

Matthew Rosel  
Senior Planner, Metropolitan Projects  
NSW Department of Planning & Environment  
GPO Box 39 Sydney NSW 2001

Arcadis Australia Pacific Pty Ltd  
Level 5, 141 Walker Street  
Locked Bag 6503  
NORTH SYDNEY NSW 2060  
Tel No: +61 2 8907 9000  
Fax No: +61 2 8907 9001  
arcadis.com

4/08/2016

## SSD 5878 MOD1 & SSD 6013 MOD2

Dear Matthew,

Request for Information – Traffic Generation

In response to your email pertaining to your preliminary review of the above-mentioned development application, please refer to the table below showing a comparison of traffic generation impacts for the PM peak.

It should be noted that in the traffic analysis undertaken for the whole of precinct for the SICEEP, the PM peak was found to be the predominant weekday peak and the critical peak between the AM and the PM peak hours. The traffic modelling approach was agreed upon with the RMS and INSW and is consistent all throughout submissions for the development plots within the SICEEP.

<b>Trip Generation Comparison Table (PM Vehicle Trips)</b>				
	<b>As approved Concept Proposal (CP) SSDA2 (RMS' 2001 guidelines)</b>	<b>As approved CP updated by RMS' TDT 2013/14 guidelines)</b>	<b>As approved MOD1 updated by RMS' TDT 2013/14 guidelines)</b>	<b>Proposed modification under RMS' TDT 2013/14 guidelines)<sup>4</sup></b>
<b>Residential (vehicle trips per unit)</b>	<b>0.24</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>
SW	107 (446 units)	81 (539 units as approved)	81 (539 units as approved)	81 (539 units as approved)
NE	115 (479 units)	87 (581 units as approved)	87 (581 units as approved)	87 (581 units as approved)
SE	94 (391 units)	59 (391 units)	59 (391 units)	59 (391 units)
N	11 (44 units)	7 (44 units)	7 (44 units)	0 (0 units)
W1	41 (170 units)	26 (170 units)	26 (170 units)	32 (265 units as approved) <sup>3</sup>
W2	60 (252 units)	38 (252 units as approved) <sup>2</sup>	38 (252 units as approved)	30 (252 units as approved) <sup>3</sup>
<b>Total Residential Net Generation</b>	<b>428</b>	<b>298</b>	<b>298</b>	<b>289</b>
<b>Retail (vehicle trips per 10 GLFA)</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>

<b>Trip Generation Comparison Table (PM Vehicle Trips)</b>				
	<b>As approved Concept Proposal (CP) SSDA2 (RMS' 2001 guidelines)</b>	<b>As approved CP updated by RMS' TDT 2013/14 guidelines)</b>	<b>As approved MOD1 updated by RMS' TDT 2013/14 guidelines)</b>	<b>Proposed modification under RMS' TDT 2013/14 guidelines)<sup>4</sup></b>
SW	95 (1700 GLFA)	85 (1522 GLFA as approved)	85 (1522 GLFA as approved)	98 (1754 GLFA, with 1522 approved)
NE	202 (3600 GLFA)	89 (1588 GLFA as approved)	89 (1588 GLFA as approved)	89 (1588 GLFA as approved)
SE	106 (1900 GLFA)	106 (1900 GLFA)	106 (1900 GLFA)	66 (1178 GLFA)
NW	0	73 (1296 GLFA as approved)	73 (1296 GLFA as approved)	73 (1296 GLFA as approved)
N	22 (400 GLFA)	22 (400 GLFA)	22 (400 GLFA)	0 <sup>1</sup> (4373 GLFA)
<b>Total Retail Net Generation</b>	<b>425</b>	<b>375</b>	<b>375</b>	<b>326</b>
<b>Commercial (vehicle trips per 100m2 GFA)</b>	<b>2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>
NW	349 (17442m2 GFA)	309 (25755m2 GFA as approved)	337 (28055m2 GFA as proposed to be modified)	337 (28055m2 GFA as approved)
<b>Total Commercial Net Generation</b>	<b>349</b>	<b>309</b>	<b>337</b>	<b>337</b>
<b>Overall Total Net Generation</b>	<b>1202</b>	<b>982</b>	<b>1010</b>	<b>952</b>

<sup>1</sup> The community floor area is not anticipated to generate regular traffic during the peak and it is expected to cater mainly to the local residents and the local business community. The GLFA excludes terrace and balcony areas for the proposed The Darling Exchange (lodged as part of SSDA10).

<sup>2</sup> 668 beds approved which converts to 265 units using the same bed to unit ratio as W2.

<sup>3</sup> In the absence of any guidelines, it is assumed that vehicle trip generation for student accommodation is not likely to exceed the vehicle trip generation for high density residential (0.15 vehicle trips per unit) and a high estimate could potentially be in the order of 0.08-0.12 vehicle trips per unit. Hence, for an estimated total of 517 units, vehicle trip generation could be in the order of 41-62 vehicle trips. In addition, there will also be seasonal logistical requirements of students moving in and out of the buildings. These trips are anticipated to occur outside the peak hour and dispersed throughout the day.

<sup>4</sup> Recalibrated traffic generation based on RMS Technical Direction TDT 2013/04a (August 2013)

Yours sincerely



Dipal Prajapati  
Senior Engineer  
02 8907 2693