

Issue History

File Name	Prepared by	Reviewed by	Issued by	Date	Issued to
P3755.001T 266 Longueville Rd Lane Cove TIA Peer Review	S. Daizli	A. Giyahi	T. Wheatley	02.08.2018	Sashika Perera Lane Cove Council
P3755.002T 266 Longueville Rd Lane Cove TIA Peer Review	S. Daizli	A. Giyahi	A. Giyahi	02/08/2019	Sashika Perera Lane Cove Council
P3755.003T 266 Longueville Rd Lane Cove TIA Peer Review	S. Daizli	A. Giyahi	S. Daizli	27/08/2019	Sashika Perera Lane Cove Council

266 Longueville Road, Lane Cove Traffic Impact Assessment Independent Peer Review**1. INTRODUCTION**

A Development Application (DA) for a proposed residential aged care facility (RACF) at 266 Longueville Road, Lane Cove, comprising 82 Independent Living Units (ILU), 70 residential aged care beds, 122 car parking spaces across two basement levels and an ambulance bay was referred to the Sydney North Planning Panel. The Panel deferred the DA noting that it required an independent peer review of the Revised Traffic and Parking Assessment Report prepared by Varga Traffic Planning, dated 25 May 2018.

Bitzios Consulting was engaged by Lane Cove Council to undertake an independent peer review of the report and supplementary documents. An initial peer review was undertaken in 2018, followed by a review in early August 2019 of a revised traffic report (dated 28 March 2019) and SIDRA models in response to our comments. A further review was undertaken in late August 2019.

2. REVIEW**2.1 TRAFFIC GENERATION RATES**

According to an onsite survey undertaken by Varga, the existing site traffic generation is 6 and 8 trips during the AM and PM peak hours respectively. The report uses the "Housing for Seniors" traffic generation rate of 0.4 peak hour trips per dwelling as specified in the *Roads and Maritime Services (Roads and Maritime) TDT 2013/4a*, totalling 61 proposed trips. Bitzios Consulting deems this to be acceptable given it is an updated rate from the previous *Roads and Maritime Guide to Traffic Generating Developments* and applies a more conservative analysis.

Bitzios Consulting also agrees with Varga's statement that the actual traffic generation for the proposed development in practice is likely to be less than 61 trips, given residential aged care beds would generate less traffic than ILUs and that the morning site peak hour does not generally coincide with the network peak hour as stated in the *TDT 2013/4a*. However, any shortfall would be made up by staff/visitors.

2.2 TRIP DISTRIBUTION

Bitzios Consulting accepts Varga's even trip distribution assumption between the west via River Road West, the north via Longueville Road and the east via Northwood Road.

2.3 SIDRA MODELS

Bitzios Consulting has reviewed the revised SIDRA models created by Varga and concluded the following:

2.3.1 Intersection Geometry

Longueville Road/Northwood Road/River Road West Intersection – Current Arrangement

- Longueville Road north approach lane 2 incorporates the right turn for buses as required.

Longueville Road/Northwood Road/River Road West Intersection – Proposed Arrangement

- Longueville Road north approach lane 2 is correctly coded as a right turn only lane as per the Roads and Maritime concept plan;
- Northwood Road south leg is correctly coded as a south-east leg;
- lane widths from the concept plan have been used as required; and
- the median chevron marking on the Longueville Road north approach as per the concept plan has been used.

2.3.2 Priorities

Longueville Road/Northwood Road/River Road West Intersection – Proposed Arrangement

- Longueville Road north approach right turn – western pedestrian crossing has priority; and
- River Road West north-west approach left turn – northern pedestrian crossing has priority.

2.3.3 Phasing and Timing

Longueville Road/Northwood Road/River Road West Intersection – Current Arrangement

- based on the provided SIDRA outputs, it has been assumed that a filter turn for the Longueville Road north approach right turn has been incorporated in Phases B and C;
- based on the provided SIDRA outputs, it has been assumed that a phase transition has been applied for the following movements in Phase B :
 - Longueville Road north approach through and right turn; and
 - Northwood Road south approach left turn and through.

Northwood Road/Kenneth Street Intersection

- Northwood Road north-west approach right turn is a filter turn in Phase A and has a phase transition applied in Phase D as required.

2.3.4 Signal Timings and Methods

Bitzios Consulting is satisfied with the signal timing method that was used for the Longueville Road/Northwood Road/River Road West and Northwood Road/Kenneth Street intersections under the existing and with development scenarios, being the user-given phase times method. The observed average phase times from the Roads and Maritime Intersection Diagnostic Monitor (IDM) data were used as a result. Hence, we concur with Varga's statement that, "the revised capacity analysis reconfirms that the traffic impacts of the development proposal will be statistically insignificant and will clearly not have any unacceptable traffic implications in terms of road network capacity."

2.3.5 Other Comments

- all other assumptions/inputs are considered valid and reasonable, provided these have resulted in the calibration of the existing SIDRA models and 95th percentile queue distances, and thus represent intersection delay and performance realistically.

2.4 SWEPT PATH ANALYSIS

Bitzios Consulting has reviewed the revised swept path diagrams attached to the report and deem that they are satisfactory and have addressed our initial comments. However, the green site boundary colour should be a different colour (perhaps magenta) to distinguish from the vehicle body clearance and vehicle body path colours in order to make a more conclusive and immediate judgement on the swept paths.

2.5 PARKING REQUIREMENTS

The development's parking requirements set out in the report in accordance with *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* are appropriate and detailed. The proposed 122 parking spaces, including 14 Persons With a Disability (PWD) spaces, seven large spaces, and one ambulance bay are deemed sufficient and should be marked and signposted for each use.

3. CONCLUSIONS

Bitzios Consulting was engaged by Lane Cove Council to undertake an independent peer review of the traffic and parking impact assessment report prepared by Varga Traffic Planning for the proposed RACF located at 266 Longueville Road, Lane Cove. Deficiencies identified in the SIDRA models in relation to Movements Priority Coding, Phasing and Timing, and better application of the Longueville Road/Northwood Road/River Road West concept plan have been rectified by Varga.

The parking requirements of the development set out in the report in accordance with *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* are appropriate. The proposed 122 parking spaces, including 14 PWD spaces, seven large spaces, and one ambulance bay are deemed sufficient and should be marked and signposted for each use.

Bitzios Consulting deems Varga's revised traffic report and SIDRA models fit for purpose and suitable for review by the Panel.