



27 July 2020

Mr Daniel Milliken
Principal Planner
Development Assessment
Northern Beaches Council
PO Box 82
Manly NSW 1655

Dear Mr Milliken,

Pittwater House - DA2019/1274

I refer to a request from Neerson Murcutt Architects Pty Ltd for a response to the traffic and parking components of the issues raised in your email dated 1 May 2020. The responses are outlined below.

- **Issue 1. Student numbers**
 - *"A formal request for the maximum student numbers to be included in the application (if that number is 1091, please state that). This can be in the form of an amended Statement of Environmental Effects or an additional cover letter style document."*
- **Response**
 - In the course of preparation of our Traffic and Parking Impacts Report (TPIR), we were provided with the planned number of students of 1091 by 2030. This number has been confirmed by the School.
- **Issue 3. Traffic and parking report - staff numbers**
 - *"Once the maximum staff numbers are known, the Traffic and Parking Report will need to be updated to clearly outline the number of staff compared with the number of parking spaces and why the deficiency is acceptable."*
 - *I note the parking surveys and the claimed underutilisation of the carpark, however, using the current state as a baseline is not supported and more detail is sought on the claim - "There are 138 staff at the school, however they are not on site all at the same time. Also, a some staff walk, use public transport or are dropped-off/picked-up and thus do not require parking. Some staff prefer to park on street."*
 - *How many staff are not onsite during school hours? How many walk, use public transport, are dropped off or prefer to park on the street? If these numbers are not known, then these claims should not be used as justification for the deficiency. I also note that the plans show 95 parking spaces but the reports state 83.*
 - *What we need from the applicant - An amended report or a cover letter from the traffic engineer updating the staff numbers, proposed parking spaces, and outlining the justification for the deficiency."*
- **Response**
 - The school provided further information regarding the staff numbers (please refer to Table 1 overleaf).
 - As evident from the table, there are 118 permanent full-time staff on site. The table adds all part-time and casual staff with the total number averaging at 160.4. However it is noted that this is the worst case scenario assuming that all part-time staff are present every day (which is not the case) Therefore the table represents staff totals without accounting for part-time staff that are not present. Assuming 50% of part-time staff on site at any one time, the estimated total is 139.2. This is very close to 138 staff reported in the Traffic and Parking Impacts Assessment (TPIA).
 - It is not quite clear why *"using the current state as a baseline is not supported"*. The school operates under the current development approvals and, if no further development is approved, the school is able to continue at the current state, with

TRAFFIC & PARKING STUDIES
AND MANAGEMENT

TRAFFIC IMPACT
ASSESSMENTS

INTERSECTION AND NETWORK
MODELLING

ENVIRONMENTAL IMPACT
ASSESSMENT OF ROADS,
TRAFFIC AND TRANSPORT
OPERATIONS

ROAD AND TRAFFIC NOISE

ROAD SAFETY STUDIES

TRAFFIC & PARKING SURVEYS

CAR PARK DESIGN

INTERSECTION DESIGN

TRAFFIC ACCIDENT
INVESTIGATION

TRAFFIC ACCIDENT
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RESEARCH AND DEVELOPMENT

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the existing shortfall of parking. The proposed development, however, aims to improve the current situation by providing additional parking (32 spaces) not required for the small number of additional staff (5). Using the existing state as a baseline is a standard approach for traffic and parking impact assessments.

Table 1. Staff summary.

	Monday	Tuesday	Wednesday	Thursday	Friday
Full time	118	118	118	118	118
Part time (changing day)	14	14	14	14	14
Part time (select days)	27	30	35	25	24
Casual	1	1	1	1	1
Alternative days	1	2	3	0	2
Total	159.5	162	166.5	158	156
Assumptions					
1. "Alternative days" are counted as a half-person on site to provide an average person on site per day					
2. "Part time (changing day)" are staff whose shifts change during term time - this table assumes worst case scenario where all of these staff are on site every day					

- o Further, with regard to the existing parking shortfall, it is important to consider the following.
 - As reported in the TPIA, the existing off-street parking areas are underutilised. The surveys on different days showed many vacant spaces in the car parks. A review of available historical aerial images from Google Maps and NSW DFSI's SIX Maps consistently shows levels of car park under-utilisation similar to those recorded by the surveys conducted by TEF Consulting.
 - Whilst the exact information about the staff travel modes is unavailable from the school, Australian Bureau of Statistics (ABS) provides Travel to Work data for Collaroy LG2 which is presented below. Travel modes for people working in this area (including the Pittwater House Schools), are as follows.

Table 2. ABS Travel to Work data.

	Narrabeen - Collaroy	Total
MTW06P Method of Travel to Work (6 travel modes)		
Public Transport	355	355
Vehicle	3,032	3,032
Active Transport	255	255
Other Mode	32	32
Worked at home or Did not go to work	1,101	1,101
Mode not stated	51	51
Not applicable	0	0
Total	4,821	4,821

Data Source : Census of Population and Housing, 2016, TableBuilder

- Removing those "worked at home" from the above data, the resulting travel mode splits would be as follows:
 - public transport 9.5%
 - vehicle 81.4%
 - active transport 6.8%
 - other/not stated 2.2%

- Based on the above percentages, the number of staff travelling by car on a daily basis is estimated to be 113 people. Some of these would be passengers / drop-offs, however for the worst case scenario it can be assumed that they are all drivers.
- With 76 car spaces provided on site the current deficiency is estimated as $113 - 76 = 37$ spaces.
- The additional 5 staff will generate parking demand for 4 cars. With the additional 32 spaces provided, the deficiency will reduce to $(113+4) - (76+31) = 10$ spaces. This is a significant improvement compared with the current situation.
- It is noted that Council's DCP requires one (1) car space for each staff member. This rate is highly unrealistic, as evidenced by the ABS data.

- **Issue 5. Traffic conditions**

- *"a. Impacts on the free flow of through traffic on South Creek Road. The applicant is to provide a median island to restrict right turn movements into and out of the car parks that are accessible from South Creek Road to provide an engineering control to enhance the left in left out operation of this access.*
- *b. Impacts on through traffic in Westmoreland Avenue the applicant is required to provide an inlaid bus bay along the road carriageway to allow for parking on the northern kerb of Westmoreland Avenue, two (2) 3.0 metre wide traffic lanes, and a bus bay to facilitate school services provided by STA and other operators.*
- *c. The relocation of the existing pedestrian crossing in South Creek Road adjoining the proposed staff car park and relocated bus zone."*

- **Response**

- a. Provision of a median island can be included as a Condition in the Development Consent. The existing road geometry allows for introduction of a median island. The design of the median at the detailed level can be undertaken for the Construction Certificate stage.
- b. This issue was addressed in the TPIA as follows.
 - *At present, in the order of 6 buses in the morning and 4 buses in the afternoon peak drop-off/pick-up hours, for about 40 minutes in each peak (not all at the same time). About 50% of these buses are medium size (21-23 seaters). Traffic volumes on Westmoreland Ave are in the order of 330 veh/h and 130 veh/h in the morning and in the afternoon peak hours respectively. This level of traffic is sufficiently low to enable opposing vehicles to pass without delays or queuing. Vehicles on the school side, when overtaking standing buses, travel with their far side wheels on the centre line, still leaving enough room for the opposing flow.*



- *In this context, considering the situation occurs only for less than an hour in the morning and in the afternoon on school days only, a significant cost of street widening is difficult to justify. The school will consider improved arrangements for buses for the future stages of redevelopment.*
- Further to the above, it is expected that, as a result of the increased number of students, the number of buses will increase proportionally by one (1) in both morning and afternoon peak periods. This is a very minor increase which will not have any noticeable effect on the existing conditions. The buses will still be on site for only about 40 minutes in each peak period. Please note that this change will not occur immediately, as the number of students will increase gradually to the planned level over the next 10 years.
- The existing traffic flows are within the street's environmental capacity for local streets, which assumes that vehicles sometimes need to veer to the side to give way to an opposing vehicle (please note that this is not required with the existing bus arrangements).
- TfNSW crash data map does not show any incidents in the last 5 years near the subject bus zone.
- In view of the above we maintain our opinion that provision of the indented bus bay is unnecessary at this stage.



- c. The proposed relocation of the existing pedestrian crossing and bus zone is included on the architectural plans.

Please do not hesitate to contact the undersigned should you require further information.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Oleg I. Sannikov', is written over a circular stamp or seal.

Oleg I. Sannikov
Director
MEngSc (Traffic Engineering)
MIEAust PEng
FAITPM