

CRANBROOK SCHOOL

**RESPONSE TO
SUBMISSIONS**

URBIS

PREPARED FOR CRANBROOK SCHOOL

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Jacqueline Parker
Consultant	Chelsea Salagaras
Project Code	SA6890
Report Number	Final

TABLE OF CONTENTS

1.	Introduction	6
2.	Transport, Traffic, Parking and Bicycle Facilities	7
2.1.	Traffic and Parking Plan	8
2.1.1.	Kerbside pick-up/drop-off management.....	8
2.1.2.	Bus accessibility	9
2.1.3.	Encouraging safe behaviour	9
2.1.4.	Safe pedestrian movement and minimising vehicle-pedestrian conflict.....	10
2.1.5.	Responsibility, review and execution of TPP	10
2.2.	Signage and Line-marking Plan	10
2.3.	Road Safety Evaluation / Road Safety Audit	10
2.4.	Construction Traffic Management Plan	10
2.5.	Bicycle Facilities	10
2.6.	Additional Modelling Requested by TfNSW	12
3.	Community Submissions	13
4.	Aboriginal Cultural Heritage	17
5.	Built Form and Urban Design.....	19
5.1.	Protection of Design Quality.....	19
5.2.	Council Commentary	20
6.	Excavation and Transport of Cut and Fill.....	21
7.	Government Architect NSW	23
7.1.	Active Transport and Linkages.....	23
7.2.	Operational Statement – Community Uses.....	23
7.2.1.	Existing School Operations.....	23
7.2.2.	Proposed Aquatic Centre.....	24
7.2.3.	Centenary Building (Chapel), Multi-Purpose Hall and Theatre	24
7.3.	Materials Board	24
8.	Flooding 25	
8.1.	Probable Maximum Flood Level.....	25
8.2.	Emergency Response Plan	25
9.	Tree Removal and Landscaping	27
9.1.	Tree Removal and Replacement.....	27
9.2.	Landscaping.....	27
10.	Biodiversity.....	28
11.	Visual Impact Assessment.....	29
12.	Woollahra Municipal Council.....	30
13.	Agency Conditions of Consent.....	31
14.	Closing	34
	Disclaimer	35
Appendix A	Amended Architectural Drawings	
Appendix B	Amended Architectural Design Statement	
Appendix C	PTC Advice	
Appendix D	Traffic and Parking Plan	
Appendix E	Green Travel Plan	
Appendix F	Traffic Modelling	
Appendix G	Community Use Management Plan	

Appendix H	Unearthed Archaeology Advice
Appendix I	Stormwater Management and Civil Design Report
Appendix J	Detailed Landscape Plans
Appendix K	BDAR Waiver to OEH
Appendix L	Additional Advice from Richard Lamb & Associates
Appendix M	Construction Impact Assessment and Management Plan
Appendix N	Response to Councils Traffic Comments
Appendix O	Construction Traffic Management Plan
Appendix P	Construction Traffic Management Plan Drawings
Appendix Q	Construction Noise and Vibration Management Plan
Appendix R	Engineering Response to Councils Comments
Appendix S	Moveable Heritage Schedule
Appendix T	Amended Geotechnical Report
Appendix U	Memo: Centenary Building Excavation
Appendix V	Memo: Centenary Retention Design
Appendix W	Arup Monitoring Layout
Appendix X	Amended ESD Report
Appendix Y	Response to Woollahra Municipal Council
Appendix Z	Water Sensitive Urban Design and Water Balance Memo
Appendix AA	Pavement, Signage and Line-marking Plan
Appendix BB	Stage 3 Road Safety Audit
Appendix CC	Response to Stage 3 Road Safety Audit
Appendix DD	Aboriginal Cultural Heritage Assessment Report

FIGURES:

Figure 1 - Location of Bicycle Parking	11
Figure 2 – Piling Platform	21
Figure 3 – Site Plan	22
Figure 4 – Materials Board	24

TABLES:

Table 1 – Traffic, Parking and Bicycle Facilities	7
Table 2 – WDCP 2011	11
Table 3 – Community Submission	13
Table 4 – Recommended Conditions of Consent - Agencies	31

1. INTRODUCTION

This final Response to Submissions report (RtS) has been prepared in response to the community and agency submissions received during the public exhibition of the Environmental Impact Statement (EIS) for Cranbrook School's 'Hordern Precinct Project' (the Proposal). The EIS accompanied a State Significant Development Application 17_8812 (SSDA) for the development of the Cranbrook Senior School Campus at 5 Victoria Road, Bellevue Hill (the site).

The Proposal was exhibited from 24 May 2018 to 22 June 2018. Three community submissions from surrounding land owners were received, two of which were supportive. The items raised in the third submission have been addressed through the provision of the further information contained in this response regarding traffic, access and car parking.

The following agency submissions were also received:

- Office of Environment and Heritage (OEH) requesting further information in relation to:
 - Aboriginal cultural heritage;
 - Flooding;
 - Landscaping/tree removal; and
 - Biodiversity.
- Transport for New South Wales (TfNSW) recommending conditions of consent;
- Roads and Maritime Services (RMS) recommending conditions of consent;
- Sydney Water recommending conditions of consent;
- Government Architect NSW (GANSW) requesting further information, and
- Woollahra Municipal Council requesting further information and recommending conditions of consent.

All agency responses received to date were supportive of the development on the basis of further information being provided or as detailed in the recommended conditions of consent.

This response follows the following format:

- Transport, Traffic, Parking and Bicycle Facilities;
- Community Submissions;
- Aboriginal Cultural Heritage;
- Built Form and Urban Design;
- Excavation and Transport of Cut and Fill;
- Response to the Government Architect NSW;
- Flooding;
- Tree Removal and Landscaping;
- Biodiversity;
- Visual Impact Assessment;
- Response to Councils commentary and recommended conditions of consent; and
- Proposed Conditions of Consent – Agencies.

2. TRANSPORT, TRAFFIC, PARKING AND BICYCLE FACILITIES

Submissions received by TfNSW, RMS and DPE requested further clarification regarding traffic, parking and bicycle facilities. **Table 1** provides a summary of these requests. PTC Traffic Consultants has provided further assessment and clarification in the following documentation enclosed:

- PTC Advice, detailing that all requested items have been addressed - **Appendix C**;
- A Traffic and Parking Plan – **Appendix D**;
- A Green Travel Plan - **Appendix E**;
- Additional traffic modelling – **Appendix F**;
- Pavement, Signage and Line-marking Plan – **Appendix AA**;
- Traffic Management Plan – **Appendix BB**; and
- Response to Stage 3 Road Safety Audit – **Appendix CC**.

Table 1 – Traffic, Parking and Bicycle Facilities

Agency	Item Requested	Response
TfNSW and Council	Green Travel Plan	<p>A Green Travel Plan has been prepared and is attached at Appendix E.</p> <p>The Green Travel Plan will be implemented as part of the ongoing operation of the redevelopment of the School.</p> <p>It is respectfully requested that the Green Travel Plan be approved as part of this consent.</p>
	Traffic and Parking Plan	<p>Refer to Section 2.1 and Appendix D.</p> <p>It is respectfully requested that the Traffic and Parking Plan be approved as part of this consent.</p>
	Signage and Line-marking Plan	<p>Refer to Section 2.2, Section 13 and Appendix AA.</p>
	Road Safety Evaluation / Road Safety Audit (RSA)	<p>Refer to Section 2.3 and Section 13 and Appendix O, Appendix BB and Appendix CC.</p> <p>It is respectfully requested that the RSA and Traffic Management Plan be approved as part of this consent.</p>
RMS	<p>Construction Traffic Management Plan (CTMP).</p> <p>Note: Council also sought the provision of an CTMP</p>	<p>Refer to Section 2.4 and Section 13.</p> <p>It is respectfully requested that the CTMP be approved as part of this consent.</p>
	Confirmation that all buildings and structures (other than pedestrian footpath	<p>All building volumes sit within the site boundary to New South Head Road.</p>

Agency	Item Requested	Response
	awnings) are wholly within the freehold property (unlimited in height or depth), along the New South Head Road boundary.	
DPE	Additional detail regarding the location of bicycle facilities	Refer Section 2.5
	Additional modelling of: <ul style="list-style-type: none"> • New South Head Road / Rose Bay Avenue; and • New South Head Road / Victoria Road. 	Refer Section 2.6
GANSW	Further information to demonstrate active transport strategies and linkages with existing, proposed and potential footpaths and bicycle paths and public transport links.	Refer to Section 7.1

2.1. TRAFFIC AND PARKING PLAN

It was requested that a Traffic and Parking Plan (TPP) be provided to accompany the SSDA which addresses:

- kerbside vehicle pick-up/drop-off management, staff parking management and orderly vehicle queuing;
- maintenance of bus accessibility and student waiting areas;
- safe parent and student behaviour during pick-up/drop-off;
- safe pedestrian movements to the School entrances, minimising vehicle-pedestrian conflicts; and
- the responsibilities of various personnel executing the plan and include measures to monitor, review the performance and make improvements to the plan.

The following provides a summary the TPP response to each of the above. The TPP will be implemented as part of the ongoing operation of the redevelopment of the School and will be updated annually if required.

2.1.1. Kerbside pick-up/drop-off management

The following kerbside pick-up/drop-off traffic management is proposed in the TPP:

- The internal driveway will be open for use between;
 - 7:00am – 9:00am; and
 - 3:00pm – 5:00pm.
- The drop-off for students will be naturally staggered with cars arriving at random intervals over the supervised period from 7.45am and 8.15am, with the peak expected between 08:00 – 08:15am given parents arrive at various times depending on their family's schedule.
- The departure of students travelling by car will be supervised between 3.15pm and 3.45pm. Pick up will be undertaken in the last (eastern) 'assisted' bays and a minimum of four members of staff will be present to assist students.
- Supervising staff will be required to wear high visibility vests and will be focused on student safety and monitoring of traffic flow.

- All vehicles entering the controlled parking zone for the purpose of picking up and setting down during term time will only approach from the Victoria Road Gate, proceed along the length of the zone, dropping off only at the designated area and exiting via the Rose Bay Avenue Gate.
- The drop off will operate as a 'head of the queue' operation, where vehicles join the queue of vehicles and students alight when the vehicle reaches the end of the queue.
- Students will wait in a designated area until their parent / guardian arrives.
- The pick-up will operate as a head of the queue system. When the car is approaching, the student will be called forward to one of the 'assisted' bays and will then proceed to enter their car, once it comes to a stop.
- The student will enter the car from the passenger side only at the pick-up point.
- Parents will remain in their car and have control of their vehicle at all times. Note: It is the driver's responsibility to ensure his/her passengers' seat belts are secured.
- It is required that, should a vehicle arrive at the head of the pick-up queue before their child is ready, then the vehicle will be instructed to leave the vehicle pick-up queue and return at a later time.
- It should be noted that the spaces provided are 8 metres in length. This allows for vehicles to exit the queue in one movement, should they have undertaken their drop off or pick up activity prior to reaching the head of the queue.

2.1.2. Bus accessibility

As detailed in the TPP, the site is serviced by frequent and numerous bus routes that operate in proximity to the site:

- New South Head Road: Routes – 323, 324, 325 and L24; and
- Victoria Road: Route 326.

These STA services run between 4:30am and 00:30am and provide access from the local area to the City at approximately 30-minute intervals, with additional services at peak times.

In addition, the School operates the following subsidised private bus services:

- Eastern Suburbs Senior School Service;
- North Shore Bus Service; and
- Inner West Service.

The frequency of these services is detailed in the TTP and a detailed map of the movement of pedestrians to each stop is also provided.

2.1.3. Encouraging safe behaviour

To encourage safe behaviour from parents and students during pick-up and drop-off, it is proposed to issue the TPP and public transport information:

- in the Enrolment Pack to parents and students; and
- through School newsletters, the School App and emails to parents.

The TPP forms part of the wider suite of policies which are currently being implemented by the School with respect to arrivals and departures, such as:

- Students walking to School unaccompanied to increase Student health and wellbeing and build independence and resilience.
- Students riding bicycles to School to increase student health and wellbeing.
- Students encouraged to use public transport to take advantage of adjacent bus and ferry services.
- Parents are encouraged to carpool to build community and reduce vehicle movements.

A Traffic Information Sheet will be prepared and distributed to all parents/guardians of students prior to the commencement of use of the new pick-up and drop-off area.

2.1.4. Safe pedestrian movement and minimising vehicle-pedestrian conflict

In order to more effectively manage traffic at the School, the Proposal includes the drop off and pick up provision within the internal driveway. Vehicular access will be via the Victoria Road gate, with egress via the Rose Bay Avenue gate. This will assist in minimising vehicle and pedestrian conflicts off-site.

The drop off and pick up provision accommodates 18 spaces in a head of the queue formation. The spaces are eight metres in length which will allow vehicles to exit the queue in one movement, should they have undertaken their drop off or pick up activity prior to reaching the head of the queue. This will assist in minimising vehicle conflicts on the site.

As detailed in **Section 2.1.3**; student, staff and parents will be informed of the required safety procedures in order to increase pedestrian awareness and minimise potential for conflict between vehicles and pedestrians.

2.1.5. Responsibility, review and execution of TPP

The Cranbrook School Headmaster is the responsible person, who implements, reviews and amends the TPP as necessary. The Headmaster is supported in this role by the Cranbrook School Council and Senior Management Committee.

The teacher/s on duty at pick-up and drop off times will assist in implementing the objectives of the TPP.

2.2. SIGNAGE AND LINE-MARKING PLAN

As detailed in **Section 13**, a signage and line marking plan has been prepared and is attached at **Appendix AA**.

2.3. ROAD SAFETY EVALUATION / ROAD SAFETY AUDIT

The submissions from TfNSW and DPE differed in their request for a Road Safety Evaluation (RSE). DPE sought a RSE on the car/bus drop off/pick up facilities and the adjacent intersections, whilst TfNSW requested a RSE on only the car/bus drop off/pick up facilities.

In discussions with DPE dated 31 July 2018, it was clarified that it was only required to audit the car/bus drop off/pick up facilities, and it was agreed that a Road Safety Audit (RSA) be prepared in lieu of the RSE.

The Applicant has prepared the RSA and this is attached at **Appendix BB**. Subsequent advice from Ptc Traffic Consultants has also been provided at **Appendix CC** which addresses the items raised in the RSA and provides further commentary on how the recommendations will be implemented.

2.4. CONSTRUCTION TRAFFIC MANAGEMENT PLAN

As detailed in **Section 13**, the Applicant has prepared a Construction Traffic Management Plan (CTMP) (**Appendix O**). The CTMP was developed to satisfy the traffic requirements within the Standard Conditions D.9 Construction Management Plan. The Applicant seeks approval of this CTMP in its current form.

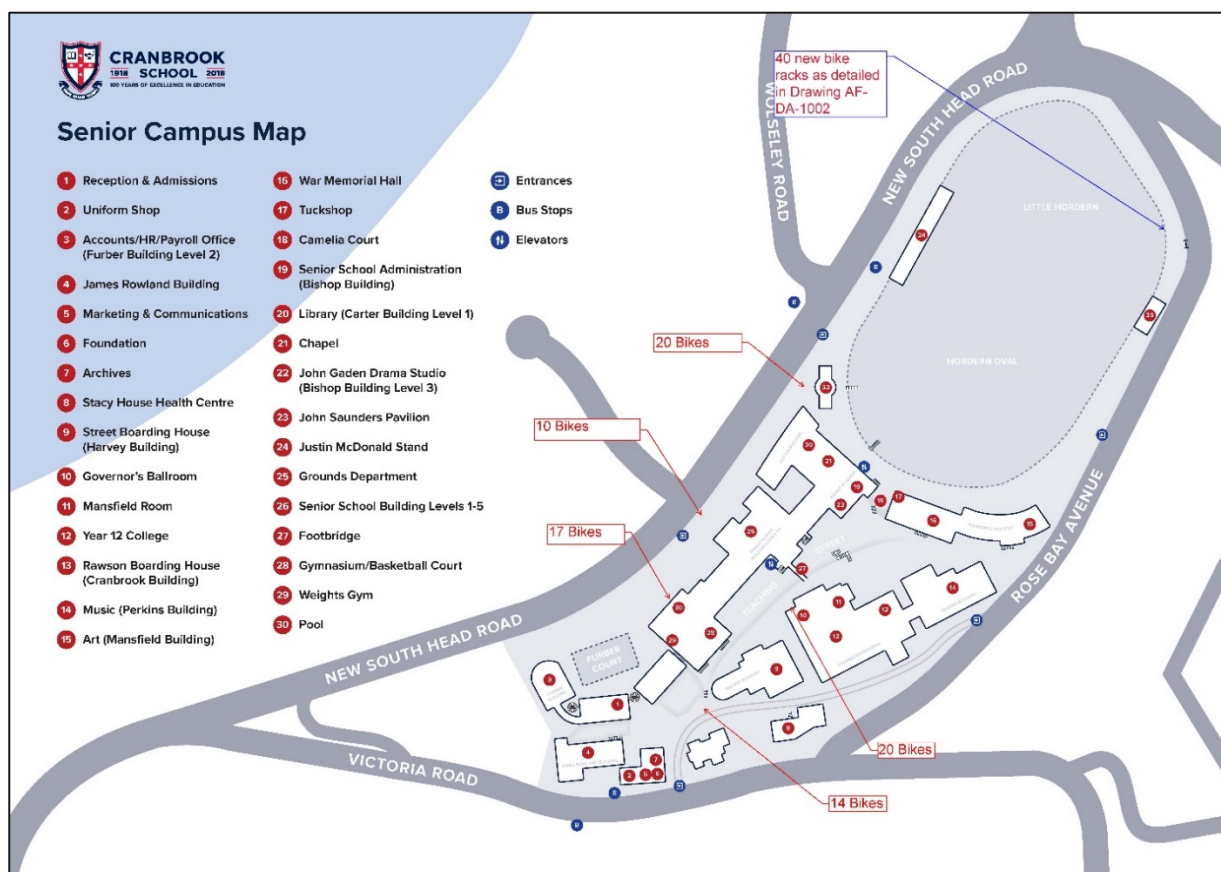
2.5. BICYCLE FACILITIES

As part of the School redevelopment, 40 additional bicycle parks are proposed on campus to supplement the existing 81 bicycle parks. Drawing AF-DA-1002 of the Architectural Drawing set at **Appendix A** details the location of the proposed additional 40 bicycle parks and **Figure 1** details the remaining existing 81 bicycle parks. The remaining bicycle facilities are located in the following locations:

- behind James Roland Pavilion (20 bikes);
- adjacent to Senior School pedestrian entrance from New South Head Road and substation (10 bikes);
- under overhang of senior school pool at ramp to Furber Court from New South Head Road (17 bikes);
- at head of pedestrian stairs to Gym, adjacent to Harvey Building and opposite residence (14 bikes); and

- at NW corner of Cranbrook Building near Harvey Building (20 bikes).

Figure 1 - Location of Bicycle Parking



Source: Cranbrook School

It was also sought that an assessment be provided of the proposed bicycle parking against the Woollahra Development Control Plan (DCP) 2015. Under Clause 11 of *State Environmental Planning Policy (State and Regional Development) 2011*, the application of Development Control Plans is excluded when assessing SSD projects. Notwithstanding this, the proposed bicycle parking has been assessed below:

Table 2 – WDCP 2011

Control	Proposal
<p>F2.6 – Traffic, parking and access</p> <p><i>C9 Bicycle parking is provided.</i></p>	<p>The proposed development includes bicycle storage facilities for 121 bikes. Change facilities are provided at level B2 as detailed in Drawing AF-DA-1003.</p>
<p><i>C10 For secondary and tertiary establishments—dedicated secure bicycle parking is provided at the following rates:</i></p> <p>a) 5% of staff numbers</p> <p>b) 10% of full time student numbers;</p> <p><i>At a central location and with associated change rooms and showers.</i></p>	<p>In addition to the 81 existing bike spaces provided on campus, the total bike parking provision on site of 120 spaces exceeds the 118 spaces as required by the DCP.</p>

Further to the above, PTC traffic consultants have also provided an assessment against Part E1.6 of Woollahra DCP 2015 (in accordance with Council's request). This is referenced in section 1.2 of the Summary of Council Responses prepared by PTC (**Appendix N**).

2.6. ADDITIONAL MODELLING REQUESTED BY TFNSW

Examination and modelling of the following intersections was sought by DPE as part of the request for further information:

- New South Head Road / Rose Bay Avenue; and
- New South Head Road / Victoria Road.

Appendix F provides detail on this additional modelling and concludes that:

- As outlined in the 'Parking and Traffic Assessment' prepared by PTC dated 10th May 2018, the development does not propose any increase to student population beyond the existing enrolment cap; and
- The traffic management procedures outlined should not change the origin and destination of staff and students accessing and egressing the site and therefore should not affect the peak hour traffic movements on the external road network.

3. COMMUNITY SUBMISSIONS

Three submissions from the community were received during the notification period. Two of the submissions were in support of the Proposal with one noting that *“the School is an important piece of infrastructure”*. The remaining items raised relate solely to traffic, car parking and access. For each item raised a summary is provided and a response given in **Table 3**.

Table 3 – Community Submission

Item Raised	Response
Intersection of Rose Bay Avenue and New South Head Road and pedestrian safety.	These intersections have been analysed as part of the Proposal and deemed to be adequate in terms of pedestrian safety.
Further assessment required regarding additional impact on future residences located at 9 and 11 Rose Bay Avenue and resultant accessibility.	There does not appear to be any foreseen traffic impact to these residences: <ul style="list-style-type: none"> • due to their siting away from the proposed car pick-up and drop-off intersection with Rose Bay Avenue; • there is no change to traffic conditions adjacent these proposed residences given this area is already used as a student pickup area; • the number of students is not proposed to increase as part of this proposal.
The ‘storage length’ of proposed kiss and ride facility and the provision of 19 car spaces appears inadequate to accommodate all vehicles queued within the site.	<p>The current pick up and drop off area on Rose Bay Avenue provided approximately 16 spaces. The proposed drop off and pick up provision accommodates 18 spaces in a head of the queue formation. The spaces are eight metres in length which will allow vehicles to exit the queue in one movement, should they have undertaken their drop off or pick up activity prior to reaching the head of the queue. This has been modelled by PTC and was considered to provide adequate queuing space for vehicles.</p> <p>The proposal to re-locate pick-up and drop-off areas onto the site is considered a significant improvement in traffic flow and safety compared to the existing situation.</p>
Objection to the location of the car park entry and exit.	The car park entry point was chosen as it presented the most appropriate and ‘neighbour-friendly’ location for access to the underground parking from Rose Bay Avenue. It does not conflict with the location of residential driveways across the road and will not result in light spill impacts to neighbours. 23 Victoria Road is not located in close proximity to the underground car parking area.

Item Raised	Response
<p>Inadequate traffic and car parking assessment including traffic generation and distribution, operating capacity conditions for the car park and drop off area and lack of consideration for capacity including commercial usage of the aquatic centre (3,500 places over 7 days) the café and an increased capacity for the School.</p>	<p>The inclusion of a car park on the site will assist in decreasing the number of vehicles associated with the School using the local road network for car parking.</p> <p>No objections were raised by government agencies; RMS or TfNSW with regard to the adequacy of the assessment or the proposed design for the drop-off and pick-up area.</p> <p>A Traffic and Parking Plan (Appendix D) has been provided to outline the specific operational details of the pick-up and drop-off area.</p> <p>There is no increase to the capacity of the School as part of the Proposal.</p> <p>PTC has investigated the provision of car parking for the site and it was deemed to be adequate.</p> <p>It is important to acknowledge that the School already operates a commercial aquatic centre with learn-to-swim facilities.</p>
<p>Objection to vehicles exiting the School both left and right onto Rose Bay Avenue – this should be directed to turn left only.</p>	<p>The traffic modelling has been undertaken on the basis that a both left-out and right-out turn onto Rose Bay Avenue is allowed. This was based on the analysis undertaken on the existing site and traffic patterns as it operates currently. A reliance on a left turn only is not an efficient outcome.</p>
<p>The School is increasing its capacity so that it will in the future be entitled to increase the number of additional enrolments.</p> <p>The creation of the car park will encourage students, teachers and other employees of the School to use the car park instead of using public transport.</p>	<p>This SSDA is seeking renewal to aging facilities associated with the operation of the School, there is no increase to the enrolment capacity of the School as part of the Proposal.</p> <p>As detailed in the Green Travel Plan Appendix E, the school intends to make travel to and from its campus safer and more sustainable for students, families and staff. The GTP addresses the local traffic issues around the school and encourages active, safe and sustainable travel methods, such as walking, cycling, scooting, public transport or car sharing.</p> <p>The car park will assist in relocating staff vehicles onto to the site, which currently use the local street network for parking.</p> <p>The on-site car park will also accommodate car parking demands for sporting fixtures on weekends.</p>

Item Raised	Response
Increased traffic generation and resultant impacts including noise, traffic, on street parking issues and pedestrian safety.	The Operational Traffic Impact Assessment and the Noise Impact Assessment lodged with the Proposal address these items.
Increased size of aquatic centre is a commercialisation of a 'learn to swim' venue that will increase the number of users to drive along Rose Bay Avenue to access the car park and the facility.	<p>The School currently operates public learn to swim classes in its existing 25 metre pool and these learn to swim classes are proposed to continue in the new learn to swim pool within the Aquatic and Fitness Centre.</p> <p>These learn to swim programs are for children who may or may not be students of the School and are expected to run for various levels of ability for 30-minute periods, between 9.30am and 7.30pm Monday to Friday, 7.30am to 5.00pm Saturday and 7.30am to 12.30pm on Sundays.</p> <p>Carparking for the learn to swim operations will be both within the new 124 space underground carpark and on street. On street parking will be freed up through the provision of the new underground carpark.</p>
Relocate car park entry and exit to New South Head Road.	<p>Due to the speed, curvature of the road and traffic volumes of New South Head Road, the preferred method of access by RMS and TfNSW, together with PTC was chosen to be Rose Bay Avenue.</p> <p>This access presents as the safest option when compared to New South Head Road.</p>
<p>Objection to the proposed parking restrictions of Rose Bay Avenue.</p> <p>Objection to the creation of any loading zones on Rose Bay Ave.</p>	<p>The loading and no stopping zones have been proposed adjacent to the entry points to the site (both existing and proposed) to increase sightlines and area for manoeuvring adjacent to ingress and egress.</p> <p>The proposed alterations to the on-street parking facilities results in a net gain of approximately 11 unrestricted parking spaces (including the existing 10P spaces) and a reduction of approximately 10 restricted parking spaces. The proposed changes should have no effect on the on-street parking provisions in the vicinity of the development.</p>
Seeks restrictions to residential parking on the eastern side of Rose Bay Avenue to limit daytime use by School patrons.	<p>Noted. This is a matter for Council's traffic division.</p> <p>The Applicant respectfully wishes to request parking arrangements remain the same on the eastern side of Rose Bay Ave. The School are providing 124 additional parking spaces and relocating the pick-up and drop-off zone to the School's internal driveway reducing its impact on local parking and traffic to the surrounding neighbours. The School is also promoting</p>

Item Raised	Response
	Green Travel by looking to implement initiatives to promote public transport, walking and cycling to school for students.
Relocation of kiss and ride to the car parking area.	No objections were raised by government agencies RMS or TfNSW with regard to the location of the drop-off and pick-up area. Relocation to the car parking area, would defeat the purpose of separating those vehicles intended to transit through the site and those intended for parking. The separation of these areas is integral to the smooth flow of traffic associated with the Proposal.
Current pick up drop offs on Victoria Road operate illegally in a bus zone.	Noted. It is expected that with onsite pick up and drop off, the need for cars to use the bus zone will be removed.
The SEARs refer to a requirement to consult with Transport for NSW (TfNSW) and NSW Roads and Maritime (RMS). Based on the EIS and Traffic Report it is evident that no comments have been received from RMS nor TfNSW regarding the operational aspects of the proposed redevelopment.	As detailed in this response, the Applicant has consulted with both TfNSW and RMS.
Traffic Report does not satisfactorily address all of the SEARs.	As part of the SSDA process, an application will not progress to the EIS phase unless they have adequately addressed all of the SEARs. The Application has been progressed and as such, DPE must have considered that the Proposal adequately addressed all of the SEARs.

As detailed in **Table 3**, the majority of the items raised in the single community objection had regard to traffic, car parking and access, associated with the School as it exists today. The objective of the Proposal is to:

- renew aged facilities;
- improve campus amenities;
- enhance student and staff safety;
- reduce the school's impact on its local environment; and
- improve operations.

4. ABORIGINAL CULTURAL HERITAGE

Items regarding Aboriginal Cultural Heritage were raised by both OEH and GANSW in their submissions. In each case, this related to the provision of further information. In summary;

- OEH sought:
 - Clarification on the scope of excavation proposed to deliver the project; and
 - The provision an Aboriginal Cultural Heritage Assessment Report (ACHAR) to identify and appropriately manage any items of Aboriginal Cultural value and ensure that they are not detrimentally impacted upon (in accordance with the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011) and *Aboriginal cultural heritage consultation requirements for proponents* (DECCW, 2010).
- GANSW sought:
 - Further consideration to the integration of Aboriginal cultural heritage context into the design of the built environment in consultation with local Aboriginal community groups. With evidence of consultation to be provided; and
 - Provision of a public art approach that identifies how the public art will be the outcome of an integrated process of working with a particular artist, artist co-operative or Land Council. Noting that the current proposal to include public art by an indigenous artist was supported by GANSW.

The Applicant engaged an Aboriginal Archaeologist to undertake the required work to fulfil the request by OEH received during agency notification phase to prepare an ACHAR in respect to the development site.

After consulting with the Aboriginal Archaeologist, the Applicant requested that the provision of the ACHAR form a pre-Construction Certificate condition so that the assessment of the SSDA may be progressed and determined. Advice was prepared by the Archaeologist and provided to OEH which outlined this request and the projected timeframes (**Appendix H**). The Applicant also sought, via the DPE, to meet with OEH to organise a discussion regarding deferment of this request.

OEH did not support deferment of the ACHAR preparation to a pre-Construction Certificate condition. As such, the Applicant has undertaken the necessary consultation with the Registered Aboriginal Parties (RAP) and has prepared an Aboriginal Cultural Heritage Assessment Report (ACHAR) (**Appendix DD**).

The recommendations made by the Aboriginal Archaeologist as stipulated in the ACHAR are:

1. *Ongoing consultation with the Registered Aboriginal Parties will be undertaken;*
2. *A two stage program of archaeological test and salvage should be undertaken in the areas of impact associated with the proposed works. This two stage excavation should be undertaken in accordance with the research design attached at Appendix C of this report. Archaeological testing will be undertaken in areas of proposed excavation and salvage will be undertaken where necessary in respect of the results of the testing.*
3. *Discussion will be held with the Registered Aboriginal Parties during and at the completion of the program of archaeological test and salvage excavations to determine appropriate artefact management based on the results of the excavations.*
4. *If any skeletal remains are uncovered during the archaeological test and salvage, all work will cease and the relevant authorities will be contacted.*

Cranbrook School commits to undertaking the above recommendations. In preparing for their construction programme, they are seeking the ability to apply for Construction Certificates for those areas not affected by the on-site aboriginal cultural investigations. This will assist in minimising disruption to the Schools recreation facilities and allow for a streamlined construction process. The proposed drafting for the relevant Condition of Consent may be as follows:

The archaeological test and salvage investigations detailed in the Aboriginal Cultural Heritage report prepared by Unearthed Archaeology shall be undertaken prior to the issue of Construction Certificates for any works within the vicinity of the proposed investigations.

5. BUILT FORM AND URBAN DESIGN

The Architectural Drawings (**Appendix A**) and Architectural Design Statement (the Statement) (**Appendix B**) have been amended to reflect minor changes to the Proposal which have occurred post lodgement of the EIS. The changes are as follows:

- Minor design changes to the northern façade of the Aquatic Centre;
- The provision of an egress stair in the exhaust structure on the western side of the oval;
- Minor reconfiguration of maintenance shed on eastern side of oval;
- The provision of exit stairs from the substation kiosk on the eastern side of the maintenance shed;
- Internal reconfiguration of Levels 3 and 4 of the Centenary Building;
- Amendment to the existing ventilation louvres at the New South Head Road frontage – arising during design investigations and the required system to ventilate the aquatic centre;
- A reduction in height to the roof of the main oval pop-up building upon exit to the Aquatic Centre;
- Replacement of external timber battens with solid timber weatherboard to all oval pop-up buildings;
- Reduction in the size of lift pop-up in the memorial garden (adjacent chapel); and
- Removal of the kitchen chimney (adjacent to the Chapel).

All changes are minor in nature and do not negatively impact surrounding neighbours or the design quality of the Proposal.

5.1. PROTECTION OF DESIGN QUALITY

The Statement provides a summary of how each of the following seven design quality principles outlined in Schedule 4 of the Education SEPP have been comprehensively addressed in the proposed architecture and landscape architecture solutions documented in the SSDA.

5. Context, Built Form and Landscape;
6. Sustainable, Efficient and Durable;
7. Accessible and Inclusive;
8. Health and Safety;
9. Amenity;
10. Whole of Life, Flexible and Adaptive; and
11. Aesthetics.

In accordance with GANSW request, the following additional statement is provided by the project Architect, Architectus to detail how design quality will be developed and protected throughout the detailed design, documentation and construction phases:

“Design quality - as it relates to architecture, interior architecture and landscape architecture - will be developed and protected throughout the detail design, documentation and construction phases of the Cranbrook Hordern Oval Redevelopment by a combination of the following:

Ongoing reference by the Project team to the Authority approved development application and all associated conditions of determination;

Ongoing vigilance from the Architect, Interior Architect and Landscape Architect to ensure that client and authority approved solutions are faithfully translated throughout all project phases;

By maintaining a change design register that tracks all changes and is reported upon at regular Project Control Group meetings so that change - which is sometimes necessary - is managed without diluting design quality; and

By maintaining senior leadership representation of Architect, Interior Architect and Landscape Architect throughout the Project lifespan”.

5.2. COUNCIL COMMENTARY

Council’s response letter dated 2 October 2018, provides commentary of the proposed built form and urban design, stating that the urban design outcome is ‘*supported from an urban design perspective*’ as follows:

- *‘The New Centenary Building is regarded by Council’s Urban Designer to be well planned and of good quality aesthetically’.*
- *‘The proposed Aquatic and Fitness Centre is considered by Council’s Urban Design Officer to provide an improvement to this neglected edge of the Campus’.*

6. EXCAVATION AND TRANSPORT OF CUT AND FILL

It was sought to confirm the specific details regarding the amount of excavation, the sourcing and transportation of fill and the location of stockpiles during construction. The School's ECI consultant has been advising the Applicant on construction related matters associated with the Proposal and has provided the following response to clarifications sought regarding excavation and transport of cut and fill. For each item, the query is stated in **bold** and the response follows.

How much of the excavated material is to be retained on-site for reuse and where it is proposed to be stockpiled during construction?

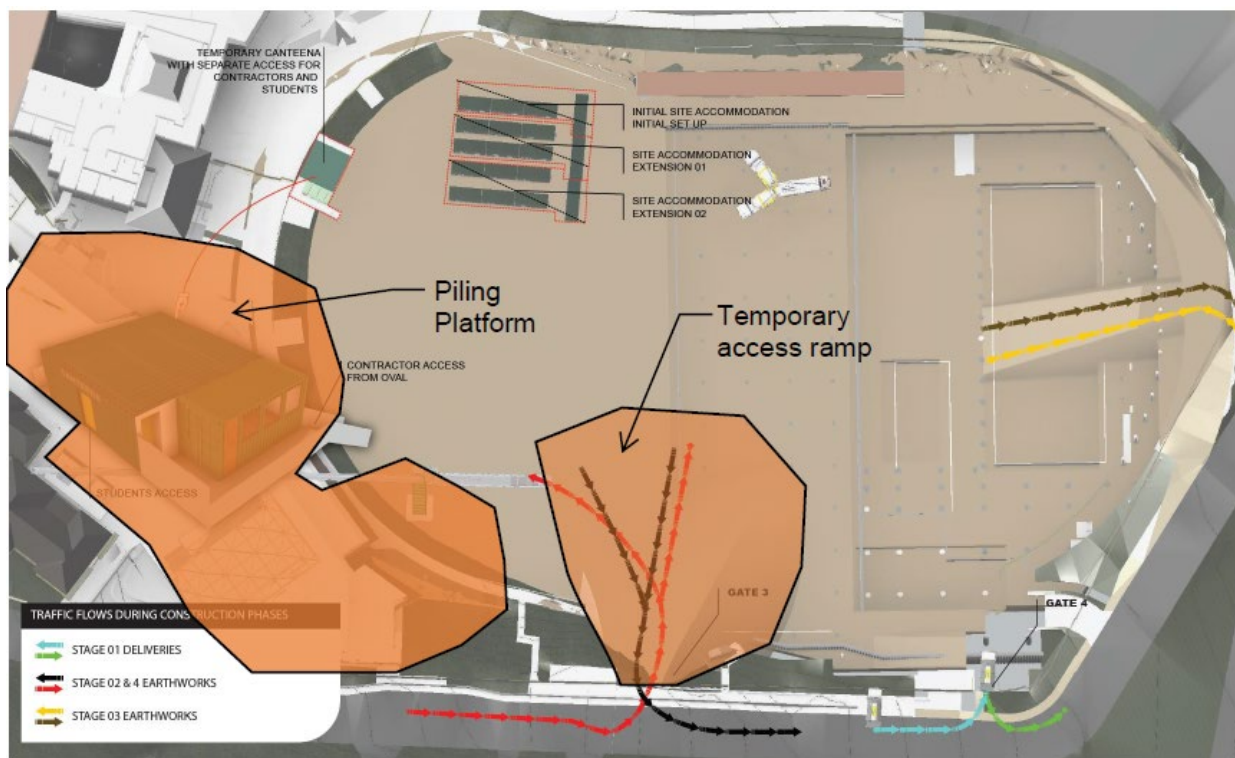
Based on Buildcorp's calculations, approximately 86,000m³ of material is expected to be excavated from the site. Of this volume, approximately 15,000m³ will be retained as a piling platform (**Figure 2**) for approximately 10-months, and approximately 8,000m³ will be retained as a temporary access ramp to/from Rose Bay Avenue (Figure 2) for approximately 18-months. Ultimately, we expect the full volume of excavated material (86,000m³) to be exported from the site.

Figure 2 – Piling Platform



Source: Buildcorp

Figure 3 – Site Plan



Source: Buildcorp

Provide details on the quantity of excavated material that is to be exported off-site and the location it is to be exported to.

Buildcorp expects the full volume of excavated material (86,000m³) to be exported from the site. Based on the geotechnical investigations completed to date, all exported material is expected to be clean sand (classified as either VENM or ENM) and exported to a recycling centre typically located in Greater Western Sydney. The Applicant is investigating several opportunities to partner with local entities who are seeking to import clean material to their site, however any viable opportunity is not expected to be realised until after the development consent is resolved.

Provide details of soil classification from the excavated material (e.g. fill or virgin excavated natural material etc.)

Soil classification has been based on the latest Geotechnical Report. All material identified as “top soil” or “fill” is assumed to be General Solid Waste (GSW) classification. All material identified as “Sand” or “Sandstone” (other than that which is identified as “possible fill”) has assumed to be Excavated Natural Material (ENM) classification. We understand that a portion of the currently assumed ENM will be classified as Virgin Excavated Natural Material (VENM) once visually assessed on site by the Geotechnical Engineer. Only VENM and ENM will be exported from the site. All GSW will be buried on site in accordance with statutory requirements, and the clean material from the borrow-pit will be exported in lieu.

How much fill is to be imported back onto the site (if any) to be reused.

Buildcorp understands that approximately 7,000m³ of engineered growing medium shall be imported to the site to re-construct the Hordern Oval playing field surface.

The Construction Traffic Management Plan is to be updated to reflect the vehicle and truck movements that would be required in response to the above requirements.

Buildcorp expects over 5,000 truck movements will be required to export all spoil material from the site, based on a “truck and dog” arrangement carrying 17m³ of material each. Buildcorp expects over 400 truck movements will be required to import all new material for the playing field reconstruction, based on a truck and dog arrangement carrying 17m³ of material each.

7. GOVERNMENT ARCHITECT NSW

The Government Architect's submission on the EIS dated 22 June 2018 commended the Applicant's undertaking of design development including the internal design competition and review by GANSW through the 'pre-SDRP' review process. The submission also sought further clarification on the following key items:

- Demonstrate active transport strategies and linkages with existing, proposed and potential footpaths and bicycle paths and public transport links with the recommendation to contribute to future modal shifts in transport options away from private vehicles;
- Provide an 'Operational Statement' demonstrating the afterhours strategy for the community uses; and
- Provide a physical materials sample board where materials are shown in the proportion they are intended to be used in the project.

Additionally, it was sought to provide further detail and annotation on the architectural drawings including;

- Key dimensions - overall building dimensions, setbacks on all plans; and
- Annotated wall sections at 1:20 scale to demonstrate typical cladding, window and door details, including materials and general construction quality.

All items requested above by GANSW are included with the appendices to this RtS (refer to **Appendix A**, **Appendix E** and **Appendix G**) and further commentary is provided below where required.

7.1. ACTIVE TRANSPORT AND LINKAGES

As detailed in the amended Architectural Drawings provided by Architectus at **Appendix A** and the ADS **Appendix B** the site contains:

- pedestrian and cycle linkages (pages 22 and 23 of the ADS);
- end of trip facilities at Level B2 (Drawing AF-DA-1003); and
- bicycle racks (Drawing AF-DA-1002).

This infrastructure provides the means to adequately support active transport strategies for staff, parents and students.

A Green Travel Plan (GTP) has been provided at **Appendix E** which aims to increase the active travel of staff, parents and students around the School and support the modal shift away from private vehicles to more active modes of transport.

7.2. OPERATIONAL STATEMENT – COMMUNITY USES

The Applicant has prepared a Community Use Management Plan for the proposed new facilities including the 'Learn to Swim' facility which forms part of the Aquatic and Fitness Centre and the Chapel which forms part of the Centenary Building (**Appendix G**). A summary of the existing and proposed operating hours and management of each use is also provided.

7.2.1. Existing School Operations

The school currently observes the following hours of operation:

- Senior School hours for students: Monday to Friday - 8:15am to 3:20pm
- School reception operating hours: Monday to Friday - 8:00am to 6:00pm
- Sports training: Monday to Friday – 6:30am to 8:00pm
- Sports Competition: Saturdays – 8:00am to 5:30pm

Extracurricular activities occur outside core School hours on weekdays, weekends and public holidays.

7.2.2. Proposed Aquatic Centre

The School currently operates public learn to swim classes in its existing 25 metre pool and these learn to swim classes are proposed to continue in the new learn to swim pool within the Aquatic and Fitness Centre. These learn to swim programs are for children who may or may not be students of the School and are expected to run for various levels of ability for 30-minute periods, between 9.30am and 7.30pm Monday to Friday, 7.30am to 5.00pm Saturday and 7.30am to 12.30pm on Sundays.

The proposed operating hours for the Aquatic Centre are:

- Monday to Saturday: 6:00am to 9:00pm; and
- Sunday: 6:00am to 6:00pm.

Carparking for the learn to swim operations will be both within the new 124 space underground carpark and on street. On street parking will be freed up though the provision of the new underground carpark.

Learn to swim users will be charged a fee (yet to be determined) for attending the learn to swim classes.

7.2.3. Centenary Building (Chapel), Multi-Purpose Hall and Theatre

The Centenary Building including the Multi-Purpose Hall and Theatre will predominantly be used during typical School operating hours. Evening events associated with the typical operations of a senior school (such as parent/teacher evenings, educational events, seminars, year group gatherings) occur periodically throughout the year as and when needed or scheduled.

The Chapel will be utilised by the School throughout the School's standard operating times and for School events and occasions. Outside of the School's operating hours and School event times the Chapel may be available for community use. A booking system via the School reception telephone line will be available to make such bookings. A yet to be determined hire fee and bond would need be charged to cover catering, staffing, security costs and wear and tear costs.

Manned security would need to be provided given the Chapel's proximity to the boarding facilities on site to ensure prospective third-party hirers remain within the confines of the chapel and an agreed perimeter.

A copy of the Community Use Management Plan is attached at **Appendix C**.

7.3. MATERIALS BOARD

A physical materials board has been delivered with this response. **Figure 4** provides a photograph of the materials board provided.

Figure 4 – Materials Board



Source: Architectus

8. FLOODING

In the submission prepared by OEH dated 19 July 2018, it was noted that additional information was to be provided within the AECOM Stormwater Management Plan on overland flow for events larger than the 1% AEP design event up to and including the probable maximum flood (PMF). Further, it was recommended that an Emergency Management Plan (EMP) be prepared. An amended Stormwater Management and Civil Design Report (the SMP) is appended to this report (**Appendix I**). Section 5.4 and Section 6.0 of the SMP address these items and a summary of each provided below.

8.1. PROBABLE MAXIMUM FLOOD LEVEL

Section 5.4 of the SMP provides an overland flow study and DRAINS model for Bellevue Hill and Rose Bay. The SMP Report details that there is an existing overland flow route along New South Head Road and Rose Bay Avenue and that this route carries significant upstream catchment in flood events. To address this existing scenario in the context of the Proposal, the SMP Report provides post-development DRAINS modelling using the PMF storm event, as requested by OEH. The modelling found that:

- overland flow along New South Head Road will largely remain within the channel formed by the roadway kerb to kerb, to the west of the site;
- towards the north, the overland flow will likely overtop the kerb and convey flow across the adjacent footpath at a level that is deemed unsafe ($V \times D > 0.4 \text{ m}^2/\text{s}$) producing a flow path which may enter the area outside of the aquatic and fitness centre; and
- the overland flow path along Rose Bay Avenue may experience unsafe flows with potential overtopping of kerbs during the PMF event.

To account for these scenarios AECOM recommended that:

- the levels of the proposed new driveway should take into account modelled PMF flood depths;
- a number of strategies should be included in the Emergency Response Plan (*'Senior School Evacuation Plan dated January 2018'*) as detailed further in **Section 8.2** below;
- the proposed raised landscaping along the frontage will offer some flood protection to prevent overland flow entering the New Aquatic and Fitness Centre frontage footway; and
- it is further noted that the levels and grading design have ensured the natural overflow point occurs toward the street and not backing toward the building. AECOM recommended that this should be further developed as part of detailed design.

Accordingly, the amended AECOM report includes consideration of the additional information requested from OEH regarding flooding.

8.2. EMERGENCY RESPONSE PLAN

As detailed in Section 6.0 of the SMP Report, a 'worst case scenario' flood event was modelled using DRAINS software in order to make recommendations for inclusion into the existing Cranbrook School *'Senior School Evacuation Plan dated January 2018'*. The recommendations were as follows:

- *The Bureau of Meteorology should be monitored for warnings related to severe storms and flash flooding conditions. Staff should be notified if relevant warnings are issued.*
- *During a storm event with the potential to cause flooding, all persons should remain indoors within the School buildings, all persons that are south of Hordern Oval should remain in place or use an inside assembly point that is not the oval.*
- *Significant overland flows along New South Head Road and Rose Bay Avenue adjacent to the frontage area may create hazardous conditions making evacuation through these areas unsafe. If it is safe to do so, Marshals or Area Wardens should confirm that all persons have left these areas during a storm event. People should not be directed to evacuate through these areas any time there is a flood or severe storm warning. Proper signage should be put in place to exclude people from hazardous areas during flooding.*

- *If required, due to a complex emergency, or to account for students not in class, a secondary muster point is recommended for use during flood events...It should be noted that Justin McDonald Stand is not recommended as an assembly point due to its proximity to the overland flow path.*
- *If persons are already on the oval, they should move to the secondary muster point.*
- *For persons inside the proposed Aquatic and Fitness Centre north of the site, they should remain in place until flooding has subsided.*
- *Communication to Marshals or Area Wardens over the Public Address system or by mobile phone device to be made to ensure all persons within their immediate area are safe and accounted for.*
- *Isolated ponding areas may remain towards the north of the site which may contribute to more widespread traffic issues. Parents are advised not to pick up their children until flooding offsite subsides.*

Cranbrook School is committed to the safety of their students and staff and has commenced updating their 'Senior School Evacuation Plan dated January 2018' (Emergency Response Plan) to reflect these recommendations. The Emergency Response Plan is sought to be provided to the Department prior to the issue of Construction Certificate.

9. TREE REMOVAL AND LANDSCAPING

9.1. TREE REMOVAL AND REPLACEMENT

In OEH's submission dated 19 July 2018, it was requested to clarify both the number of trees to be removed and the number of trees to be planted. It is confirmed that:

- 35 trees are to be removed; and
- 36 trees are to be replanted.

This is detailed on the amended Landscaping Plans prepared by Arcadia (**Appendix J**). For consistency, the Construction Impact Assessment and Management Plan prepared by Botanics Tree Wise People Pty Ltd has also been updated to reflect these changes (**Appendix M**).

OEH also recommended six conditions regarding replacement landscaping and on-going management to be included on the determination notice for the Proposal. The Applicant accepts the inclusion of these conditions as detailed in **Section 13** of this response.

9.2. LANDSCAPING

Arcadia Landscape Architecture has prepared the landscaping scheme for the Proposal. Detailed landscaping plans are provided from page 54 of the Landscape Package at **Appendix J**. These were provided to GANSW post their February review of the Proposal. In their summary letter provided to the Applicant dated 22 June 2018, they stated their request to provide *'further information and drawings that demonstrate an integrated landscape plan'* had *'been adequately addressed'*. This clarification has been provided because the DPE summary letter dated 2 July 2018 still sought that this information be provided under *'Attachment 2 – Other Matter for Consideration 2. Urban Design and Built Form'*. Referencing the GANSW response; it is considered that this matter has been adequately addressed.

10. BIODIVERSITY

In accordance with the Secretary's Environmental Assessment Requirements, the Applicant was required to prepare a Biodiversity Development Assessment Report (BDAR). As part of the SSDA the project ecologist, Travers Bushfire and Ecology, prepared a Biodiversity Assessment Report (BAR). The OEH was referred the BAR and in their submission dated 14 August 2018, they clarified the following:

"The power to determine whether an SSD is "not likely to have any significant impact on biodiversity values" has been delegated to the OEH Senior Executive on 4 December 2017.

Section 7.9(2) of the Biodiversity Conservation Act 2016 (BC Act) states that a SSD application:

"is to be accompanied by a biodiversity development assessment report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values".

...

An applicant may apply to DPE and OEH to waive the requirement to prepare a BDAR. To do this, the applicant would need to provide the relevant information to demonstrate that the development is not likely to have any significant impact on biodiversity values.

A development is not likely to have any significant impact on biodiversity values if it is

- (i) not likely to directly or indirectly impact on native vegetation, or*
- (ii) impact on habitat for threatened species, or*
- (iii) result in any additional biodiversity impacts prescribed under section 6.1 of the Biodiversity Conservation Regulation 2017 (BC Regulation).*

The applicant should refer to Section 1.5 BC Act and sections 1.4 and 6.1 of BC Regulation in consideration of these factors.

...OEH has assessed the information provided in the BAR to determine whether a waiver can be granted. OEH has determined that a waiver can be granted in this instance as the proposed development is not likely to have any significant impact on biodiversity values and there is no need for the SSD application to include a BDAR".

In accordance with the OEH's response regarding biodiversity, Travers Bushfire and Ecology have sought a formal waiver from the OEH (**Appendix K**). This was issued to the DPE on 10 September 2018. Confirmation that the waiver has been granted has not yet been received.

11. VISUAL IMPACT ASSESSMENT

Richard Lamb and Associates (RLA) prepared a Visual Impact Assessment Report in May 2018. The report analysed and assessed the likely impacts of the SSDA. Additional advice from RLA (**Appendix K**) has been sought by the Applicant to address the minor architectural changes proposed (**Appendix A**). In the context of the amended drawings, the RLA advice has had regard to views from:

- No.7 Rose Bay Avenue, open terrace;
- No. 7 Rose Bay Avenue, first floor central bay window;
- No. 5 Rose Bay Avenue, first floor window;
- No. 5 Rose Bay Avenue, central ground floor window; and
- No. 1 Rose Bay Avenue.

The advice concluded that the amendments were minor and make no change to the findings of the RLA Visual Assessment Report with respect to visibility and view sharing. Accordingly, it is considered that the Proposal has adequately addressed SEAR 5 regarding 'Environmental Amenity', specifically with regard to view loss and that a high level of environmental amenity is maintained for surrounding residential land uses.

12. WOOLLAHRA MUNICIPAL COUNCIL

In its response dated 2 October 2018, Council recommended a series of conditions of consent (A) together with amendments to the Construction Impact Assessment Management Plan (B) and Ecological Sustainable Development Report (C) which were exhibited with the EIS.

It is confirmed that the requested changes to (B) and (C) above have been undertaken, refer to **Appendix M** and **Appendix X**, respectively.

With regard to (A) conditions of consent, EPM Projects have prepared a summary response to each item at **Appendix Y**.

13. AGENCY CONDITIONS OF CONSENT

Sydney Water, TfNSW, RMS and OEH recommended conditions of consent be included as part of the determination of this application. These are documented as follows, together with a summary of the Applicant's position on each of these conditions:

Table 4 – Recommended Conditions of Consent - Agencies

Agency	Recommended Condition	Applicant Response
Sydney Water	<i>The approved plans must be submitted to Sydney Water Tap in™ online service to determine whether the development will affect any Sydney Water Sewer or water main, stormwater drains and/or easement, and if further requirements need to be met.</i>	Noted.
TfNSW	<p><i>Green Travel Plan</i></p> <p><i>As part of the ongoing operation of the School, a detailed Green Travel Plan (GTP), which includes target mode shares for both staff and students with the objective to reduce the reliance on private vehicles, shall be prepared. The GTP must be implemented accordingly and updated annually.</i></p>	<p>A Green Travel Plan has been provided as part of this response (as detailed in Section 2 and attached at Appendix E).</p> <p>It is agreed to have this condition included to provide the means for the annual update for the GTP.</p>
	<p><i>Traffic and Parking Management Plan</i></p> <p><i>The Applicant shall prepare a Traffic and Parking Management Plan, which details the measures to safely manage the daily transport task to/from the School for both the interim and final design. Traffic and parking management measures that need to be addressed include:</i></p> <ul style="list-style-type: none"> <i>• kerbside vehicle pick-up/drop-off management, staff parking management and orderly vehicle queuing;</i> <i>• maintaining bus accessibility and student waiting areas;</i> <i>• safe parent and student behaviour during pick-up/drop-off; and</i> 	<p>The Applicant has prepared a Traffic and Parking Management Plan attached at Appendix D. The plan will be implemented as part of the ongoing operation of the School.</p>

	<ul style="list-style-type: none"> safe pedestrian movements to the School entrances, minimising vehicle-pedestrian conflicts. <p>The plan shall also detail the responsibilities of various personnel executing the plan and include measures to monitor, review the performance and make improvements to the plan. This plan should be implemented as part of the ongoing operation of the redeveloped School.</p>	
	<p><i>Signage and Line-marking Plan</i></p> <p>The Applicant shall prepare a detailed signage and line-marking plan of the proposed changes to kerbside parking restrictions to accommodate the various vehicle movements to/from the development within the local road network. The preparation of the plan should be made in consultation with and approved by Woollahra Municipal Council. The approved kerbside parking restrictions must be implemented to the satisfaction of Council.</p>	A Signage and Line-marking Plan has been provided at Appendix AA . It is sought that the Plan be approved as part of this SSDA.
	<p><i>Road Safety Evaluation</i></p> <p>A Road Safety Evaluation (RSE, refer to NSW Centre for Road Safety Guidelines for Road Safety Audit Practices and Austroads Guide to Road Safety Part 6: Road Safety Audit) shall be conducted on all relevant sections of road utilised for bus and private vehicle pick-up and drop-off. This should be undertaken as part of the detailed design stage and upon completion of all relevant road works.</p> <p>Appropriate road safety measures and/or traffic management measures shall be implemented based on the outcomes of the RSE.</p>	<p>Addressed in Section 2.3.</p> <p>A Road Safety Audit has been prepared and is attached at Appendix CC. It is sought that the Plan be approved as part of this SSDA.</p>
RMS	<p>Roads and Maritime raises no objection on property grounds provided all buildings and structures (other than pedestrian footpath awnings), together with any improvements integral to the future use of the site are wholly within the freehold property (unlimited in height or depth), along the New South Head Road boundary.</p>	Addressed in Table 1 .
	<p>A Construction Traffic Management detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council prior to the issue of a Construction Certificate.</p>	Refer to Appendix O – A CTMP has been prepared. The Applicant seeks the approval of the CTMP as part of this SSDA.
OEH	<p>OEH highlights that, in assessing the overland flow for the full range of events (including the PMF) provides essential information to inform emergency management and recommends that an emergency response plan is prepared...</p>	As detailed in Section 8.2 Cranbrook School is committed to the safety of their students and staff, and has updated their 'Senior School Evacuation

		Plan' (Emergency Response Plan) to reflect these recommendations.
	<p><i>Replacement landscaping should keep in context with the existing character of the property.</i></p> <p><i>Construction sediment and erosion control measures are to be install and maintained in accordance with Managing Urban Stormwater: Soils and Construction (Landcom 2004) to minimise impact of possible construction sedimentation to local drainage and Sydney Harbour.</i></p> <p><i>Control and eradication of noxious and other invasive ecological weeds should be undertaken to prevent further invasion by these species. Invasive ecological weed species such as Camphor Laurel, Common Olive, Chilean Cestrum, Small-leaved Privet, Mickey Mouse Plant, Senna, Asparagus Fern, Fish-bone Fern, and Madiera Vine were observed with the subject site.</i></p> <p><i>A weed control plan be produced and enacted by the groundskeepers to control or eradicate noxious and environmental weeds which are required to be controlled in accordance with NSW Biosecurity Act (2015).</i></p> <p><i>As field actives may be ongoing until approximately 8pm, lighting on the field is required. Lighting should be turned off at other times to limit disturbances to on-site boarders, neighbours and fauna that may utilise the existing vegetation.</i></p> <p><i>Two (2) nest boxes currently located within the new building footprint are to be moved to nearby retained trees, or new nest boxes install as replacements nearby.</i></p>	<p>The Applicant accepts the recommendations of the Travers Bushfire and Ecology Biodiversity Assessment Report dated April 2018 and accepts that these will be provided as conditions of consent.</p>

14. CLOSING

This response has considered the submissions received from DPE, Council, TfNSW, RMS, GANSW and OEH, and the community during the exhibition of the EIS for Cranbrook School's 'Hordern Precinct Project'.

Following consideration of the authority and public submissions, the applicant has

- Provided updated information where requested;
- Resolved to accept the majority of requested conditions, with minor variation sought to four of the recommended conditions;
- Sought a waiver from OEH from the preparation of a BDAR; and
- Prepared an ACHAR to manage items of Aboriginal Cultural significance should they be uncovered during the construction process.

Overall, the authorities reviews of the proposal found that generally there are no significant adverse impacts associated with the Project, and recommendations have been made for mitigation measures to reduce these impacts further during construction and operation of the Project.

The Proposal in its current form is considered appropriate for the location and should be supported by the Minister for the following reasons.

The Proposal:

- is classified as an 'educational establishment' and is therefore permissible with consent under the Woollahra Local Environmental Plan 2014.
- has been prepared having regard to Council's planning policies and generally complies with the aims and objectives of the planning controls for the site.
- is supported by the community, with only one community objection received to the project.
- is suitable for the site as evidenced by the site analysis and various site investigations, including geotechnical, site contamination, flora and fauna and heritage.
- does not have any unacceptable off-site impacts on adjoining or surrounding properties or the public domain, in terms of traffic, social and environmental impacts. The proposal relocates on-street parking to a basement level, relieving pressure on the constrained parking situation.
- provides bicycle parking spaces and provides access to existing end-of-trip facilities to encourage walking and cycling to and from the site.
- will not increase the number of students at the school and as such does not constitute an intensification of the use of the site.
- is of a high quality in terms of built form, bulk and architectural treatment and responds positively to adjoining development.
- will make a positive contribution to the built form of the school and create an attractive streetscape along New South Head Road.
- significantly improves the landscaping and open space areas of the school with upgraded recreational and learning areas and landscape improvements.
- will result in an improved educational environment for the school through:
 - providing additional open space for students;
 - enabling an excellent academic programme;
 - supporting a fulfilling and diverse extra-curricular experience;
 - developing efficient, effective, expressive and environmentally sustainable facilities.

DISCLAIMER

This report is dated 7 February 2019 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Cranbrook School (**Instructing Party**) for the purpose of Response to Submissions (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A AMENDED ARCHITECTURAL DRAWINGS

APPENDIX B AMENDED ARCHITECTURAL DESIGN STATEMENT

APPENDIX C PTC ADVICE

APPENDIX D TRAFFIC AND PARKING PLAN

APPENDIX E GREEN TRAVEL PLAN

APPENDIX F TRAFFIC MODELLING

APPENDIX G COMMUNITY USE MANAGEMENT PLAN

APPENDIX H UNEARTHED ARCHAEOLOGY ADVICE

APPENDIX I

STORMWATER MANAGEMENT AND CIVIL DESIGN REPORT

APPENDIX J DETAILED LANDSCAPE PLANS

APPENDIX K BDAR WAIVER TO OEH

APPENDIX L ADDITIONAL ADVICE FROM RICHARD LAMB & ASSOCIATES

APPENDIX M CONSTRUCTION IMPACT ASSESSMENT AND MANAGEMENT PLAN

APPENDIX N RESPONSE TO COUNCILS TRAFFIC COMMENTS

APPENDIX O CONSTRUCTION TRAFFIC MANAGEMENT PLAN

APPENDIX P CONSTRUCTION TRAFFIC MANAGEMENT PLAN DRAWINGS

APPENDIX Q

CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN

APPENDIX R ENGINEERING RESPONSE TO COUNCILS COMMENTS

APPENDIX S MOVEABLE HERITAGE SCHEDULE

APPENDIX T AMENDED GEOTECHNICAL REPORT

APPENDIX U

MEMO: CENTENARY BUILDING EXCAVATION

APPENDIX V MEMO: CENTENARY RETENTION DESIGN

APPENDIX W ARUP MONITORING LAYOUT

APPENDIX X AMENDED ESD REPORT

APPENDIX Y RESPONSE TO WOOLLAHRA MUNICIPAL COUNCIL

APPENDIX Z WATER SENSITIVE URBAN DESIGN AND WATER BALANCE MEMO

APPENDIX AA PAVEMENT, SIGNAGE AND LINE-MARKING PLAN

APPENDIX BB STAGE 3 ROAD SAFETY AUDIT

APPENDIX CC RESPONSE TO STAGE 3 ROAD SAFETY AUDIT

APPENDIX DD ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT



BRISBANE

Level 7, 123 Albert Street
Brisbane QLD 4000
Australia
T +61 7 3007 3800

GOLD COAST

45 Nerang Street,
Southport QLD 4215
Australia
T +61 7 5600 4900

MELBOURNE

Level 12, 120 Collins Street
Melbourne VIC 3000
Australia
T +61 3 8663 4888

PERTH

Level 14, The Quadrant
1 William Street
Perth WA 6000
Australia
T +61 8 9346 0500

SYDNEY

Tower 2, Level 23, Darling Park
201 Sussex Street
Sydney NSW 2000
Australia
T +61 2 8233 9900

CISTRI – SINGAPORE

An Urbis Australia company
#12 Marina View
21 Asia Square, Tower 2
Singapore 018961
T +65 6653 3424
W cistri.com