ltd

24 September 2014
Reference No: 13.14.152



The General Manager
Holroyd City Council
PO Box 42
Merrylands NSW 2160

Dear Sir

Traffic and Parking Assessment – 2-8 Wayman Place, Merrylands

Traffic Solutions Pty Ltd has been engaged by Coplex Construction Pty Ltd to provide Council with an assessment of the traffic and parking implications of a development proposing 62 residential Units including 15 affordable housing units. (Comprising 7 x 1 bedroom, 47 x 2 bedroom and 8 x 3 bedroom dwellings). The 15 affordable housing units consist of 12 x 2 and 3 x 3 bedroom units.

Address:
P.O Box 9161
Bathurst
NSW 2795

Seventy six (76) parking spaces are proposed in 2 basement levels with vehicle access via a 5.5m wide driveway direct to the Wayman Place cul-de-sac bulb. A site inspection has revealed that the proposed driveway location is satisfactory and will provide very good sight distance along Wayman Place.

Phone / Fax:
(02) 6331 0467

This assessment has been undertaken with reference to plans prepared by Architex Job No 2150, drawing numbers DA00-DA17, issue B dated 15th September 2014.

E-mail
craig@trafficsolutions.com.au

An estimation of the traffic generation of the proposed development can be calculated by reference to the Roads and Traffic Authority's 'Guide to Traffic Generating Developments, Section 3 – Landuse Traffic Generation' of October 2002. The guide specifies the following peak hour generation rates:

Metropolitan Regional (CBD) Centres.

Daily vehicle trips = not available
Peak Hour Vehicle Trips = 0.24 trips per unit.

Metropolitan Sub-Regional Centres.

Daily vehicle trips = not available
Peak Hour Vehicle Trips = 0.29 trips per unit.

The Roads and Traffic Authority defines a high density residential flat building as:

“... a building containing 20 or more dwellings. This does not include aged or disabled persons' housing. High density residential flat buildings are usually more than five levels, have basement level car parking and are located in close proximity to public transport services. The building may contain a component of commercial use.”

It is considered that the traffic generation rate applicable to this development will be the Metropolitan Sub-Regional Centres rate due to its close proximity to Merrylands bus/rail interchange and therefore the estimated traffic generation of the development calculates as:

62 dwellings @ 0.29 trips/unit =

18 peak hour trips

Accordingly, the proposed development has the potential to generate approximately 18 vehicle trips vehicle trips in the peak hours.

The estimated potential traffic generation of the subject site can be discounted by the traffic generated by the existing 4 freestanding dwelling houses. The RMS suggests a traffic generation rate of 0.85 vehicle trips per dwelling in the peak hours for free standing dwellings giving a total of approximately 3.4 existing peak hour trips.

Consequently, the potential increase in traffic flows is estimated to be in the order of **15** vehicle trips in the peak hours. This increase in traffic will not have a noticeable or detrimental effect on the current operation of Wayman Place or the surrounding road network.

Geometric design requirements for car park layouts are specified in the *Australian/New Zealand Standard, Parking Facilities Part 1: Off Street Car Parking (AS/NZS 2890.1)* of 2004 and *Australian/New Zealand Standard, Parking Facilities Part 6: Off street Parking for People With Disabilities* of 2009. Part 1 of this standard classifies this development as a Class 1A off-street car parking facility requiring a category 1 driveway. The following table provides a comparison on the requirements of AS/NZS 2890.1 and AS/NZS 2890.6 applicable to the car parking proposal.

FEATURE	AS/NZS 2890.1 & AS/NZS 2890.6 REQUIREMENT	PROPOSED	CONFORMS TO STANDARD
Parking Space	5.4m x 2.4m car space Additional 300mm when adjacent a wall	5.4m x 2.4m min	YES
	5.4m x 2.4m plus 5.4m x 2.4m shared zone disabled	5.4m x 2.4m plus 5.4m x 2.4m shared zone disabled	YES
Aisle Width	5.8m min	6.1m min	YES
Blind Aisle	1.0m	1.2m min	YES
Driveway Width	Category 1 d/w = 3m – 5.5m Category 2 d/w = 6m – 9m Note: Driveways are normally combined, but if separate, both entry and exit widths should be 3.0m min.	Category 1 d/w 5.5m	YES
Ramp Grades	1 in 20 (5%) for 1st 6m > 20m 1 in 5 (20%) max < 20m 1 in 4 (25%) max. Transition required if grade change in excess of 1 in 8 (12.5%)	1 in 20 (5%) for 1 st 6m	YES
		Ramps < 20 @ 1 in 5 (20%) with 1 in 8 (12.5%) grade transitions.	YES
Ramp Widths	For straight ramps - One way ramps = 3.0m min - Two way ramps = 5.5m min Additional 300mm when adjacent For curved ramps - One way ramps = 3.6m min - Two way ramps = 7.8m min Additional 300mm when adjacent	Two way straight ramps 5.5m plus clearances	YES
Headroom	2.3m desirable	2.365m	YES
	2.2m minimum 2.5m above disabled space	2.5m min	YES

Accordingly this development proposal adheres to the above Australian Standard Requirements.

Due to the angle of the driveway ramps it is recommended that 'Convex Safety' mirrors be provided at the top and bottom of the ramps to enable drivers to view on coming vehicles, should this occur.

Council's Development Control Plan (*Holroyd City Council Development Control Plan 2013*) specifies the following car parking requirements:

Residential Flat Buildings –

1 bedroom – min 0.8 spaces per dwelling – max. 1 space per dwelling.
 2 bedroom – min 1 space per dwelling – max 1.5 spaces per dwelling.
 3 bedroom – min 1.2 spaces per dwelling – max 2 spaces per dwelling.
 Visitors – min 0.2 spaces per dwelling – max 0.5 spaces per dwelling.

Accordingly, the minimum car parking required for the non-affordable housing units in this development proposal calculates as:

7 x 1 bedroom dwellings @ 0.8 spaces/dwelling	=	5.6 spaces.
35 x 2 bedroom dwellings @ 1 spaces/dwelling	=	35 spaces.
6 x 3 bedroom dwellings @ 1.2 spaces/dwelling	=	7.2 spaces.
48 dwellings @ 0.2 space/ unit for visitors	=	9.6 spaces.
SUB TOTAL	=	57.4 spaces.

In addition, the State Environmental Planning Policy (Affordable Rental Housing) 2009 requires the following car parking requirements for affordable housing:

PART 2 - NEW AFFORDABLE RENTAL HOUSING Division 1 - In-fill affordable housing.

2 (a) (ii) in any other case-at least 0.5 parking spaces are provided for each dwelling containing 1 bedroom, at least 1 parking space is provided for each dwelling containing 2 bedrooms and at least 1.5 parking spaces are provided for each dwelling containing 3 or more bedrooms.

Accordingly, the car parking required for this development proposal calculates as:

12 x 2 bedroom dwellings @ 1 spaces/dwelling	=	12 spaces.
3 x 3 bedroom dwellings @ 1.5 spaces/dwelling	=	4.5 spaces.
SUB TOTAL	=	16.5 spaces.
TOTAL	=	73.9 spaces

Consequently, the proposed residential development exceeds Council's DCP and the SEPP's parking requirements with the provision of **76** off-street parking spaces.

The preceding assessment has revealed the following:

- The access driveway proposed to serve the development is suitably located and will provide very good sight distance along Wayman Place.
- The proposed development satisfies the related geometric design specifications contained in the Australian Standards for off street parking and vehicular access. However it is

recommended that 'Convex Safety' mirrors be provided at the top and bottom of the vehicle ramps to aid sight lines.

- The off street parking provided in the proposed development is considered to be adequate as it exceeds the RTA and the Affordable Rental Housing SEPP 2009 requirements.
- The proposal has a potential net increase in estimated peak hour traffic flows in the order of **15** vehicle trips will not have a noticeable or detrimental effect on the current operation of Wayman Place or the surrounding road network.

Should you require any additional information or clarification of the contents of this letter please contact me on the numbers provided.

Yours sincerely

A handwritten signature in black ink, appearing to read 'C. Hazell'.

Craig Hazell
Director