planning consultants

Response to Submissions Report

State Significant Development – SSD-10291

St Luke's Grammar School – Senior School Campus and Sports Centre

210 Headland Road and 800 Pittwater Road, Dee Why and 224 Headland Road, North Curl Curl

Prepared for: The Anglican Schools Corporation and St Luke's Grammar School
November 2021

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1 Introduction

1.1 Introduction

In May 2020, The Anglican Schools Corporation (TASC) and St Luke's Grammar School (SLGS) submitted State Significant Development Application (SSDA No. 10291) to the NSW Department of Planning, Industry and Environment (DPIE) for the proposed new senior school campus and sports centre for St Lukes Grammar School at 210 Headland Road and 800 Pittwater Road, Dee Why and 224 Headland Road, North Curl Curl (the site).

The SSDA was notified between 2 July and 29 July 2020 in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). Submissions were received from:

- Transport for NSW (TfNSW) (**Table 2**);
- Environment, Energy and Science Group – DPIE (EES Group) (**Table 5**);
- Environmental Protection Authority (EPA) (**Table 6**);
- Northern Beaches Council (Council) (**Table 7**);
- Water NSW (**Table 9**); and
- Rural Fire Service (RFS) (**Table 10**).

In addition, six (6) public submission were received (**Table 11**) and DPIE has provided a Request for Response to Submissions (RTS) letter, which includes key issues that are required to be addressed (**Table 1**).

The project team has reviewed these submissions and responded to each item raised. The following document summarises the responses and directs DPIE to the relevant report where each item has been addressed.

1.2 Meetings and Further Submissions

Following the exhibition period of the SSDA, the proponent met with Council and TfNSW to discuss the proposed Response to Submissions:

- 23 September 2020: Meeting with Council and TfNSW to discuss traffic and parking;
- 8 October 2020: Meeting with Council to discuss heritage and urban design;
- 21 October 2020: Further heritage commentary received from Council's heritage advisor (**Table 8**);
- 26 October 2020: Further urban design commentary received from Council's urban design advisor;
- 18 March 2021: TfNSW response received in relation to traffic and parking (**Table 3**);
- 22 June 2021: Meeting with TfNSW to discuss Traffic and Parking;
- 23 June 2021: TfNSW response received in relation to traffic and parking (**Table 4**); and
- 26 August 2021: Meeting with Council to discuss traffic and parking.

Responses to any additional issues raised by Council and TfNSW through the above process are provided within this report.

2 NSW Department of Planning, Industry and Environment

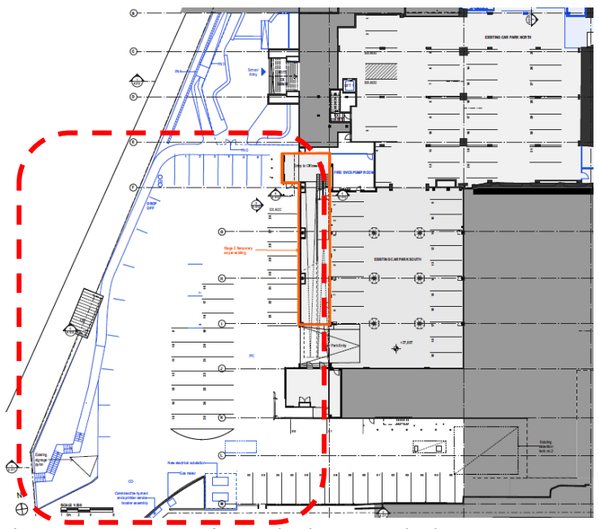
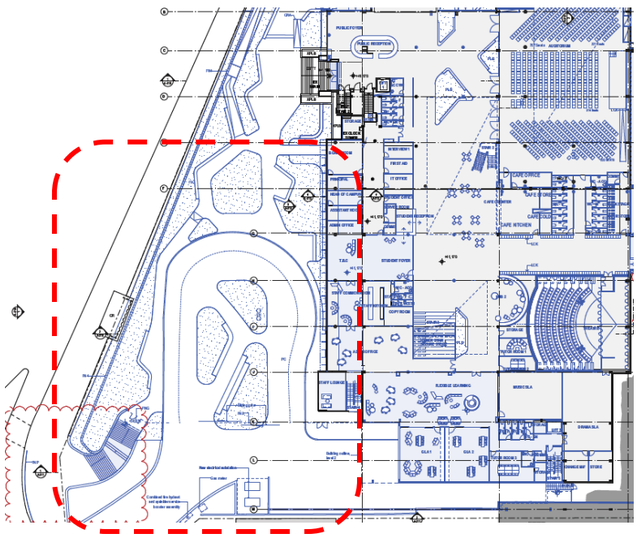
Table 1 NSW Department of Planning, Industry and Environment

Item #	Issue	Response	Reference
1.1	**Traffic and parking impacts and assessment**		
1.1.1	The Department notes that Transport for NSW (TfNSW) have raised concerns regarding the increase in pedestrian / vehicle conflicts associated with the Harbord Road driveway providing access to the senior school campus at 800 Pittwater Road. The Department agrees with the above concern. Noting the proposed change of use of the premises, the Department requires you to: • investigate the feasibility of an alternative access point to the site, including the closure of the Harbour Road driveway. Or	The following seven (7) alternative vehicular access points to 800 Pittwater Road were considered by the proponent (**Figure 1** and **Attachment 3**): • Option 1: Existing driveway from Harbord Road; • Option 2: New entry from Pittwater Road; • Option 3: Vehicle entry via 224 Headland Road; • Option 4: Vehicle access via Stony Range Regional Botanic Garden; • Option 5: Vehicle access via 226 / 228 Headland Road; • Option 6: Vehicle entry from 275 Harbord Road; and • Option 7: Vehicle entry from 210 Headland Road (entry from Tango Avenue).  *Figure 1 Plan showing location of alternative entry points to 800 Pittwater Road, Dee Why (TZG)* A review of each of the options for vehicular entry is provided below:	**Attachment 3** **Attachment 7**

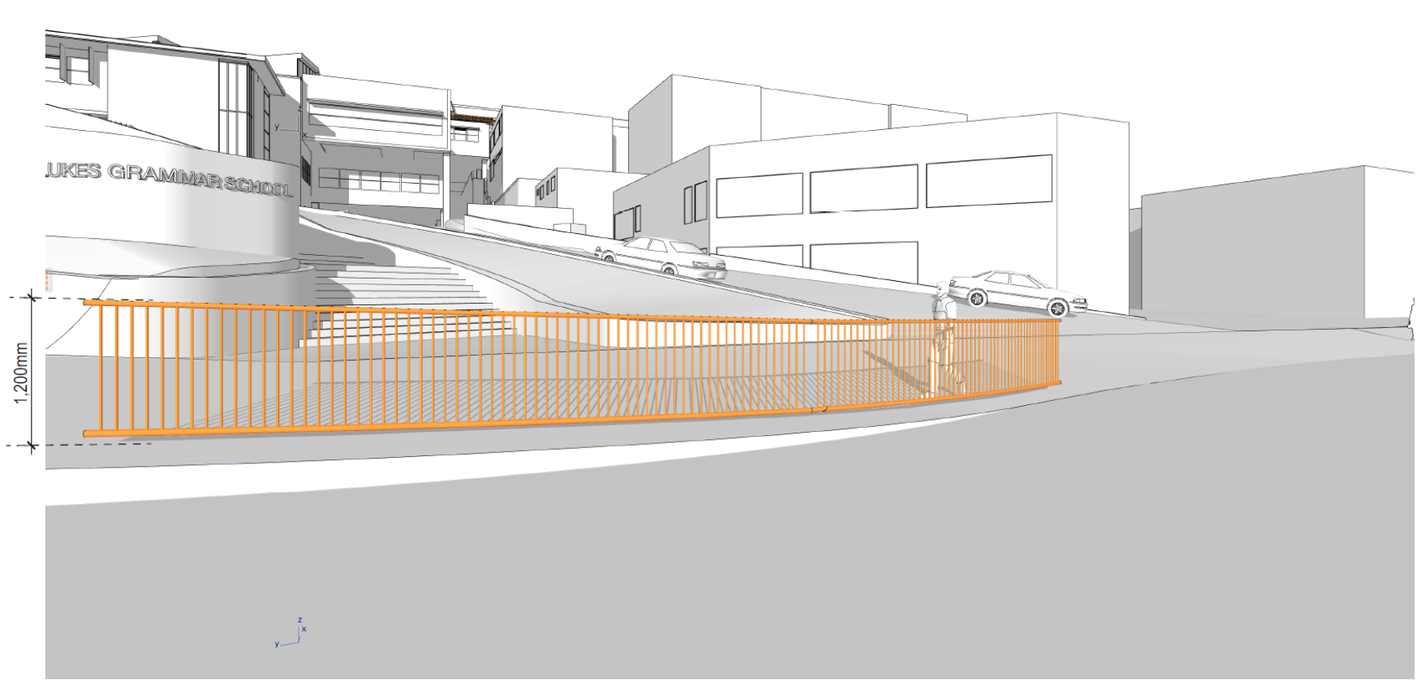
Option	Advantages	Disadvantages
Option 1: Existing entry from Harbord Road	• Existing entry into 800 Pittwater Road (long established). • Moderate level changes between existing road level and site (existing driveway has suitable gradient for vehicles). • Site in school ownership. • Potential impacts to signalised intersection can be appropriately mitigated.	• Proximity to Pittwater Road/Warringah Road/Harbord Road signalised intersection. • Potential for traffic to queue (AM peak) into intersection. • Space in school forecourt used for vehicle access and at-grade parking.
Option 2: New entry from Pittwater Road	• Approximately 90m north of signalised intersection. • Separates pedestrian and vehicle traffic. • At-grade parking in forecourt could be replaced with additional play area / outdoor space for school. • Site in school ownership.	• Requires extensive excavation to provide new driveway and link into existing basement carpark. • New vehicular access point to site from classified road. • Potential impacts on heritage values of site (excavation beneath clock tower and former curved canteen. • Potential impacts to structural adequacy of existing building (excavation beneath existing building). • Impacts on existing bus lane along Pittwater Road.
Option 3: Vehicle entry via 224 Headland Road	• Removes vehicular access to site from classified road. • At-grade parking area in forecourt could be replaced with additional play area / outdoor space for school. • Site in school ownership.	• Increased traffic to local roads (Headland Road). • 20m level difference between 224 Headland Road and 800 Pittwater Road. • Impacts on shared driveway with 222 Headland Road. • New vehicle link and associated infrastructure between 224 Headland Road and 800 Pittwater Road would result in visual (bulk / scale) and heritage impacts.
Option 4: Carpark of Stony Range	• Existing Stony Range carpark to be used for drop-off/ pick-up resulting in potential reduced traffic generation during AM / PM school peak periods.	• Vehicle access from Harbord Road would still be required for staff / student parking as well as deliveries / servicing.

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment

Item #	Issue	Response	Reference
		Regional Botanic Garden: • Location is located 220m north of signalised intersection. — • Site is not in school ownership and would require agreement / approval between school and Council (as Crown Land Manager) for use. • Stony Range is crown land dedicated for recreation under the Crown Land Management Act and Local Government Act. • Students would be required to work through Stony Range or along Pittwater Road. Option 5: Vehicle entry via 226 / 228 Headland Road: • Less of a level difference between 226 / 228 Headland Road and 800 Pittwater Road. • Removal of vehicular access to site from classified road. • At-grade parking in forecourt could be replaced with additional play area / outdoor space for school — • Existing shared driveway between 226 and 228 Headland Road. • Strata titled lots. • Not in school ownership • Increased traffic to local roads (Headland Road). • Loss of additional industrial units to provide vehicle access to school (inconsistent with zoning). • Visual and heritage impacts as a result of new vehicle connect. Option 6: Vehicle entry via 275 Harbord Road: • Potential for separation between vehicle and pedestrian traffic. — • Driveway in close proximity to signalised intersection. Would still need to include part of 800 Pittwater Road frontage to provide adequate driveway width. • Site not in school ownership. • Demolition and removal of existing industrial units. • Fill required to amend site levels. Option 7: Vehicle entry via 210 Headland Road (Tango Avenue): • Removal of vehicle access to the site from a classified road. • At-grade parking in forecourt could be replaced with additional play area / outdoor space for the school — • Increased traffic to local roads (Headland Road and Tango Avenue). • Access via part of Stony Range Regional Botanic Garden (Crown land) or access via 222 Headland Road (not in school ownership) It is concluded that the alternative vehicular access options to the site are not feasible and that use of the existing driveway from Harbord Road is the most appropriate option for vehicular access to the site. These options have been discussed and explored with TfNSW as part of the consultation process set out under **Section 1.2**,	
	• demonstrate that the existing driveway can operate safely in the future ameliorating the identified risks.	The key identified risks associated with the use of the existing driveway from Harbord Road to the site are: • Increased pedestrian / vehicle conflict; • Potential queuing in the Pittwater Road / Warringah Road / Harbord Road intersection during AM / PM school pick-up and drop-off; and • Traffic generation. Each of these identified risks has been assessed in the Traffic and Parking Matters (Response to Submissions) prepared by Varga Traffic Planning. Pedestrian / Vehicle Conflict The existing driveway access from Harbord Road to 800 Pittwater Road is to be upgraded to provide new stairs and access pathway from Harbord Road to the school's entry. This provides separation between vehicles and pedestrians. During Stage 2, this comprises the construction of temporary stairs and pathway in order to retain the existing Officeworks pylon sign (**Figure 2**). As part of Stage 3, a new stair will be constructed (**Figure 3**). The stairs have been designed to provide additional waiting area at the base of the stairs. Details of the pedestrian access movements onto Headland Road are provided on Plan sheet A-100. It is therefore considered that there is suitable capacity at 800 Pittwater Road to accommodate pick-up and drop-off demand during Stages 2 and 3 without impacting on the safety or operation of the existing signalised intersection.   *Figure 2 Stage 2: Access from Harbord Street to school entry*	**Attachment 2** **Attachment 7** **Attachment 9** **Attachment 10** **Attachment 12**

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment			
Item #	**Issue**	**Response**	**Reference**
		Figure 3 Stage 3: Access from Harbord Street to school entry	
		An RMS pedestrian fence will be installed along the kerb to direct pedestrians to the signalised pedestrian crossings (**Figure 4**).  *Figure 4 Proposed pedestrian fence adjacent to Pittwater / Harbord Road* A School Traffic Management Plan will be prepared for the senior school campus. It is proposed that three (3) staff members will provide supervision during pick-up and drop-off periods. One staff member will be stationed at the base of the stairs to ensure that students cross the roads safely. This arrangement has been discussed with TfNSW. It is therefore considered that the risk of pedestrian / vehicle conflict can been appropriately mitigated. <u>Vehicle Queuing</u> An analysis of the potential impacts of vehicle queuing during Stages 2 and 3 has been undertaken by Varga Traffic Parking. Firstly, an assessment of the drop-off and pick-up characteristics of the existing Senior School students was undertaken. This was undertaken at 5-minute intervals to determine the average number of cars that will be stopped to drop-off or pick-up Senior School students in each 5-minute period. The analysis found that the maximum demand for pick-up and drop-off for Senior School students during Stages 2 and 3 is two (2) cars. This is based on a drop-off duration of 30 sections and a pick-up duration of 70 seconds. During Stage 2, a total of seven (7) drop-off / pick-up spaces are provided within the external forecourt (identified in red and green in **Figure 5)**. There is also capacity for four (4) overflow spaces (shown in yellow). In addition, a further 12 spaces are located within the basement. This provides a capacity for 23 vehicles without disrupting other traffic flows within the site or impacting on the Pittwater Road / Harbord Road / Warringah Road intersection. During Stage 3, a total of 12 drop-off / pick-up spaces are provided within the external forecourt (identified in red and green in **Figure 6**). There is also capacity for four (4) overflow spaces (shown in yellow). In addition, a further 12 spaces are provided with the basement. This provides capacity for 28 vehicles without disrupting other traffic flows within the site or impacting on the adjacent signalised intersection.	

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment

Item #	Issue	Response	Reference

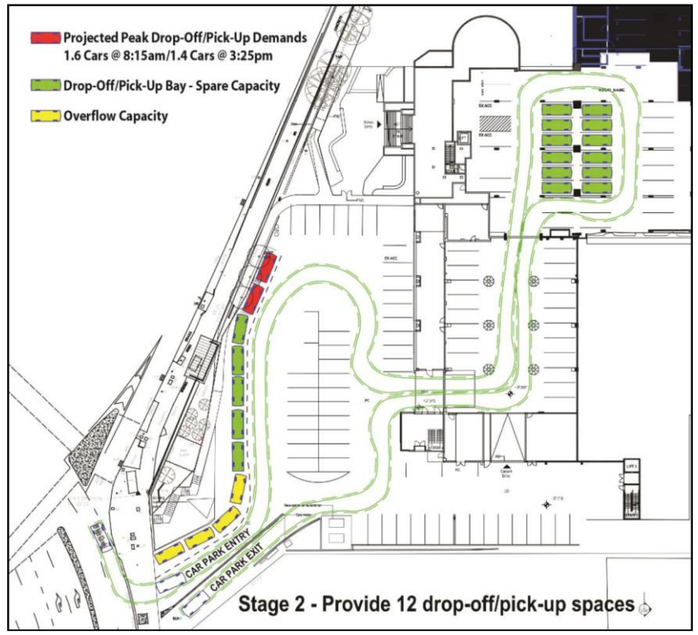


Figure 5 Stage 2 Drop-off and pick-up spaces (Varga Traffic Planning)

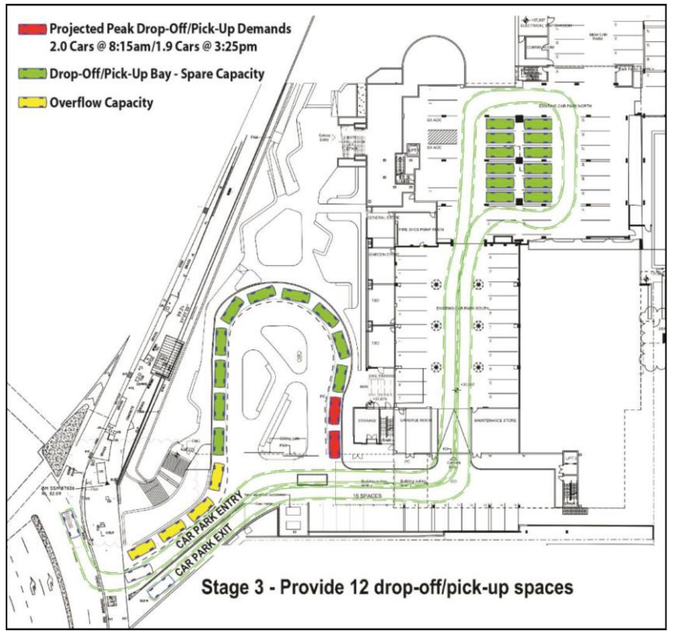


Figure 6 Stage 3 Drop-off and pick-up spaces (Varga Traffic Planning)

Traffic Generation

In late 2020, additional traffic and parking surveys were undertaken to determine:

- Existing traffic activity generated by the existing uses of 800 Pittwater Road (Officeworks, Fitness First and medical facility); and
- Existing traffic activity generated by the existing school at 210 Headland Road.

The traffic survey found that the existing use of 800 Pittwater Road generates on average 3,224 vehicles per day (Monday to Friday) (**Figure 7**).

Table 2 - Results of Traffic Surveys
Existing Commercial Uses at 800 Pittwater Road
Vehicles Per Day (vpd)

	In	Out	Total
Monday	1,674 vpd	1,692 vpd	3,366 vpd
Tuesday	1,739 vpd	1,758 vpd	3,497 vpd
Wednesday	1,592 vpd	1,611 vpd	3,203 vpd
Thursday	1,537 vpd	1,527 vpd	3,064 vpd
Friday	1,475 vpd	1,517 vpd	2,992 vpd
Five Day Average	**1,603 vpd**	**1,621 vpd**	**3,224 vpd**

Figure 7 Existing traffic generation – 800 Pittwater Road (Varga Traffic Planning)

The survey of the existing school found that the senior school students generate the least amount of traffic (as compared to junior and middle school students) and the traffic generation is the most widely dispersed with less distinctive peak periods. This is a result of senior school students attending additional classes both before and after regular school hours.

At Stage 3, the use of 800 Pittwater Road as a senior school campus is expected to generate an average 644 vehicles per day (including out-of-hours community uses of the swimming pool and sports centre) (**Figure 8**). This results in a nett reduction in 2,580 vehicles per day compared to existing operations.

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment

Item #	Issue	Response	Reference

Table 3 - Projected Future Traffic Flows*
Proposed Senior School at 800 Pittwater Road
Vehicles Per Day (vpd)

	In	Out	Total
Monday	327 vpd	327 vpd	654 vpd
Tuesday	339 vpd	339 vpd	678 vpd
Wednesday	297 vpd	296 vpd	592 vpd
Thursday	329 vpd	329 vpd	658 vpd
Friday	319 vpd	319 vpd	638 vpd
Five Day Average	**322 vpd**	**322 vpd**	**644 vpd**

** Includes after-hours community uses of the pool*

Figure 8 Projected traffic generation – 800 Pittwater Road (Varga Traffic Planning)

Table 4 - Nett Reduction in Traffic Flows
As a Consequence of the Proposed Senior School at 800 Pittwater Road
Vehicles Per Day (vpd)

	In	Out	Total
Existing Commercial Uses	1,603 vpd	1,621 vpd	3,224 vpd
Proposed Senior School Campus	322 vpd	322 vpd	644 vpd*
Nett Reduction in traffic	**-1,281 vpd**	**-1,299 vpd**	**-2,580 vpd**

** Includes after-hours community uses of the pool*

Figure 9 Nett reduction in traffic generation at 800 Pittwater Road (Varga Traffic Planning)

In addition, the analysis by Varga Traffic Planning found that:

- The existing use of 800 Pittwater Road generates 190 vehicles per hour during the AM school peak period (7:30 – 8:30am) and 251 vehicles per hour in the PM school peak period (3:20 – 4:20pm) (**Figure 10**); and
- The proposed senior school campus will generate an average of 188 vehicles per hour during the AM school peak period and 136 vehicles per hour during the PM school peak period (**Figure 11**).

Table 5 - Results of Traffic Surveys
Existing Commercial uses at 800 Pittwater Road
Vehicles Per Hour (vph)

	AM School Peak Hour			PM School Peak Hour		
	In	Out	Total	In	Out	Total
Monday	98 vph	81 vph	179 vph	148 vph	123 vph	271 vph
Tuesday	93 vph	94 vph	187 vph	132 vph	99 vph	231 vph
Wednesday	88 vph	78 vph	166 vph	139 vph	119 vph	258 vph
Thursday	102 vph	93 vph	195 vph	117 vph	125 vph	242 vph
Friday	116 vph	108 vph	224 vph	127 vph	126 vph	253 vph
Five Day Average	**99 vph**	**91 vph**	**190 vph**	**133 vph**	**118 vph**	**251 vph**

Figure 10 Existing traffic generation during AM and PM school peak hours (Varga Traffic Planning)

Table 6 - Projected Future Traffic Flows*
Proposed Senior School at 800 Pittwater Road
Vehicles Per Hour (vph)

	AM School Peak Hour			PM School Peak Hour		
	In	Out	Total	In	Out	Total
Monday	117 vph	60 vph	177 vph	58 vph	65 vph	123 vph
Tuesday	146 vph	80 vph	226 vph	62 vph	85 vph	147 vph
Wednesday	104 vph	40 vph	144 vph	60 vph	88 vph	148 vph
Thursday	131 vph	70 vph	201 vph	54 vph	58 vph	112 vph
Friday	127 vph	64 vph	191 vph	60 vph	88 vph	148 vph
Five Day Average	**125 vph**	**63 vph**	**188 vph**	**59 vph**	**77 vph**	**136 vph**

** Includes arrival of first swim school class / community uses of the pool at 4pm*

Figure 11 Proposed traffic generation during AM and PM school peak hours (Varga Traffic Planning)

Therefore, there will be a reduction in traffic generation of 2 vehicles per hour in the AM school peak and 116 vehicles per hour in the PM school peak (**Figure 12**). There will also be a reduction in traffic generated during the PM peak from 300 vehicles per hour to 84 vehicles per hour associated with the after-hours use of the site.

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment

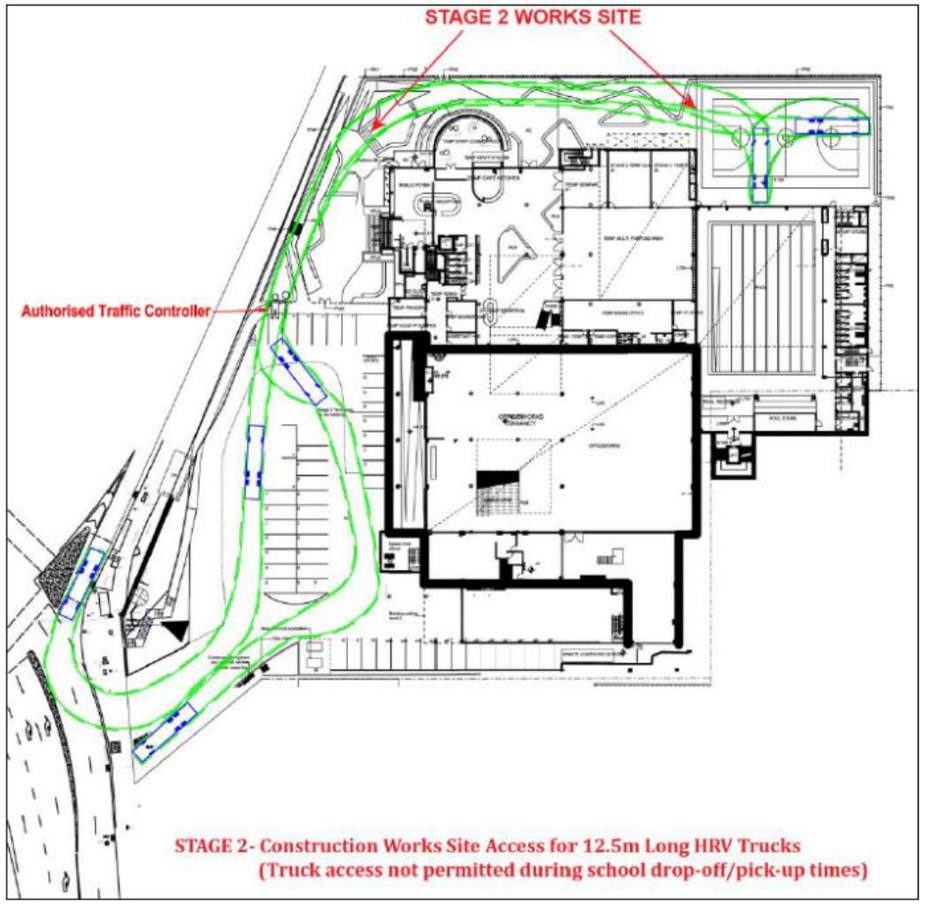
Item #	Issue	Response	Reference
		Table 7 - Nett Reduction in Traffic Flows As a Consequence of the Proposed Senior School at 800 Pittwater Road Vehicles Per Hour (vph) AM School Peak Hour: In / Out / Total; PM School Peak Hour: In / Out / Total Existing Commercial Uses: 99 vph / 91 vph / 190 vph / 133 vph / 118 vph / 251 vph Proposed Senior School Campus: 125 vph / 63 vph / 188 vph / 59 vph / 77 vph / 135 vph **Nett Reduction: +26 vph / -28 vph / -2 vph / -74 vhp / -41 vph / -116 vph** *Figure 12 Nett reduction in traffic generation at 800 Pittwater Road* Therefore, the proposed use of 800 Pittwater Road as a senior school campus will result in considerably less traffic generation than its existing use. The existing driveway from Harbord Road will operate safely into the future.	
1.1.2	Provide further clarification regarding the information provided in the submitted traffic report including: • analysis and information to address the potential impacts due to queuing of vehicles utilising the proposed pick-up and drop-off areas.	As described above, a maximum pick-up / drop-off capacity for 23 vehicles is provided in Stage 2 of the proposed development and a maximum pick-up / drop-off capacity for 28 vehicles is provided in Stage 3 of the proposed development. This is adequate to cater for the maximum peak drop-off / pick-up demand of two (2) vehicles without impacting on traffic flows within the site or on the adjoining signalised intersection.	**Attachment 12**
	• further reasons and / or analysis to justify that the impacts on the local traffic network would reduce as a result of the proposed change of use to a school.	The Traffic and Parking Matters (Response to Submissions) prepared by Varga Traffic Planning provides an assessment of the impacts of the proposed development on the traffic generated by 800 Pittwater Road and the traffic generated by 210 Headland Road (the existing school campus). This assessment was based on additional traffic and parking surveys undertaken for both sites. The assessment found that there will be a substantial reduction in the traffic generated by 800 Pittwater Road from 3,224 vehicles per day to 644 vehicles per day. There will also be a reduction in traffic generated by the site during the AM and PM school peak periods. As discussed below, the proposed changes to the student mix at 210 Headland Road will result in a minor increase in traffic generation during the AM and PM peak school periods at the existing school campus.	**Attachment 7** **Attachment 9** **Attachment 12**
	• an updated traffic modelling with appropriate peak hour factors as requested by TfNSW.	Updated SIDRA modelling was undertaken by Varga Traffic Planning with reference to a peak flow period of 15 minutes as requested by TfNSW.	**Attachment 7**
	• an assessment of the impacts of cumulative parking demands, including after school hours uses, as well as during the proposed Stage 2 operations which would concurrently occur with the commercial use at 800 Pittwater Road.	The following table sets out the existing and proposed off-street parking spaces at 800 Pittwater Road: **Use / Existing / Stage 2 / Stage 3** Radiology Clinic: 34 / - / - Fitness First: 114 / - / - Office Works: 40 / 40 / - School staff: - / 48 / 60 Visitors & Builders: - / 28 / 5 Year 12 students: - / 15 / 26 **TOTALPARKING SPACES: 182 / 131 / 91** During Stage 2, there will be 40 spaces available for use by Officeworks. These spaces are located within the forecourt area and will be clearly identified as for use by Officeworks only. The remaining 91 spaces will be for use by the school. Outside of school hours, these 91 spaces will be available for use by patrons of the sports centre (224 Headland Road) and swimming pool (800 Pittwater Road). It is considered that these 91 spaces are adequate to address parking demand from the afterhours use of the site during Stage 2. At Stage 3, there will be a total of 91 off-street parking spaces at 800 Pittwater Road. Outside of school hours, these off-street parking spaces will be available for use by patrons of the sports centre and swimming pool.	**Attachment 7**
	• estimates of trip generation of each development stage.	Due to the current mix of uses at 800 Pittwater Road, it is difficult to separately identify the traffic generated by each of the existing uses. Nevertheless, traffic modelling was undertaken by Varga Traffic Planning to consider the impacts of the proposed development on the capacity and operation of the Pittwater Road / Harbord Road / Warringah Road intersection. The results of the SIDRA capacity analysis found that the intersection will continue to operate at its current level of service (Level D) under the future projected travel demands, with no appreciable change in average vehicle delays. **Table 10 - Results of SIDRA Capacity Analysis Pittwater Road and Harbord Road Intersection** AM School Peak: LoS / AVD / DoS; PM School Peak: LoS / AVD / DoS Existing Year 2019: D / 47.5 / 0.835 / D / 52.8 / 0.805 Completion of Stage 1 (no change): D / 47.5 / 0.835 / D / 52.8 / 0.805 Completion of Stage 2: D / 50.0 / 0.861 / D / 52.8 / 0.805 Completion of Stage 3: D / 49.9 / 0.852 / D / 51.8 / 0.798 *LoS: Level of Service; AVD: Average Vehicle Delays; DoS: Degree of Saturation* *Figure 13 Results of SIDRA capacity modelling on Pittwater / Harbord / Warringah Road Intersection (VTP)*	**Attachment 7** **Attachment 9** **Attachment 12**

2 NSW Department of Planning, Industry and Environment

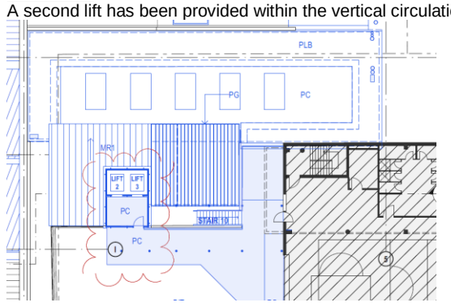
Table 1 NSW Department of Planning, Industry and Environment

Item #	Issue	Response	Reference
	• an assessment of the proposed traffic impact on the existing junior campus at 210 Headland Road, caused by the change in the current student mix between the senior and junior campuses (i.e. increase of primary school students in the existing campus).	The existing student mix at 210 Headland Road comprises (total 1,022 students): • 364 junior school students (PreK to Year 6); • 355 middle school students (Years 7 – 9) and • 303 senior school students (Years 10 – 12). The proposed development seeks to increase the number of middle school students (at 210 Headland Road) and senior school students (at 800 Pittwater Road). No change to the number of junior school students is proposed. Therefore, the proposed student mix at the conclusion of Stage 3 is: • 364 junior school students (PreK to Year 6); • 636 middle school students (Years 7 – 9) (+281 students); • 600 senior school students (Years 10 – 12) (+297 students). This will result in a total of 1,000 students (Pre-K – Year 9) at 210 Headland Road and 600 students (Years 10 – 12) at 800 Pittwater Road. Based on the additional traffic and parking surveys of the existing school campus, the increase in middle school students will result in an additional 36 vehicles per hour in the AM peak school period and an additional 11 vehicles per hour in the PM peak school period. This is offset by the senior school students moving to 800 Pittwater Road, which reduces the traffic generation by 31 vehicles per hour in the AM peak school period and 9 vehicles per hour in the PM peak period. Therefore, the nett change at 210 Headland Road is an additional 5 vehicles per hour in the AM peak school period and an additional 2 vehicles per hour in the PM peak school period. This increase in traffic will not result in an adverse impact on the surrounding road network and can be managed in accordance with the school's Traffic Management Plan.	**Attachment 7** **Attachment 9** **Attachment 12**
1.1.3	The submitted Green Travel Plan (GTP) shows that about 94% of the staff currently utilise private vehicles for commuting to the school. It is anticipated that this would reduce to 90% in the future, upon implementation of the GTP. However, the Department considers that the 90% target comprises a very high percentage of private vehicle usage. Consequently, a Workplace Travel Plan (WTP) needs to be prepared and submitted with the RTS. The WTP must provide a description of the meaningful details or incentives to encourage the use of more sustainable travel modes. The WTP should include: • objectives and targets (i.e. site-specific, measurable, achievable and timeframes for implementation) to define the direction and purpose of the WTP. • actions to help achieve the objectives. • measures to promote and support the implementation of the plan. • a process for monitoring and review of the WTP at regular intervals.	A Workplace Travel Plan (WTP) has been prepared by Varga Traffic Planning. The WTP provides for workplace travel plan actions that, if incorporated, will assist in promoting the use of more sustainable travel modes. The WTP will be updated prior to the issue of any occupation certificate for the development.	**Attachment 8**
1.1.4	Further clarification should be provided regarding the function of the current School Traffic Management Plan (STMP) in achieving the proposed targets within the GTP.	The following response is provided by Varga Traffic Planning in relation to the role of the current School Traffic Management Plan in achieving the proposed targets outlined in the Green Travel Plan: *The purpose of the School Traffic Management Plan is to manage the day-to-day traffic activity associated with drop-offs and pick-ups by both cars and school buses. The day-to-day traffic operations are intensively managed by a large number of school staff to minimise traffic delays during the morning drop-off and more importantly during afternoon pick-up.* *The STMP has been developed and refined over a period of several years, with the most recent change being the introduction of a third staggered finishing time for the Junior School in 2019. The STMP has been highly successful in reducing delays, with queues at the 210 Headland Road site having been eliminated at all times except for a brief period before 3:15pm associated with the Junior School pick-up. The operation of the STMP is not related to the GTP or the WTP.*	**Attachment 7**
1.1.5	A further transport pattern survey for both staff and students should be conducted to determine the future travel demands and the adequacy of existing and future transport infrastructure. The results of this survey should be incorporated, as appropriate, into any amendments to the STMP and Green Travel Plan as well as the WTP.	In late 2020, additional transport pattern surveys were undertaken for both staff and students. Student transport mode survey found that: • *approximately 92% of Junior School student are driven to/from school, noting that 57% of the students travelled with another student in the car* • *the largest proportion of Middle School students, approximately 50%, travel to/from school by bus using either school buses or regular STA buses (the latter including the 132 bus and the new B-Line bus service)* • *approximately 40% of Middle School students were driven to/from school, noting that 27% of the students travel with another student in the car* • *the largest proportion of Senior School students, approximately 48%, travel to school by bus, using either school buses or regular STA bus services (including the 199 bus and the new B-Line service)* • *approximately 35% of Senior School students are driven to/from school, noting that 22% of the students travelled with another student in the car.* Varga Traffic Planning concluded that:	**Attachment 7** **Attachment 8**

2 NSW Department of Planning, Industry and Environment

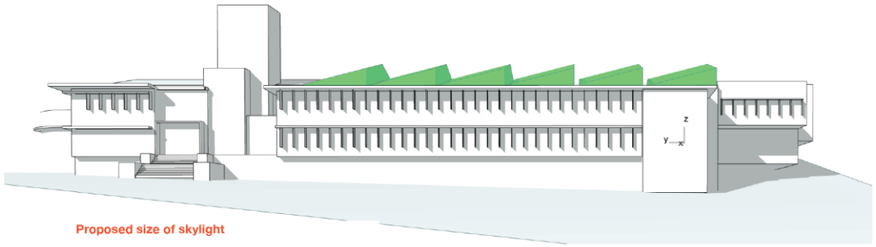
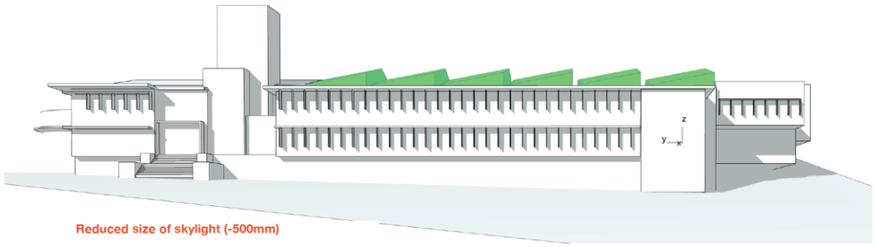
Table 1 NSW Department of Planning, Industry and Environment			
Item #	**Issue**	**Response**	**Reference**
		In summary, the transport mode split survey results indicate that the proportion of students being driven to/from school decreases as their age increases, and that the proportion of students travelling by public transport or active transport (i.e. walking) increases as students get older. The results of the transport mode split surveys have been used to inform the Work Place Travel Plan. The staff travel mode survey found that 93% of staff drove to/from school. The results of these surveys have been incorporated into the Work Travel Plan.	
1.1.6	Further evidence should be provided to adequately demonstrate: • that a heavy rigid vehicle can adequately manoeuvre within the car parking areas, to ensure potential conflicts between construction vehicles associated with the development of St Luke's College Senior Campus and operational vehicles which may be associated with the operation of the St Luke's Senior Campus and adjacent commercial uses are minimised.	Turning circle diagrams have been prepared by Varga Traffic Planner to show how during the construction of Stage 2, a 12.5m long Heavy Rigid Vehicle (HRV) would be able to access the site from Harbord Road and access the northern part of the site (**Figure 14**). Adequate space is available in the north-east corner of the site, to enable the 12.5m HRV to exit the site in a forward direction.  *Figure 14 Stage 2 Construction Vehicle Swept path analysis (12.5m HRV) (Varga Traffic Planning)* During construction, all construction vehicle movements will be supervised by authorised traffic controllers. No construction vehicles will be permitted to enter the site during school drop-off and pick-up times. A Construction, Pedestrian and Traffic Management Plan (CPTMP) will be prepared prior to the issue of any Construction Certificate.	**Attachment 7**
	• that 25 parking spaces within the site at 800 Pittwater Road are sufficient to cater for 600 senior students, given that there are limited opportunities to park on the nearby streets.	A total of 82 spaces will be provided across the school campus for Year 12 students, as follows: • 17 spaces at 210 Headland Road; • 39 spaces at 224 Headland Road; and • 26 spaces at 800 Pittwater Road. Based on 200 students in Year 12 (Stage 3), this is equivalent to 2 spaces per 5 Year 12 students, which is consistent with the requirements of Part C3 (Parking Facilities) and Appendix 1 (Car Parking Requirements) of the Warringah Development Control Plan 2011 (the DCP).	**Attachment 2**

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment			
Item #	**Issue**	**Response**	**Reference**
1.2	**Built form and building design**		
1.2.1	Prior to the lodgement of the EIS, the State Design Review Panel recommended the reduction in the use of transparent materials such as plexiglass or acrylic material. The design of the fence along Pittwater Road incorporates an acrylic material on top. The RTS should justify that the use of the material responds appropriately to the previous State Design Review Panel comments.	A number of design options for the noise barrier along Pittwater Road were considered by the design team in response to the comments raised by the Government Architect New South Wales (GANSW) and Council (**Figure 15)**. The three (3) options considered are: • Option 1: Acrylic top / sandstone base; • Option 2: Acrylic full height; and • Option 3: Sandstone full height. Option 1 was the preferred option as it balances heritage, urban design and CPTED considerations as well as satisfying acoustic requirements. The acrylic top provides visibility from the surrounding public domain towards to the heritage elements of building. It also provides appropriate acoustic mitigation.    *Figure 15 Noise barrier wall options – Option 1 top, Option 2 middle and Option 3 bottom (TZG)* Following feedback from Council's heritage adviser on 21 October 2020, the colour of the vertical fins has been amended to a neutral finish.	**Attachment 2** **Attachment 3** **Attachment 4** **Attachment 6**
1.2.2	The Department concurs with the comments from Northern Beaches Council (Council) regarding the provision of a second elevator to connect the two sites and the revision to the roofline at 800 Pittwater Road, and considers that this should be addressed in the RTS.	Second Lift A second lift has been provided within the vertical circulation building linking 800 Pittwater Road and 224 Headland Road (**Figure 16**).  *Figure 16 Level 5 showing two lifts within the vertical circulation*	**Attachment 2** **Attachment 3** **Attachment 4**

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment

Item #	Issue	Response	Reference
		Sawtooth Roof *The proposed roof form incorporating sawtooth roofs is acceptable from a heritage perspective as they will provide natural light into the central area of the building without compromising the facade treatment. However, it would be preferable if the height of the sawtooth roof was reduced, to minimise its visibility on the western facade, as the original roof was not readily visible above the original parapet.* The design of the sawtooth roof was based on the need to balance the visual impact of the roof with providing adequate natural light to the internal spaces of the school. The proposed skylights extend two (2) metres above the height of the existing ridgeline and provide 27.47m^2 of clear glazed area. The design team considered an option to reduce the height of the sawtooth roof by 500mm, which results in the skylights having a clear glazed area of 17.5m^2 (**Figure 17**). Whilst this will reduce the visibility of the sawtooth roof, it will reduce the natural light within the internal spaces and result in non-compliance with BCA requirements for natural light. It is therefore considered that the current sawtooth roof design is appropriate and interprets the original roof form of the building. Council's heritage adviser has confirmed that the proposed approach is supportable from a heritage perspective.   *Figure 17 Current sawtooth roof design (top), height reduced by 500mm (bottom)(TZG)*	
1.2.3	The details of the condition and capacity of the pedestrian path from the senior campus to Headland Road must be provided to demonstrate that it would satisfactorily cater as a walking path for the senior school students.	Regarding the condition of the path between 224 Headland Road and 210 Headland Road, it is noted that Council has not required upgrades under recent approvals. On 24 February 2020, Council approved DA2019/0977 for "indoor recreation facility and internal fit-out" of Units 3, 4 and 7 of 224 Headland Road, North Curl Curl. This DA also includes the construction of a new pedestrian pathway and stairs from Headland Road to 224 Headland Road. As a condition of consent for this DA, Council required upgrades to the existing bus bay in front of 210 Headland Road. Council has not required upgrading of the footpath to the west of the existing bus bay as a part of this work, noting the current movements of students along Headland Road.	N/A (DA2019/0977)

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment

<table>
<tr><th>Item #</th><th>Issue</th><th>Response</th><th>Reference</th></tr>
<tr><td></td><td></td><td>Regarding the capacity of the path, students of St Luke's are already using the path for arrival/departure journeys to/from the school site, and also to 224 Headland Road pursuant to the use approved by Council under DA2019/0977. Currently, the footpath is used by only select groups of students and as noted above, Council has not required upgrading of the footpath to the west of the existing bus bay. Under the proposed arrangements, there will no scheduled movement of senior students between the 224 and 210 Headland Road site, and junior or middle school students who are utilising the facilities at 224 Headland Road will still move in select groups (rather than year groups). Therefore, there is little to no change in the school's use of the footpath, and there is adequate capacity in the current pedestrian path to accommodate these needs.</td><td></td></tr>
<tr><td colspan="4">1.3 Staging and Community use</td></tr>
<tr><td>1.3.1</td><td>The RTS must include a detailed schedule or a table which clearly identifies the proposed works in each of the development stages and the proposed student numbers / staff numbers within the campuses (including the existing campus) at the completion of each development stage.</td><td>The following table provides a schedule of the proposed works at each of the development stages and the proposed student and full time equivalent (FTE) staff numbers at the completion of each stage:
<table>
<tr><th>Stage</th><th>Proposed Works</th><th>Staff Numbers</th><th>Student Numbers</th></tr>
<tr><td>Stage 1 (224 Headland Road)</td><td>• Demolition of existing internal walls, stairs, mezzanine levels, fittings and fixtures;
• Removal of existing car parking line marking and concrete planter boxes;
• Internal alterations and additions to construct two (2) full size basketball courts with dance/exercise floor;
• Fitout of school uniform store on mezzanine level of building;
• Installation of new lift at southern end of building to provide access to school uniform store on mezzanine level;
• New external works including new concrete paver footpath, new line marking for 41 car spaces including two (2) accessible spaces; and
• New landscaping works relating to 224 Headland Road including raised planter beds containing a mix of endemic and native plants.</td><td>120 FTE staff (210 Headland Road)
Total: 120 FTE staff

It is understood that no staff will be permanently based at 224 Headland Road.</td><td>1,022 (cap) (210 Headland Road)
No students based at 224
Total: 1,022 students</td></tr>
<tr><td>Stage 2 (800 Pittwater Road)</td><td>• Demolition and removal of existing tenancy fitouts (I-MED and Fitness First) including demolition of existing Fitness First swimming pool;
• Demolition of part of the existing basement carparking along with the northern access ramp;
• Reconfiguration of basement carpark to provide a total of 73 spaces (including two (2) accessible spaces);
• New internal fitout of northern portion of 800 Pittwater Road as a Senior School Campus for St Luke's Grammar School comprising:
o Ground Floor (Level 1): School entry, administration and staff offices, café, general learning areas, multi-purpose area, and new Wellness Precinct including 25 metre internal swimming pool along with male and female amenities and change rooms;
o First Floor (Level 2): Humanities Precinct, Library and Wellness Precinct;
o Second Floor (Level 3): General learning areas, Visual Arts Precinct, and Design and Technology Precinct;
o Third Floor (Level 4): Roof terrace;
o Fourth Floor (Level 5): Access to 224 Headland Road;
• Excavation and construction of new vertical circulation (lift and stairs) between 800 Pittwater Road and 224 Headland Road;
• New roof to part of existing building at 800 Pittwater Road including sawtooth elements;
• New landscaping to northern portion of site including new sports court;
• New acoustic wall along part of Pittwater Road frontage;
• Reconfiguration of southern portion of forecourt to provide drop-off / pick-up area for students (equivalent to 7 spaces) along with 51 at-grade carparking (including one (1) accessible space);
• New electrical substation adjacent to southern site boundary; and
• New stair and access pathway from Harbord / Pittwater Road to school and Officeworks entry.</td><td>120 FTE staff (210 Headland Road)
36 FTE staff (800 Pittwater Road)
Total: 156 FTE staff</td><td>1,000 (210 Headland Road)
360 (800 Pittwater Road)
Total: 1,360 students</td></tr>
<tr><td>Stage 3 (800 Pittwater Road)</td><td>• Demolition and removal of existing Officeworks tenancy;
• Demolition and removal of temporary fitout from Stage 2;
• Reconfiguration of southern portion of basement parking including relocation of carpark entry to southern side of building. There will be a total of 76 spaces (including 2 accessible spaces) located in the basement;
• Construction of new southern extension to building (four (4) storeys equivalent);
• Internal fitout of 800 Pittwater Road as Senior School campus for St Luke's Grammar School comprising:</td><td>120 FTE staff (210 Headland Road)
60 FTE (800 Pittwater Road)
Total: 180 FTE Staff</td><td>1,000 (210 Headland Road)
600 (800 Pittwater Road)
Total: 1,600 students</td></tr>
</table>
</td><td></td></tr>
</table>

2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment

Item #	Issue	Response	Reference
		○ Ground Floor (Level 1): Administration area and staff rooms, Auditorium, Chapel, Village Centre, Café, Theatre and Performing Arts Precinct, Wellness Precinct and staff and student amenities; ○ First Floor (Level 2): Library; Humanities Precinct; Media Centre; Wellness Precinct, Roof Terrace above curved 'former Canteen' and staff and student amenities; ○ Second Floor (Level 3): Visual Arts Precinct, Maths Precinct, Science Precinct, Design and Technology Precinct, Roof Terrace above southern extension and staff and student amenities; ○ Third Floor (Level 4): No change from Stage 2; ○ Fourth Floor (Level 5): No change from Stage 2; • New sawtooth roof to southern portion of building; • Landscaping to southern portion of site; • Extension of acoustic wall along full length of Pittwater Road frontage of the site; • New pedestrian entry and stairs from Harbord Road; • Removal of the existing pylon sign and new signage for the school; and • Reconfiguration of driveway entry and forecourt to provide 15 pick-up and drop-off spaces and a bus turning area.	
1.3.2	The EIS indicates that the sports centre at No.224 Headland Road would be made available for use by local schools and sporting groups. In this regard, details of the extent and frequency of out-of-hours community use, including weekend use of the proposed building should be provided. Based on the extent of the use, the EIS should assess the impacts of the community use on the surrounding built environment (in terms of traffic and noise). This assessment should include, but not be limited to, consideration and management strategies for noise impacts and traffic impacts associated with the proposed use of the school facilities by the community in the evenings or the weekends.	The sports centre at 224 Headland Road will be made available for hire by local school and sporting groups. Local schools that may use the facility include: • Brookvale Public School; • Manly Selective High School; • St Augustine College; • Northern Beaches Secondary College; and • North Curl Curl Public School. This is consistent with the current use of Units 3, 4 and 7 at 224 Headland Road under DA 2019/0977 approved by Northern Beaches Council on 21 February 2020. The proposed hours of operation for the Sports Centre are between 7am and 9pm Monday to Friday and 8am to 6pm on Saturday. After-hours use of 224 Headland Road by local schools and sporting groups will be available between 4pm and 9pm Monday to Friday (during school term) and between 8am and 6pm on Saturday. It is proposed that there would be three (3) training sessions of one (1) hour each in the afternoon, with up to 30 participants per court. Training facilities will be supervised by Sports Centre staff, with a maximum of four (4) staff on site across the facility. Booking of the courts will be managed through the school's Director of Sport. An Operational Plan of Management for 224 Headland Road will be prepared prior to the issue of any Occupation Certificate. <u>Noise</u> The Environmental Noise Assessment report prepared by Day Design provides an assessment of the potential noise generated during both the day (7am to 6pm) and evening periods (6pm to 10pm) by the use of the sports centre at Stages 1, 2 and 3 of the proposed development. The following assumptions were used in this assessment: • The sports centre is operating at full capacity; • Windows located on the southern and western side of the building are fixed with 6.38mm thick laminated glass; • Doors located on the western side of the building may be partially opened during use (approximately 10% of the floor area); and • Ceiling / roof system consists of a metal deck roof with standard thermal insulation batts beneath. Section 4.8 of the Environmental Noise Assessment found that the noise generated by the sports centre complies with the relevant project specific noise criteria at each of the nine (9) receptor locations during both the day and evening periods. The Environmental Noise Assessment hasn't identified any specific noise management measures. It is therefore concluded that the use of the proposed sports centre will not have an adverse impact on the acoustic amenity of the surrounding precinct. <u>Traffic and Parking</u> It is proposed that any community parking for the sports centre will be provided at 800 Pittwater Road. During Stages 2 and 3, there will be 91 parking spaces available at 800 Pittwater Road for use by the community in relation to both the sports centre and swimming facilities. Varga Traffic Parking have identified that the sports centre will generate approximately 33 vehicles per hour between 4pm and 7pm. The traffic generated by both the sports centre and swimming pool has been included in the overall assessment of the traffic generated by the proposed development at 800 Pittwater Road.	**Attachment 7** **Attachment 15**

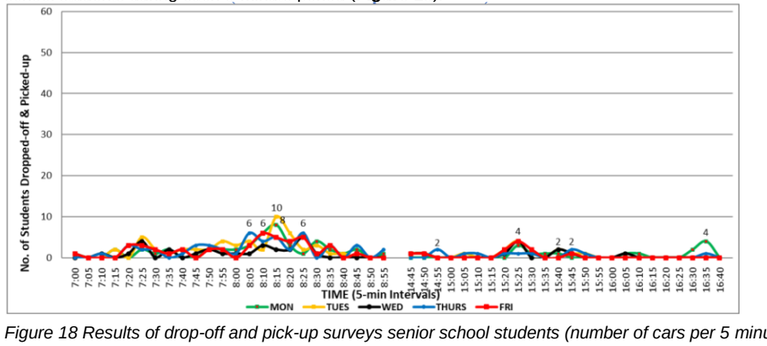
2 NSW Department of Planning, Industry and Environment

Table 1 NSW Department of Planning, Industry and Environment			
Item #	**Issue**	**Response**	**Reference**
1.3.3	Provide an assessment of the likely use of the building by the school community and other groups during out-of-school hours or the weekends. The assessment must include details of the likely number of users, frequency of use, noise and traffic impacts with associated management strategies.	The school proposes to provide Learn to Swim and Squad Training at the proposed Wellness Centre at 800 Pittwater Road. This will be available to children who may or may not be students of the school. The proposed hours of the Wellness Centre are 6am to 7pm Monday to Friday and 7am to 5pm on Saturday. Use by the community will mainly be available 4pm to 7pm Monday to Friday and on Saturdays. These hours are less than the current operating hours of Fitness First, which operates 24 hours per day, seven (7) days a week. It is anticipated that three (3) swim classes and squad training sessions will be held at the pool with up to 50 students at each session. In addition, the auditorium will be capable of hosting school events and functions. An Operational Plan of Management for 800 Pittwater Road will be prepared prior to the issue of any Occupation Certificate for the site. Noise The Environmental Noise Assessment report prepared by Day Design provides an assessment of the potential noise generated at 800 Pittwater Road by the day and evening uses of the site during Stages 2 and 3. Section 4.8 of the Environmental Noise Assessment concludes that the potential out of school hours and weekend use of 800 Pittwater Road will not have an adverse impact on the acoustic amenity of any of the nearby receptors. Traffic and Parking As noted in the item above, parking for both the sports centre and swimming pool will be located at 800 Pittwater Road. During Stages 2 and 3, a total of 91 parking spaces will be available out of school hours for community parking. Varga Traffic Planning have identified that the swimming pool will generate 84 vehicle movements per hour between 4pm and 7pm. Overall, the proposed out of school hours use of both the sports centre and swimming pool is anticipated to generate substantially less traffic than the existing commercial uses of the site, which typically generate up to 300 vehicles per hours during the afternoon road network peak hour.	**Attachment 7** **Attachment 15**
1.4 Biodiversity			
1.4.1	The EIS indicates that the proposal would have impacts on the Stony Creek Botanic Gardens. It is unclear whether this is in relation to indirect, direct or prescribed impacts. If direct impacts are intended, confirmation of the extent of these impacts and that appropriate landowner consents have been obtained must be provided.	The Biodiversity Development Assessment Report (BDAR) has been updated to clarify that the any impacts to Stony Range Regional Botanic Garden will be indirect. Figure 7 of the BDAR identifies the extent of the indirect impact zone.	**Attachment 13**
1.4.2	The RTS must include additional information regarding the assessment of impacts on the microbat habitat as requested by the public authorities.	The BDAR notes the following in relation to microbat habitat: *No threatened fauna species were recorded during the field survey. Additionally, important habitat features such as hollow bearing trees, intact native vegetation or important breeding/foraging resources were not recorded within the development area. The field survey identified that the existing buildings contain flat, metal roofing which does not contain suitable habitat for threatened microbat species. The roof cavities did not contain suitable small crevices and not white-wash or other indications of microbat use was observed around the existing rooves.* Table 21 of the BDAR has been updated to include the following measure and action to mitigate and manage potential impacts on microbat habitats: *Measure* *Instigating clearing protocols including pre-clearing surveys, daily surveys and stage clearing, the presence of a trained ecological licensed wildlife handler/microbat wildlife handler during clearing events* *Action* *Pre-clearance survey of existing structures to be demolished and trees to be removed and identification / location of habitat trees (i.e. for birds or possums) by a suitably qualified ecologist.* *Trees identified for retention should be clearly delineated as a 'No Go' zone with high visibility bunting.* *Supervision by a qualified ecologist/licensed wildlife handler/licenced microbat wildlife handler during demolition and habitat tree removal in accordance with best practise methods.* *Any tree removal is to be undertaken by a suitably qualified and insured arborist.*	**Attachment 13**

3 Transport for NSW

3.1 Transport for NSW Submission – 29 July 2020

Table 2 Transport for NSW – 29 July 2020

Item #	Issue	Response	Reference
2.1 Vehicle Access to 800 Pittwater Road			
2.1.1	Comment The proposed development is likely to increase student movements along Harbord Street at a location where some of the right turning vehicles from Pittwater Road need to enter and exit the driveway located in close proximity to the Pittwater Road/Warringah Road/Harbord Road intersection. The following comments are made in relation to the proposed access arrangement to the school: • The proposed activities associated with the development would likely to increase pedestrian / vehicle conflicts and cause pedestrian related incidents at the entrance to the school with the increase in pedestrian movements; and • The proposed school arrangement would have potential impact on the safety and operation efficiency of the Pittwater Road / Warringah Road signalised intersection as the proposed school activities such as off-street parking and pick up and drop off activities on site would likely to cause queuing onto Harbord Road, which results in immediate obstruction to the operation of the signalised intersection. As such, Transport for NSW does not support the vehicle access driveway from Harbord Road to the proposed development." Recommendation It is requested that the Proponent: • Investigates an alternate access to Harbord Road driveway with the closure of this access in consultation with TfNSW during the preparation of the applicant's response to submission.	As described under Item 1.1.1 (**Table 1**), a number of alternative vehicular access were considered. It was concluded that these alternative options were not feasible as follows: • Alternative options would require additional property acquisition; and/or • Result in additional traffic generation on local roads; and/or • Require consideration excavation or construction of new structures to resolve differences in topography; and/or • Result in unacceptable heritage and visual impacts. It is therefore concluded that the existing driveway is the most suitable vehicular access the site. It is also noted that the existing driveway is capable of catering for all vehicle sizes including 12.5m Heavy Rigid Vehicles (HRV) and/or buses.	**Attachment 3** **Attachment 7**
2.2 Traffic Impact			
2.2.1	Comment The traffic report did not include supporting information to demonstrate that the pickup and drop-off activities on the proposed pickup and drop-off area will not have adverse impact on the adjacent road network. TfNSW is concerned that the vehicle queuing at the proposed pickup and drop-off area will overflow to Harbord Road, which results in obstruction at the signalised intersection. Recommendation The Proponent is requested to provide analysis and information to address the potential queuing issue at the proposed pickup and drop-off area.	Additional traffic surveys of the existing school were undertaken by Varga Traffic Planning to determine the drop-off and pick-up demand generated by the senior school students. There is a current enrolment of 303 senior school students. The analysis was undertaken at 5-minute intervals to determine the average number of cars that will be stopped to drop-off or pick-up senior school students during each 5-minute period (**Figure 18**).  *Figure 18 Results of drop-off and pick-up surveys senior school students (number of cars per 5 minutes).*	**Attachment 7** **Attachment 10** **Attachment 12**

3 Transport for NSW

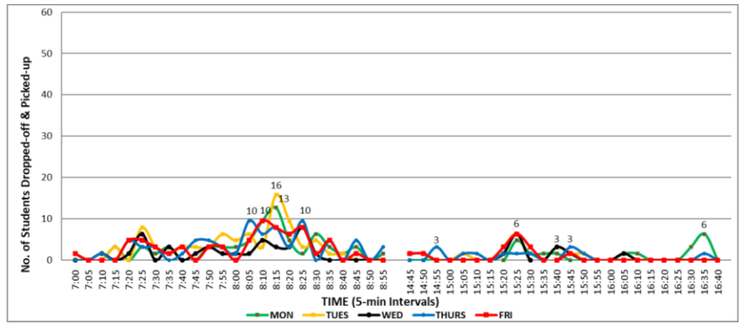
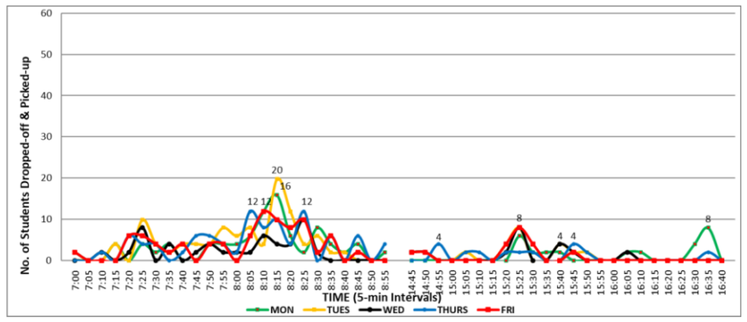
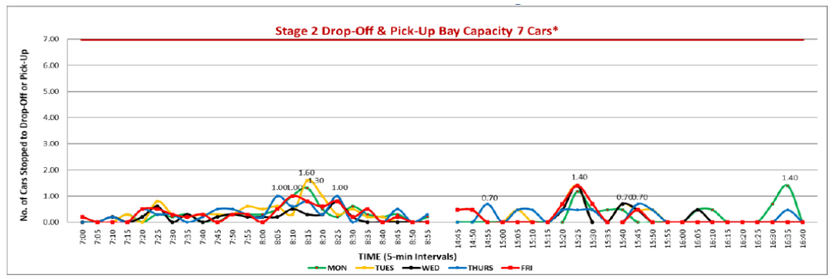
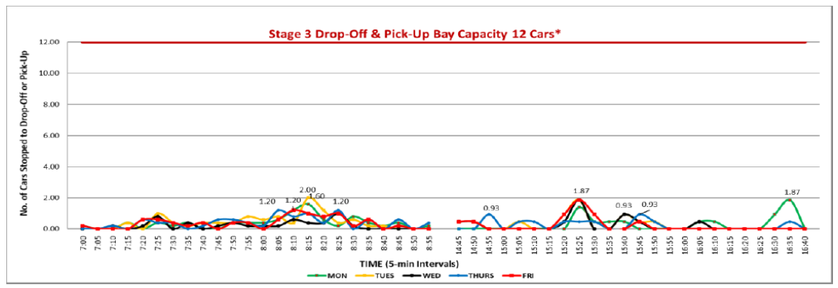
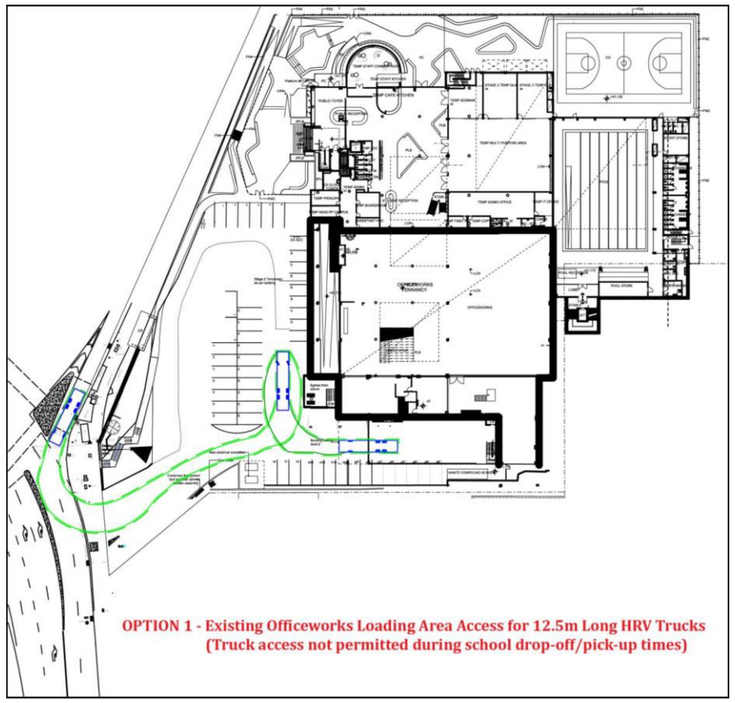
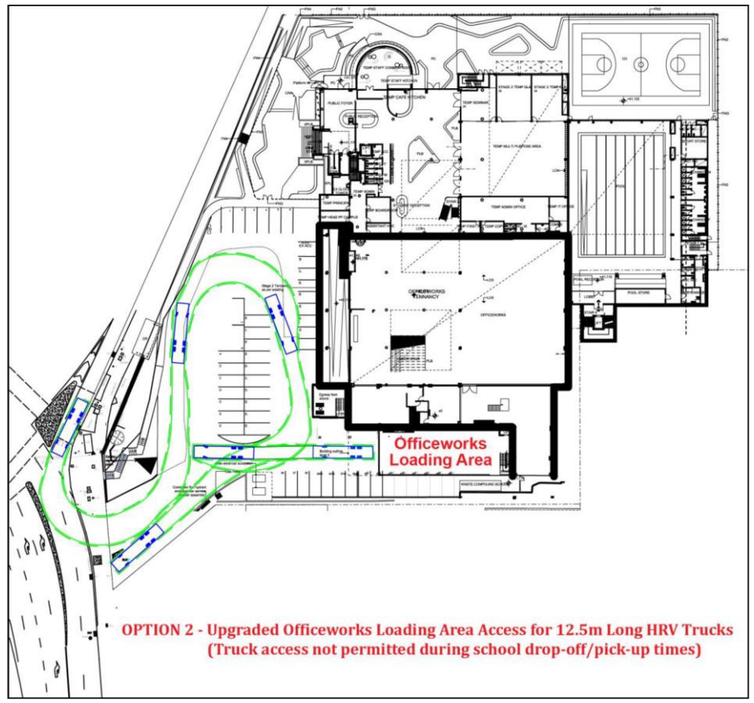
Table 2 Transport for NSW – 29 July 2020			
Item #	**Issue**	**Response**	**Reference**
		The results found that the peak-time for drop-off was 8:15am with a maximum of 10 cars undertaking drop-off during that 5-minute interval. The peak-time for pick-up was 3:25pm with a maximum of 4 cars undertaking pick-up during that 5-minute period. The survey also found that the average drop-off duration was 30 seconds per car and the average pick-up duration was 70 seconds. These results were extrapolated for Stage 2 when there is a maximum of 480 senior students enrolled at 800 Pittwater Road (**Figure 19**) and for Stage 3 when there is a maximum of 600 students enrolled at 800 Pittwater Road (**Figure 20**).  *Figure 19 Projected future senior school drop-offs and pick-ups in Stage 2 (Number of cars per 5 minute interval)*  *Figure 20 Project future senior school drop-offs and pick-ups in Stage 2 (number of cars per 5 minute interval)* The projections found that the maximum number of cars: • Dropping off senior school students during Stage 2 was 16 cars during 5 minute interval at 8:15am; • Picking up senior school students during Stage 2 was 6 cars during the 5 minute interval at 3:25pm; • Dropping off senior school students during Stage 3 was 20 cars during the 5 minute interval at 8:15am; and • Picking up senior school students during Stage 3 was 8 cars during the 5-minute interval at 3:25pm. It was therefore concluded that peak: • Drop-off demand in Stage 2 will be 1.6 cars at 8:15am (**Figure 21**); • Pick-up demand in Stage 2 will be 1.4 cars at 3:25pm (**Figure 21**); • Drop-off demand in Stage 3 will be 2 cars at 8:15am (**Figure 22**); and • Pick-up demand in Stage 3 will be 1.9 cars at 3:25pm (**Figure 22**).	

Table 2 Transport for NSW – 29 July 2020			
Item #	**Issue**	**Response**	**Reference**
		 *Figure 21 Number of cars stopped to drop-off or pick-up senior school students in Stage 2*  *Figure 22 Number of cars stopped to drop-off or pick-up senior school students in Stage 3* During Stage 2, a total of seven (7) drop-off / pick-up spaces are provided within the external forecourt (**Figure 5**). In addition, there are four (4) overflow capacity spaces and a further 12 spaces have been identified within the basement carpark. This means that there is capacity for 23 cars to undertake pick-up or drop-off without disrupting other traffic flows within the site or impacting on the nearby signalised intersection. During Stage 3, a total of 12 drop-off / pick-up spaces are provided within the external forecourt (**Figure 6**). In addition, there are four (4) overflow spaces and a further 12 parking spaces have been identified within the basement carpark. This provides capacity for 28 cars without disrupting other traffic flows within the site or impacts on the nearby signalised intersection. It is therefore concluded that there is suitable capacity within the site to manage school drop-off and pick-up without obstructing the signalised intersection.	
2.2.2	<u>Comment</u> The traffic report did not include the assessment of existing and future travel demands. <u>Recommendation</u> The Proponent is requested to undertake further transport pattern survey for both staff and students to determine the future travel demands and the adequacy of existing and future transport infrastructure.	A transport mode split survey was undertaken by Varga Traffic Planning that found that: • *approximately 92% of Junior School student are driven to/from school, noting that 57% of the students travelled with another student in the car* • *the largest proportion of Middle School students, approximately 50%, travel to/from school by bus using either school buses or regular STA buses (the latter including the 132 bus and the new B-Line bus service)* • *approximately 40% of Middle School students were driven to/from school, noting that 27% of the students travel with another student in the car* • *the largest proportion of Senior School students, approximately 48%, travel to school by bus, using either school buses or regular STA bus services (including the 199 bus and the new B-Line service)* • *approximately 35% of Senior School students are driven to/from school, noting that 22% of the students travelled with another student in the car.* In general, it was found that the proportion of students being driven to/from school decreases as students get older and the proportion of students travelling to/from school by public or active transport modes increases as students get older. The results of the transport mode spilt survey have been used to determine the adequacy of existing and future transport infrastructure.	**Attachment 7**
2.2.3	<u>Comment</u> The swept path diagrams in the traffic report indicate that the manoeuvre of a HRV encroaches the pickup and drop-off area. In particular during Stage 2, these pickup and drop-off spaces will be likely occupied by the vehicles associated with the Officeworks during off-peak period. This will potentially obstruct the vehicle movement on site and result in potential vehicles queuing back to Harbord Road.	Currently trucks servicing Officeworks use the loading dock located at the southern end of the site. These trucks currently make a three-point turn using the end of the existing car park aisle (**Figure 23**). It proposed that during Stage 2, Officeworks trucks will be able to drive around the carpark to avoid having to make a three-point turn (**Figure 24**). This will only be able to occur outside of the school's drop-off and pick-up periods. Officeworks customers will not be permitted to use the drop-off and pick-up bays, which will clearly indicated through the use of line markings and/or signposting. Based on traffic surveys conducted at the Officeworks loading dock over a five (5) day period (6:30am and 7:30pm), there were two (2) heavy vehicle deliveries during this period. Both of these heavy vehicle deliveries occurred between 9am and 3pm, when there will be minimal traffic activity generated by the school use. Deliveries by smaller trucks and vans also mainly occur between 9am and 3pm. It is proposed to prepare a site-specific Plan of Management with Officeworks for Stage 2 that will stipulate that no heavy vehicle deliveries are to occur during the peak AM and PM periods (7am – 8:30am and 3pm – 4:30pm).	**Attachment 7**

3 Transport for NSW

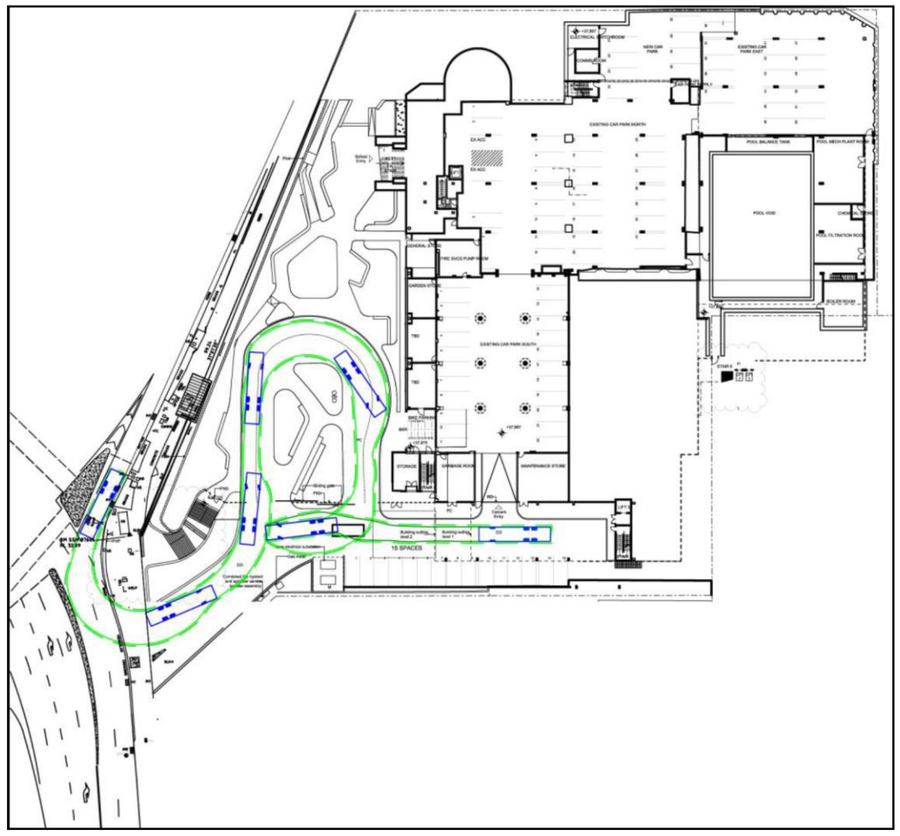
Table 2 Transport for NSW – 29 July 2020

Item #	Issue	Response	Reference
	Recommendation The Proponent is requested to revise the design of the car parking area allowing manoeuvre of a HRV without any encroachment.	 *Figure 23 Existing Officeworks truck access arrangements.*  *Figure 24 Access for Officeworks trucks during Stage 2*	
2.2.4	Comment The development proposes a total of 130 parking spaces on site. However, no further analysis is provided to demonstrate that these parking supply will be adequate to accommodate the parking demand on each development stage. Recommendation The Proponent is requested to assess the impacts of cumulative parking demands, including after school hours uses, as well as during Stage 2 when Officeworks is still in operation.	The following table sets out the existing and proposed off-street parking spaces at 800 Pittwater Road: **Use / Existing / Stage 2 / Stage 3** Radiology Clinic: 34 spaces / - / - Fitness First: 114 spaces / - / - Office Works: 40 spaces / 40 / - School staff: - / 48 / 60 Visitors & Builders: - / 28 / 5 Year 12 students: - / 15 / 26 **TOTAL PARKING SPACES: 182 spaces / 131 spaces / 91 spaces** During Stage 2, there will be 40 spaces available for use by Officeworks. This is consistent with Condition 9 of DA97/59 approved by the former Warringah Council on 2 February 1997. These spaces are located within the forecourt area and will be clearly identified as for use by Officeworks only. The remaining 91 spaces will be for use by the school. Outside of school hours, these 91 spaces will be available for use by patrons of the sports centre (224 Headland Road) and Wellness Centre (800 Pittwater Road). It is considered that these 91 spaces are adequate to address parking demand from the afterhours use of the site during Stage 2. At Stage 3, there will be a total of 91 off-street parking spaces at 800 Pittwater Road. Outside of school hours, these off-street parking spaces will be available for use by patrons of the sports centre and swimming facilities. Across the three (3) sites (800 Pittwater Road, 224 Headland Road and 210 Headland Road) the following parking spaces will be available for use by SLGS staff, students and visitors: **/ Existing / Stage 1 / Stage 2 / Stage 3** 210 Headland Road: 133 Spaces / 133 Spaces / 133 spaces / 133 spaces 224 Headland Road: - / 41 spaces / 41 spaces / 41 spaces 800 Pittwater Road: - / / 91 spaces / 91 spaces **TOTAL PARKING SPACES: 133 spaces / 174 spaces / 265 spaces / 265 spaces**	**Attachment 7**

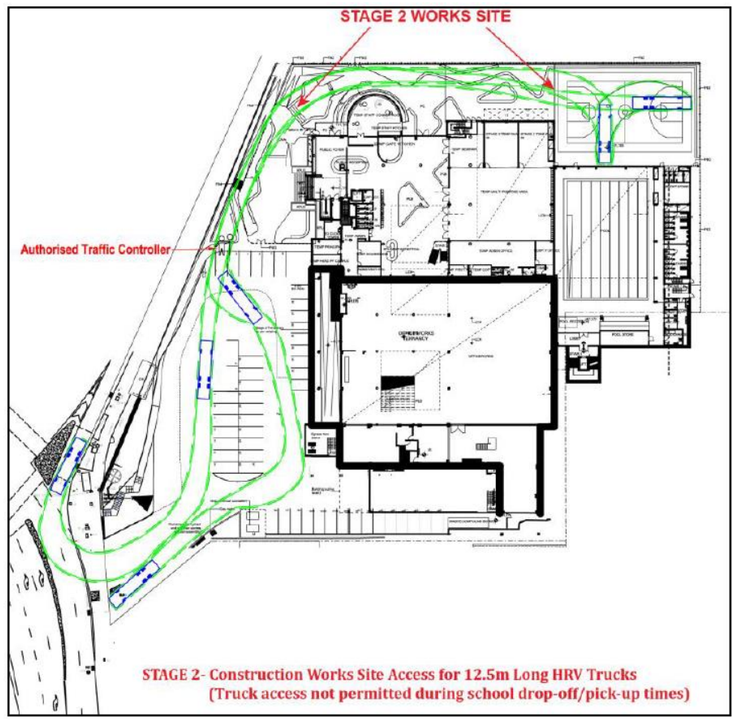
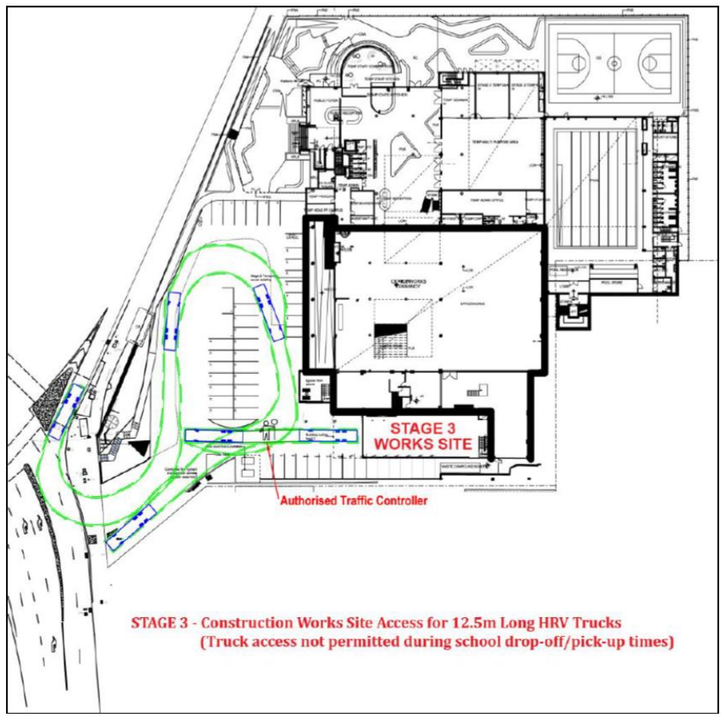
3 Transport for NSW

Table 2 Transport for NSW – 29 July 2020			
Item #	**Issue**	**Response**	**Reference**
2.3 Traffic Modelling			
2.3.1	Comment The traffic modelling results summarised in Table 3.1 and Table 3.2 of the Traffic and Parking Assessment Report (Traffic Report) show that the Pittwater Road/Warringah Road/Harbord Road will experience less vehicle delays with the introduction of 40km/h speed limit, which does not replicate the reality. Recommendation Further information and assumptions should be provided to support this claim.	Varga Traffic Planning notes the following: *The SIDRA traffic modelling indicates that the existing intersection currently operates at an average speed of 33.4 km/h in the AM school peak, and 33.3 km/h in the PM school peak.* *Traffic modelling of the "proposed" traffic conditions (i.e. at the completion of Stage 3) indicates that the intersection will operate at 32.0 km/h during the AM school peak and 33.0 km/h during the afternoon school peak.* *In essence, the traffic modelling shows that, if a 40 km/h school zone speed limit was applied, it would have little practical effect on the current operating performance of the intersection during the school peak periods, because it is already operating at less than 40 km/h in any event.*	**Attachment 7**
2.3.2	Comment The parking survey results in the traffic report indicate that the traffic generation is intense and occurring in 15min peak periods during school time. However, the traffic generated by the proposed development is modelled in flat peak hour, which underassess the impact of the pickup and drop-off activities on the adjacent road network. Recommendation The traffic model should be updated with appropriate peak hour factors. The SIDRA modelling files should be submitted to TfNSW for review.	The SIDRA modelling has been updated to reflect a peak flow period of 15 minutes. It is understood that a copy of the SIDRA modelling file has been provided to TfNSW for review.	**Attachment 7**
2.4 Traffic Generation			
2.4.1	Comment The development is proposed to be completed in multiple stages. However, the traffic report only includes traffic generation estimation on the final stage when the development is completed. It is noted that the Stage 2 of the development may generate more vehicle traffic due to the remained trading of the Officeworks on site." Recommendation The Proponent should estimate trip generation of each development stage. And the impact of the traffic generation of each development stage should also be assessed in traffic modelling with the following scenarios: • year 2019; • completion of Stage 1; • completion of Stage 2, • completion of Stage 3, and • 10 years after completion of Stage 3.	The SIDRA traffic modelling has been updated to include a peak flow factor of 15 minutes. An assessment has been made of the existing (2019) and at completion of Stages 1, 2 and 3 (**Figure 13**). The analysis concludes that the intersection will continue to operate a Level of Service D, with a minor increase in average vehicle delay (AVD) and degree of saturation (DoS) during Stage 2. This will reduce at the completion of Stage 3. Varga Traffic Planning notes that: *As the intersection currently operates at or near capacity, there is no potential for growth in traffic flows during peak periods. Any increase in traffic flows through the intersection (eg. an increase in AADT volumes) would therefore occur outside peak periods, during business hours or after hours, when the Senior School will generate little, if any traffic, and all commercial traffic activity generated by the site is reduced (in Stage 2) or has ceased (in Stage 3).* An assessment at 10 years after the completion of Stage 3 has not been undertaken as it is likely that other changes across the Northern Beaches road network will impact on the current operation of the Pittwater Road / Warringah Road / Harbord Road intersections including: • Proposed Northern Beaches tunnel; • Upgrades to the Wakehurst Parkway; and • Grade separation of the Wakehurst Parkway / Warringah Road intersection.	**Attachment 7**
2.4.2	Comment It is noted that the development proposes the allowance of community using the swimming pool and sports centre after school hours, which will also generate additional traffic during road network peak periods. However, the traffic report did not include the impact assessment of these additional traffic generated by the after school hour facilities.	Varga Traffic Planning has identified that the following traffic generation rates for the sports centre and swimming pool: • Sports Centre will generate approximately 33 vehicles per hour (4pm – 7pm); and • Swimming Pool will generate 84 vehicles per hours (4pm – 7pm). This traffic generation is substantially less than the current traffic generated by the existing commercial use of 800 Pittwater Road, which currently generates approximately 300 vehicles per hour during the PM peak period. It is therefore concluded that the proposed community use of both 224 Headland Road and 800 Pittwater Road will not result in any adverse impacts on the Pittwater Road / Warringah Road / Harbord Road intersection.	**Attachment 7**

3 Transport for NSW

Table 2 Transport for NSW – 29 July 2020			
Item #	**Issue**	**Response**	**Reference**
	Recommendation The Proponent is requested to undertake traffic modelling with these additional traffic generated by the after school hour facilities, in order to assess the impact of the proposed development on Pittwater Road/Warringah Road/Harbord Road intersection during road network peak hours.		
2.5 Car Parking			
2.5.1	Comment It is noted that the development involves the alternation of the existing car park. However, the assessment of the remaining car park layout and the alternation in not included in the traffic report. Recommendation The Proponent is requested to assess the layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements in relation to landscaping and/or fencing, aisle widths, aisle lengths, and parking bay dimensions) in accordance with AS 2890.1- 2004, AS2890.6-2009 and AS 2890.2 – 2002 for heavy vehicle usage. The swept path of the longest vehicle (including garbage trucks, building maintenance vehicles and removalists) entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS.	Varga Traffic Planning has confirmed that the layout of the proposed carpark at both Stages 2 and 3 complies with the relevant requirements of: • AS 2890.1 – 2004 Parking facilities – Part 1: Off-street car parking; • AS 2890.2 – 2002 Parking facilities – Part 2: Off-street car parking facilities; and • AS 2890.6 – 2009 Parking facilities – Off-street parking for people with disabilities. **Figure 24** illustrates the swept path of a 12.5m HRV during Stage 2. **Figure 25** illustrates the swept path of a 12.5m HRV during Stage 3. During Stage 3, access for garbage vehicles will be restricted to after-hours use only, which is consistent with the existing arrangements at 210 Headland Road.  *Figure 25 Swept turning path of 12.5m HRV during Stage 3*	**Attachment 7**

3 Transport for NSW

Table 2 Transport for NSW – 29 July 2020			
Item #	**Issue**	**Response**	**Reference**
2.6 Construction Pedestrian and Traffic Management			
2.6.1	Comment It is noted that the construction working hours are proposed from 7am-6pm Monday to Friday. Construction activities for the expansion of the school are expected to occur while students are on site during the operation of Stage 2. 12.5m HRVs would not be able to turnaround within the site and need to reverse out of the site during the construction and operation of Stages 2 and 3. It is advised that construction vehicle movements from the development could have potential impact on general traffic and bus operations within the vicinity of the School, as well as the safety of pedestrians and cyclists particularly during school time and commuter peak periods. It is noted that a preliminary Construction Traffic and Pedestrian Management Plan has been submitted, however greater detail is required to determine the likely impacts to the road network and public transport operation (if any). Recommendation It is requested that the applicant be conditioned to update the Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with TfNSW and submit a copy of the final CPTMP to the Principal Certifying Authority (PCA), prior to the issue of any construction certificate.	Plans have been prepared by Varga Traffic Planning to show how construction vehicles would be able to enter and exit the site in a forward direction during the construction of Stages 2 and 3 of the proposed development (**Figure 26** and **Figure 27**). Construction vehicles access to the site will be restricted to outside of peak AM and PM periods to minimise impacts on the school and the adjoining road network. The CPTMP will be updated in consultation with TfNSW prior to the issue of any construction certificate being issued for 800 Pittwater Road.  *Figure 26 Stage 2 Construction Access for 12.5m HRV (Varga Traffic Planning)*  *Figure 27 Stage 3 Construction Access for 12.5m HRV (Varga Traffic Planning)*	**Attachment 7**
2.7 Green Travel Plan			
2.7.1.	Comment It is noted that an overview of the Travel Plan for the development, which outlines actions and strategies that could be implemented to encourage staff, students and visitors to travel to the School using public and active transport has been provided as part of the development application. Recommendation It is requested the applicant be conditioned to update the Green Travel Plan in consultation with TfNSW and submit for endorsement of the PCA, at least six (6) months prior to the commencement of operation of the new school.	A Workplace Travel Plan (WTP) has been prepared and submitted as part of this RTS submission package. It is noted that the provides for sustainable measures that will benefit the environment if adopted by the school moving forward. A condition of consent requiring an updated Green Travel Plan (GTP) to prepared in consultation with TfNSW at least six (6) months prior to the commencement of operation of the new school is accepted.	**Attachment 7** **Attachment 8**

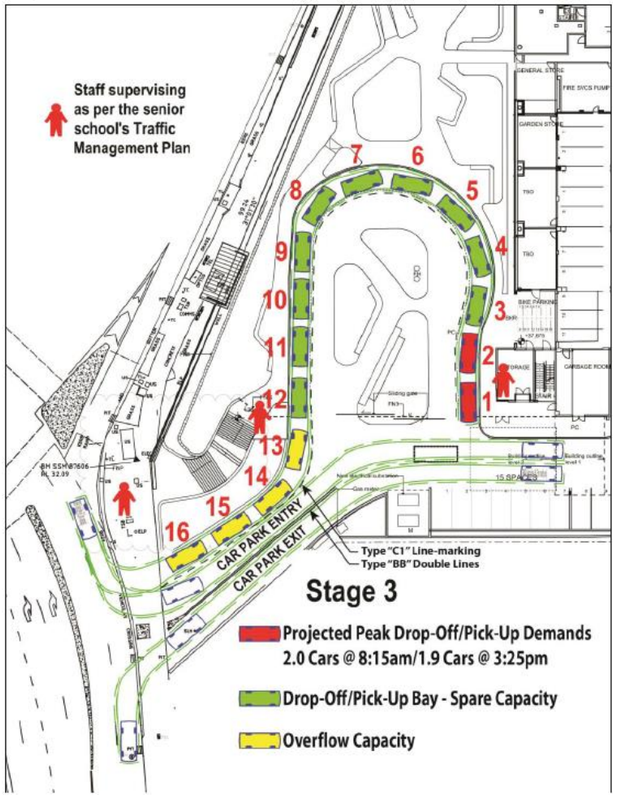
3 Transport for NSW

Table 2 Transport for NSW – 29 July 2020			
Item #	**Issue**	**Response**	**Reference**
2.8 Access to School Bus Services			
2.8.1	Comment School buses are expected to pick up and drop off students from Headland Rd and Quirk St school frontage. Recommendation It is requested that the applicant provide the details of condition and capacity of the pedestrian path from the senior campus to Headland Road for senior students to access the school buses as part of the applicant's Response to Submissions.	DA2011/0446 and DA2019/0977 approved alterations and additions to St Luke's. In accordance with DA2011/0466 (as modified) and DA2019/0977, the pedestrian footpath and pedestrian link around the perimeter of 210 and 224 Headland Road has been widened and upgraded. It is considered that the existing condition and capacity of the pedestrian path from the senior campus to Headland Road is suitable to provide for adequate access for senior students accessing the school buses.	**Attachment 7**
2.9 School Operational Management Plan			
2.9.1	Comment It is noted that pedestrian access on the south-west corner of the site at 800 Pittwater Road would lead to high number of students and parents waiting at the corner of a busy intersection with limited waiting area. This would have the potential for pedestrians to use travel lanes for waiting area and cause pedestrian related incidents. It is advised that any direct pedestrian access onto multi-lane road should be avoided where possible. The existing north-west pedestrian access can still provide direct connection to the school entry from the protected pathway to Pittwater Road." Recommendation It is requested that the applicant be conditioned to prepare a School Operational Management Plan, in consultation with TfNSW, to manage student movements safely within and in the vicinity of the site and other transport related issues, prior to the issue of the occupation certificate.	The proponent has no objections to the inclusion of a condition of consent prior to the issuing of an Occupation Certificate, that requires a new School Operational Management Plan to assist in managing student movements safely within and in the vicinity of the site (including other transport related issues). To address safety concerns for students and parents waiting outside the school site, a new pedestrian fence is proposed along the kerb line where the existing pedestrian fence terminates, through to the existing driveway in Harbord Road. Furthermore, pedestrian safety and flow will be managed through staff supervision at any pick-up and drop-off points, as well as near the site access driveway and the signalised pedestrian crossing	**Attachment 7**

3.2 Transport for NSW – 18 March 2021

On 23 September 2020, the proponent attended a meeting with Council and TfNSW to discuss the traffic and parking issues raised in both submissions. Following this meeting, a copy of the Traffic and Parking Matters Response to submissions (dated 11 February 2021) (**Attachment 7**) and Work Travel Plan (**Attachment 8**) were provided to both Council and TfNSW for review. On 18 March 2021, TfNSW raised the following matters (**Attachment 9**), which are addressed in **Table 3**.

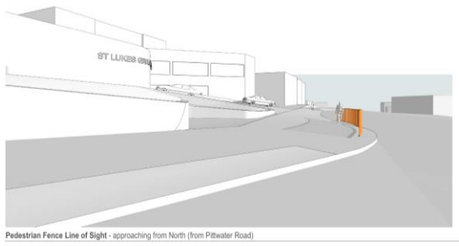
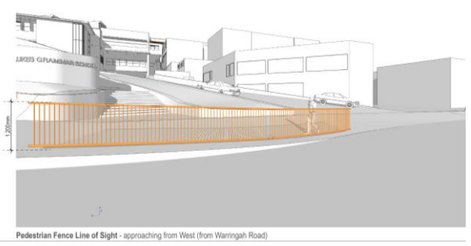
Table 3 Additional Transport for NSW Comments – Dated 18 March 2021			
Item #	**Issue**	**Response**	**Reference**
3.1 Vehicular Access to 800 Pittwater Road (new Senior School site)			
3.1.1	The queuing analysis undertaken for the proposed pick-up and drop-off activities in the RtS needs to be updated to address the following matters: • The queuing analysis has not included the vehicles queuing to access the off-street car park. • The queuing analysis assumes that 70 secs would be adequate to pick up each student. This would only be possible if each student would be ready to be picked up as soon as the vehicle arrived. If some of the students arrive late to the pick-up area, cars need to wait longer than 70 secs and block	As discussed previously, during Stage 2 a total of seven (7) spaces are provided within the forecourt for pick-up and drop-off. In addition, there are four (4) overflow spaces and an additional 12 drop-off and pick-up spaces located within the basement carpark. During Stage 3, a total of 12 spaces are provided within the forecourt for pick-up and drop-off along with four (4) overflow spaces and an additional 12 drop-off and pick-up spaces located within the basement carpark. These spaces are considered to adequately cater for the anticipated peak maximum drop-off and pick-up demand of two (2) vehicles. The existing school campus at 210 Headland Road has an established Traffic Management Plan (TMP) to manage pick-up and drop-off. The existing TMP incorporates detailed measures to ensure that students are waiting in the nominated position prior to their vehicle arriving and has successfully reduce queuing	**Attachment 10**

Table 3 Additional Transport for NSW Comments – Dated 18 March 2021			
Item #	**Issue**	**Response**	**Reference**
	other vehicles to enter the site. This would cause queuing on to public roads; and • Parents would arrive to the site and queue at the school gate well before the school opens. This would also cause queuing on to public roads. Based on the above, the proposed activities associated with the development would likely cause queuing on public roads and increase pedestrian / vehicle conflicts and cause pedestrian related incidents at the entrance to the school with the increase in pedestrian movements. Vehicle movements need to be either restricted or reduced from this driveway to provide a safer environment for pedestrians as well as vehicles at this location.	during the Junior School pick-up from Tango Avenue. A similar strategy can be adopted for the senior school campus at 800 Pittwater Road. The strategy would include: • Parent's displaying surname of student on passenger side sun visor; • Drivers to always remain with their vehicle; • Students to enter the car from the passenger side and keep bags with them; and • Staff supervision at key vantage points (**Figure 28**). The pick-up and drop-off arrangements during Stages 2 and 3 have been designed to ensure that these spaces do not impede traffic flow or access to the forecourt parking or basement carpark. No gates are proposed to be provided to the driveway. Roller shutters will restrict access to the basement carpark outside of operational hours.  *Figure 28 Proposed Stage 3 Senior School Drop-Off/Pick-Up Bays and carpark access (Varga Traffic Planning)*	
3.1.2	To reduce the potential queuing concerns raised above TfNSW requests that the submitted plans and documentation are amended so that the Harbord Road vehicular access can only be used by school staff. Student pick up and drop off and student parking facilities are not to be provided on the Senior Campus. This is due to the driveway location immediately next the Pittwater Road and Warringah Road signalised intersection. Any overflowing vehicle to Harbord Road will immediately result in significant traffic congestion not only at the signalised intersection but also to the broad road network.	As outlined in this RTS report, it is appropriate to provide student pick-up, drop-off and parking facilities at 800 Pittwater Road. Subject to the management measures outlined in the RTS report, the proposed development will not have an impact on the operation of the Pittwater Road / Warringah Road / Harbord Road intersection.	**Attachment 10**

3 Transport for NSW

Table 3 Additional Transport for NSW Comments – Dated 18 March 2021			
Item #	**Issue**	**Response**	**Reference**
3.2 Traffic Generation			
3.2.1	The RtS did not include the details of bus movements generated by the proposed development and the impact of the increasing bus movements on the nearby road network and existing bus pick up and drop off facilities. It is requested that the applicant undertake an impact assessment of existing and future school bus movements likely to be generated by the proposed development and details of improvements required to the bus pick up and drop off facilities.	The proposed development will not generate any additional bus movements or require additional bus services. Based on the analysis of Varga Traffic Planning, there is sufficient spare capacity available on the existing school bus network. School buses will continue to operate from 210 Headland Road. In addition, there are a number of public bus services, including the B-line, located within the vicinity of the site that students can use.	**Attachment 10**
3.2.2	The RtS did not address TfNSW's requests of estimating trip generation of each development stage. It is requested that details of trip generation for each development stage, including the traffic generated by the after school hour facility, should be tabulated and provided to TfNSW for review.	The RTS prepared by Varga Traffic Planning provides detailed estimates of trip generation at each development stage.	**Attachment 10**
3.2.3	The RtS did not include the traffic modelling result for the scenario of 10 years after completion of Stage 3. The scenario of 10 years after completion of Stage 3 should be included in the traffic impact assessment.	As noted in the RTS prepared by Varga Traffic Planning: *"…the Pittwater Road/Warringah Road/Harbord Road intersection currently operates at or near capacity, and there is no potential for growth in traffic flows during peak periods.* *Any increase in traffic flows through the intersection could only occur outside peak periods, during business hours or after hours, when the new Senior School will generate little, if any traffic.* *Factoring up or increasing existing peak hour traffic flows through the intersection to simulate a "10 years hence" scenario is therefore impractical and unrealistic.* *It is also likely that reductions in traffic flows will occur on Pittwater Road "10 years after completion" following completion of the Northern Beaches Link tunnel and the upgrade of Wakehurst Parkway to dual carriageways. The upgraded Wakehurst Parkway and the grade-separated intersection with Warringah Road will then provide a superior, high speed alternative route to Pittwater Road for all traffic with an origin or destination anywhere to the north of Narrabeen.*	**Attachment 10**
3.3 Traffic Modelling			
3.3.1	6. The SIDRA modelling files should be submitted to TfNSW for review.	The SIDRA modelling files have been submitted to TfNSW for review.	**Attachment 10**
3.4 Car Parking			
3.4.1	Based on the RtS, the existing car park will be reconfigured to provide the required number of car parking spaces for Stages 2 and 3.	The existing car park at 800 Pittwater Road will be reconfigured during Stages 2 and 3 as follows: • Existing 182 spaces; • Stage 1 182 spaces; • Stage 2 131 spaces (including 40 for Officeworks); and • Stage 3 91 spaces.	**Attachment 10**
3.4.2	The design of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements in accordance with the relevant Austroads and Australian Standards.	The proposed car park has been designed in accordance with the relevant Austroads and Australian Standards.	**Attachment 10**
3.5 Construction Pedestrian and Traffic Management			
3.5.1	It is noted that the construction working hours are proposed from 7am-6pm Monday to Friday. Construction activities for the expansion of the school are expected to occur while students are on site during the operation of Stage 2. It is advised that construction vehicle movements from the development could have the potential to impact on general traffic and bus operations within the vicinity of the School, as well as the safety of pedestrians and cyclists particularly during commuter peak periods and school opening and closing periods. It is requested that the applicant updates the Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with TfNSW, prior to the issue of any construction certificate and submit a copy of the final CPTMP to the Council for approval if DPIE agrees for Council to approve the CPTMP.	The Construction Pedestrian and Traffic Management Plan (CPTMP) will be updated in consultation with TfNSW prior to the issue of any construction certificate.	**Attachment 10**

3 Transport for NSW

Table 3 Additional Transport for NSW Comments – Dated 18 March 2021			
Item #	**Issue**	**Response**	**Reference**
3.6 Green Travel Plan			
3.6.1	TfNSW notes the Work Place Travel Plan for staff and students prepared by Varga Traffic Planning as part of the RtS. The Plan includes some measures to encourage mode shift and mode share targets. TfNSW does not consider the proposed measures or mode share targets to be adequate for this development. The applicant will need to update the Green Travel Plan in consultation with TfNSW and submit for endorsement of the PCA, at least six (6) months prior to the commencement of operation of the new senior school campus.	The Workplace Travel Plan and Green Travel Plan will be updated in consultation with TfNSW, at least six (6) months prior to the commencement of operation of the new senior school campus.	**Attachment 10**
3.7 Access to School Bus Services			
3.7.1	The RtS states that the approved works from other developments are expected to provide an upgraded pedestrian path between the Senior School and the school bus stops in Headland Road. It is requested that the applicant consults with Council to provide adequate footpath facilities between the Senior School and the school bus stops in Headland Road.	The proponent will consult with Council to ensure that adequate footpath facilities are provided between the new campus and school bus stops on Headland Road.	**Attachment 10**
3.8 School Operational Management Plan			
3.8.1	The RtS states that the new School Traffic Management Plan for the Senior School will include staff supervision at the drop off/pick up area and also at footpath area at the bottom of the stairs, near the site access driveway and the signalised pedestrian crossing. It is requested that the applicant prepares a School Operational Management Plan, in consultation with TfNSW, to manage student movements safely within and in the vicinity of the site and other transport related issues, prior to issue of the occupation certificate.	The School Operational Management Plan will be updated, in consultation with TfNSW, to manage student movements, prior to the issue of the occupation certificate.	**Attachment 10**
3.8.2	The RtS states that a pedestrian fence is proposed along the kerb line at the north-east corner of Pittwater Road/Warringah Road intersection. TfNSW notes that the provision of a pedestrian fence may obstruct line of sight for vehicle turning left from Pittwater Road and vehicle departing from the driveway. A line of sight assessment should be undertaken for the proposed pedestrian fence.	The proposed pedestrian fence will comprise a TfNSW-approved fence. A line of sight assessment has been undertaken by TZG Architects (**Figure 29**).   *Figure 29 Line of sight assessment (TZG Architects)*	**Attachment 10**

3 Transport for NSW

3.3 Transport for NSW – 23 June 2021

On 22 June 2021, the proponent attended a meeting with TfNSW representatives to discuss the second Response to Submissions document prepared by Varga Traffic Planning (**Attachment 10**). Following this meeting, TfNSW provided email feedback (dated 23 June 2021, refer **Attachment 11**). **Table 4** (and **Attachment 12**) provides a response to the matters raised in the email.

Table 4 Additional Transport for NSW Comments – Dated 23 June 2021

Item #	Issue	Response	Reference
4.1 Additional Transport for NSW Comments – 23 June 2021			
4.1.1	NO STOPPING sign should be installed for the overflow parking spaces.	Agreed. A “no stopping sign” will be installed for the overflow parking spaces.	**Attachment 12**
4.1.2	The applicant may be conditioned that a review of the pickup and drop-off operation to be undertaken after 6 month trial of Stage 2 operation, as well as for the period of 6 months after the commencement of Stage 3 operation.	Noted and accepted.	**Attachment 12**
4.1.3	Raw survey data for parking duration survey for pickup and drop-off to be provided to TfNSW for review and reference.	A copy of the raw survey data is provided in **Attachment 12.**	**Attachment 12**
4.1.4	Traffic management plan to be updated allowing early arriving vehicle to park in the basement car park. No vehicle waiting is allowed at the pickup and drop-off area. If additional parking is required for the waiting parents for school pick and drop off activities, the applicant needs to convert student parking in the basement for parents to park and wait until students arrive.	A Traffic Management Plan will be prepared for 800 Pittwater Road that addresses the early arrival of vehicles including preventing vehicles from waiting in the pick-up / drop-off zone.	**Attachment 12**
4.1.5	The applicant is to submit to updated concept and traffic management plan to DPIE for referral to TfNSW for review.	A Traffic Management Plan will be prepared prior to the issue of any construction certificate for 800 Pittwater Road.	**Attachment 12**

4 Environment, Energy and Science Group

Table 5 Environment, Energy and Science Group dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
5.1 Aboriginal Cultural Heritage			
5.1.1.	Please note from 1 July 2020 ACH regulation, including advice regarding SSIs and SSDs, is now managed by Heritage NSW The new contact for the ACH regulation team is heritagemailbox@environment.nsw.gov.au.	Noted. No submission has been received from Heritage NSW.	N/A
5.2 Biodiversity			
5.2.1	EES has reviewed the BDAR and notes that the BDAR states that "The development site comprises three parcels within the Northern Beaches local government area (LGA): • 800 Pittwater Road, Dee Why (Lot 6 DP523299); • 210 Headland Road, North Curl Curl (Lot 2112 DP752038) • 224 Headland Road, North Curl Curl (SP45082)" but that the development footprint is restricted to the first and third of these properties. BDAR section 1.6 Species Credit Species states *No threatened fauna species were recorded during the field survey. Additionally, important habitat features such as hollow bearing trees, intact native vegetation or important breeding/foraging resources were not recorded within the development area. The field survey identified that the existing buildings contain flat, metal roofing which does not contain suitable habitat for threatened microbat species. The roof cavities did not contain suitable small crevices and not white-wash or other indications of microbat use was observed around the existing rooves.* It is appreciated that an assessment of the buildings as potential habitat for microbat species has been undertaken without having to be specifically requested. However, the assessment should have been carried also out for the purpose of assessing possible prescribed impacts on all possible microbat species, not just possible species credit species, as well as on the structures other than buildings. Part of the SSD is at 224 Headland Road, on which existing structures consist of a large concrete platform on which is situated a multi-storey commercial building, oriented north-south, and an open carpark. On its eastern side the platform is supported on an elevated sandstone outcrop, but its western side and northern end extends out from and above the outcrop supported by large columns. This configuration situation provides for an area with numerous cavities and crevices of varying size, in parts sheltered by vegetation. The southern two-thirds is also sheltered by the closely proximate commercial building to the west. These features are illustrated by photographs in Figures 51, 52, 58 and 59 of the Heritage Impact Statement (City Plan Heritage). Such areas could be used for roosting by microbat species, including the following threatened species, for which there are recent records within five kilometres of the development site: • *Miniopterus orianae oceanensis*, Large Bentwinged Bat • *Miniopterus australis*, Little Bent-winged Bat. There are numerous recent records of these species and known over-wintering roosts in Dee Why. • *Micronomus norfolkensis*, Eastern Coastal Free-tailed Bat. There is one recent record of this species within five kilometres. • *Saccolaimus flaviventris*, Yellow-bellied Sheathtail-bat The measures in Table 21 titled "Measures proposed to mitigate and manage impacts" should be revised to consider the possibility that microbats might be encountered in such structures, not just in trees. EES recommends that measures such as inclusion of pre-clearing surveys, daily surveys and staged clearing, and the presence of a trained ecological or licensed microbat wildlife handler during clearing events, should apply to demolition of existing structures, not just to clearing of trees, as is currently proposed.	The measures in Table 21 of the BDAR have been revised to include the requirement for a pre-clearance survey to be undertaken prior the demolition of any existing structures or removal of any trees.	**Attachment 13**

4 Environment, Energy and Science Group

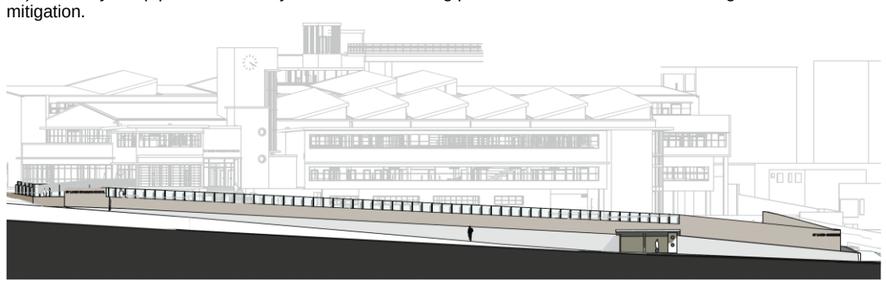
Table 5 Environment, Energy and Science Group dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
5.3 Flood			
5.3.1	The northern portion of the development site is in the upper reaches of the Dee Why South Catchment whilst the southern portion is located in the upper reaches of the Greendale Creek Catchment. The flood study reports indicate that the northern portion of the development site is subject to low hazard under the PMF event. EES notes that the onsite detention storage will be included to limit the stormwater discharge from the site under pre-development stage in accordance with the requirements of Northern Beaches Council. EES does not have any specific comments in relation to flooding and this development proposal.	Noted	N/A

5 NSW Environmental Protection Authority

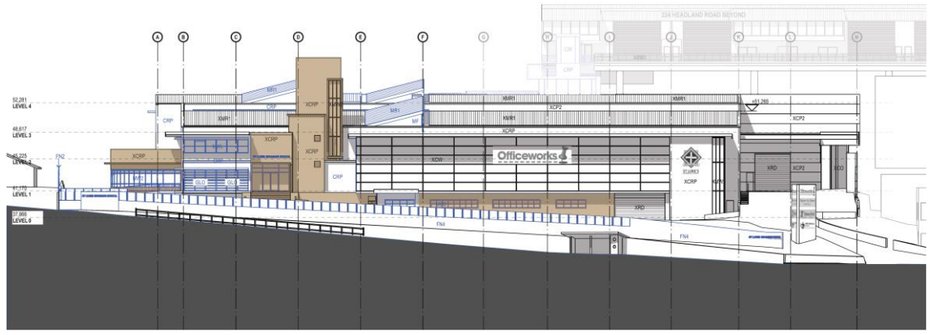
Table 6 NSW Environmental Planning Authority dated 13 July 2020			
Item #	**Issue**	**Response**	**Reference**
6.1	**NSW EPA response**		
	No comment regarding the proposal and no further interest in the proposal	Noted	N/A

6 Northern Beaches Council

6.1 Northern Beaches Council Submission – 28 July 2020

Table 7 Northern Beaches Council dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
7.1 Permissibility			
	In response to Clause 35(6)(b), the EIA notes that the proposed development seeks to enable the use of the school facilities by community groups, including after-hours use. The EIA provides reference to the sports centre at No.224 Headland Road being made available for hire by local schools and sporting groups. Further information is required on the use of the sports facility for community groups in order to ensure that requirements of clause 35(6)(b) are fully addressed. To this end it is recommended that the Operation Plan of Management (POM) is amended to provide further detailed consideration to ensure it comprehensively addresses the balance between the school use and community use of the facility. Clarity around what extent the development will be available to be used by the "community" beyond St Luke's Grammar School (including other schools, sporting groups, general public etc) is required to be fully expressed in the POM.	The proposed sports centre at 224 Headland Road will be generally available for use by other schools, sporting groups and the general public outside of school hours, being 4pm – 9pm Monday to Friday and 8am – 6pm on Saturday. This is consistent with the current approved use of Units 3, 4 and 7 at 224 Headland Road under DA2019/0977. Local schools that may use the facility include: • Brookvale Public School; • Manly Selective High School; • St Augustine College; • Northern Beaches Secondary College; and • North Curl Curl Public School. The sports courts will be available for one (1) hour bookings, with up to 30 participants per court. Training sessions will be supervised by Sports Centre staff, with a maximum of four (4) staff on site across the facility. A comprehensive Operational Plan of Management for 224 Headland Road will be prepared prior to the issue of any Occupation Certificate for the Stage 1 works.	**N/A**
7.2 Urban Design			
	The proposal generally satisfies the SEARs and Council's Urban Designer raises no significant issues with the proposal, however recommends that the following matters are addressed:	-	-
7.2.1	<u>School Campus Connectivity</u> The proposed links connecting No.224 Headland Road and No.800 Pittwater Road, being both the internal lift connection and previously approved pathway and stair connection is a logical and well-founded strategy. The circulation as a nodal point in the scheme provides a single and clear wayfinding strategy between the sites across the whole campus. With just a single lift to provide this link, there is the potential to introduce a second lift in the main vertical circulation core to accommodate for the growth of student numbers over time. Given the scope and size of the campus and projected increase in numbers over time it would be prudent to provide several lifts.	A second lift has been incorporated into the design of new link building between 224 Headland Road and 800 Pittwater Road.	**Attachment 2** **Attachment 3**
7.2.2	<u>No. 800 Pittwater Road</u> <u>Architectural Design Statement</u> In concurrence with the Government Architect NSW (GANSW) comments regarding the use of the plexiglass fencing elements, there needs to be testing that looks to an alternate material. An alternate must sit in harmony with the sandstone elements and the greater natural landscape context of the natural podium whilst tying in with the form and architectural style and horizontal banding of the building expression could be further tested. A combination of landscaped planting elements combined with subtle detail in the fencing elements, noting it fronts Pittwater Road and frames the foreground and context of the whole site is encouraged. <u>Space Planning Stage 2</u> The culmination with the stage 3 works demonstrates a clearly articulated and consolidated spatial planning regime. The only question is how the staging of works, with regards to the facade treatment will play out and affect current students, staff and users of the site and the general public. See further commentary below in Staging Report section. <u>Noise Barrier Wall</u> Council concurs with the comments of the GANSW on the plexi-glass noise wall barrier. This issue is complex as the plexi-glass offers a reduced bulk/built form impact to the streetscape and views to the heritage building and is a well considered landscape response to the forecourt. Whilst noting support of deletion of the plexi-glass element, the applicant is encouraged to further test alternate options with the view to considering retention of the plexi-glass if further testing does not prove to result in a better urban design outcome. Understanding the constraints of the acoustic requirements along with the visual and aesthetic result of a solid barrier wall of lapped and capped timber or opaque material (not a preferred option) this aspect of the development presents a difficult position.	A number of design options for the noise barrier along Pittwater Road were considered by the design team in response to the comments raised by the Government Architect New South Wales (GANSW) and Council. The three (3) options considered are: • <u>Option 1:</u> Acrylic top / sandstone base; • <u>Option 2:</u> Acrylic full height; and • <u>Option 3:</u> Sandstone full height. Option 1 was the preferred option as it balances heritage, urban design and CPTED considerations as well as satisfying acoustic requirements (**Figure 30**). The acrylic top provides visibility from the surrounding public domain towards to the heritage elements of building. It also provides appropriate acoustic mitigation.  *Figure 30 Proposed noise barrier wall (Option 1) (TZG Architects).* Following the meeting with Council on 8 October 2020 to discuss heritage and urban design issues, Council has confirmed support for the proposed approach.	**Attachment 2** **Attachment 3** **Attachment 4** **Attachment 5** **Attachment 6**

6 Northern Beaches Council

Table 7 Northern Beaches Council dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
	The option presented in the Noise Barrier Wall Design Statement of the Urban Design Report integrates well with the topography, provides a clarity of wayfinding and addresses the context of the site geology, topography and built form heritage well. It is less desirable to fence off the forecourt of No. 800 Pittwater Road, and a better outcome to have a clarity of view to the existing/proposed building in it's context.		
7.2.4	Option Testing Plexi-glass Noise Barrier Noting the variegated ground plan treatment of the landscaping that articulates is there an opportunity to provide a plexi-glass screen that follows this meandering line of articulation that can be planted out with larger and smaller planting treatments at various points along this line to assist to soften the effect of a long straight plexi-glass wall. Possibly an option worth testing that could provide additional acoustic attenuation through the depth of planting and plexi-glass combined so as to break up the long linear elevation of plexiglass.		**Attachment 2** **Attachment 3** **Attachment 4** **Attachment 5** **Attachment 6**
7.2.5	No. 224 Headland Road External treatment of the building should indicate the link and connection to the No.800 Pittwater Road site demonstrating its connection to the greater campus.	The following architectural design statement has been prepared by TZG Architects in relation to the design of 224 Headland Road: *The building has been designed to provide a functional fit-out with minimal impact on the building envelope.* *The two new full-size basketball courts have been designed for training purposes with ample run-off space and space to set-up team benches.* *The existing windows and roller doors are proposed to be retained to provide natural light and the natural ventilation.* *A new pit-less and overhead-less lift is proposed to be inserted within the existing building envelope to provide accessible access to the school clothing store on level 1.* The industrial appearance of 224 Headland Road has been maintained reflecting its location within an industrial area.	**Attachment 6**
7.2.6	Staging The staging demonstrates a logical and ordered development of the site given the constraints of the availability and end of lease of the respective tenancies across the site. Consideration to an effective treatment to the hoardings during construction with temporary external structures/scaffolding during this time will be foremost on the minds of the users of the site. Staging of works, and the effects on the elevational presentation, particularly between stages 2 and 3, and how the landscape treatment to the frontage of site maintains a semblance of order and aesthetic treatment should be considered. An interesting precedent is the use of Reg Mombasa hoarding illustrations at the Wynyard Station bus interchange in the Sydney CBD which provide a moment of interest and distraction to the works beyond. Site hoardings that provide support or a welcome face to the community and users across the site should be considered in the overall construction staging program.	TZG have prepared an elevation showing the appearance of 800 Pittwater Road at the completion of Stage 2 (**Figure 31**).  *Figure 31 Pittwater Road elevation of 800 Pittwater Road following completion of Stage 2 (TZG Architects)* The use of hoarding illustrations to provide a moment of interest will be considered by the proponent as part of the overall construction staging program.	**Attachment 2** **Attachment 3**
7.3 Heritage			
7.3.1	Clause 5.10 of WLEP requires the consent authority to consider the effect of the proposed development on the heritage significance of any item. The building at No.800 Headland Road is heritage listed under Schedule 5 of WLEP and requires the conservation of the semi-circular section in the north-east corner, building front entry and clock tower. In addition, adjoining heritage items include Stony Range Flora Reserve and the Bus Shelter on Pittwater Road and the impact of the development on neighbouring items is also of relevance.	Noted	

6 Northern Beaches Council

Table 7 Northern Beaches Council dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
7.3.2	Building form and facade The new design fails to interpret the solidity and fenestration pattern of the original facade. The existing glazing on the western facade is proposed to be replaced with a new facade of solidity and fenestration which is not a lot different than the existing in terms of the location of the external walls. The original facade was located behind the leading edge of the clock tower with a parapet and recessed upper storey facade as well a large overhang. Similarly, the area to the left of the main entrance was also behind the leading edge of the tower. This original design ensured that the asymmetrical clock tower and building entrance took prominence as part of the original design, which has been lost in later additions. While the proposal does adopt a strong horizontal architectural statement, by adopting the line of the current Officeworks building for its new walls and large overhangs, this component will continue to affect views to and from the clock tower. It would be preferable if the overhangs are removed and the upper section on the southern end recessed, thereby reinstating the original parapet wall. This will help to interpret the solidity and fenestration and the articulation of the original fabric. Slightly recessed glazing behind this parapet wall could complete the second storey. By doing this the proposed second storey area will need to be reduced (a reduction in the size of the proposed atrium may be considered to regain the required internal area). The original colonnade on the ground floor should be reinstated. This again will result in a slightly reduced internal floor area but will help the building to regain its original fabric on the western facade. A similar design approach should apply to both sides of the main entry on the western facade, so as to retain the prominence of the tower element and also retain significant views to the tower and to the semi-circular canteen element at the north-west end of the building.	TZG Architects, in conjunction with the heritage consultants City Plan, have undertaken a detailed visual study to review Council's heritage comments: *The view study illustrates the history of the building alteration since the opening of the original Top Dog Men's Wear factory in 1949 and explore the impact to the obstruction of views to the clocktower and the semi-circular canteen element the later alterations impose.* *The Northern Beaches Council objective is to open up the views to the clocktower and the semi-circular canteen element and to interpret the solid fenestration and articulation of the original fabric.* *The Northern Beaches Council recommendation to reinstate the original parapet wall on Level 2 and the colonnade on Level 1, would require significant restructuring of fabric demolished in 1998.* *The view study shows that the 1950s and 1993 additions and the proposed works, do not affect the views to the clocktower and canteen when approaching from Warringah Road, which is the main view of the building* (**Figure 32**)*. The views are slightly improved when approaching from Pittwater Road or from Harbord Road.* *The GFA loss resulting from the set-back of the western façade as per Council's recommendations amounts to more than 500m^2.* *To re-instate the original colonnade on Level 1, the administration area would have to be reduced by 235m^2 and the public foyer area would have to be reduced by 22m^2. The remaining floor area would have to be insufficient to fit the required accommodation.* *To re-instate the original parapet wall on Level 2, the general learning areas (GLAs) would have to be reduced by 255m^2, which will result in the loss of 5 GLAs. The remaining GLAs will be insufficient to fit the required number of students and does not meet the educational requirements.* *We conclude that the benefits of retaining the existing structure far outweigh the advantage of improving the views the clocktower and canteen.* *The environmental cost of re-building the western section of the building does contradict the ESD principle of retaining existing structure whenever possible. The loss of 500m^2 GFA would further make the project unviable as the briefed areas would not fit the envelope.* It is therefore concluded that retaining the current building envelope is an appropriate design strategy and no design amendments have been made. On 21 October, Council's heritage team advised: *It remains Heritage's strong preference that the original setback line and colonnade from 1949 be reinstated. However it is accepted that the proposal intends to utilise the existing line established by Officeworks and this can be tolerated by Heritage on balance.*	**Attachment 3**

6 Northern Beaches Council

Table 7 Northern Beaches Council dated 28 July 2020

Item #	Issue	Response	Reference
		 Street View Warringah Road - Building Massing - Proposed  Street View Warringah Road - Building Massing - Council Recommendation *Figure 32 Comparison views of 800 Pittwater Road from Warringah Road intersections Top as proposed and Bottom as per Council suggestion*	
7.3.3	<u>Roof</u> The proposed roof form incorporating sawtooth roofs is acceptable from a heritage perspective as they will provide natural light into the central area of the building without compromising the facade treatment. However, it would be preferable if the height of the sawtooth roof was reduced, to minimise its visibility on the western facade, as the original roof was not readily visible above the original parapet.	As discussed in **Table 1**, TZG Architects considered the option to reduce the height of the sawtooth roof so as to reduce its visibility on the western façade. However, it was determined that lowering the height of the roof would have an adverse impact on the amount of daylight received by the internal spaces of the building and therefore, the proposed height of the roof has been maintained.	**Attachment 3**
7.3.4	<u>Materials and finishes</u> The preferred external colours are “Option 2 – Half-strength blue”, with the heritage fabric rendered white to reflect the original finish. From a heritage perspective, the preferred external colours would be those shown as “Option 3 - Neutral” in the Architectural Design Report (page 58). In addition to this, it is preferred that original components be painted in original colours (e.g. white), with the new components painted in a slightly different neutral shade. In doing so, the original fabric components would be clearly identifiable, but with the whole facade still presenting with a neutral palette, reflecting the original architectural design concept. No objections are raised to the use of other colours (e.g. blue) for building components behind the facade, as darker colours will ensure that the heritage facade is prominent and distinct and that new building additions are recessive.	The proposed external colours have been revised in response to Council’s feedback. *The original building fabric is proposed to be painted white with the new walls in the western wing of the building to be painted in a slightly darker neutral tone. The skylights and the walls of the central wing of the building are proposed to be painted dark blue to appear recessive. The walls of the eastern wing are proposed to be painted mid grey. The three different tones are to scale down the building mass and to emphasize the 3 structural wings of the building complex.* *A toned down version of the blue colours is proposed for the shading fins to provide a contrast to the white walls and thus to reinforce the horizontality of the fenestration bands. The blues are referencing the St. Luke’s School colour strategy as used at the Schools other campuses, including the campus at 210 Headland Road. The blues will also indicate that the fins are part of the new building fabric.* *The proposed selection of 2 different shades of blues has been toned down to respond to councils preference.* *The darkest blue is proposed to be used only for the enlarged shading fins as a way to interpret the location of the original colonnade columns The remaining 4 blue tones are proposed to be randomly placed along the all other shading fins.*	**Attachment 3** **Attachment 6**

6 Northern Beaches Council

Table 7 Northern Beaches Council dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
7.3.5	Signage Proposed signage is generally acceptable. However, consideration should be given to a reduction in the size of proposed Sign 2, the main sign on the southern end of the front facade, so that it does not dominate the facade and compete with the heritage clock tower.	A review of the proposed signage at 800 Pittwater Road has been undertaken by TZG Architects. The proposed development will result in an overall decrease in the number of signs located on site. Council accepted the proposed signage in the correspondence dated 21 October 2020.	**Attachment 3**
7.3.6	Clock tower The plans and renders provided do not show the existing window on the north-eastern corner of the heritage listed tower. This window must remain and must not be removed as it is an essential element of this heritage listed structure.	This was a drafting error and the existing window on the north-eastern corner of the clocktower is to be retained. This has been corrected on the architectural drawings.	**Attachment 2**
7.3.7	Fencing No objections are raised to the proposed fencing along Pittwater Road. It is understood that it needs to act as a noise barrier, so the use of a clear acrylic top is supported to enable visibility of the heritage item, while still providing security and noise reduction. Such a solution is preferable to a solid fence or metal fence of 1.8 metres. The vertical fins however should only be in a neutral tone, so as to blend in with the facade of the heritage building and not compete with it.	The vertical fins are to be painted a neutral finish, which is consistent with Council's recommendation.	**Attachment 2** **Attachment 3** **Attachment 6**
7.3.8	Heritage Bus Shelter It is recognised that this heritage listed bus shelter is not part of the site owned by the school, however, the bus shelter was an integral part of the original development. It would be preferable if, as part of this redevelopment, the school restores and paints the bus shelter, in colours which match the redeveloped heritage building at No.800 Pittwater Road. In this way the connection between these two heritage items can be maintained. In addition, it would be appropriate for the bus shelter to be included within the Heritage Interpretation Plan, which should be required by any approval.	The heritage bus shelter is not located on school property and therefore any works to the bus shelter will require approval from the owner.	N/A
7.3.9	In summary, design modifications to the building components on either side of the original clock tower, are considered necessary to ensure that the prominence of the remaining original components of the original Top Dog factory are celebrated. By setting back these components, views to the clock tower will be restored and it will also provide an opportunity to better interpret the original design character of these horizontal elements. In accordance with the Heritage Impact Statement (City Plan Heritage - November 2019) submitted with the application, any approval should include conditions. Please refer to addendum to this letter for suggested heritage conditions.	Noted. As discussed above, no design modifications have been made to the building components either side of the original clocktower.	N/A
7.4 Aboriginal Heritage			
7.4.1	An Aboriginal Cultural Heritage Assessment (ACHA) was prepared by Eco Logical Australia on 4 March 2020 in accordance with the SEARs requirements. The Assessment notes: "The ACHA has identified that zero Aboriginal heritage sites will be harmed by the proposed development. There is nil archaeological potential across the entirety of the study area and no archaeological mitigation measures are required." Given the above, the Aboriginal Heritage Office considers that there are no Aboriginal heritage issues for the proposed development. Under the National Parks and Wildlife Act 1974 (NPW Act) all Aboriginal objects are protected. Should any Aboriginal Cultural Heritage items be uncovered during earthworks, works should cease in the area and the Aboriginal Heritage Office assess the finds. Under Section 89a of the NPW Act should the objects be found to be Aboriginal, the Department of Planning, Industry and Environment (DPIE) and the Metropolitan Local Aboriginal Land Council (MLALC) should be contacted.	Noted - No response required.	N/A
7.5 Landscape			
7.5.1	The site offers a symbolic 'gateway' to the coast strip east of Pittwater Road and landscape treatment shall enhance the visual and physical perception of this 'gateway', whilst respecting and highlighting the historic built items of the building at No.800 Pittwater Road, and allowing other parts of the building to sit within a landscape setting. The proposed landscaping generally satisfies the requirement of WLEP, WDCP 2011 and SEARs. However, the following concerns shall be addressed with design modifications:	Noted.	N/A
7.5.2	Landscape Treatment to No.224 Headland Road The proposed landscape treatment at No.224 Headland Road is limited due to the intensified sporting activity and associated parking, apart from planters to separate buildings and the external car park. It is recommended that the car parking arrangement be reviewed to introduce tree planting along the western boundary by reducing car spaces, and thus activating	The landscape treatment to 224 Headland Road only reflects the availability of space suitable for raised planter beds to improve pedestrian safety and movements along the western side of the buildings. The overall scope of works for 224 Headland Road reflects and responds to the existing built form of the site, including the provision of car parking on the suspended slab comprising the western half of the site. The car parking strategy for the proposed development reflects the balance of movements during and outside of school hours across all three sites, and the introduction of tree planting along the western boundary of the 224 Headland Road property is not considered feasible both from the ability to plan trees within suitable planter beds, or from the	N/A

6 Northern Beaches Council

Table 7 Northern Beaches Council dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
	the Green Travel Plan proposal to reduce dependence on car use as public transport and improved pedestrian and cyclist opportunities are available with this development proposal. Where possible, and as recommended in the Arboricultural Impact Assessment report, existing boundary planting to the Headland Road frontage shall be retained and/or replaced to provide a softening of the development upon the streetscape amenity.	requirement to provide flexibility in parking for staff and students so as to accommodate all operations envisioned for the site. The objectives of the Green Travel Plan (which would seek to reduce the reliance on car parking) reflect the balance of car parking that is able to be accommodate on site, and does not require (based on discussions with TfNSW) a reduction in car parking below that already provided in order to activate/achieve those objectives. No works are proposed under this DA in relation to the existing boundary planting to the Headland Road frontage, and accordingly no impact to the existing trees is proposed by the carrying out of this work. It is considered that further landscape treatment of 224 Headland Road is not warranted, on balance of the other outcomes achieved for the development across all three sites.	
7.5.3	Landscape Treatment to Pittwater Road To enhance the 'gateway', incorporate the built forms with the landscape, and improve the visual amenity from public places / roads, a boundary landscape buffer along Pittwater Road shall be provided of suitable width to support tree planting as envisaged in the architectural image of section 4.3 3D View, exterior 3, through a redesign of the external layout including adjusted arrangement of the ramp, external area, and pick-up/drop-off area, represented in the stage 3 proposal. Any planting shall recognise the heritage and visual value of the heritage items of the building at No. 800 Pittwater Road.	The external forecourt to 800 Pittwater Road has been carefully designed to provide adequate pick-up and drop-off area, suitable swept paths for vehicles as well outdoor learning and play spaces. At the completion of Stage 3, there will be new planting along the Pittwater Road frontage comprising a mix of native trees and palms that will maximise views and vistas into the site and respond to the heritage and visual values of the site.	N/A
7.5.4	Planting Schedule A Plant Schedule is provided and the self-seeding tree species (referenced in the referral attached) susceptible of spreading into bushland shall be removed from the list and replaced with a suitable non-invasive species.	The landscape planting schedule will be amended to remove any self-seeding tree species and replacement with suitable non-invasive species prior to the issue of any construction certificate for 800 Pittwater Road.	N/A
7.5.5	Arboricultural Assessment An Arboricultural Impact Assessment is provided with the development proposal reporting on the 62 existing trees. The recommendations of the arborist report are accepted and include tree protection measures to ensure the retention of the recommended species, including protective fencing, trunk and ground protection, and engagement of a Project Arborist to supervise tree protection measures.	Noted. The recommendations outlined in the arborist report will be incorporated into the project's Construction Management Plan.	N/A
7.6 Biodiversity			
7.6.1	As required under the SEAR's the SSD includes a Biodiversity Development Assessment Report (BDAR) prepared by an accredited assessor in accordance with the Biodiversity Assessment Method. The BDAR has assessed that the development site has been cleared of remnant vegetation and replaced with a modified landscape which includes native and exotic vegetation plantings. No threatened flora or fauna species were identified on site, and potential impacts to biodiversity are low, and have been avoided and minimised where possible. The proposed development footprint will result in removal of a small amount (0.035 ha) of planted native vegetation and 0.06 ha of horticultural plantings and opportunistic weeds. Potential prescribed impacts have been assessed, and a serious and irreversible impact is unlikely. The BDAR has also assessed the potential biodiversity impacts of the development against other relevant Commonwealth, State and Local planning controls, concluding that impacts are minor in nature. The BDAR has calculated a biodiversity offset of one ecosystem credit, reflecting the low integrity of native vegetation within the site. Trees within the adjoining flora reserve will be protected and landscaping of the new site is proposed in order to minimise potential indirect impacts. The mitigation measures within the BDAR recommend that landscaping in the development site is to use locally derived native species and those found within the PCTs present (PTC 1776). The submitted Landscape Plan does not fully satisfy that mitigation measure, and it is recommended that the species palette is revised.	The landscape plan will be updated prior to the issue of a construction certificate to satisfy the mitigation measures outlined in the BDAR.	N/A
7.7	**Traffic and Parking**		
	Council's Transport Unit have expressed serious concerns with the proposal and note that the applicant has not addressed the possibility of removing access off Harbord Road and providing access solely on Pittwater Road for the proposed Senior Campus. Noting that the applicant has mentioned some topographic items, they have not specifically stated if these can be overcome to achieve a better outcome for the site. The following recommendations are provided and the Department of Planning, Industry and Environment must seek resolution of these critical issues before finalising the assessment of the SSD.	-	-

6 Northern Beaches Council

Table 7 Northern Beaches Council dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
7.7.1	Access via Pittwater Road The preference of Council is that the access be provided on Pittwater to avoid the potential of rear end collisions when turning from Pittwater Road onto Harbord Road, being that the access point is close to the intersection. An access directly off Pittwater Road would provide better accessibility and improve safety. Further, the reconfiguration would support the possibility for additional parking capacity.	A number of alternative vehicle entry points to the site were considered by the proponent. A new entry/exit driveway from Pittwater Road into the site was discarded for the following reasons: • Pittwater Road is a classified road with high volumes of traffic; • Any new driveway would require considerable excavation and could potentially impact on the structural adequacy of the existing building; • Potential impacts on the heritage values of the site; and • Impacts on the existing bus lane along Pittwater Road. In addition, a new driveway from Pittwater Road is unlikely to be supported by TfNSW. The existing driveway is considered to be suitable and this RTS report discusses the range of measures that have been incorporated into the development to mitigate any impacts on the existing road network and adjoining signalised intersection.	**Attachment 3** **Attachment 7**
7.7.2	Traffic volumes and RMS input The traffic volumes assumed for the Senior Campus, are deemed adequate. RMS input in the assessment of the application is required as the proposal will directly impact a set of signals and the state road network. The anticipated net decrease in traffic generation of the site is deemed beneficial on the network.	Noted – Feedback from TfNSW has been incorporated into the design of the proposed senior school campus at 800 Pittwater Road (refer to **Section 3** of this report).	**Attachment 7**
7.7.3	Further information There is insufficient information provided with the application and additional information is required to address the below issues: • How the increase in the student numbers at No.210 Headland Road will impact the local traffic network, particularly in regard to pick-up/drop-off periods. The following information is required: ○ Comparison of the existing student mix at No.210 Headland Road would suggest that approximately 27% of the junior students and 17% of the senior students, arrive by car. ○ This this would indicate that once the senior campus operates at 100% capacity, 1,000 students will be attending the Junior Campus at the above rate of drop-off and pick-up. ○ This would relate to an increase of almost 300 students to the junior campus. ○ In accordance with the rates adopted in the applicant's traffic report, the rate of drop-off and pick-up will increase by approximately 50 movements in the peak 1 hour. ○ This will have a significant impact on the local area, particularly as the current School Traffic Management Plan is still not seen as operating at optimum performance. This is noted through a number of site visits, observations and local concerns raised whereby queueing has been seen to extend near to No.224 Headland Road from the drop-off/pick-up bay on Tango Avenue. ○ The afternoon service appears to operate to a near satisfactory level, albeit the impact only occurs for approximately 15min in the afternoon and is therefore within tolerance levels.	The existing student mix at 210 Headland Road comprises (total 1,022 students): • 364 junior school students (PreK to Year 6); • 355 middle school students (Years 7 – 9) and • 303 senior school students (Years 10 – 12). The proposed development seeks to increase the number of middle school students (at 210 Headland Road) and senior school students (at 800 Pittwater Road). No change to the number of junior school students is proposed. Therefore, the proposed student mix at the conclusion of Stage 3 is: • 364 junior school students (PreK to Year 6); • 636 middle school students (Years 7 – 9) (+281 students); • 600 senior school students (Years 10 – 12) (+297 students). This will result in a total of 1,000 students (PreK – 9) at 210 Headland Road and 600 students (Years 10 – 12) at 800 Pittwater Road. Additional traffic surveys were undertaken to by Varga Traffic Planning to understand the traffic generated by the junior school, middle school and senior school students. It is noted that the junior school generates the most traffic, followed by the middle school and the senior school generates the least amount of traffic. The analysis by Varga Traffic Planning found that proposed increase in numbers of middle school students at 210 Headland Road will be largely offset by the relocation of 303 senior school students to 800 Pittwater Road. As set out Table 1 of the RTS report prepared by Varga Traffic Planning, there will be a net increase in 5 vehicles per hour (vph) during the AM peak school period and a net increase in 2 vehicles per hour during the PM peak school period as a result of the increase in number of middle school students at 210 Headland Road (**Figure 33**). This increase is considered to have a negligible impact on the surrounding road network In addition, it is noted that the school has implemented staggered finish times as follows: • Pre-school: 2:45pm; • Kindergarten to Year 2: 2:55pm; • Years 3 – 6: 3:05pm • Years 7 – 12: 3:20pm. This means that any traffic generated by the additional middle school students will occur after the traffic generated by the junior school has already dispersed.	**Attachment 7**

6 Northern Beaches Council

Table 7 Northern Beaches Council dated 28 July 2020

Item #	Issue	Response	Reference
		Table 1 - Nett Change in Drop-Offs & Pick-Ups at 210 Headland Road During the AM & PM School Peak Hours Vehicles per Hour (vph) |	Nett Increase in Middle School Drop-Offs & Pick-Ups Generation |	Less Existing Senior School Drop-Offs & Pick-Ups to be Relocated* |	*Nett Change* in Drop-Offs & Pick-Ups at 210 Headland Rd | | AM | PM | AM | PM | AM | PM | | Monday | 40 vph | 10 vph | 30 vph | 8 vph | +10 vph | +2 vph | | Tuesday | 41 vph | 6 vph | 40 vph | 10 vph | +1 vph | -2 vph | | Wednesday | 38 vph | 12 vph | 20 vph | 9 vph | +18 vph | +3 vph | | Thursday | 32 vph | 16 vph | 35 vph | 8 vph | -3 vph | +8 vph | | Friday | 31 vph | 10 vph | 32 vph | 9 vph | +-1 vph | +1 vph | | **Five Day Average** | **36 vph** | **11 vph** | **31 vph** | **9 vph** | **+5 vph** | **+2 vph** | * Does not include *Senior School* students who will continue to be dropped-off or picked-up at 210 Headland Road with their younger siblings *Figure 33 Extract of Table 1 from the Varga Traffic Planning RTS dated 11 February 2021*	
	• Confirmation of the number of parking spaces 'required' by students needs to be summarised in a table. It is unclear on what basis the applicant has determined 25 parking spaces to be sufficient for 600 senior students, particularly when public parking is minimal due to the location of the Senior Campus.	A total of 82 spaces will be provided for Year 12 students across the three (3) sites: • 210 Headland Road: 17 spaces (as existing); • 224 Headland Road3: 39 spaces; and • 800 Pittwater Road: 26 spaces. Based on an enrolment of 200 Year 12 students (at the completion of Stage 3), this is equivalent to over two (2) spaces per five (5) Year 12 students.	**Attachment 7**
	• Whilst the Green Travel plan appears to promote the use of public transport for students, it is stated that approximately 17% of the existing senior students will arrive by car. However, it does not indicate the number of senior students parking, both on and off-street. Further clarification is required as this will determine whether the proposed 25 parking spaces for Senior Staff will be adequate on the new senior campus.		
7.8 Heath			
7.8.1	Noise The development is expected to generate noise and also will be impacted by noise from the roadway and surrounding industrial areas. An acoustic report has been submitted, as per the SEARs, which addresses how noise entering and exiting the site will be mitigated. From this report a number of recommendations have been proposed which should be included as specific conditions in the event that approval is granted.	Noted. It is accepted that the conditions of consent will include conditions relating to noise mitigation measures.	N/A
7.8.2	Contamination The proposal involves a change of use of No.800 Pittwater Road and No.224 Headland Road from commercial, (medical) to an educational use. Furthermore, No.800 Headland Road has a historic factory use. In accordance with SEPP 55 (Contamination) and the SEARs requirements, a phase 2 contamination report has been submitted. The report identifies that two samples contained elevated nickel and lead. The areas where the sample identified exceedances of the heavy metals are areas not proposed to be excavated. Based on this information Council's Health Unit have advised that further remediation may not be required as long as hard surfaces are mainlined. However, the Department should satisfy itself, prior to determination, that the proposed site will be made suitable for the proposed use. In addition, the Department should address issues with respect of asbestos by means of conditions to ensure compliance of the removal of asbestos in accordance with the relevant legislation. Please refer to suggested Health conditions in the attached referrals."	Noted. It is accepted that the conditions of consent will include conditions relating to site contamination and ensuring that the site is made suitable for the proposed use.	N/A
7.8.3	Food The plans show proposed food premises within the proposed development. The Department should ensure that suitable conditions are included in any future consent to ensure the businesses comply with current Australian standard fit out requirements for food premises and their registration with Council.	Noted – It is accepted that conditions of consent may be included to ensure that ensure the school complies with the current Australian standard fit out requirements for food premises, as well as registering with Council.	N/A

6 Northern Beaches Council

Table 7 Northern Beaches Council dated 28 July 2020			
Item #	**Issue**	**Response**	**Reference**
7.8.4	Pool The proposal provides limited detail for the pool, as such it is recommended that the Department include conditions in any future consent requiring the construction of the pool to meets proper water quality treatment and facility design and to ensure the public pool is registered with Council.	Noted – it is accepted that a condition of consent may be imposed that requires the construction of the pool to meet proper water quality treatment and facility design, as well as ensuring that the pool is registered with Council.	N/A
7.9 Waste			
7.9.1	The operational waste management plan appears to provide on-site arrangements for waste management appropriate for the development. The temporary waste storage area at No.800 Pittwater Road for Stage 2 should be enclosed and adequately screened from view from Pittwater Road and Harbord Road. The plan for waste storage areas at both locations should demonstrate how an appropriate collection vehicle will both enter and leave the site in a forward direction. The plan states in the introduction that “demolition and construction waste (is) addressed in a separate report.” However, this document could not be located for review. The proposal shall ensure all arrangements for demolition and construction waste management be duly considered.	The proposed waste storage area during Stage 2 is located adjacent to the existing Officeworks loading dock. It is set well back from the Pittwater and Harbord Road site frontages and will be adequately screened from view. **Figure 24** illustrates the proposed swept path for a 12.5m long HRV during Stage 2. **Figure 25** illustrates the swept path of 12.5m long HRV during Stage 3. The Demolition and Construction Waste Management Plan was provided as Appendix 31 of the Environmental Impact Statement	N/A
7.10 Stormwater			
7.10.1	The Stormwater Management report prepared by Northrop (dated 29/5/2020 Revision 2) has been reviewed and it is accepted that the plan has been prepared generally in accordance with Councils Water Management Policy (Former Warringah Council). In regard to stormwater quality the proposal plans for No.800 Pittwater Road (stages 2 and 3) utilise and enlarge an existing stormwater detention tank. The consultant has used the DRAINS model to determine site discharge and storage requirements to the 1 in 100 AEP storm event. The pre-developed condition as advised at the previous pre lodgement meeting (PLM) was to be “state of nature” and this requirement has been achieved. The stage 1 redevelopment at No.210 Headland Road does not require on site stormwater detention as the proposal is an internal reconfiguration of the existing building. Stormwater quality controls are not required either. The stage 2 and 3 stormwater quality plan has used a mixture of pit inlet baskets and stormwater cartridge filters. The Music model has demonstrated that this treatment train will meet the water quality objectives of Councils Water Management Policy.	Noted - No response required.	N/A
7.11 BCA			
7.11.1	The proposed development including reports relating to Access and BCA compliance have been reviewed with respect to aspects relevant to Building Certification and Fire Safety Group. There are no objections to the development, subject to Compliance with the BCA and all relevant Standards. In addition, the following reports are to be taken into consideration as part of the design and construction: • Concept Fire Engineering Report by MCD dated 14/11/2019; • Fire DA support Statement by MCD dated 14/11/2019 • BCA Compatibility Statement by Group DLA dated 5/2/2020 • Access Review Report by Funktion dated 4/3/20	Noted - No response required.	N/A

6 Northern Beaches Council

6.2 Northern Beaches Council – 21 October 2020

On 8 October 2020, the proponent met with Council to discuss heritage and urban design issues. Following this meeting, feedback was received from Council's heritage advisor (**Attachment 4**) and urban design advisor (**Attachment 5**). **Table 8** provides a response to the matters raised in Council's letter dated 21 October 2020.

Table 8 Northern Beaches Council dated 21 October 2020

Item #	Issue	Response	Reference
8.0	**Heritage**		
8.1	Noise Barrier Wall Heritage raises no objections to the proposed sandstone base and acrylic top noise wall. Heritage's only comment remains that the metal fins be of a neutral tone to blend in with the heritage building beyond.	A neutral tone has been adopted for the metal fins.	**Attachment 6**
8.2	Location of Western External Walls It remains Heritage's strong preference that the original setback line and colonnade from 1949 be reinstated. However it is accepted that the proposal intends to utilise the existing line established by Officeworks and this can be tolerated by Heritage on balance.	Noted - No response required.	N/A
8.3	Column Interpretation Heritage disagrees with the proposed column interpretation strategy on the western façade of larger fins painted in a deep blue colour. Heritage would prefer that the fins along this elevation remain the same size and colours.	It is no longer proposed to adopt a column interpretation strategy.	**Attachment 6**
8.4	Saw Tooth Roof As indicated in our original submission, Heritage does not object to the idea of a saw tooth roof as it reflects the industrial manufacturing history of this site, but raised concerns about it being visible above the parapet. Heritage notes the comments about the need to provide light into the inside of the building and this impact can be tolerated, on balance, in conjunction with the proposed recessive colour paint scheme.	Noted.	N/A
8.5	Colour Scheme Heritage notes the revised colour scheme and wishes to thank the applicants for addressing this matter. Heritage strongly supports this colour scheme with only a minor amendment. The shading fins should only be painted in the two lightest blue colours.	The proposed colour scheme has been amended in accordance with Council's request.	**Attachment 6**
8.6	Signage Heritage notes the response regarding proposed Sign 2. On balance, Heritage can tolerate the size of this sign.	Noted - No response required.	N/A
8.7	Other Matters Heritage notes the proposal's renders excluded the upper north east window on the clock tower. Heritage understands this was an error and the window is to be retained. This window must be retained. Heritage appreciates the comments regarding the ownership of the bus stop located on Pittwater Road. Heritage would suggest that the way forward is for the colour schedule used on the building be provided to Council to enable the bus stop to be painted in a sympathetic and complementary scheme, thereby recognising the shared history of the two heritage items. Heritage will however maintain that the Heritage Interpretation Plan for the school should include discussion of the bus stop.	The architectural drawings have been amended to show that the window in the upper north-east corner of the clocktower has been retained. A Heritage Interpretation Plan will be prepared for 800 Pittwater Road that includes discussion on the heritage bus stop.	**Attachment 2**

7 Water NSW

Table 9 Water NSW			
Item #	**Issue**	**Response**	**Reference**
9.	Proposal not located near any WaterNSW land, so no particular comments or requirements regarding the proposal	Noted - No response required.	N/A

8 NSW Rural Fire Service

Table 10 NSW Rural Fire Service

Item #	Issue	Response	Reference

10.	The site is not mapped as bush fire prone land on the Council's Bush Fire Prone Land Map, however the adjoining Stoney Range Regional Botanic Garden is an area that can support a bush fire.
	
	In this regard, a bush fire assessment report shall be prepared by a suitably qualified person which assesses the proposed development against the requirements of *Planning for Bush Fire Protection 2019* providing recommendations.
		A Bushfire Assessment Report has been prepared by Building Code & Bushfire Hazard Solutions Pty Ltd, that provides an assessment of the proposed development against the relevant requirements of *Planning for Bush Fire Protection 2019* (PBFP 2019).
		
		The Bushfire Assessment Report notes that the site and the adjoining Stony Range Regional Botanic Gardens have unique characteristics in which the typical assessment pathways under the PBFP 2019 would over-represent the potential threats. These unique characteristics include:
		
		• *Stony Range Regional Botanic Garden was specifically declassified by Council and the NSW Rural Fire Service in 2016 as being any form of bushfire hazard on the Bush Fire Prone Lands Map, which in doing so removed the planning trigger for the application of PBP to all surrounding properties (including the School);*
		• *Council's current Bushfire Prone Land Map was certified on 7th August 2020 by the Commissioner of the NSW RFS following an extensive consultation period. Stony Range Regional Botanic Garden remains not classified as Category 1, 2 or 3 Vegetation;*
		• *There have been no recorded wildfires within Stony Range Regional Botanic Garden;*
		• *The closest recorded wildfire (Allenby Park 2005-06) was located >1.9km to the west of the subject site and Stony Range Regional Botanic Garden;*
		• *The Stony Range Flora Reserve Fire Regime Management Plan (Ecological Australia 2006) is available on Northern Beaches Council's website. This plan includes designated APZs and Land Management Zones;*
		• *Stony Range Regional Botanic Garden has a comprehensive network of paths and trails;*
		• *Elevated sprinklers are located throughout Stony Range Regional Botanic Garden to achieve the desired microclimates;*
		• *Hose points are also available throughout Stony Range Regional Botanic Garden which facilitate early suppression of unplanned fires;*
		• *The subject buildings will be fitted with an internal fire sprinkler system;*
		• *The subject site is located within a NSW Fire & Rescue area with the closest station located in Dee Why (<800m from Stony Range Regional Botanic Garden and the subject site).*
		
		Nevertheless, the Bushfire Assessment Report provides an assessment against the aims and objectives of PFBP 2019, along with Section 6.4 'Development of SFPP developments' of PFBP 2019.
		
		Section 7 of Bushfire Assessment Report makes the following recommendations:
		
		Asset Protection Zones
		1. That all grounds not built upon shall be maintained as an Inner Protection Area as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of Planning for Bush Fire Protection 2019.
		
		Landscaping
		2. That any new landscaping is to comply with Appendix 4 of Planning for Bush Fire Protection 2019.
		
		Emergency management
		3. That a Bush Fire Emergency Management and Evacuation Plan is prepared for the school consistent with the relevant requirements detailed in Table 6.8b of Planning for Bush Fire Protection 2019.
		
		Services (where applicable)
		Water:
		4. That the new internal hydrant system is to comply with the requirements detailed in Table 6.8c of Planning fir Bush Fire Protection 2019, specifically:
		
		• *fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2005;*
		• *hydrants are not located within any road carriageway;*
		• *fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.*
		• *all above-ground water service pipes external to the building are metal, including and up to any taps.*
		• *fire hose reels are constructed in accordance with AS/NZS 1221:1997 Fire hose reels, and installed in accordance with the relevant clauses of AS 2441:2005 Installation of fire hose reels.*
		
		Electricity:
		5. Any new electrical services must comply with Table 6.8c of Planning for Bush Fire Protection 2019, specifically:
		
		• *where practicable, electrical transmission lines are underground.*
		• *where overhead electrical transmission lines are proposed:*
		  ○ *lines are installed with short pole spacing (30 metres), unless crossing gullies, gorges or riparian areas; and*
		  ○ *no part of a tree is closer to a power line than the distance set out in ISSC3 Guideline for Management Vegetation Near Power Lines.*
		
		Gas:
		6. Any new gas services must comply with Table 6.8c of Planning for Bush Fire Protection 2019, specifically:
		
		• *reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 - The storage and handling of LP Gas, the requirements of relevant authorities, and metal piping is used;*
		• *all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;*
			Attachment 14

7 Water NSW

Table 10 NSW Rural Fire Service			
Item #	**Issue**	**Response**	**Reference**
		• *connections to and from gas cylinders are metal;* • *if gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m away from any combustible material, so they do not act as a catalyst to combustion;* • *polymer-sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used; and* • *above-ground gas service pipes external to the building are metal, including and up to any outlets.* The Bushfire Assessment Report concludes that subject to the implementation of these recommendations, the development will achieve a reasonable and satisfactory level of bushfire protection.	

9 Public Submissions

Table 11 Public Submissions

Item #	Issue	Response	Reference
11.0	**Traffic**		
11.0.1	Traffic impacts on the road network The increase in student capacity will have additional off-street parking concerns for residents.	The key themes raised in the public submissions have been addressed as part of the detailed consultation and assessment carried out with TfNSW and Council, and each are addressed in turn below. In regard to parking, this is addressed at Items 1.1.2, 2.2.4 and 7.7.3, as well as in the Traffic and Parking Matters (Response to Submissions) prepared by Varga Traffic Planning. Across the three (3) sites, car parking will increase from 133 spaces (existing) to 265 spaces (at Stages 2 and 3), 82 of which will be provided for Year 12 students (achieving a rate consistent with the DCP requirements). The proposed car parking is adequate for the requirements of the school.	**Attachment 7** **Attachment 9** **Attachment 12**
	The majority of the school traffic will be during the morning drop off and afternoon pick−up periods, which coincide with the peak traffic periods at the intersection of Pittwater Road and Harbord Roads. This will make traffic congestions worse.	In regard to traffic generation in the morning and afternoon peak periods, this is addressed at Items 1.1.1 and 1.1.2, as well as in the Traffic and Parking Matters (Response to Submissions) prepared by Varga Traffic Planning. Additional traffic surveys have been carried out to determine existing traffic activity generated by the existing uses at 800 Pittwater Road and the existing school at 210 Headland Road. At Stage 3, the use of 800 Pittwater Road as a senior school campus will result in a nett reduction in 2,580 vehicles per day compared to existing operations. Traffic movements at 210 Headland Road will adjust for additional junior school students but also a reduction in senior school students. The nett change at 210 Headland Road will be an additional 5 vehicles per hour in the AM peak school period and an additional 2 vehicles per hour in the PM peak school period. Therefore overall, the school traffic conditions will not be changing such that the intersection of Pittwater Road and Harbord Roads will be significantly impacted.	
	Vehicles leaving the 800 Pittwater Road site are forced to turn left, currently many vehicles after turning left, then immediately stop to turn right into a narrow lane to turn around to head north or west. This blocks traffic heading south on Harbord Road.	In regard to vehicle movements out of 800 Pittwater Road, traffic management carried out by the school will ensure that road safety is communicated clearly to all users of the 800 Pittwater Road site. Road safety audits of the intersection of Harbord Road and the laneway have not been raised by TfNSW or Council in any of the discussions to date, and so it is expected this issue is not of concern to the relevant road authorities. Notwithstanding the school will ensure appropriate road safety advice is communicated effectively to all site users.	
	With Pittwater Road classified by the RMS as a State Road with also a Bus Lane, where will traffic queue when waiting to enter the 800 Pittwater Road site?	In regard to traffic queuing, this is addressed in Items 1.1.1, as well as the Traffic and Parking Matters (Response to Submissions) prepared by Varga Traffic Planning. An analysis of the potential impacts of vehicle queuing during Stages 2 and 3 have been undertaken, which have found that the proposed arrangements allow for a capacity of 23 vehicles at Stage 2 and 28 vehicles at Stage 3 without disrupting any other traffic flows. This is to accommodate a forecast maximum demand for pick-up and drop-off of two (2) vehicles. Therefore there is no risk of traffic queuing impacting local or State roads, and this has been accepted by both TfNSW and Council.	
	The Junior School will occupy the site at 210 Headland Road and therefore a greater reliance on parents dropping children at school is created, making the traffic situation in Headland Road, Quirk Street and Tango Avenue worse.	In regard to the traffic impacts associated with 210 Headland Road, this is addressed at Item 1.1.2 as well as the Traffic and Parking Matters (Response to Submissions) prepared by Varga Traffic Planning. The increase in middle school students will result in an additional 36 vehicles per hour in the AM peak school period and an additional 11 vehicles per hour in the PM peak school period. This is offset by the senior school students moving to 800 Pittwater road, which reduces the traffic generation by 31 vehicles per hour in the AM peak school period and 9 vehicles per hour in the PM peak period. Therefore the nett change at 210 Headland Road is an additional 5 vehicles per hour in the AM peak school period and an additional 2 vehicles per hour in the PM peak school period. This increase in traffic will not result in an adverse impact on the surrounding road network and can be managed in accordance with the school's Traffic Management Plan.	
	Headland Road from Harbord Road to the school is a narrow, steep suburban street that can not cope with the amount of traffic generated by the school as it is now.	In regard to the capacity of Headland Road, further to the discussion above, the nett change of traffic movements at 210 Headland Road is an additional 5 vehicles per hour in the AM peak school period and an additional 2 vehicles per hour in the PM peak school period. These movements are not considered sufficient enough to warrant an analysis of the capacity of Headland Road, as the impacts are expected to be negligible and well within the operating parameters of the road and its intersections.	
11.0.2	Additional drop off zone The school designs need to cater for an additional drop off zone rather the using Tango avenue which is clearly overused now for the primarily school component	As discussed above, the nett change of traffic movements at 210 Headland Road is an additional 5 vehicles per hour in the AM peak school period and an additional 2 vehicles per hour in the PM peak school period. This is a result of the senior students moving to the new campus and the proposed increase in junior school students at the existing campus. The proposed development does not involve any works or changes to the 210 Headland Road campus, including any amendments to the existing Traffic Management Plan and associated measures implemented at the site pursuant to Council and NSW Land and Environment Court requirements. The forecast nett change to traffic movements will not result in any noticeable change in the use of the Tango Avenue and does not trigger the requirement for an additional drop off zone to be provided.	**Attachment 7**
11.0.3	Traffic Management Plan An overall traffic management needs to be considered including Headland and Harbord Road intersection (lights) drop off and entry requirements to Pittwater Road entry and exit moved to say Pittwater Road with traffic light management.	The existing School Traffic Management Plan prepared for 210 Headland Road will be retained and implemented with measures reflecting the adjusted student numbers. A new School Traffic Management Plan will be prepared for 800 Pittwater Road. The new School Traffic Management Plan will reflect the outcomes as assessed by Council and TfNSW in regard to the operations and performance of Harbord Road, Headland Road and Pittwater Road.	**Attachment 7**
11.0.4	On-site car parking The sports centre having just 39 car parks means that having the street already clogged with parked cars during the school day, the street will be full in the evenings and weekends. If 2 teams are playing then another 2 teams having a game there will be 4 lots of cars being parked and that will be far more than 39 cars.	The project will provide 41 parking spaces at 224 Headland Road and the parking demand for after-hours use has been anticipated at approximately 33 vehicles per hour. In terms of traffic impacts, these are considered acceptable pursuant to discussions with TfNSW. In terms of parking impacts, the car parking provision on the site has been maximised given the existing built form and achieves a suitable car parking supply for the envisioned usage during school hours and after school hours, in accordance with Council's DCP requirements.	**Attachment 7**
11.1	**Urban Design**		
11.1.1	The slope was used to squeeze in an additional storey which wouldn't have been allowed on level ground	The proposed development does not represent overdevelopment of the land, and responds appropriately to the constraints and opportunities of the land in terms of floor space distribution, connectivity, amenity, heritage conservation and design.	N/A