

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

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21 February 2018 Ref: 16219

Adam Fahey Catholic Healthcare Limited PO Box 914 Macquarie Park, NSW

Dear Adam

Re: Proposed Residential Age Care Facility 11-15 Lang Road, 76-80 Marsh Pde, 536-542 Hume Hwy, Casula Supplementary Traffic and Parking Assessment

I understand Council has sought further clarification with respect to the proposed vehicle access location and an operational management/strategy to minimising staff parking demand.

Site Access

I have reviewed the prevailing site topography and traffic and operational circumstances of Lang Road and Marsh Parade and it is my assessment that the site is more suitably accessed via Marsh Parade for reasons outlined as follows:

Lang Road being located some 5m above the proposed parking level would eventuate in the need for extended ramp connection (if used as an access) and this is further exacerbated by requirements for heavy vehicle access which are to comply with the onerous design criteria of AS2890.2:2004, amongst which 7m long grade transitions, etc.

On the other hand, an access at Marsh Parade would provide a generally level driveway/circulation arrangement and this design outcome, with all other things being equal, will be more superior from a traffic operation and safety point of view.

Traffic Engineering | Traffic Signal Design | Road Safety Audit

Whilst Lang Road and Marsh Parade are both classified as Local Roads I note that right turn movements are permitted in Lang Road while that for Marsh Parade are prohibited physically by a median island. From the stand point of general and additional traffic movements resultant from the development, providing access at Lang Road would represent an increase of traffic conflict/delays for the Hume Highway-Lang Road and the Lang Road-Hume Highway right turn movements.

On the other hand, locating the vehicular access away from the Lang Road and Hume Highway intersection (i.e. Marsh Parade) acts to minimise this impact to only the minor proportion wishing to depart to the north, and therefore a more desirable outcome.

The suitability and appropriateness of site access location are generally subject to a number of considerations including:

- Frontage road traffic
- Typology of proposed uses
- Sight distances
- Grades

It is apparent that Lang Road and Marsh Parade are comparable on the above aspects. However the level difference with respect to a vehicular access at Lang Road would result in less desirable ramp gradients for all users, in particular service vehicles.

I am advised there are additional circumstances which are beyond the consideration of traffic which also contribute to the proposed access strategy outcome and these are discussed under their respective disciplines.

Staff Travel and Parking Management

Local Transport Accessibility

The site is conveniently located with respect to existing public transport services. The Hume Highway bus stops which are located 40m (southbound) and 70m (northbound) from the site's entry point provide high frequency truck route services (4 services per hour) connecting between Liverpool CBD and Campbelltown via routes no. 855, 856, 857, 870, 871 and 872. Alternatively, the Casula Railway Station is located some 750m to the south east or an easy 10 minutes' walk.

Details of the Bus maps and Sydney Trains network maps including an aerial image indicating locations of bus stops and train station in relation to the site are provided in Appendix A.

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Statutory Parking Requirements

The minimum car parking provision required under the SEPP criteria for this development scheme is 33 spaces. Against this requirement provision for 34 spaces has been made to be entirely compliant with the criteria.

Staff Peak Parking Demand

The anticipated staff roster and no. of staff are indicated as follows:

Time	Max Staff
0630-1430	20
1430-2230	10
2230-0630	5
0900-1700	6
	0630-1430 1430-2230 2230-0630

Based on a conservative assessment with 70% to 90% of staff commuting to/from the premises by car (including those who carpool) the projected travel mode could have the following composition:

	TRAVEL MODE (%)		
	AM	MD	PM
Trains	5	5	0
Buses	15	5	5
Carpool (Passenger & driver)	5	5	5
Drive (single driver)	65	75	85
Dropped off/Picked up	10	10	5

Application of the above projections would indicate the following peak parking demands:

Morning shift changeover	26 spaces
Afternoon shift changeover	13 spaces
Night shift changeover	23 spaces

It is apparent that the most critical changeover shift occurs between the morning and afternoon shifts at 2.30pm. This temporary parking 'spike' during the peak changeover can be entirely accommodated within the development's car parking provision (34 spaces). Further, it is noted that peak visitation periods do not overlap with this changeover time and as such there would not be any discernible impact on the overall car parking demand.

It is nevertheless pertinent that the above assessed drivers' mode shares are quite high particularly given the convenience of the site. As such it is proposed that the CHL

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Management would, as part of the staff induction process, incorporate the following initiatives to minimising staff parking demand:

- provide appropriate information in relation to available transport services and accessibility with respect to the site to continue to encourage the uptake of transport services available to the vicinity of the site.
- organise and encourage car pooling amongst staff members whose residences are within convenient proximities.

I trust this is sufficient for your requirements.

Yours faithfully

Bernardyslo

Bernard Lo *BE(Civil), MTrans, MIEAust* Director Transport and Traffic Planning Associates Encl.

Appendix A

Transport Services

Google Maps 76 Marsh Parade, Casula NSW 2170 to Casula Station, Casula NSW

Walk 750 m, 10 min



Imagery ©2018 CNES / Airbus, DigitalGlobe, Map data ©2018 Google 100 m

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Sydney Trains Network

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Check timetables and trip planners for train services and connections

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