

M^CLAREN TRAFFIC ENGINEERING

Transport Planning, Traffic Impact Assessments, Road Safety Audits, Expert Witness

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16 August 2012

2012/054.L01 CM/hc

Chief Town Planner
City of Botany Bay
PO Box 331
MASCOT NSW 1460
Attention: Ms Catherine McMahon
Dear Catherine,

TRAFFIC & PARKING IMPACT ASSESSMENT REVIEW PART 3A APPLICATION EASTLAKES SHOPPING CENTRE

Reference is made to your request for an assessment and review of the submitted details in support of the proposed expansion of Eastlakes Shopping Centre.

The following submitted reports have been assessed as part of our initial review:

- Colston Budd Hunt & Kafes, *Transport and Accessibility Impact Assessment for Part 3A Application for the Proposed Redevelopment of Eastlakes Shopping Centre*, July 2012
- Site Plan, Drawing DA02 Issue D as prepared by Rice Daubney architects.
- Ground Floor Plan, Drawing DA05 Issue F as prepared by Rice Daubney architects.
- Basement Level 1 Plan, Drawing DA04 Issue F as prepared by Rice Daubney architects.
- Basement Level 2 Plan, Drawing DA03 Issue F as prepared by Rice Daubney architects.

The following matters/comments are raised in relation to the level of detail provided in the submitted reports outlined above:

- The traffic report submitted outlines in paragraph 2.1 that the existing site currently provides 11,540m² GLA. The report also states that the centre includes Woolworths and Aldi supermarkets as well as 7000m² of specialty shops

It is assumed that the supermarket component equates to 5,540m² however this requires confirmation.

A breakdown of the existing uses GLA should be provided to properly assess the increase and/or decrease in specific land uses.



- The traffic report bases its traffic and parking demand for the existing and future scenarios on the 11,540m² GLA.

Recent site visits to the shopping centre show that not all business premises were occupied. It is expected that the existing traffic and parking demand surveys relates to a lower GLA than that stated in the submitted traffic report.

The number of vacant premises in the existing centre should be provided along with the operational GLA of the centre at the time of the survey (i.e. 11,540m² is the total GLA, however due to the vacant and unoccupied business spaces, the GLA of the centre would be less given the reduction).

- Paragraph 2.20 of the traffic report summarises the queuing on Racecourse Place extending to the south as occurring for *only a short time, clear quickly, and do not result in congestion at the intersections of Racecourse Place with Gardeners Road and Evans Avenue*. Additionally, the report also outlines the Level of Service (LoS) for the separate intersections analysed using the SIDRA program

The undersigned is familiar with the road network analysed given his involvement in the recent L&E case against McDonalds. The undersigned confirms that queuing occurs on Racecourse Place down to the Evans Avenue roundabout. While this queuing may not affect the current operation of the roundabout, it is expected that any future growth in traffic within the Eastlakes shopping precinct will result in queuing effects that will compromise the performance of the Racecourse Place / Evans Avenue roundabout. This matter was raised in detail during the McDonalds case with the Commissioner accepting the concerns of the undersigned with regard to the inadequate assessment of this queuing effect. During that case VISSIM simulation modelling was undertaken, the input & output results were not accepted by the court.

The applicant shall submit all electronic SIDRA files for review and confirmation of calibration. In addition, a correctly calibrated micro-simulation model is needed to assess the impact of vehicle queuing within Racecourse Place.

Further, during the case the McDonalds legal team produced a future road layout that removed the Racecourse Place / Evans Avenue roundabout and extended Racecourse Place to the south as part of the future expansion of the Eastlakes Shopping Centre as a way of resolving the vehicle queuing issue. A copy of this plan is attached in **Annexure A**. The plan also relied upon a new entry to the centre from Gardeners Road, which we understand is no longer being pursued.

- The applicant outlines changes to the existing access arrangements to the centre and intersection controls of the surrounding road network. The traffic report outlines the introduction of two new roundabouts at the Barber Avenue/Evans Avenue and Barber Avenue/St Helena Parade.

No details of swept path profiles for the proposed roundabouts particularly to accommodate the 19m Semi-trailer design vehicle. Additionally, swept path review of the proposed new access arrangements are also not provided

Council needs to confirm the approved truck route for this centre with regard to past consents. If Council are unable to confirm or deny whether this is an existing route then the applicant should submit CAD DWG files or at best, Microsoft Word/ Adobe PDF plots of the swept paths for the truck route.

- Paragraph 3.39 of the traffic report outlines the 19m Semi-trailer haulage route will travel via Maloney Street via Evans Avenue, Longworth and Barber Avenue.

It is not clear whether this route is approved or designed to cater for the 19m Semi-trailer particularly given the Aldi service route is limited to Gardeners Road, Racecourse Place and Evans Avenue as part of DA07-070.

The applicant is to confirm the 19m truck route is allowable and achievable. Electronic DWG or PDF plots of swept paths for the 19m truck route are to be supplied as well as consent for this route (if it is an existing route).

- The traffic report outlines that the Aldi loading dock has been designed to accommodate a 12.5m truck. It is also outlined that the Woolworths loading dock has been designed for a 19m Semi-trailer.

No detailed swept path plots have been provided in the submitted report. It is not known whether these separate loading docks can be adequately accessed by the design vehicles.

The applicant should submit CAD DWG files or at best, Microsoft Word/ Adobe PDF plots of the swept paths.

- The submitted traffic report states that *the existing marked pedestrian crossings in Evans Avenue (east and west of Racecourse Place) will be retained along with the marked pedestrian in Barber Avenue (west of St Helena Parade).*

The report does not outline the performance of these marked pedestrian crossing in particular pedestrian flows and queuing in their respective streets. Additionally, the site plan indicates only one pedestrian crossing, on Evans Avenue, with the other crossings non existent on the plan.

The applicant should assess the existing pedestrian crossings in terms of the pedestrian & vehicle demand, vehicle queuing and safety of all crossings for both the existing and future conditions. The site plan should also outline the retention of these crossings and their location with respect to the changed intersection controls.

- Paragraph 3.33 to 3.35 outlines the queuing space before the boom gate at the site accesses. The report states, as per the standard, the queuing space for the northern car park (243 car spaces) is 6 spaces while the southern car park (759) requires queuing space for 11 spaces. The traffic report is providing

space for 6 queued vehicles in the northern car park and 12 queued vehicles for the southern car park.

Figure 7 of the submitted traffic report outlines the traffic flows for the Saturday midday peak hour. The figure details the shopping centre access of Evans Avenue/ Racecourse Place roundabout as having a total of 320 vehicles per hour. It is understood this is under boom gate control with twin lane entry. The two other access points experience lower volumes and provide single lane boom gates.

It is requested that the applicant carry out queuing analysis for all ingress and egress locations based on inbound/outbound flow and required service time. Details of the input and output of this analysis are to be provided along with assumptions, if any.

- The traffic report outlines the public transport activity within the proximity of the site particular Sydney Buses route 301,303,343 and 357.

Review of the bus routes are outlined in the table below.

Route	AM Peak ⁽¹⁾		Inter Peak ⁽³⁾		PM Peak ⁽²⁾		Hours of Operation	LOS
	Frequency	LOS	Frequency	LOS	Frequency	LOS		
301	9	A	4	C	8	A	19	A
303	9	A	4	C	8	A	19	A
343	11	A	5	B	11	A	19	A
357	2	D	1	D	2	D	12	D

Notes: 1- average from 7-9am
 2- average from 4-6pm
 3 average from 9am-3pm

Sydney Buses routes 343 and 357 utilise Gardeners Road directly and does not travel south of this road. Routes 301 and 303 travel via Racecourse Place, Evans Avenue and Maloney Street. The nearest bus stop to access 301 and/or 303 is on Racecourse Place and also Evans Avenue near Longworth Avenue for westbound and on Evans Avenue near Dalby Place for eastbound traffic flow. It is expected that these two bus services will have greater affect in achieving lower private car use and greater public transport use.

- The traffic report outlines a parking requirement for the retail of 436 spaces which is greater than Council’s DCP and lower than the RMS guidelines. The parking for the high density residential component will have a total of 446 spaces and an additional 82 spaces for the serviced apartments. The high density residential parking is greater than the RMS guidelines and slightly lower than Council’s requirement.

The retail component’s parking requirement is based on the existing demand. As noted previously, the applicant should provide details on the actual GLA in use at the time of the survey. The high density residential parking provided is some 89 car spaces greater than the RMS requirement and 18 spaces lower than the Council requirement. The traffic generation for the residential

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component of 0.29 vehicles/hour/unit is associated with the 357 parking spaces. The development is providing parking some 25% greater than the RMS guidelines. Although this is greater than the requirement, due to the connection to the shopping centre and public transport access, the vehicle trip rate of 0.29veh /hour /unit is appropriate.

Yours faithfully,

M^cLAREN TRAFFIC ENGINEERING



Craig M^cLaren
Director

BE Civil. Graduate Diploma (Transport Eng) MAITPM MITE

RMS Accredited Level 3 Road Safety Auditor

RMS Accredited Traffic Control Certifier, Auditor & Planner (Orange Card)

ANNEXURE A : FUTURE ROAD LAYOUT, PRODUCED DURING RECENT PROCEEDINGS AGAINST MCDONALDS AUSTRALIA

