



TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

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Ref: 21298 Rev E

Ms Clare Collett
Special Counsel
Mills Oakley

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Dear Clare

Re: Penrith Lakes Responses to SOF&C's

Part B2 – Insufficient Information Contentions

Particulars 1.0

- 1.1 This is correct and is confirmed by the Supplementary Traffic Assessment dated 17.10.2021 which provides further clarification and adopts a more robust traffic generation rate in response to the issues raised by TfNSW.
- 1.2 The Supplementary Traffic Assessment provides additional information and adopts a more robust traffic generation rate which was said to be the principal deficiency in the TIA.
- 1.3
 - 1.3.1 The traffic assessments which have now been undertaken confirm that the proposed development:
 - will not adversely impact on the surrounding road network
 - will not require any action to upgrade the access road network in order to accommodate the traffic generated by the development
 - 1.3.2 Clause 34 of the SEPP – Whilst the site is not in a special contributions area, the Department has requested contributions and an offer has been submitted

1.3.3 Clause 22 of the SEPP – vehicle access for development on the subdivision lots (and its construction) will be via existing controlled intersections being:

- Traffic signals at the Castlereagh Road and Lugard Street intersection
- Roundabout at the Castlereagh Road, Old Castlereagh Road and Andrews Road intersection

These intersections have significant spare capacity and the TIA and Supplementary Assessment have demonstrated that these intersections can accommodate the traffic generated by development on the subdivision.

1.3.4 There will be no need for amelioration measures in terms of road upgrading. A Green Travel Plan cannot be applied to a subdivision, however a requirement for such can be applied to the subsequent Development Applications if considered appropriate.

1.3.5 The most significant construction activity is the filling of the site and approval has been granted for this and provision was made in the Stage 1 to 5 assessment to take account of this continuing activity during the operation of Stages 1 to 5.

The construction of the subdivision will be undertaken in stages and the subsequent development of lots will occur over an extensive period of time (at least 10 years).

The staging of the subdivision works is not resolved, however it is clear that:

- The access intersections are controlled and will operate quite satisfactorily
- The traffic movements for the construction works will only be a fraction of those consequential to the subsequent development work. A requirement for a Construction Pedestrian and Traffic Management Plan for the subdivision works subsequent to filling and compaction would more appropriately be incorporated into the Consent Conditions.

- 1.3.6 The Supplementary Traffic Assessment clearly demonstrates that the revised traffic generation rate is extremely robust to the point that it is significantly higher than the rate recommended by TfNSW for the assessments of development in the Mamre Road South Precinct Business Park. The land uses permitted in the Penrith Lakes Employment Land are very comparable to those permitted in Erskine Park, Eastern Creek, North Penrith Industrial Area and the Mamre Road South Precinct.

The development outcomes in these areas have been almost entirely that of warehouse/industrial use and the same outcome is inevitable for the proposed subdivision as evidenced by the advice from Planning Ingenuity, Urbis, Macquarie Commercial, PRD and Colliers.

- 1.3.7 The reference to “cumulative” is unclear. This Development Application was submitted in early 2019 and if the reference is to the recently advertised potential development outcome resultant to a change to the SEPP then:

- The potential uses are not even permitted yet
- The potential uses were never envisaged when the TIA was prepared and the DA submitted
- It would not be appropriate to speculate on what other development there may or may not be. Any other potential future development will be subject to its own rezoning and assessment by the authorities.

- 1.3.8 There is an existing sealed footway along Castlereagh Road. It is proposed to provide a shared path through the site and provide footways along both sides of the subdivision roads. The traffic signals at the Castlereagh Road and Lugard Street intersection will provide for controlled pedestrian crossing movements to/from the bus stops in Castlereagh Road.

- 1.3.9 For others

- 1.3.10 The subdivision road system has been designed to accommodate B Double trucks but no decision has been made to apply to the NHVR to allow B Double trucks to use the new roads. There is a wide range of lot sizes and B Double trucks would not be used for the small lots but could readily be accommodated on the large lots (or a consolidated of lots).
- 1.3.11 If it is considered appropriate, a Consent Condition could require the provision of a left turn deceleration lane at the Old Castlereagh Road access intersection. However, there will be no requirement for a “right turn treatment” in Old Castlereagh Road as there will essentially be movements into the site by this right turn from what is a “dead end” road.

By email dated 12.10.2021, TfNSW provided further advice to DPIE regarding “guidance” in regard to Trip Generation rates. The first point given in this advice is as follows:

- ❖ Regard should be given to RMS published data in relation to Office development in a comparable area which did not have access to rail services at the time. Such a site was included in the RMS Consultant Study of “Office Blocks” being Site N^o. 8 at 10 – 12 Lexington Drive, Bella Vista.
Besides the fact that the FSR provision in the Norwest Business Park is 2.5:1 or more compared to the Penrith North site which will have a far lower FSR, there is a further repetition of the errors which have plagued the survey and assessment processes undertaken by RMS in attempting to upgrade the Guide to Traffic Generating Development document.
The traffic generation data quoted in the TfNSW email is extracted from the Summary Circular TDT 2013/04a. However, if reference is made to the detail Analysis Report for the Office Blocks Study for the actual survey results sheet and its summary (see attached), these details are quite different to the figures contained in the Circular and it is obvious that there was a “transposition” error for “vehicle movements” whereas the “person movements” were correct. The upshot is that the generation rates shown in the Circular and reported in the email are totally incorrect being 234% higher in the afternoon peak than the actual surveyed rate.
- ❖ In regard to second point, it is not apparent how the generation rates agreed for the Mamre Road South Precinct development were derived or why they varied from the surveys of Erskine Park and Wonderland given the very comprehensive nature of these surveys.

It was said at the Joint Meeting that TfNSW had undertaken its own surveys to derive these generation rates but it would seem that this was not the case. Nonetheless, the generation rate adopted for the Supplementary Traffic Assessment is 49 – 52% higher than the rates agreed by TfNSW for the Mamre Road South Precinct.

Yours faithfully



Ross Nettle

Director

Transport and Traffic Planning Associates

4.8 OB 8 – 10 -12 Lexington Drive, Bella Vista

4.8.1 Site Summary

The Lexington Drive site is located in the Norwest Business Park in close proximity to Old Windsor Road and the North West Transit Way with key details indicated in Table 4.49.

Table 4.49: Site Summary Details

Total Staff	Size	Parking Spaces	Loading Bays	Operating Hours	No of Tenants	Primary Industry	Accessibility Score ¹⁸
34 (32)	4 floors, 1,200m ² GFA	83 car spaces, 0 bike spaces	1 loading bays	Mon-Fri, 8:30am- 5:00pm	1	Professional/ Technology	0.6

Note: The total staff figure in brackets is the total number of staff on-site during the day of the survey.

4.8.2 Trip Survey Data

Car Park In & Out Vehicle Data

The number of vehicle trips (Visitors & Staff) entering and exiting the on-site car park during the AM and PM peak hours and throughout the day are shown in Table 4.50.

Table 4.50: Survey Summary (Vehicle Trips)

Period	Time	Vehicle Trips (In & Out)	Proportion		Estimated Vehicle Trip Rates	
			In	Out		
Vehicle Based (Car Park In/Out)						
AM Peak	08:00-09:00	18	89%	11%	1.5/100m ² GFA	0.22/parking space
PM Peak	16:45-17:45	6	0%	11%	0.5/100m ² GFA	0.07/parking space
Daily	07:00-18:30	75	55%	45%	6.25/100m ² GFA	0.90/parking space

As described in Section 3.3, the above trip rates do not capture all the staff or visitors driving to the site and a more robust method is to calculate the trip rates by applying the vehicle mode split proportions to the total person trips recorded in the AM and PM peak hours.

Commercial Trip Data

There were a total of 5 commercial vehicles accessing the site over the survey period which all arrived between 8:00am and 10:30am. The peak hour commercial vehicle movements into and out of the site (maximum 3 trips/hour) occurred during the morning period between 8:00am and 9:00am. Commercial vehicle trips have been included in the analysis of trip generation for the whole site.

Person Trip Data

The total number of person trips (Visitors & Staff) entering and exiting the building during the AM and PM peak hours and throughout the day are shown in Table 4.51.

Table 4.51: Survey Summary (Person Trips) – All Modes

Period	Time	Total Person Trips (In & Out)
Person Based (Building In/Out)		
AM Peak	08:00-09:00	34
PM Peak	16:45-17:45	14
Daily	07:00-18:30	142

¹⁸ The methodology for calculating the accessibility score is contained in the Data Report

LOCATION: 10 - 12 Lexington Drive, Bella Vista, NSW - Argus Technologies



Date: Tuesday, 01/12/09

Hourly Counts	Non - Commercial						Commercial						Total						
	Vehicles			Occupants			Vehicles			Occupants			Vehicles			Person (Include pedestrians)			Visitors Cars Outside
Time	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	
7:00 - 8:00	6	0	6	6	0	6	0	0	0	0	0	0	6	0	6	9	0	9	0
7:15 - 8:15	9	0	9	9	0	9	1	0	1	1	0	1	10	0	10	17	0	17	0
7:30 - 8:30	13	0	13	15	0	15	2	0	2	2	0	2	15	0	15	26	0	26	0
7:45 - 8:45	14	0	14	16	0	16	3	1	4	3	1	4	17	1	18	32	1	33	0
8:00 - 9:00	13	0	13	15	0	15	3	2	5	3	2	5	16	2	18	31	3	34	0
8:15 - 9:15	9	0	9	11	0	11	3	3	6	3	3	6	12	3	15	26	5	31	0
8:30 - 9:30	6	0	6	6	0	6	2	3	5	2	3	5	8	3	11	18	5	23	0
8:45 - 9:45	5	0	5	5	0	5	1	2	3	1	2	3	6	2	8	12	4	16	0
9:00 - 10:00	1	0	1	1	0	1	1	1	2	1	1	2	2	1	3	6	2	8	0
9:15 - 10:15	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	2	0	2	0
9:30 - 10:30	0	0	0	0	0	0	1	1	2	1	1	2	1	1	2	2	2	4	0
9:45 - 10:45	0	1	1	0	1	1	1	1	2	1	1	2	1	2	3	2	4	6	0
10:00 - 11:00	1	1	2	1	1	2	1	1	2	1	1	2	2	2	4	3	4	7	0
10:15 - 11:15	1	1	2	1	1	2	1	1	2	1	1	2	2	2	4	3	4	7	0
10:30 - 11:30	3	1	4	3	1	4	0	0	0	0	0	0	3	1	4	5	2	7	0
10:45 - 11:45	4	0	4	4	0	4	0	0	0	0	0	0	4	0	4	7	0	7	0
11:00 - 12:00	5	1	6	5	1	6	0	0	0	0	0	0	5	1	6	9	1	10	0
11:15 - 12:15	5	3	8	5	3	8	0	0	0	0	0	0	5	3	8	9	4	13	0
11:30 - 12:30	3	6	9	3	6	9	0	0	0	0	0	0	3	6	9	5	8	13	0
11:45 - 12:45	3	6	9	3	6	9	0	0	0	0	0	0	3	6	9	5	8	13	0
12:00 - 13:00	2	5	7	2	5	7	0	0	0	0	0	0	2	5	7	3	7	10	0
12:15 - 13:15	3	6	9	4	6	10	0	0	0	0	0	0	3	6	9	6	10	16	0
12:30 - 13:30	4	4	8	5	4	9	0	0	0	0	0	0	4	4	8	8	8	16	0
12:45 - 13:45	3	4	7	4	4	8	0	0	0	0	0	0	3	4	7	6	9	15	0
13:00 - 14:00	4	7	11	6	8	14	0	0	0	0	0	0	4	7	11	9	14	23	0
13:15 - 14:15	6	5	11	7	6	13	0	0	0	0	0	0	6	5	11	12	12	24	0
13:30 - 14:30	5	4	9	6	5	11	0	1	1	0	1	1	5	5	10	10	11	21	0
13:45 - 14:45	5	4	9	6	5	11	0	1	1	0	1	1	5	5	10	10	10	20	0
14:00 - 15:00	3	1	4	3	1	4	0	1	1	0	1	1	3	2	5	6	5	11	0
14:15 - 15:15	0	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	3	3	0
14:30 - 15:30	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	1	2	3	0
14:45 - 15:45	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	1	3	4	0
15:00 - 16:00	1	2	3	1	2	3	0	0	0	0	0	0	1	2	3	1	3	4	0
15:15 - 16:15	1	1	2	1	1	2	0	0	0	0	0	0	1	1	2	1	1	2	0
15:30 - 16:30	0	2	2	0	2	2	0	0	0	0	0	0	0	2	2	0	4	4	0
15:45 - 16:45	0	3	3	0	3	3	0	0	0	0	0	0	0	3	3	0	6	6	0
16:00 - 17:00	0	4	4	0	4	4	0	0	0	0	0	0	0	4	4	0	10	10	0
16:15 - 17:15	0	5	5	0	5	5	0	0	0	0	0	0	0	5	5	0	12	12	0
16:30 - 17:30	0	5	5	0	5	5	0	0	0	0	0	0	0	5	5	0	13	13	0
16:45 - 17:45	0	6	6	0	6	6	0	0	0	0	0	0	0	6	6	0	14	14	0
17:00 - 18:00	0	5	5	0	5	5	0	0	0	0	0	0	0	5	5	0	10	10	0
17:15 - 18:15	0	5	5	0	5	5	0	0	0	0	0	0	0	5	5	0	10	10	0
17:30 - 18:30	0	6	6	0	6	6	0	0	0	0	0	0	0	6	6	0	10	10	0
Peak	14	7	14	16	8	16	3	3	6	3	3	6	17	7	18	32	14	34	0

APPENDIX D2 – OFFICE BLOCKS – VEHICLE-BASED TRIP RATES

	OB1 North Sydney	OB2 Chatswood	OB3 Sydney Olympic Park	OB4 Hurstville	OB5 Macquarie Park	OB6 Parramatta	OB7 Liverpool	OB8 Norwest	OB9 Newcastle	OB10 Wollangong	Average
AM Peak Hour											
Trips	52	105	505	93	119	185	70	33	126	123	141
Trips/100m ² GFA	0.17	1.03	1.48	2.86	2.07	0.69	2.49	2.75	1.03	0.95	1.55
PM Peak Hour											
Trips	44	86	481	60	106	166	48	14	139	100	124
Trips/100m ² GFA	0.14	0.84	1.41	1.84	1.84	0.61	1.70	1.17	1.14	0.77	1.15
Daily											
Trips	387	710		623	906	1636	518	138	1615	838	819
Trips/100m ² GFA	1.23	6.95		19.15	15.76	6.06	18.39	11.50	13.26	6.49	10.98
Road Network AM Peak Hour											
Trips	51	47	-	65	119	185	57	30	126	123	89
Trips/100m ² GFA	0.16	0.46	-	2.00	2.07	0.69	2.02	2.50	1.03	0.95	1.19
Road Network PM Peak Hour											
Trips	44	36	-	60	72	75	46	10	137	100	64
Trips/100m ² GFA	0.14	0.35	-	1.84	1.25	0.28	1.63	0.83	1.12	0.77	0.82

Source: Trip Generation and Parking Generation Surveys (Office Blocks), GTA Consultants for the NSW Roads and Traffic Authority, September 2010, p114



Technical Direction
For traffic, safety and transport practitioners
OPERATIONAL POLICY – GUIDELINES – ADVICE

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TDT 2013/
04a

**Guide to Traffic Generating Developments
Updated traffic surveys**

APPENDIX D3 – OFFICE BLOCKS – PERSON-BASED TRIP RATES

	OB1 North Sydney	OB2 Chatswood	OB3 Sydney Olympic Park	OB4 Hurstville	OB5 Macquarie Park	OB6 Parramatta	OB7 Liverpool	OB8 Norwest	OB9 Newcastle	OB10 Wallongong	Average
AM Peak Hour											
Trips	397	249	842	119	142	387	95	34	172	158	260
Trips/100m ² GFA	1.26	2.44	2.47	3.66	2.47	1.43	3.37	2.83	1.41	1.22	2.26
PM Peak Hour											
Trips	338	205	801	77	126	349	65	14	191	128	229
Trips/100m ² GFA	1.08	2.01	2.35	2.37	2.19	1.29	2.31	1.17	1.57	0.99	1.73
Daily											
Trips	2,975	1,691	-	802	1,079	5,114	700	142	2,213	1,074	1754
Trips/100m ² GFA	9.47	16.56	-	24.65	18.77	18.94	24.85	11.83	18.17	8.31	16.84
Road Network AM Peak Hour											
Trips	391	111	-	104	142	266	58	31	172	158	159
Trips/100m ² GFA	1.25	1.09	-	3.20	2.47	0.99	2.06	2.58	1.41	1.22	1.81
Road Network PM Peak Hour											
Trips	338	90	-	67	86	298	48	10	190	128	139
Trips/100m ² GFA	1.08	0.88	-	2.06	1.50	1.10	1.70	0.83	1.56	0.99	1.30

Source: Trip Generation and Parking Generation Surveys (Office Blocks), GTA Consultants for the NSW Roads and Traffic Authority, September 2010, p116