SSD 6917 - INNER SYDNEY HIGH SCHOOL

SUPPLEMENTARY RESPONSE TO SUBMISSIONS

10 JANUARY 2018
PREPARED FOR NSW DEPARTMENT OF EDUCATION

URBIS

OVERVIEW OF AGENCY SUBMISSIONS RECEIVED

The Response to Submissions for the Project was placed on public exhibition between 11 October 2017 and 11 November 2017. During this period, government agencies, City of Sydney Council, key infrastructure stakeholders and the community were invited to make written submissions on the Project to NSW DP&E.

A total of 13 submissions were received during the EIS exhibition period. Of these submissions, nine were provided by government agencies and Council. Four submissions were provided by community members regarding the project.

1.1. AGENCY SUBMISSIONS

Agency submissions were received from:

- The Department of Planning and Environment (DPE)
- The Office of the Government Architect (GA NSW)
- City of Sydney Council (CoS)
- Transport for NSW (TfNSW)
- Roads and Maritime Services (RMS)
- Sydney Water (SW)
- Office of Environment and Heritage (OEH)
- Heritage Council of NSW
- NSW Environment Protection Authority (EPA)

A response to issues raised by the DPE and all other government agencies are provided in Error! Reference source not found. below.

1.2. PUBLIC SUBMISSIONS

The public submissions were reviewed and categorised according to key issues, being:

- Naming of the School
- Issues addressed by original application and Response to Submissions including, height and scale, overshadowing, traffic impacts, noise and park usage.
- The issues public have been summarised in **Table 1** below.

1.3. ADDITIONAL INFORMATION PROVIDED

In response to the submissions received additional technical information has been prepared to support the ongoing assessment of the application. The below table provides a list of the appendices provided with the Supplementary RTS Submission.

Table 1 – List of Appendices

Reference	File Name	Prepared by
Appendix A	Design Report RTS Submission	FJMT
Appendix B	Addendum Flood Advice	FJMT and Northrop
Appendix C	Sun Study Addendum	FJMT
Appendix D	Addendum Wind Advice	CPP

Reference	File Name	Prepared by
Appendix E	Addendum Traffic Advice	Positive Traffic
Appendix F	Addendum Archaeological Advice	Casey & Lowe
Appendix G	Addendum Acoustic Advice	Acoustic Studio

Table 2 – Response to Agency Submissions

ISSUE	COMMENT	RESPONSE	Comment
Department of Planning and Environment			
Bicycle Parking Numbers	Confirm bicycle parking.	110 Bicycle parking spots are provided. 96 bicycles are located Building 2 Lower Ground. It is intended that these will be used by the students. 14 bicycles are also located in Building 01 Lower ground as a flow over. It is envisaged that these could be used by staff.	
Hours of Operation	Confirm hours of operation.	The proposal is for 7am to 11pm. This is Department's approach on other schools, with activities ceasing at 10pm and one hour to clean up and vacate.	
School Identification Signage	To be confirmed and information provided.	Signage will be provided to the southern wall of the new Forecourt on Chalmers Street.	Refer to Appendix A
Updated GFA Schedule and plans should be provided.	To be provided.	GFA was submitted as part of the RTS Submission. These can be resubmitted if required.	Refer to Drawing No. 2801 of Plan set.
Office of the Government Architect (GA NSW)			
Response to DIP Recommendation	A response prepared to address the recommendations of the DIP is to be provided. Where changes have been made, a justification is required.		
Budget	A number of the recommendations raised by the DIP refer to the potential impact of budget constraints on delivery of the design vision for this project. In addition to those raised above, the GA is generally concerned that the design could be easily undermined by progressive cost cutting measures during development. We	These issues are addressed in the Design Excellence Report (provided to DPE but not issued to GAO) with a point by point response.	

	request further detail on how the building will be delivered to budget, to address the DIP recommendations above and the following; • Potential cost of the extent of curved glazing, glazed balustrading and other curved façade elements such as the proposed aluminium louvres, specifically to ensure that a cheaper / inferior substitution is not made. • Impacts on budget of delivering built forms with complex geometry. • Costs associated with operability / mixed mode, noting that there are inconsistencies in the documentation in this regard. • Materials – including further detail on colours, finishes and durability. We recommend presentation of a holistic and integrated design response to the challenges above.	The D&C Procurement includes a PPR providing detailed design intent and the contractual requirement to deliver the design intent.	
Fencing	It appears that the extent of fencing to street and park edges has been minimised through use of the building edge as the secure line – this is supported. The drawings and report however are not clear on the extent of new palisade fencing over retention of heritage fencing. Please provide detail of extents, type, height and detail. Heritage fencing, walls, plinths and gates should be retained wherever possible and not replaced with new palisade fencing which is of significantly lesser quality.	These comments have been satisfied.	Refer to Appendix A
Materials	Submission of a physical materials sample board to clarify design intent and prove consistency with the design competition and DIP recommendations.	A physical materials board was submitted to the DPE at the time of lodgement of the Response to Submissions.	This has been issued.

City of Sydney			
Flooding	The RtS identifies the need for further site-specific flood studies to be undertaken with appropriate flood mitigation measures to be recommended to protect the school as well as not having an adverse impact on the surrounding streets and the park. As such, the revised proposal currently fails to comply with the City's Interim Floodplain Management Policy. The site specific flood study and flood mitigation options identified in the RtS needs to be prepared and submitted for consideration **prior to any determination of the application**.	Modelling has been completed and discussions have been ongoing with Council. To mitigate the flooding on Chalmers Street it is proposed to remove the sandstone plinth to the north of Building 3 (the northern most heritage building as identified on the attached drawings) up to the current pathway. This will result in a flood level approximately 20mm below the floor level of the most affected property to the east of Chalmers Street (184 Chalmers Street). The removal of the plinth has been discussed with City of Sydney Council who are in support of this solution. With the removal of the sandstone plinth as identified above the flood levels are raised in Pembroke Street by 35mm. City of Sydney (Peter Garland) noted that significant flooding was a pre-existing condition and not due to the new development of the Inner Sydney High School. Therefore, for the purposes of the school, this increase was acceptable. With the removal of the sandstone plinth as identified above and more detailed survey data the flood levels lowered by 50mm.	Refer to Appendix B
Prince Alfred Park Interface	The RtS relies upon land within the park to redefine the overland floor paths, and to mitigate level changes and access requirements between the proposed buildings and the park. These works include the introduction of terraces/retaining walls, a seating wall, and planting that does not tie into the existing park palette. These works are	Prior to the submission of both the SSD Application and the Response to Submissions, the Project Team have discussed the implications of the flood mitigation with Council. Council has given support to the proposed flood mitigation strategy, which includes a series of low walls and planting. The material palette and the planting palette are consistent with Prince Alfred Park. fjmt will continue to	Can be conditioned

	outside of the school grounds within the park and therefore require engagement with the City's Parks and Public Domain teams are necessary to satisfactorily resolve these concerns.	engage with the City on the interface and recommend that a condition would be appropriate.	
Tree Retention and Protection	The arborist report has not properly assessed the likely below and above ground impacts of the works on Trees 1 and 17. The arborist report does not include root investigation information and does not explain how significant an impact the TPZ encroachment will be on the trees in accordance with Australian Standard AS4970. The report also does not satisfactorily address the above ground impacts from construction (including the need to install scaffolding) on the significant tree canopy spread. If necessary, the below and above ground building design should be modified accordingly. In addition, it is recommended that he canopy of both trees be accurately surveyed to establish the extend of pruning required to all the building to be constructed (including any required scaffolding and the required clearances). Once accurately surveyed, any pruning should be limited to a total of 15% canopy removal with a maximum branch diameter of no more than 150mm diameter.	The disturbance to the trees root zone of 20-25% is at the upper level of what is acceptable. The tree genus and construction tolerances have been considered and so has the location of the roots (permeable areas as opposed to under hardscapes). With regard to root mapping, further discussions will be had with Council to identify the objectives of the root mapping. The above ground portion of the trees were considered, Tree 17 has no branches over 150mm to be cut and the pruning will account for less than 15% of the trees crown mass. Alternatives to scaffolding will be investigated to the southern facade to mitigate the risk of further damage to the tree. The construction methodology can be reviewed by the Arborist and agreed prior to the commencement on construction. As a further risk mitigation exercise, pruning of the dominant tree to the south west would also allow additional light to reach the tree which is currently quite compromised. Tree 1 will need some further crown investigation to ensure the building does not impact on the tree 15% crown mass or branches over 150mm. No scaffolding will be in this area either. Alternatives to scaffolding will be investigated to the northern facade to mitigate the risk of further damage to the tree. The construction methodology can be reviewed by the Arborist and agreed prior to the commencement on construction.	Can be conditioned
Natural Ventilation	The adaptability of the project is being inherently constrained due to acoustic requirements. It is not clear that design options	The project is constrained by acoustic requirements, directly impacting ability to naturally ventilate the building. In a meeting with City of Sydney Lord Mayor, there was general	

	for natural ventilation have been explored. The project is vulnerable in the event of any disruptions to the mechanical ventilation system. Without natural ventilation, the spaces will overheat and not be conventional contemporary practice for the design of an office building in Sydney. It is not best practice for teaching spaces and does not acknowledge the importance of a healthy learning environment. There is also no information in the RtS to confirm that night purge through openable windows is available.	agreement that ventilation is not possible when trying to protect the acoustic and pollution environment. Vulnerability of the project in the event of mechanical equipment failure is not considered a major risk. Mechanical ventilation is common practice throughout Sydney, council often require mechanical ventilation in adverse acoustic circumstance. Advice the mechanical design team have received indicates the learning environment would be adversely impacted by acoustic interference associated with natural ventilation. It is unclear how night purge would be achieved through openable windows. The tower building is designed for economy cycle ventilation. This system is capable of purging the building at night or during operation with 100% fresh air as ambient conditions allow.	
Water Efficiency	In the context of a public sector building, dual plumping reticulation for toilet flushing is a reasonable expectation. Even if the roof area is trafficable in terms of student play space, this does not reduce the potential to filter and capture roof water, store and reticulate to toilet flushing. Students and staff should be made aware of this via signage - signage can convey powerfully to students and staff that a commitment has been made conserve natural resources.	The Project team understands the importance of water efficiency. In a public-sector building, water re-use is an important aspect of building performance. However, there are risks associated with trafficable areas and re-use in a building with young persons. Therefore, Northrop has identified the most appropriate approach for the building use is water efficient fixtures, minimising the water usage and ensuring an efficient and safe outcome.	
Energy Efficiency	The City advises that solar and/or heat-pump technology are the logical choices for hot water services. Gas or gas-boosting locks the school into additional operating cost risks. The Northrop response state it is expected that “this will be a relatively minor load within the	The current proposal is to provide gas boosted hot water. The overall approach utilising gas provides a greater response than electricity and also provides a system that mitigates maintenance risk with regards to more technical solutions. Council’s comments on the alternatives in relation to life cycle approaches to the education sector have been	

	building as it will primarily supply science labs and low flow tapware". This may understate standing losses and, if hot water is reticulated to all staff and student bathrooms (this is not mandatory) there are extensive hot water pipe chases which will trigger hot water draw down. Solar (evacuated tube recommended) with controlled boosting or heat pump water heating is recommended.	considered. The proposal is to proceed with the current solution in view of DoE's interest.	
Overshadowing	The drawings are unclear in that shadow falling on glazing of 204-214 Chalmers Street is not identified. However, it is clear that the west facing apartments in the south west corner of this building are impacted at 3pm. At midday, the angle of sun is too oblique to the facade to be of any effect. These apartments therefore rely on solar access from some time after midday (possibly 12:30) for the following two hours. In the existing condition, they are compliant. In the proposed condition, the material submitted shows that solar access is lost at 3pm. This impacts two apartments each at level 1 and 2, and 1 apartment at levels 3, 4, and 5. Without the half hour views, it is not possible to conclude whether these 7 apartments change from a complying to non-complying status. The Department should satisfy itself whether the reduction in sunlight hours results in a solar access non-compliance or not, and whether the resultant amenity is acceptable.	Half hour shadows have been prepared from 12.30pm. There is no additional shadow at 12.3pm and 1.30pm. There is some additional shadow at 2.30pm. There is no impact on 204 Chalmers Street until 2.30pm. This property will not be impacted by the proposal in the morning, midday and early afternoon hours.	Refer to Appendix C

Wind Impacts	The CPP letter in the RtS does not address the specific areas within the school site such as the podium areas located outside the tower footprint. The City's concerns relate to the usability of the spaces and that any physical structures to ameliorate wind are considered holistically as part of the proposal, rather than ad hoc additions at a later date.	The pedestrian wind environment in public areas would be expected to remain similar to the existing. Taking into account the points above and the intended use of the surrounding areas, no immediate need for permanent mitigation measures in the public domain is anticipated for this development.	Refer to Appendix D
Egress	Given that this is a BCA issue, the Department should satisfy itself of the suitability of the revised egress solution.	Due to the verticality of the campus it is critical that the fire egress strategy is simple and clear. To achieve this, all main access stairs are also used as fire egress stairs. The exit system for the building comprises two fire-isolated stairs serving the above ground levels, with independent smoke separated stairs serving the basement level. The exits either discharge directly to Prince Alfred Park to the west and north, or towards the central external landscaped area to the east. Alternative paths of travel are available to the park from the central landscaped area. The widths of the exits serving the building are generally in accordance with the deemed-to-satisfy provisions of the building. A higher population – up to 400 – is proposed for the level 4 external terrace. The population of this level will be assessed as a fire engineering performance solution considering the low fire hazard and ventilation provided. Evacuation modelling is proposed to assessment ensure that that the increased population of this level does not adversely impact upon evacuation from other parts of the building. An emergency management plan will need to be developed and implemented. This is expected to include a phased evacuation strategy developed in consultation with stakeholders including Fire and Rescue NSW, the fire safety engineer, fire services engineer, architect and users. Consideration will also need to be given to the management of occupants discharging to the east of the new building and direction towards the assembly point in Prince Alfred Park.	Recommend a condition of consent for emergency management plan

Insufficient Information	*Materiality and Facades* – Insufficient information has been submitted to clarify or confirm final material selections. A sample board has not been provided to the City for review.	A physical materials board was submitted to the DPE at the time of lodgement of the Response to Submissions.	
	Full commercial kitchen – Insufficient information has been submitted regarding the full commercial kitchen now proposed. The Department should satisfy itself that this element of the proposal complies with all relevant standards and is acceptable.	We would request that a condition is provided that sign off by a Kitchen Consultant is provided at CC.	Can be conditioned
Transport for NSW (TfNSW)			
Transport and Pedestrian Management During Operation	Suggested conditions of consent. Preparation of a Transport and Pedestrian Management Plan (TPMP) in consultation with the Sydney Coordination Office within TfNSW, RMS and CoS.	Transport and Pedestrian Management Plan (TPMP) can be undertaken in consultation with the Sydney Coordination Office within TfNSW, RMS and CoS as part of the CC. This will allow time to finalise pedestrian access arrangements / school bus stop locations etc. Condition is acceptable.	Can be conditioned
Green Travel Plan	Preparation of Final Green Travel Plan in consultation with the Sydney Coordination Office within TfNSW.	The size of the school may trigger a need for school special bus services. The GTP indicates a need for monitoring and two potential mitigation measures. The GTP nominates a target of 5% drop-off; whereas the Transport and Accessibility Impact Assessment Report indicates that perhaps 12.5% of the incremental student population might be dropped off. These two estimated proportions are for separate purposes - in the GTP this is a target to aim for in the first two years of operation of the school; the Transport and Accessibility Impact Assessment Report is examining impacts, and a higher proportion is considered appropriate for that purpose.	Can be conditioned

		A condition to prepare a final green Travel Plan is reasonable.	
Construction Pedestrian and Traffic Management Plan	Preparation of a Construction Transport and Pedestrian Management Plan (CTPMP) in consultation with the Sydney Coordination Office within TfNSW.		
Roads and Maritime Services (RMS)			
RMS have provided a number of conditions		Positive Traffic has reviewed and provided a response.	Refer to Appendix E
Advisory comments			
Pedestrian walk times	Additional pedestrian walk times may be required at the intersection of Chalmers Street and Cleveland Street as a result of the development. It should be noted that additional pedestrian walk times may increase delays for vehicles turning left from Chalmers Street (southern leg) to Cleveland Street.	All pedestrian phases at this location run every cycle as is commonplace in the Sydney CBD and is not reliant on pedestrian volumes. This is a matter for the RMS to review once the school is operational.	
SIDRA Model	It is understood from recent correspondence from the applicant that it is no longer intending to provide the electronic copies of the Sidra modelling as this is no longer available.	As per previous correspondence, the SIDRA model is no longer available. This has been discussed with the RMS.	
Pedestrian Level of Service	It is noted that the pedestrian Level of Service is proposed to be assessed through a Fruin analysis. Should the proposed access points and pedestrian facilities require modification, this should be identified in the plans. It is therefore recommended that the pedestrian	A Fruin analysis of surrounding footpaths would likely be undertaken as part of preparing the CC. The Green Travel Plans notes pedestrian infrastructure is of a good quality with little barrier to movement along the school frontage. Pedestrian demands would also be managed with	Can be conditioned

	assessment is provided prior to the determination of the application.	staggered start times as discussed with RMS / TfNSW at consultation.	
Pedestrian Access Points	Pedestrian access points should be located in such a way to guide students to the appropriate crossing locations (ie the main pedestrian access gate should be located closer to the signalised intersection of Cleveland Street/Chalmers Street and/or Prince Alfred Park). Secondary access points should efficiently disperse students while linking to pedestrian facilities to safely and efficiently corral students to their connecting public, active or private transport modes. The main pedestrian gate being located at a mid-block location may encourage large numbers of students to congregate, spill on the road or cross the road at a mid-block locations to the pick-up/set down point.	Noted. Staggering finish times is one method to limit demands. It will be the responsibility of the school staff to corral students during exiting the school to ensure the safety of school children.	
Pick-up/Drop-off Zones	Roads and Maritime retains its concern with regard to the proposed pick-up/drop off zone. As the kerbside drop off would be on the driver's side of vehicles, students on the passenger side of vehicles would exit into traffic lanes. It is noted that the applicant proposes that parents would need to instruct their children to exit the vehicle via the driver's side directly to the adjacent footpath. This assumes no students would sit in the front passenger seat, which may be unrealistic for high school aged students. It may be unrealistic to enforce a condition/management plan that requires that students are not permitted to use the front passenger seat.	This was discussed at length at consultation and is related to the loading zone comment from TfNSW. It was agreed that given the existing time restrictions there is the possibility of a number of locations for school drop off / pick up as parents look for available kerbside parking.	

Access Strategy/Pedestrian Safety Management Plans	Should the above assessment/revisions not be addressed prior to the determination of the application, an Access Strategy/Pedestrian Safety Management Plans should be developed, including details of the proposed operational arrangements to ensure pedestrian safety, prior to student occupation of the site. Staggered start/finish times would be strongly encouraged. The Access Strategy/Pedestrian Safety Management Plans should be regularly reviewed and revised to address operational issues.	This would build on the work of the GTP and would require finalisation of access points to inform this work. Staggered start / finish times are noted.	
Nearby Businesses	Affected businesses should be consulted in relation to the impacts of the proposed 'pick-up/drop-off' zone on Chalmers Street.	The existing No Parking zone allows the drop off / pick up of both goods and persons and thus could be used by parents with no change to the existing arrangements. The access to the No Parking zone would be finalised through consultation with the CoS.	
Infrastructure SEPP	It should be noted that Chalmers Street is not a classified road (unclassified regional road number 7083). Clause 101 of ISEPP should be addressed on this basis, to the satisfaction of DP&E. City of Sydney and TfNSW Sydney Coordination Office would need to be consulted with regard to any physical works on Chalmers Street.	Noted and access arrangements comply with relevant standards.	
Car Park Layout	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) should	Noted and access arrangements comply with relevant standards.	

	be in accordance with AS 2890.1- 2004, AS2890.6-2009 and AS 2890.2 - 2002.		
Parking provisions	Parking provision, including accessible parking for any students, staff and parents/caregivers with a mobility impairment, should be in accordance with Council's requirements.	Noted and parking provision complies.	
	The proposed development should be designed such that road traffic noise from Cleveland Street is mitigated by durable materials in order to satisfy the requirements for habitable rooms under Clause 102 (3) of State Environmental Planning Policy (Infrastructure) 2007.	Noted.	
Swept Path and Large Vehicles	It is noted a swept path plan has been submitted for an 8.8m medium rigid vehicle however the traffic and transport study mentioned access by a 9.2m Council waste collection vehicle being required. The swept path of the 8.8m vehicle cuts very close to obstructions on site including other car parking spaces. There appears to be no additional allowance for the overhang of a 9.2m waste collection vehicle.	Council also provides small rigid waste vehicles as options for waste servicing of properties within the City. Recommend condition of consent that the final size of the waste vehicle be confirmed with Council at time of CC and this vehicle is used to assess the design for CC submission.	Can be conditioned
Security Gate	Any proposed security gate across the driveway will need to be recessed such that the largest vehicle can be contained wholly on site before being required to stop in order to prevent queueing onto the footpath of Cleveland Street.	The security gate will be open during extended working hours and the security line is to the eastern boundary of the carpark. A security gate will be closed after hours and access will not be permitted to the carpark.	Can be conditioned

Sydney Water			
No further comments. A Section 73 Compliance Certificate must be obtained from Sydney Water Corporation and submitted to the Certifying Authority prior to occupation of the building. Sydney Water's formal requirements for servicing the development will be provided will be provided at Section 73 Compliance Certificate applicate phases.			
Office of Environment and Heritage (OEH)			
No further comments			
Heritage Council of NSW			
Tower Height and Design	Despite the amendments to the design, to remove the tower's twist, remove one floor and simplify the composition, the tower's height and design are still over-dominant, and visually intrusive. The amendments are not sufficient to reduce the adverse impact on the setting and view to the significant buildings of the Former Cleveland Street Public School	The revised design has sought to simplify the overall form of the new campus. The decision by DoE to provide an enlarged school on the original Former Cleveland Street Public School has inevitably resulted in a larger form. It is important that the new campus has a spirit of its own and provide a focus and beacon for education in the city. The intention is that both the new and the old buildings work together to provide a harmonious campus. The design has sought to minimise height by the introduction of a basement which has meant that the tower does not occupy the Concept Design envelope. This is a positive change in response to the heritage fabric. The confirmation of the materiality of the Studio Levels (Level 2 and 3) to be terracotta is again a positive move to provide a quality backdrop for the heritage fabric. The proposed terra cotta clad podium sets a responsible scale for the building overall and provides a sufficiently neutral backdrop to maintain the prominence of the heritage buildings in the streetscape. The tower has been simplified in detail and form. The overall design follows the conventional pattern for tall building adjacent to heritage items through the use of a podium. The impact of the tower is mitigated by the relationship of the podium to the adjacent heritage buildings. Now that this relationship is established and accepted, a reduction in the height of the tower will make little change to this relationship nor will the impact of the tower change in any meaningful way.	

Tree Removal	The amended proposal meets the intention of the EIA comment. The trees identified as being of historic significance in the CMP 2016, Tree 1 (Queensland Kauri), Tree 17 (Morten Bay Fig) and Tree 18 (Morten Bay Fig) will be retained and protected.	Retention of three significant trees, given the size of the site and the proposal required for the site is an excellent heritage outcome.	N/A
Proposed raised new north-east courtyard	The amendments to the proposal have reduced the impact and meet the intention of the EIA comment.	This work is necessary for the ongoing function of the site to provide at grade entry to the school. The proposal for this area is respectful of the significant elements in the immediate area and provides appropriate amenity with the least possible intrusion. This is an acceptable inconsistency in relation to CMP Policy 21 given the amenity achieved and the overall requirement that the existing significant buildings continue to function as a school.	N/A
Archaeological Assessment prepared by Casey and Lowe	The delegated Heritage Council submission dated 18 August 2017 requested that the Archaeological Assessment by Casey and Lowe Pty Ltd (July 2016) include more information. However, the July 2016 Archaeological Assessment does not appear to have been updated. Therefore, the July 2016 assessment should be revised in light of previous comments, re-stated below, before it is suitable to inform the assessment of the proposal and guide any work on site, if the proposal is approved.	This is an item of local heritage significance (Item 1477) pursuant to SLEP 2012 and is not an item of State heritage significance. OEH and the Heritage Division have been consulted as part of the SSD application and their comments have been acknowledged. Concurrence is not required. Notwithstanding this, Casey & Lowe have prepared a response which addresses the items raised by the Heritage Council with regard to the Archaeological Assessment. Below is a summary of the items raised by the Heritage Council and a summary comment. Further detail is provided in Appendix F.	Refer to Appendix F
	• *The assessment should address whether extra historical research is warranted for this site, additional to the research outlined in the Perumal Murphy Alessi Heritage Consultants Heritage Assessment.*	Additional historical research is not considered to be warranted at this stage of the project. A thorough understanding of the history of the site, and the implications of this in terms of physical remains has been gained from the Heritage Assessment produced by Perumal Murphy Alessi (2015). Further research of specific aspects of the	

		site's history may be appropriate during post-excavation analysis, depending on the nature of the archaeological remains.	
	• *The assessment should include a comparative analysis, consideration of the site against the relevant NSW Historical Themes and how the themes might be reflected in the archaeological record at this site.*	There have been a number of archaeological projects in Surry Hills and the surrounding areas that relate to the potential archaeological resource within the study area. An unexhaustive list of these has been summarised and discussed within Appendix F.	Refer to Appendix F
	• *The research framework proposed in the Archaeological Assessment Section 7 needs to consider relevant comparative information and the NSW Historical Themes in forming questions to be addressed during archaeological works.*	Given the close connection between archaeological potential and research potential, it is appropriate for all archaeological investigations, including testing and monitoring, to have research design. The archaeological testing and monitoring during the proposed works should endeavour to address a set of research questions directed by the NSW Historical Themes. Casey & Lowe have provided a list of research questions developed for the subject site.	Refer to Appendix F
	• *The Archaeological Assessment needs to provide more information to support the argument for limited research potential.*	The potential archaeological remains on the site have limited research significance because the probability of survival of remains has been assessed being generally low, with some areas of moderate potential. The continuous use of the site as an educational facility through the twentieth century means there have been impacts from new construction, ground levelling, landscaping, and services, on the earlier buildings and features. All these will have an influence of the type and location of the site's archaeological remains and their ability to address research questions.	Refer to Appendix F
	• *In the archaeological assessment's proposed mitigation strategy, clearly describe when and why an archaeologist is*	An archaeologist will be required to monitor certain areas of the site during demolition and excavation stages. There is a possibility that archaeological evidence may survive in	Refer to Appendix F

	required for monitoring and/or the discovery of unexpected finds.	areas assessed as having low archaeological potential, or in areas not excavated during the program of archaeological testing. If unexpected finds are uncovered, work must stop in the vicinity of the find until an archaeologist has assessed the nature and significance of the find. If the find is deemed of local significance the Heritage Division will be notified. A Testing Methodology and Monitoring Methodology is also provided at Appendix F.	
	• *The management strategy should be guided by what is likely to be found and where impacts will occur. Some of the anticipated impacts are likely to be refined or expanded in detailed design.*	Detailed design plans were not available at the time of writing the archaeological assessment. Detailed plans for construction (post lodgement) will give a more comprehensive understanding of the location and extent of the impacts. This allows for a more targeted approach to both archaeological testing and monitoring.	Refer to Appendix F
NSW Environmental Protection Authority (NSW EPA)			
Demolition of Building 4	The EIS for the project indicated that demolition activities (and associated early works) would be undertaken pursuant to a separate development assessment process. Nevertheless, the EPA's submission of 4 August 2017 concerning the project EIS highlighted its concerns that any demolition activities be undertaken in a manner consistent with the EPA's recommendations concerning subsequent stages of construction. The EPA confirms its advice and recommendations subject to appropriate	Demolition works to be undertaken in a manner with the EPA's recommendations.	

	adjustment of the merged assessment process.		
Hazardous materials – asbestos containing materials, lead-based paint and PCBs	The January 2016 Hazardous Materials Risk Assessment Report was not submitted in support of the EIS. The EPA confirms its advice and recommendations concerning management of potential hazardous materials including asbestos containing materials, lead-based paint and polychlorinated biphenyls (PCBs) that may be present on the development site.	Noted	
Hours of Work	The EIS proposes construction hours of 7.30 am to 3.30 pm on Saturdays. Section 2.3 of Attachment A to the EPA's submission concerning the EIS noted that the proposed Saturday work hours (for work audible at surrounding residences) **is inconsistent with the recommended standard construction hours and that the EIS provided no justification for the proposed departure from standard hours**. Table 5 Response to Agency Submissions to the Report indicates proposed construction (and presumably demolition) hours as 7.00 am to 5.00 pm Saturdays "… requested to facilitate delivery of the project to meet the development timeframe …". However, the EPA does not consider productivity to be adequate justification for undertaking project works (audible or likely to be audible at noise	Noted. If required the recommended standard construction hours are accepted. A variation to extend these hours is desired.	

	sensitive land uses) outside the recommended standard hours of construction. Accordingly, the EPA confirms that site preparation, demolition, stripping out, bulk earthworks, construction and construction-related activities (audible or likely to be audible at surrounding residences or other noise sensitive land uses) should only be undertaken during recommended standard construction hours. The EPA further confirms its previous advice and recommendations in Section 2.3 of Attachment A to the EPA's submission dated 4 August 2017.		
Operational Noise – fixed mechanical plant and equipment	Section 3.6 to EIS Appendix S ESD Report states that "natural ventilation is to be used where possible …" and "[n]atural ventilation principles are to be incorporated into the architectural design where possible" whilst noting the need for limited mechanical ventilation for classrooms exposed to high traffic noise emissions. However, section 5.8 to the Report indicates that the proponent now intends that all classrooms are to be "… fully air-conditioned …". The EPA thus anticipates increased operational noise impacts in the absence of feasible and reasonable noise mitigation and management measures matched to the modified mechanical ventilation plant and equipment.	Acoustic Studio has provided a quantitative assessment of noise from fixed mechanical plant and equipment in the SSDA acoustic report, plus provided supplementary documentation and further quantitative assessment for mechanical plant noise on 25 September 2017 (letter attached). These two items adequately address noise impacts from fixed mechanical plant and equipment.	Refer to Appendix G

	The EPA confirms its previous advice and recommendations concerning mitigation and management of noise impacts associated with operation of fixed mechanical plant and equipment, especially mechanical ventilation plant and equipment.		
Operational Noise (other than from fixed mechanical plant and equipment)	Section 3.1 of Attachment A to the EPA's submission concerning the EIS provided detailed advice and recommendations concerning operational noise impacts associated with the operational phase of the development. The EPA notes that Table 5 Response to Agency Submissions to the RtS report indicates noise impacts from the school (including rooftop courts) have been assessed in accordance with City of Sydney Standard Conditions of Development Consent for 'Noise – General'. The EPA emphasises that – a) the EPA is the appropriate regulatory authority for activities undertaken for and on behalf of the Department of Education at the development site, and b) the Council is the appropriate regulatory authority for activities undertaken by external parties, including community organisations, at the school outside normal school hours (excepting where any such activities are undertaken for or on behalf of the Council). The EPA confirms its previous advice and recommendations concerning mitigation and management of operational noise impacts other than those emitted by fixed mechanical plant and equipment.	Acoustic Studio has carried out an assessment of the Level 4 Games Court in accordance with Council's objective criteria. This is the most stringent objective criteria applicable. The EPA acknowledges this and does not request additional assessment from what has already been provided, however, refers to additional recommendations concerning noise mitigation that were previously issued. Acoustic Studio has provided quantitative assessment in the SSDA and provided supplementary documentation for both the Level 4 Games Court and Mechanical Plant. Acoustic Studio can carry out noise compliance monitoring if conditioned.	Refer to Appendix G

WSUD	Table 5 Response to Agency Submissions to the RtS report does not appear to address the advice and recommendation made by the EPA concerning practical opportunities for stormwater harvesting and re-use. The EPA confirms its previous advice and recommendations concerning stormwater harvesting and re-use.	Due to the limited area available for rain and storm water harvesting and storage, as a result of the heritage roof scapes and the requirement to minimise the tower footprint to achieve an acceptable bulk and scale it was deemed more appropriate to provide alternative sustainable responses. The roof areas also provide for recreation limiting the use of rainwater from these areas to similar uses to storm water (i.e. toilet flushing.) Due to the competing priorities around the building operation, the project deemed a focus on energy efficiency and water use minimisation as more cost-effective sustainability outcomes then the duplication of pipework to offset water consumption. Ongoing assessment of these priorities will continue throughout the further design phases of the project. The project team are nevertheless mindful of a sustainable landscape approach and as such have introduced drought resistant species and permeable paving where practical from a safety aspect.	

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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.

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