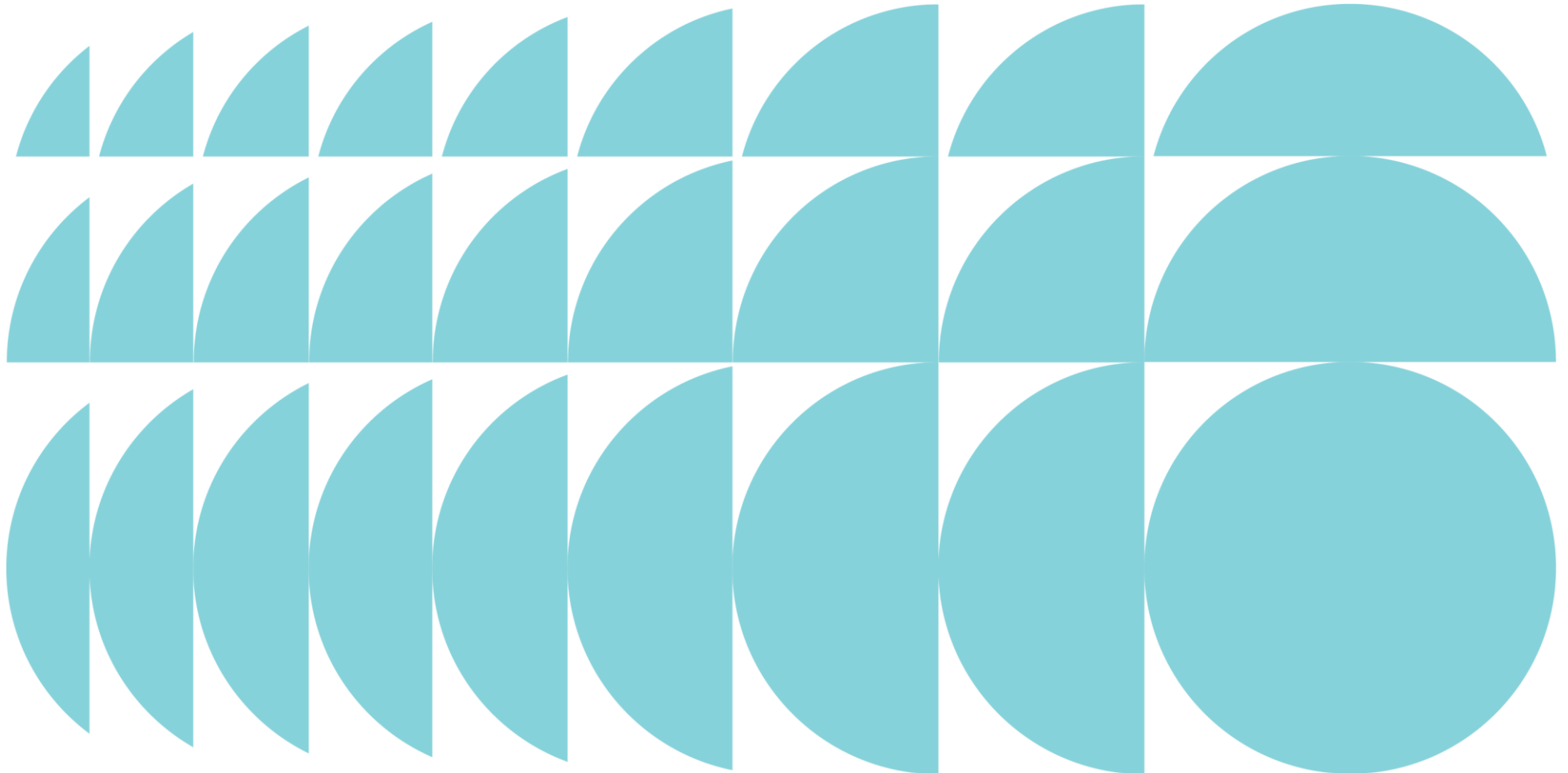


Response to Agency Submissions

Samuel Gilbert Public School Development

Submitted to Department of Planning and
Environment

27 May 2019 | 2190298



Appendix A

Response to Government and Agency Submissions

The following is a response to the full text of submissions provided by or on behalf of State and local government agencies. For completeness, the full text of each submission is provided in the left-hand column, accompanied by the proponent’s corresponding response in the right-hand column. The proponent’s responses have been informed by input by the expert consultant team, and should be read in conjunction with the publicly exhibited Environmental Impact Statement and accompanying technical reports, as well as the Response to Submissions Report to which this document is appended.

The relevant agencies can be found at the following page references:

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Issue	Response
Department of Planning and Environment	
Urban Design and Built Form Council, the Government Architect NSW and the public have raised concerns regarding the appropriateness of the scale of the proposed building on Ridgescrop Drive in the context of the surrounding development and the existing character of the site. The Department is particularly concerned with the scale of Block N given its close proximity to the street and associated removal of trees and lack of space for new screen planting. Consideration should be given to the opportunity to set Building N further back from the street, similar to the arrangement for Building P, in order to provide greater separation and screen planting between the building and the street.	The revised design has increased the building setback and reduced the height of the building, resulting in an overall improvement to the relationship between the school and the surrounding development. Specifically: - Building N has been set back a further 3 metres from Ridgescrop Drive, resulting in a total set back of 11.6 metres. - Building N and P have been reduced in height by 1.3 metres, from 17 metres to 15.7 metres. - The increased set back allows for additional trees and screen planting. These design changes improve the relationship of the development with the surrounding area. See further discussion regarding the built form in the Response to Submissions Report.
The RtS is to address the comments made in relation to the proposed development in the Government Architect NSW's submission.	A response to the SDRP comments was prepared and submitted with the original SSDA as Appendix C of the Architectural Design Report. This initial response was also issued to the Department of Planning and Environment on the 8th November 2018. This response document has been updated to reflect a number of modifications that have been made to the proposed development in response to the Agency Submissions that have been received. The revised State Design Review Panel – Response to Advice Schedule (Issue P3) is included at Appendix D.
The proposed building exceeds the maximum building height prescribed under Clause 4.3 of The Hills Local Environmental Plan 2012. A Clause 4.6 variation request should therefore be submitted with the RtS for consideration.	Noted. A Clause 4.6 variation request is submitted at Appendix F.
Traffic and Parking The trip generation assumptions and the intersection analysis set out in the Traffic and Transport Impact Assessment (TTIA) should address comments made by TfNSW.	The TTIA has been updated to address comments made by TfNSW. Specifically, trip generation projections and intersection analysis at Section 6 of Appendix G have been prepared in accordance with TfNSW's recommendations. 294 vehicular trips to and from the site is the total traffic projected to be generated over a 1.5 hour period. This is equivalent to 196 vehicular trips to and from the site over an hourly period, and comprises 98 inbound and 98 outbound movements.
The TTIA notes that the existing drop-off/pick-up zone has been shut down due to queuing issues and its impact on traffic congestion on Ridgescrop Drive. A further assessment should be undertaken to determine the appropriate provision of dropoff/pick-up facilities for the school on the basis of expected demand. This assessment should not rely on the use of nearby parking facilities and should be designed to avoid congestion on surrounding roads.	Two additional kiss and ride zones are introduced, as well as the reinstatement of the existing kiss and ride. Refer to Section 2.2 of the covering RTS.
The TTIA notes that the level of pedestrian traffic within the pedestrian refuge on Ridgescrop Drive west of Gilbert Road) meets the threshold for consideration of the implementation of a formal pedestrian crossing. Confirmation should be provided as to whether a formal pedestrian crossing is proposed to be delivered as part of the development.	A formal pedestrian crossing is not proposed as part of the subject proposal, however the provision of a formal pedestrian crossing as per the recommendation in the TTIA is subject to The Hills Shire Council's Traffic Committee deliberation.

Issue	Response
Information should be included in the RtS regarding the safety of the location of the proposed main school entrance given its proximity to the intersection of Ridgescrop Drive and Garland Crescent. This should also consider the location of the nearest pedestrian crossings/refuges on Ridgescrop Drive and pedestrian desire lines.	The main pedestrian entrance is proposed to be situated approximately 50m to the east of its current location. The new location remains within walking distance to existing pedestrian crossing facilities across Gilbert Road and Ridgescrop Drive to the east and west. The new entry has been designed to provide improved security and creates a more direct path of access into the school. The existing fence along Ridgescrop Drive will provide a physical safety barrier for people accessing the school.
The proposal includes the retention of 27 existing car parking spaces on the site which is significantly fewer than the 92 spaces required by The Hills Development Control Plan 2012 as noted in the EIS and TTIA. The Department requires adequate on-site car parking to be provided or suitable alternative arrangements to be made. Relying on on-street parking, off-street parking on adjoining land (including private land), possible future parking proposed by Council or inferring the use of public/active transport, given the total shortfall of 66 spaces generated by the development, has not been adequately demonstrated. If additional parking spaces cannot be provided, the RtS should provide justification demonstrating why additional car parking spaces cannot be physically located on the site. In addition, a more detailed Green Travel Plan (GTP) should be provided with the RtS setting out specific detailed measures to achieve mode shift, as well as targets to be achieved.	In accordance with Clause 11 of the State and Regional Development SEPP, The Hills DCP does not apply to SSD applications. It is also noted that the Education SEPP does not include any development standards for car parking associated with schools. As a result, the variation to The Hills DCP is acceptable as the TTIA has confirmed that car parking demand as a result of the proposed works can be accommodated on the surrounding street network. The increased kiss and drop zone proposed as part of this amended application will provide increased capacity for students to be dropped off at the school, reducing the need for parking. Additional car parking cannot be provided on the site due to the significant amount of vegetation and change in levels across the site. Any increase in car parking would require either additional tree removal, earthworks or a loss of landscaping proposed for the site. A detailed GTP is provided at Appendix G, which sets out measures to implement alternative modes of travel, including cycling, public transport and car pooling. The GTP would be implemented through the school communication channels, including newsletters, website, noticeboards and targeted events.

Issue	Response
An Operational Traffic and Parking Management Plan (OTPMP) should be provided. The OTPMP should address staff parking, on-street parking management, drop-off/pick-up, vehicle queueing, bus accessibility, student waiting areas, pedestrian movements, measures implemented to mitigate pedestrian/vehicle conflict and implementation and monitoring of the plan.	A Draft OPTMP is provided at Appendix G and outlines measures to manage parking and drop-off/pick up. A final OPTMP will be prepared prior to CC and subject to further consultation with the school and SINSW.
Clarification should be provided whether end-of-trip facilities would be provided on-site and that these facilities would be adequate having regard to the proposed staff and student numbers.	As noted in the TTIA, 60 bicycle parking spaces have been located on the site – adjacent to Buildings I and Q. Further to this, the following end of trip facilities are to be provided on the site – 12 x Staff Lockers 1 x Staff Shower 2 x Student Showers - Bag storage locations for all students – located adjacent to classrooms. The proposed end of trip facilities are noted on Architectural Drawing SD1614.
Vegetation The Arboricultural Impact Assessment (AIA) submitted with the EIS indicates that further assessment is required to determine the potential to retain trees located just outside of the 3 metre buffer around the works area. These investigations should be undertaken to confirm the extent of tree removal required for the proposed development.	102 trees are required to be removed for the proposed development. Trees located outside of the 3m buffer around the works are identified to be retained and it is recommended that assessment of these trees is undertaken upon completion of works to confirm that they remain suitable for retention.
A Vegetation Management Plan (VMP) should be submitted with the RtS detailing proposed vegetation management arrangements for the entire school site. This shall be prepared in accordance with the recommendations at Section 5.4 of the Biodiversity Development Assessment Report (BOAR) and recommendations included in the AIA.	A VMP will be prepared prior to the relevant CC and in accordance with the recommendations of the BDAR. This approach will allow vegetation management to be closely coordinated with construction works on the site.
Bush Fire - The bush fire report indicates that the entire site is considered to be managed and does not constitute a bush fire hazard. Furthermore, Recommendation 1 in the report states that the site should continue to be maintained as an inner protection area (IPA). - Confirmation and evidence is required that the existing vegetation across the site is managed to the standard of an IPA as set out by the NSW Rural Fire Service. If the existing level of vegetation management does not meet this standard, further information should be provided to clarify any additional vegetation removal required as part of the proposed development.	Since the submission of the SSDA, it has been determined that vegetation across the site was not being managed to the standard of an IPA as required by the NSW Rural Fire Services. As a result, a revised bushfire protection strategy has been formulated. This strategy reduces the size of the Asset Protection Zone (APZ) in accordance with the requirements of <i>Planning for Bushfire Protection 2006</i>. This approach reduces the need for additional vegetation removal and has been accepted by the NSW RFS. Refer to Appendix J for further detail.

Issue	Response
The Hills Shire Council	
It is noted that the current development application does not seek to provide additional on-site parking. Further, the existing on-site parking arrangement is deficient, as it does not provide an adequate number of spaces to service the existing capacity of the school. It is understood that the proposal seeks to increase student numbers from 780 to 1000 and staff numbers from 45 to 58. Despite seeking to further intensify the use by increasing the number of students and staff, the proposal makes no consideration for providing further on-site parking.	As set out in the TTIA and in the RTS Report, car parking demand as a result of the development can be accommodated by existing on-street parking arrangements. Car parking rates set by The Hills DCP do not apply to SSD and there are no car parking rates set by the Education SEPP. Increased kiss and drop capacity is proposed and will be further supplemented by a Green Travel Plan, which promotes alternative modes of travel. As a result, the proposed car parking arrangement is acceptable.
The submitted Traffic and Parking Assessment relies on the future provision of car parking areas associated with the school sports oval and adjoining recreational reserve, in order to cater for the additional parking demand. Council considers that to rely on yet to be constructed parking infrastructure is not appropriate, and that a more immediate solution should be provided at the development application stage.	The TTIA surveys the available on-street car parking to determine whether parking demand can be accommodated on the surrounding street network. The results of the survey show that there are parking spaces in excess of the demand generated by the school. As a result, this solution is acceptable.
Buildings N and P will have a proposed height of 17m, representing a significant departure from the maximum 9m height limit. The substantial height breach will be most evident from Ridgecrop Drive where a number of established canopy trees are proposed for removal. The proposal is considered to fail Principle 1 of Schedule 4 Schools – design quality principles of SEPP (Educational Establishments and Child Care Facilities) 2017. The removal of these canopy trees along with a reduced setback to Ridgecrop Drive limits opportunity for the potential for replanting, in turn, the proposal is unable to ensure landscaping is integrated into the design of the school.	The revised design has increased the building setback and reduced the height of the building, resulting in an overall improvement to the relationship between the school and the surrounding development. Specifically: • Building N has been set back a further 3 metres from Ridgecrop Drive, resulting in a total set back of 11.6 metres. • Building N and P have been reduced in height by 1.3 metres, from 17 metres to 15.7 metres. • The increased set back allows for additional trees and screen planting. The Supplementary Design Report at Appendix D includes an assessment against the design quality of the Education SEPP, which sets out how the proposal responds to the context, built form and landscape of the surrounding area.
The notable built form along the southern elevation is inconsistent with a low-density residential area. Reduced separation, limited landscaping and a significant building height breach is not considered an appropriate design and planning outcome. The proposal may subsequently result in amenity impacts to those properties on the southern side of Ridgecrop Drive. A more appropriate transition from the subject site to these residential properties is necessary, in order to minimise impacts caused by the additional built form.	As outlined above, the building setback has been increased and overall height reduced to improve the interface with the surrounding area. Whilst the site is located in a predominantly low density residential area, it is appropriate that an education facility has a different built form from surrounding dwelling houses. Through the incorporation of a greater setback and increased planting to the site boundary, a potential amenity impacts will be minimised. Notwithstanding the amendments that have been made in response to the concerns raised with the proposed built form, it is important to recognise that a built form that is larger than the character of the surrounding area is appropriate on the subject site because: - There is a significant need for high quality education facilities to meet projected future student demand in The Hills LGA. The provision of this key social infrastructure will result in significant benefits to the wider community that outweigh the localised impacts that occur as a result of the proposal. - The site is highly constrained by bushfire and ecology. Acknowledging the recognised need for the facilities, the alternative to the current proposal would be to expand the footprint of the development, having a far greater impact on the vegetation on the site and producing a worse planning outcome. - Schools are civic buildings, which since the early establishment of Sydney have deliberately been larger than the development that surrounds them in order to act as important markers, that recognise the value of education and their centrality to our communities.
It is understood that the 'Kiss and Drop' indent area located along Ridge has recently been 'shutdown' due to traffic and congestion concerns. It is suggested	The site is constrained by significant vegetation and level changes, which makes expansion of the road network within the site to accommodate a kiss and drop the least preferred option. Instead, it is proposed to

Issue	Response
that a 'Kiss and Drop' area be provided within the confines of the school grounds to help address this issue.	reinstate the existing kiss and drop and further supplement this with sign-posted kiss and drop zones on Ridgescrop Drive and Gilbert Road. This arrangement will be progressed with The Hills Shire Council.
Further to recent correspondence from Council's Manager Development and Control, Mr Paul Osbourne, I wish to advise of additional works in Samuel Gilbert School where Council is seeking to establish public access to an upgraded playing field using land owned by the Department of Education. There is sufficient cleared area in the school play area for a full size football field with an amenities block, but the logical expansion of car parking facilities to support public use of a football field is located at the green pointer shown in the photograph. New car parking in this location will serve a dual use for the football field and during school hours for staff and parents. The principle of this dual use, similar to the actual football field, is in accordance with ministerial directions from education, planning and local government representatives that seek to maximize shared use of state and local government public facilities, saving many millions of dollars. I appreciate that state owned schools generally have insufficient internal parking facilities to meet peak demand periods during school hours. However the constraints on this land require innovative solutions to an expensive problem and Council intends to work closely with the Department of Education, the principle of the school, and local residents to achieve a satisfactory outcome, combining the demand for the proposed new school buildings as well as the proposed playing field in one location that suits both uses. As a result of these negotiations I will be seeking a consultative approach with the Department on alternative means of improving the parking demands through the proposals listed above together with other options that would spread the demand for car parking over a wider peak time, particular during the afternoons.	Schools Infrastructure NSW (SINSW) have provided a direct response on behalf of the Department of Education in correspondence dated 24 May 2019. The Department of Education acknowledges The Hills Shire Council letter and interest for a future opportunity to develop the existing Samuel Gilbert Public School playing field into a full size football field including amenities block with access from Excalibur Avenue and north eastern Ridgescrop Drive boundary. The Department of Education confirms that the lodged SSD-9274 application has no provision or documentation for developing the school playing fields or any change in use for the school, while any proposal would be the subject of a separate development application with the local authority. The Department of Education therefore confirms that any Council approach and shared development proposal will be co-operatively received and managed in accordance with the Department's protocols, policies, and education facility standards.

Issue	Response
Transport for NSW	
Kiss-and-ride capacity Comment: The traffic assessment states the following: <i>"It is further understood following discussions with Council's Road Safety Officer that student pick-up/drop-off activity within the indented 'Kiss and Ride' facility during peak school start/finish periods, have in recent history resulted in queuing extending onto the eastbound Ridgecrop Drive carriageway, which has caused impedance on the through traffic flow." (pg. 22)</i> The above indicates that the current supply of 'kiss-and-ride' kerbside parking (approximately 32m of kerbside length) is insufficient for demand. Although the 'shutdown' of the indented bay would alleviate the blockage of the eastbound traveling lane, the demand for pick-up and drop-off would still be present albeit being undertaken elsewhere. As described in Section 5.5 of the report, the kerbside parking restrictions available for private vehicles along the surrounding roads are primarily unrestricted, which indicates that there are no additional 'kiss-and-ride' opportunities currently available. Recommendation: Additional assessment should be undertaken to determine an appropriate provision of 'kiss-and-ride' for the expected demand. It should be recognised that parents/guardians would have different preferences with regards to parking durations. The management of parking surrounding the school should balance the diverse demands of parents/guardians.	It is proposed to reinstate the existing kiss and drop, as well as introduce sign-posted kiss and drop zones on Ridgecrop Drive and Gilbert Road. The future school population of 1,000 students is projected to generate a maximum short term parking demand/queue of 37 vehicles, which requires a drop-off/pick-up bay length of approximately 220 – 230m. The proposed amended development includes an additional combined drop-off/pick-up bay length of 252.5m (i.e. 140m along the northern side of Ridgecrop Drive and 112.5m along the western side of Gilbert Road), which exceeds the minimum projected requirement. As a result, the proposed kiss and drop-off proposal is considered to be adequate in supporting the future demand generated by the school.

Assessment of existing on-street parking demands

Comment: The traffic assessment indicates the provision of 26 formal off-street car parking spaces within the school grounds. The assessment concluded that *'the number of parked vehicles within this off-street parking area was observed to be slightly higher than the formal parking provision'* (pg. 13).

The off-street parking provision is expected to service the parking demands generated by 58 staff. Based on recent studies supporting other school projects within northwest Sydney, it is likely that the majority of staff travel to the school via private vehicle; parking on-site or onstreet. Therefore, it is likely that staff currently utilise on-street parking.

The addition of 13 staff to service the increased student population would likely generate demand for approximately 13 parking spaces. It is likely that staff would utilise eligible parking spaces close to access points. The majority of on-street parking surrounding the school is unrestricted.

It should be noted that staff would generally arrive prior to students arriving and depart after students leave the school. Therefore, staff parking will compete with parent pick-up/drop-off for on-street car parking.

Recommendation: The cumulative on-street parking demands generated by additional staff and pick-up/drop-off activities during the morning and afternoon periods should be assessed. Appropriate measures to manage on-street parking should be recommended to be implemented by the Applicant accordingly.

Surveys undertaken by TSA indicate that the current population of 45 staff generate a peak parking demand of 44 spaces (26 within the on-site parking area and 18 within the on-street parking area along the western side of Gilbert Road adjacent to the eastern site frontage).

Based on the above survey results, a staff parking rate of 1 car space per staff can be established. Based on this parking rate, the increase in the school employment level from 45 to 58 staff could be expected to generate an additional on-street parking demand of 13 spaces.

The parking surveys of the surrounding on-street parking facilities in the immediate vicinity of the site coinciding with the start and finish times of the school show a minimum vacancy of 126 car spaces. The future school population of 58 staff and 1,000 students is projected to generate the following on-street parking demand:

- Long-term staff parking – 31 spaces (18 existing and 13 additional).
- Short-term parking associated with the students pick-up/drop-off – 37.
- Total parking demand generated by staff and students = 68.

Based on the above, it is evident that there is capacity within the surrounding road network in the immediate vicinity to accommodate the additional parking generated by the proposal. No further measures are necessary to manage on-street parking, however the GTP will be implemented to encourage alternative modes of travel.

Issue	Response
Staff bicycle parking and end-of-trip facilities Comment: It is unclear from the traffic assessment whether there are appropriate existing end-of-trip facilities to support staff cycling trips to/from the school. If there is currently no provision for end-of-trip facilities within the school, one should be provided as part of this redevelopment proposal. Recommendations: DP&E and the Applicant should consider the above.	As noted in the traffic report 60 bicycle parking spaces have been located on the site – adjacent to Buildings I and Q. Further to this, the following end of trip facilities are to be provided on the site – • 12 x Staff Lockers • 1 x Staff Shower The proposed end of trip facilities are noted on Architectural Drawing SD1614.

Issue	Response
Trip generation assumptions Comment: The additional walking trips generated have been estimated based on surveys of students utilising the surrounding pedestrian crossing facilities (refer to pg.24 of the traffic assessment). The use of the crossing facilities is unlikely to have a significant correlation between students solely walking between the school and home. The above assumption has been used to inform the private vehicle trip generation, as this has been based on the remaining balance of generated trips (i.e. vehicle trip generation = total trip generation – walking trips – bus trips). Furthermore, the assessment incorrectly estimates the private vehicle trip generation (148 vehicle trips) based on drop-off/pick-up behaviour of parents/guardians. Assuming the mode share and student occupancy rate per vehicle stated within the traffic assessment, the estimated trip generation should be 294 vehicle trips to account for separate inbound and outbound trips. The calculation of the revised trip generation is as follows: • No. of additional students = 220 • Private vehicle mode share = 80% [per traffic assessment] • Student vehicle occupancy rate = 1.2 students per vehicle [per traffic assessment] • Total additional vehicle trips = $(220 \times 80\% / 1.2) \times 2$ [this accounts for inbound and outbound trips occurring within the same hour] Recommendation: The traffic analysis should be revised to account for inbound and outbound trips associated with pick-up/drop-off occurring within the same hour. The subsequent intersection analysis should be revised in response to the revised trip generation assumptions.	The TTIA includes revised traffic generation and intersection performance analysis in accordance with TfNSW recommendations. Refer to Section 6.1 of Appendix G.

Issue	Response
Government Architect NSW	
The Government Architect NSW has been asked to review and provide comment on the EIS for Samuel Gilbert Public School. Please find our response below. This review is based on the Environmental Impact Statement prepared by Minto Planning Services, focusing on the following documents: • Architectural plans (Appendix C) • Landscape plans (Appendix G) Preliminary plans for this proposal were reviewed by GANSW in October 2018, and this response references comments from those reviews, with additional commentary arising from the information provided in the EIS.	Noted.
The proposal as developed has not addressed the issues raised through the SDRP process. On the basis of the material submitted the proposal has not addressed concerns around: • 1. Built form & circulation • 2. Massing & scale • 3. Landscape & context • 4. Materials	A response to the SDRP comments was prepared and submitted with the original SSDA as Appendix C of the Architectural Design Report. This initial response was also issued to the Department of Planning and Environment on the 8th November 2018. This response has been updated to reflect a number of modifications that have been made to the proposed development in response to the Agency Submissions that have been received. The revised State Design Review Panel – Response to Advice Schedule (Issue P3) is included at Appendix D.
Office of Environment and Heritage	
Aboriginal Cultural Heritage If the project is approved, OEH suggests Recommendations (2) (3) and (4) from the ACHA are included as conditions of consent. Conditions of consent should also include the need for protocols if an Aboriginal object (or suspected object) is discovered during construction and also for on-site employees and/or contractors to be made aware of the statutory obligations that apply to the discovery of Aboriginal objects (see recommended conditions of consent below).	Noted.
Biodiversity Native Vegetation OEH notes the native vegetation extent on site has been ground-truthed (see section 3.1.1 of BOAR, page 23) and Figure 1.3 in the BOAR shows 'verified native vegetation' on the site. Comparing Figure 1.3 with Figure 1.2b (site plan showing the location of the proposed works), there appears to be additional native vegetation in the area where buildings N and P are proposed that has not been mapped which will be affected by the development (see pages 8 and 9). The proponent needs to clarify if native vegetation that has not been mapped as 'verified native vegetation' occurs in this area.	Vegetation mapping, largely in the southern half of the site has been updated and is provided at Appendix I. There is a mix of native vegetation and landscaping in the area of Building N & P. The additional area has been calculated as an impact caused by the proposed buildings, with the future vegetation integrity score for that area marked as zero (0). This will increase the credit requirement of the development.

Issue	Response
The BDAR indicates that areas such as this that aren't mapped as vegetation are 'cleared or managed lands which contain limited local native species due to previous clearance(s) and ongoing management'. OEH is aware that these areas may be managed as an asset protection zone (APZ), but managed areas will still contain some biodiversity values which would be lost through clearing. If these areas do contain native vegetation, OEH considers the level of impact may be underestimated.	The vegetation polygons have been amended in the March 2019 updated report to account for outlier native trees. Cleared or managed areas contain landscaped planting rather than remnant native vegetation. No further action is required.
Also, the Executive Summary states that areas of clearing have been calculated for the buildings only and do not include areas that will need to be managed as APZs. It is unclear why APZs have not been included. This also suggests the area considered for impact assessment is an underestimate	The bushfire assessment has been replaced by a new bushfire assessment by Peterson Bushfire that clarifies the extent of required asset protection zones for the proposed buildings and excludes existing APZ management. Therefore the BDAR is only assessing impacts caused by the asset protection zones for the proposed development. The impact assessment has been revised accordingly and now incorporates the required asset protection zones.
Avoid and minimise impact on biodiversity values Some dot points have been provided in Section 5.2 of the BOAR on how the project has avoided or minimised impacts, but these are brief. These dot points include how the location of the project has avoided impacts, but there is no detail on this. More detail should be provided, with reference to section 8.1.1 of the BAM. Also, there is no information on how the project has been designed to avoid impacts (section 8.1.2 of the BAM). Other comments on the BOAR include: • There is some consideration of indirect impacts provided in section 5.1, but more detail should have been provided, with reference to 9.1.4.1-9.1.4.3 of the BAM • There is no mention of prescribed impacts. Although there may be none, the BOAR should at least include a statement that this is the case • More detail should be provided on the measures to mitigate and manage impacts, with reference to sections 9.3.2 and 9.3.3 of the BAM • Recommendations related to the displacement of resident fauna should be made with reference to recommendations in section 9.3.2.2 of the BAM • No adaptive management strategy provided, as per section 9.4 of the BAM • Some recommended mitigation measures are provided in Section 5.4 but there are no details on outcomes, timing or responsibility' • No sensitivity class and no biodiversity risk weighting information has been provided.	The BDAR at Appendix I has been updated to provide further detail in accordance with these requirements. Specifically: • Section 5.2 details how the project has been designed to avoid impacts in accordance with the BAM. • Section 5.1 details potential indirect impacts. • Section 5.1 details that there are no prescribed biodiversity impacts. • Section 5.2 details mitigation and management measures. • Section 5.4 details recommendations related to the displacement of resident fauna. • Section 5.4 details adaptive management measures. • Section 5.4 details timing and responsibilities for implementation of mitigation measures. • Section 6 has been updated to include sensitivity class and biodiversity risk weighting information.

Issue	Response
Sydney Turpentine Ironbark Forest (STIF) The BOAR notes the impact on STIF is estimated at 0.01 ha (see Figure 3.1 and section 4.3.1, page 41) and that the impacts are not considered to be serious or irreversible as the loss of STIF vegetation will be mitigated through native landscaping and replaced at a minimum 2: 1 ratio (see section 4.1.1, page 40). The proponent needs to provide details on the proposed location of the area(s) to be revegetated with STIF. The area(s) should be contiguous with the existing STIF.	The updated estimated impact on STIF remains 0.01ha. The areas of revegetation are defined on the updated landscape plans by Ground Ink Landscape Architects. The landscape plan shows the total area of STIF planted vegetation within the landscape is 0.05ha. To achieve an offset ratio of 2:1, only 0.02 ha of STIF revegetation is required. The landscape plan does not provide a contiguous link of STIF from the southern remnant to the northern remnant, as the bushfire strategy requires a discontinuous link to maintain the existing separation as required for an APZ.
The BPA notes the school site is managed as an Inner APZ except for the two remnant areas of STIF and this will continue in the future (see Figure 9 and section 4.7, page 20). The proponent needs to clarify if the revegetated area(s) of STIF will be managed as an Inner APZ, as the BOAR recommends revegetating native understorey commensurate with STIF to achieve a maximum of 15% cover for APZ compliance (Section 5.4, page 58). If the revegetated STIF is proposed to be managed as an APZ, the proposed removal of STIF will not be adequately mitigated. If the development is approved OEH recommends the following Condition of Consent is included: the existing areas of STIF and revegetated areas of STIF must not be managed as an APZ.	As a result of the revised bushfire strategy, the STIF remnants on site are subject to an APZ for the existing school. Consequently it is not possible to retain the STIF in an unmanaged state. Consequently the BDAR and landscape plans have been updated to reflect the APZ management regime that is required for the existing school and the additional impacts for the proposed buildings, in accordance with the Bushfire Assessment Report at Appendix J. A revised biodiversity credit assessment has been undertaken to reflect existing and new management requirements.
OEH agrees with the BOAR recommendation that the existing area of STIF needs to be delineated on the ground to ensure it is protected from construction impacts and ongoing APZ management (see Section 5.4, page 57). The replanted STIF should also be delineated.	The existing areas of STIF and immediately adjoining areas of vegetation will be protected by either fencing or existing building walls where access is not available. The retained vegetation areas including STIF will hence exclude any student and public access in accordance with an approved vegetation management plan and APZ management requirements. The Landscape Plan has been updated to reflect the integrated requirements.
Tree removal The AIA notes that the definitive number of trees requiring removal is difficult to determine at this stage (section 5, page 9). It also indicates 77 trees within Building Envelope (including 3 metres beyond the platform) are proposed for removal (page 10) while Appendix E2 indicates 87 trees are to be removed. The proponent needs to clarify the number of trees likely to be removed by the project. The Tree Location Plan in Appendix 1 of the AIA is blurred and difficult to read. It is recommended this plan is replaced by a legible plan.	102 trees are proposed for removal as part of this project. The Arboricultural Impact Assessment at Appendix H includes detailed tree schedules at Appendix E, including all trees proposed for removal.

Issue	Response
Fire Mitigation Management The AIA indicates regeneration of the understorey and mid-storey layers is being adversely impacted by bushfire mitigation measures and this is likely to lead to gradual tree decline (page 20). The AIA highlights the importance of understorey trees to the overall health of the larger trees. The AIA found several large trees had been removed and that many trees have been removed since the initial arboricultural assessment (Appendix B3, pages 37 and 38). OEH agrees with the AIA that: • there is a need to meet fire mitigation measures while limiting the loss of beneficial trees and understorey • decisions regarding which trees are removed requires greater consideration and discussion between specialists (see Appendix B3, page 37) • tree tagging is undertaken as part of this SSO project for tree location, data collection and referencing.	Noted. The proposed bushfire mitigation strategy limits the need for vegetation removal or pruning. 102 trees are identified for removal, as outlined in the Arboricultural Impact Assessment at Appendix #, Landscape Plans at Appendix H. The updated BDAR at Appendix I reflects the proposed tree removal, bushfire mitigation strategy and landscape plans. Tree tagging will be implemented in accordance with the recommendations of a VMP.

Site Landscaping

OEH in its submission on the SEARs recommended the site landscaping use a diversity of native trees, shrubs and groundcover species from the relevant native vegetation community. The Indicative Plant Palette indicates trees to be planted at the site include exotic species such as:

- Chinese Weeping Elm (*Ulmus parvifolia*) which is native to southern China.
- *Fraxinus* 'Raywoodii' which is a deciduous tree.
- Acer 'Autumn Blaze' which is a deciduous tree

and Australian natives which are not local native species such as:

- Weeping Lilly Pilly (*Waterhousea floribunda*) which is a rainforest tree of eastern Australia and grows along streams from near Dungog in NSW to Mackay in central eastern Queensland.

The Department should note *Ulmus parvifolia* is listed as a weed in Appendix 2 of the Greater

Sydney Local Land Services (2017) Greater Sydney Regional Strategic Weed Management Plan 2017-2022 as it poses a potential risk to biodiversity. It is recommended *Ulmus parvifolia* is removed from the Indicative Plant Palette if there is potential for this species to spread both on and off the site.

The OEH recommendation to use local native plant species is consistent with the BOAR and EIS for this SSD. It is recommended the Indicative Plant Palette is amended to be consistent with the BOAR and EIS and it uses a diversity of local native provenance trees, shrubs and groundcovers from the relevant local native vegetation community (or communities) rather than exotic species and non-local native species, particularly as:

- the BOAR includes the following recommendation: "landscaping within the property is to use locally occurring (endemic) native species commensurate with STIF" (see Section 5.4, page 58)
- the EIS indicates the Recommendations of the BOAR will be incorporated into the development (see Sections 6.1.3 and 6.20, page 46 and 92)
- the EIS includes a Mitigation Measure to implement and comply with the Mitigation and Amelioration of Impacts in Section 5.4 of the BOAR (see Section 7, page 98)
- The BDAR concludes the impacts are not considered to be serious or irreversible on the basis that the loss of STIF vegetation is mitigated through native landscaping and that STIF is to be replaced at a minimum 2:1 ratio (see section 4.1.1, page 40).

The Indicative Plant Palette has been updated to remove *Ulmus parvifolia*. Two exotic species are retained as they have been particularly chosen for their foliage, distinct colour, and suitability for use in school environments. Locally occurring species have been integrated with non-invasive exotic species, with the majority of plants selected being Australian natives.

The loss of STIF is to be replaced at a 2:1 ratio as outlined on the Landscape Plans at **Appendix E**. The area to the south of Building N (to the Ridgeway Road frontage) has been nominated as the primary location for the planting of STIF species (as noted on drawing LDA-10 as item 12). STIF species will also be incorporated into landscaping works throughout the development.

The Indicative Plant Palette (drawing LDA-09) provided with the submission is preliminary and is not an exhaustive list of species that will be incorporated into the project. Other STIF species consisting of a mixture of trees, shrubs, grasses and groundcovers are intended to be incorporated into the scheme. The final location of these species have not yet been nominated in the landscape design drawings as this is intended to be developed through the subsequent design stages of the project.

Issue	Response
There are numerous benefits and educational value in landscaping the school site with a diversity of local native plants including: • preservation of the biodiversity values of the local area • provision of the most suitable food and habitat for local native fauna including nectar for pollinators (moths, butterflies, bees etc) which provide a food source for local native birds. • a stepping stone for more mobile native fauna to move across the landscape, and • once established local provenance vegetation would require less maintenance/watering than exotic plants. The use of local native vegetation also has added benefits in reducing the need for fertiliser application which reduces fertiliser laden runoff entering the local waterways and will assist to improve instream health, water quality, reduce algal blooms etc. OEH recommends advanced and established local native tree species are planted to improve habitat, as the removal of the existing trees and the benefits they provide, can take decades for a juvenile tree to replace. A minimum tree height of 2-2.5 metres and/or plant container pot size of 50- 75 litres or greater is preferable.	Tree installation sizes are intended to vary and will be subject to nursery / grower availability at the time of plant procurement. Installation diversity is preferred whilst also achieving instant impact with larger installation sizes of available stock i.e. 100L or greater Syncarpia glomulifera (Turpentine) and other tree species commercially available. More unique tree species may need to be sourced as juvenile sizes or alternatively will need to be pre-grown for implementation in the project. A diverse mix of native tree, shrub and groundcover species are intended to be implemented in the project with preference for locally occurring species.
Habitat Improvement The BOAR notes small and medium hollows were observed in low density on site and that nest boxes have been installed (page 18). OEH suggests the nest boxes are monitored on an ongoing basis to determine if they are being used by native fauna. The installation of the nest boxes and the monitoring of them provides a great educational opportunity for the school. Should ongoing monitoring of the nest boxes find the nest boxes are being utilised by native fauna, consideration should be given to installing some additional nest-boxes.	Noted.
OEH suggests the following additional mitigation measure is included to salvage tree trunks from the trees to be removed and locate these in the remnant vegetation to improve habitat: • any trees to be removed are salvaged and used in the remnant vegetation on site to enhance habitat including tree hollows and tree trunks (greater than approximately 25-30cm in diameter and 3 m in length)	Noted.
Floodplain risk management OEH's advice provided in May 2018 recommended the use of The Hills Shire Council's flood study titled 'The Hills Urban Overland Flow Study' as the basis for the flood investigation, because the site is more likely to be affected by overland flooding than mainstream flooding. The Flood Statement discusses mainstream flooding and concludes that the site is not affected by mainstream flooding as it is 27m higher than the creek. The Flood	Henry & Hymas have consulted with The Hills Shire Council and confirm that the site is not affected by overland flow flooding. Refer to Appendix O.

Issue	Response
Statement has not considered overland flow flooding and accordingly, OEH's previous comments remain relevant.	
Sustainability and Building Design OEH usually recommends SSD developments incorporate green roofs and/or a cool roof and green walls into the design. The benefits of Green Roofs, Cool Roofs and Green Walls are outlined in the OEH (2015) Urban Green Cover in NSW Technical Guidelines which can be found at the following link: http://climatechange.environment.nsw.gov.au//Adapting-to-climate-change/Green-Cover As the school site is managed as an Inner APZ (except for the two remnant areas of STIF), green roofs may not be appropriate. The OEH guidelines recommend that where green roofs are not possible, white or cool coloured roofs are used to reduce the building's absorption of solar radiation and increase re-radiation of urban heat. OEH recommends consideration is given to whether there is potential to incorporate cool roofs into the design to assist in reducing the urban heat island effect and minimise local temperature impacts.	In order to reduce the urban heat island effect it is proposed that the proposed buildings N and P will incorporate a light coloured roof (Surfmist) which has the lowest solar absorbance for a standard Colorbond colour. It is proposed that Building Q will incorporate Shale Grey (NCC Classification Medium) in order to reduce glare as this roof is more visible to pedestrians. Further to this, the avoidance of dark colours to the exterior of the buildings further reduces the impact of this development on the urban heat island effect. In addition to this, the project incorporates a number of Environmentally Sustainable initiatives. These are outlined in the ESD Report prepared by JHA Consulting Engineers (included as Appendix Y to the EIS).
Recommended Conditions of Consent If the development is approved OEH recommends the following are included as conditions of consent: Aboriginal Cultural Heritage 1) A protocol should be in place to deal with any unexpected Aboriginal objects that may be located during the construction phase. This should be included in the construction management plan or equivalent documentation.	Noted.
2) On-site employees or contractors involved in ground surface disturbance must be made aware of the statutory obligations that apply to the discovery of Aboriginal objects prior to the commencement of any works.	Noted.
3) If an Aboriginal object (or a suspected object) is discovered during construction, works must cease in the vicinity of the find and a fully qualified archaeologist must inspect the site to assess the object. If it is confirmed that it is an Aboriginal object and further material or in situ deposit could be present an appropriate management strategy should be prepared. This can include conservation in situ or salvage excavation if warranted. The management strategy must be designed in consultation with the Registered Aboriginal Parties. If the item is found to	Noted.

Issue	Response
not be an Aboriginal object, works may continue.	
4) If human remains are found all work must cease, the site must be secured and the NSW Police and the NSW Coroner's Office must be notified. If the remains are found to be Aboriginal, OEH and the Local Aboriginal Land Council must be contacted to assist in determining appropriate management.	Noted.
5) Further archaeological assessment is required if the proposal activity extends beyond the area of the current investigation. This would include consultation with the Registered Aboriginal Parties for the project and may include further field survey.	Noted.
6) Continued consultation with the Registered Aboriginal Parties for the project must be undertaken if there are any major changes in project design or scope, further investigations or finds.	Noted.
Biodiversity and Habitat Improvement The proponent is required in future to provide a Table of credit class and matching credit profile as required by Table 26 of the BAM. As such the following conditions are to be imposed on any forthcoming development consent: 1. Like for like ecosystem credit retirement condition 1.1 Prior to carrying out development that will impact on biodiversity values, the class and number of ecosystem credits in Table 1 must be retired to offset the residual biodiversity impacts of the development.	A table of credit classes is provided in the updated BDAR at Appendix I . The recommended conditions of consent are noted.
1.2 The requirement to retire credits in condition 1.1 may be satisfied by payment to the Biodiversity Conservation Fund of an amount equivalent to the class and number of ecosystem credits, as calculated by the Biodiversity Offsets Payment Calculator.	Noted.
1.3 Evidence of the retirement of credits or payment to the Biodiversity Conservation Fund in satisfaction of condition 1.1 must be provided to the Secretary of the Department of Planning and Environment for approval prior to carrying out development that will impact on biodiversity values.	Noted.
DPE should confirm compliance with the above condition as outlined below. Retirement of credits: proponent provides evidence to OPE in form of a credit retirement report issued by OEH confirming credit transactions. OPE confirms credit transaction corresponds to a like for like credit of the appropriate number from an appropriate location.	Noted.
Payment to the Biodiversity Conservation Fund: proponent provides evidence to OPE in form of a section 6.33 Statement Confirming Payment into the	Noted.

Issue	Response
Biodiversity Conservation Fund issued by the Biodiversity Conservation Trust. The statement will indicate the number and class of credits that the payment corresponds to and any related development application reference. OPE confirms the payment transaction corresponds to the appropriate class and number of credits.	
The following additional conditions must also be included in accordance with the BOAR: 1) Should any injured fauna species be found during the construction period, construction must stop immediately so that the injured animal can be taken to a vet or wildlife carer. All handling of fauna species should be conducted by a qualified ecologist or wildlife carer	Noted.
2) During vegetation clearing, animals that are injured or displaced are to be captured and relocated (by a qualified ecologist or wildlife carer) to nearby bushland (subject to landowner approval), or trees containing wildlife shall be sectioned and dismantled before relocating the animals; and	Noted.
3) Nocturnal fauna species, such as gliders and possums, if captured and rescued during vegetation clearing, are to be secured in suitable enclosures and kept in a quiet, dark and cool environment until they can be released into suitable habitat after dark	Noted.
4) The revegetated area(s) of STIF must be contiguous with the areas of existing STIF and be fully structured with a diversity of local native tree, shrub and groundcover species.	The landscape plan does not provide a contiguous link of STIF from the southern remnant to the northern remnant, as the bushfire assessment requires a separation between vegetation to maintain the APZ as required for the existing school and the proposed new buildings. An updated landscape plan has been prepared integrating ecological and bushfire management requirements. The key ecological outcome achieved is an integrated management solution that aims to enhance the existing STIF and increase its biodiversity by stipulating an enhance restoration/regeneration of the understorey to a maximum of 15% by cover within the nominated APZ zones. The VMP is to specify the performance targets to achieve an improved biodiversity outcome for the STIF onsite. The residual impacts will offset through the biodiversity offset scheme
5) The existing STIF and revegetated areas of STIF must not be managed as an APZ.	As discussed above the bushfire assessment requires parts of the STIF to be managed as APZ. All vegetation management will be undertaken in accordance with a detailed VMP.
6) The existing STIF must be delineated on the ground prior to any works commencing.	Noted.
7) Trees to be removed are salvaged and used in the remnant vegetation on site to enhance habitat including tree hollows and tree trunks (greater than approximately 25-30cm in diameter and 3 m in length).	Noted.

Issue	Response
Landscaping 1) The site landscaping shall use a diversity of local provenance species (trees, shrubs and groundcovers) from the native vegetation community (or communities) that once occurred on the site to improve biodiversity (rather than use exotic plant species or non-endemic native species). The Landscape Plan shall include details on: - the native vegetation community (or communities) that once occurred on the site - a list of local provenance tree, shrub and groundcovers to be used in the landscaping, the quantity and location - the pot size of the local native trees to be planted - the relocation of any existing juvenile native tree or shrub species that occur within the development footprint.	Noted.
2) Tree planting at the site shall use advanced and established local native trees preferably with a minimum plant container pot size of 50-75 litres, or greater	Noted.
Green Roofs and Cool Roofs 1) The development where possible incorporates green roofs, green facades and/or cool roofs into the design.	It is requested that this recommendation not be included as a condition of consent for this project. An alternative solution is proposed, being that the proposed buildings N and P will incorporate a light coloured roof (Surfmist) which has the lowest solar absorbance for a standard Colorbond colour. It is proposed that Building Q will incorporate Shale Grey (NCC Classification Medium) in order to reduce glare as this roof is more visible to pedestrians. Further to this, the avoidance of dark colours to the exterior of the buildings further reduces the impact of this development on the urban heat island effect. In addition to this, the project incorporates a number of Environmentally Sustainable initiatives.
OEH - Heritage	
Thanks for the referral, I've looked at the relevant docs as well as the Heritage Division's earlier comments on the proposal. There's no State Heritage issues or concerns in relation to the proposal that warrant a formal response from the Heritage Division.	Noted.
Sydney Water	
Water Servicing	Noted.

Issue	Response
The proposed development site is under Rogans Kellyville Parklea Rouse Hill Oakville Water Supply Zone. This supply zone has the capacity to service the development.	
The existing 100mm water main located in Gilbert Avenue fronting the development site will service this development.	Noted.
Wastewater Servicing The existing 150mm sewer at the east boundary of the development site has sufficient capacity to service this development.	Noted.
This development is under the Castle Hill Sewer Treatment System	Noted.
This advice is not a formal approval of our servicing requirements. Detailed requirements, including any potential extensions or amplifications, will be provided once the development is referred to Sydney Water for a Section 73 application. More information about the Section 73 application process is available on our web page in the Land Development Manual.	Noted.
Endeavour Energy	
That the Applicant engages a Level 3 Accredited Service Provider (ASP) as early as possible to design and prepare a proposed method of supply. Endeavour Energy will assess the proposal and depending on the outcome of the assessment, any required padmount or indoor/chamber substation/s will need to be located within the property in a suitable and accessible location. The substation and associated cabling will need to be protected by an easement and associated restrictions benefiting and gifted to Endeavour Energy. Endeavour Energy's Network Connections Branch can be contacted via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm or on Endeavour Energy's website under 'Home > Residential and business > Connecting to our network' via the following link: www.endeavourenergy.com.au.	Noted.
- That the applicant recognises Endeavour Energy's design requirements for minimum easement widths as follows and that there are mandatory restrictions associated with these easements: 3 m for low voltage and 11 kV underground power lines which can be reduced to 1 m if there is concrete protection of minimum 50 mm concrete cover at standard burial depth; and 2.75 m x 5.5 m for a padmount substation.	Noted.

Issue	Response
That the Applicant takes into consideration the restrictions and encroachments that are permitted, prohibited or controlled, associated with Endeavour Energy easements.	Noted.
That the Applicant must maintain unimpeded access to Endeavour Energy assets at all times. If impedances are present, they must be removable at any notice; otherwise removal by Endeavour Energy will be charged to the property owner's account.	Noted.
That the Applicant takes into consideration the bushfire prone nature of the property and provides for suitable siting of the new or uprated padmount substation in compliance with fire restrictions which include providing adequate clearances between the substation and adjacent buildings or if these clearances cannot be achieved, using building components of suitable FRL	Noted.
That the Applicant carries out demolition work in accordance with Australian Standard AS 2601— 2001: 'The demolition of structures', and applies to Endeavour Energy to disconnect and remove all electric cables or apparatus which are liable to be a source of danger, other than a cable or apparatus used for the demolition works.	Noted.
That the Applicant obtains advice from the Dial Before You Dig 1100 service or seek guidance from Endeavour Energy Regional Services North, prior to any underground work to identify the location of any underground electrical and other utility infrastructure across or in the vicinity of the site and to assist in assessing the risk of the proposed work impacting this infrastructure. This will help to minimise the risk of excavation work damaging electricity works which can be penalised under the Electricity Supply Act 1995 (NSW).	Noted.
That the Applicant takes into consideration other utilities such as telecommunications, water and gas are as a general rule, not allowed within Endeavour Energy easements, whether in parallel or longitudinally above Endeavour Energy power cables, and are prohibited within an Endeavour Energy padmount substation easement. If the sharing of an Endeavour Energy easement with third party assets is unavoidable, the Applicant must consult Endeavour Energy on the layout of the utilities in relation to Endeavour Energy cables. The cables may need concrete encasement and there will be minimum clearances to be maintained between Endeavour Energy power cables and the utilities.	Noted.
That the Applicant takes into consideration electricity infrastructure must not be subject to flood inundation and drains within or in the vicinity of the area allocated for the infrastructure must be properly maintained to avoid the possibility of water damage to the infrastructure	Noted.

Issue	Response
That the Applicant adopts a policy of prudent avoidance by the siting of more sensitive uses away from any electricity infrastructure, including any possible future electricity infrastructure required to facilitate the proposed development.	Noted.
That the Applicant recognises noise emitted by the normal operation of the existing padmount substation is generally not an issue; however, Endeavour Energy recommends that it be included in the detailed acoustic assessment recommended by the acoustic consultants when the mechanical plant for the redevelopment has been finalised.	Noted.
That the Applicant avoids the planting of large trees in the vicinity of electricity infrastructure. Suitable planting includes low growing shrubs not exceeding 3.0 metres in height and ground covers and/or smaller shrubs with non-invasive root systems.	Noted.
Environmental Protection Authority	
2.1 Site Contamination and hazardous building materials Recommendations 1. The proponent be required (prior to commencing any work on the development site) to prepare and implement a procedure for identifying and dealing with unexpected finds of site contamination (including asbestos containing materials, lead-based paint and PCBs) and to include in that procedure details of who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved.	Noted.
2. The proponent be required to satisfy the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 'asbestos wastes'. Note: The EPA provides additional guidance material at its web-site http://www.environment.nsw.gov.au/waste/asbestos/index.htm .	Noted.
3. The proponent be required to consult with Safework NSW concerning the handling of any asbestos waste that may be encountered during the project.	Noted.
4. The proponent be required to undertake additional investigation prior to any construction, including the footprint of relocated and demolished structures and underground utilities with the scope of that additional investigation detailed in a sampling and analysis quality plan.	Noted.
5. The proponent be required consider the guidance material provided in the National Environment Protection (Assessment of Site Contamination) Measure as well as the following EPA documents when undertaking further site assessment – - Technical Note: Investigation of Service Station Sites, 2014, - NSW EPA Sampling Design Guidelines,	Noted.

Issue	Response
- Guidelines for the NSW Site Auditor Scheme (3rd edition) 2017, and - Guidelines for Consultants Reporting on Contaminated Sites, 2011.	
6. The proponent be required to ensure that the processes outlined in State Environmental Planning Policy 55 - Remediation of Land (SEPP55) are followed in assessing the suitability of the land and any remediation required in relation to the proposed use.	Noted.
7. The proponent be required to ensure that the proposed development does not result in a change of risk in relation to any pre-existing contamination on the site so as to result in significant contamination	Noted.
8. The proponent be required to notify the EPA should any contamination of the development site be identified which meets the triggers in the Guidelines for the Duty to Report Contamination	Noted.
2.2 Noise and vibration The EPA anticipates that demolition, site preparation (including tree clearing), bulk earthworks, construction and construction-related activities are likely to have significant noise and vibration impacts on the adjoining pre-school and surrounding residences. 2.2.1 general construction hours The EPA notes that EIS section 6.22 indicates that the proponent proposes to comply with the recommended standard construction hours. Recommendation The proponent be required to ensure that as far as practicable all demolition, site preparation, bulk earthworks, construction and construction-related activities likely to be audible at any noise sensitive receivers such as surrounding residences are only undertaken during the standard construction hours, being: (a) 7.00 am to 6.00 pm Monday to Friday, (b) 8.00 am to 1.00 pm Saturday, and (c) no work on Sundays or gazetted public holidays.	Noted.

Issue	Response
2.2.2. Intra-day respite periods The EPA anticipates that those demolition, site preparation, bulk earthworks, construction and construction-related activities generating noise with particularly annoying or intrusive characteristics (such as those identified as particularly annoying in section 4.5 of the Interim Construction Noise Guideline) would be subject to a regime of intra-day respite periods where: - (a) they are only undertaken after 8.00 am, - (b) they are only undertaken over continuous periods not exceeding 3 hours with at least a 1 hour respite every three hours, and - (c) 'continuous' means any period during which there is less than an uninterrupted 60 minute respite between temporarily halting and recommencing any of the intrusive and annoying work referred to in Interim Construction Noise Guideline section 4.5. The EPA emphasises that intra-day respite periods are not proposed to apply to those demolition, site preparation, bulk earthworks, construction and construction-related activities that do not generate noise with particularly annoying or intrusive characteristics. Recommendation The proponent be required to schedule intra-day 'respite periods' for construction activities identified in section 4.5 of the Interim Construction Noise Guideline as being particularly annoying to noise sensitive receivers, including surrounding residents.	Noted.
2.2.3 Idling and queuing construction vehicles The EPA is aware from previous major infrastructure projects that community concerns are likely to arise from noise impacts associated with the early arrival and idling of construction vehicles (including concrete agitator trucks) at the development site and in the residential precincts surrounding that site. Recommendation The proponent be required to ensure construction vehicles (including concrete agitator trucks) involved in demolition, site preparation, bulk earthworks, construction and construction-related activities do not arrive at the project site or in surrounding residential precincts outside approved construction hours.	Noted.

Issue	Response
2.2.4 Reversing and movement alarms The EPA has identified the noise from 'beeper' type plant movement alarms to be particularly intrusive and is aware of feasible and reasonable alternatives. Transport for NSW, Barangaroo Delivery Authority/Lend Lease and Leighton Contractors have undertaken safety risk assessments of alternatives to the traditional 'beeper' alarms. Each determined that adoption of 'quacker' type movement/reversing alarms instead of traditional beepers on all plant and vehicles would not only maintain a safe workplace but also deliver improved outcomes of reduced noise impacts on surrounding residents. The Interim Construction Noise Guideline Appendix C provides additional background material on this issue. Recommendation The proponent be required to consider undertaking a safety risk assessment of site preparation, bulk earth works, construction and construction-related activities to determine whether it is practicable to use audible movement alarms of a type that would minimise the noise impact on surrounding noise sensitive receivers, without compromising safety.	Noted.
2.3 Dust control and management The EPA considers dust control and management to be an important air quality issue during demolition, site preparation, bulk earthworks and subsequent construction. Recommendation The proponent be required to minimise dust emissions on the site, and prevent dust emissions from the site.	Noted.
2.4 Sediment control <i>Managing Urban Stormwater Soils and Construction</i>, 4th Edition published by Landcom (the so-called 'Blue Book') provides guidance material for achieving effective sediment control on construction sites. The proponent should implement all such feasible and reasonable measures as may be necessary to prevent water pollution in the course of developing the site. The EPA emphasises the importance of – - (a) not commencing demolition, site preparation, bulk earthworks, construction and construction-related activities until appropriate and effective sediment controls are in place, and - (b) daily inspection of sediment controls which is fundamental to ensuring timely maintenance and repair of those controls.	Noted.

Issue	Response
2.5 Waste control and management (general) The proponent should manage waste in accordance with the waste management hierarchy. The waste hierarchy, established under the Waste Avoidance and Resource Recovery Act 2001, is one that ensures that resource management options are considered against the following priorities: - Avoidance including action to reduce the amount of waste generated by households, industry and all levels of government - Resource recovery including reuse, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources - Disposal including management of all disposal options in the most environmentally responsible manner. All wastes generated during the project must be properly assessed, classified and managed in accordance with the EPA's guidelines to ensure proper treatment, transport and disposal at a landfill legally able to accept those wastes. The EPA further anticipates that, without proper site controls and management, mud and waste may be tracked off the site during the project. Recommendation The proponent be required to ensure that: 1) all waste generated during the project is assessed, classified and managed in accordance with the EPA "Waste Classification Guidelines Part 1: Classifying Waste", November 2014 and the 2016 Addendum thereto; 2) the body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste, or spoil from the vehicle or trailer; and 3) mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site, is removed before the vehicle, trailer or motorised plant leaves the premises.	Noted.

Issue	Response
2.6 Waste control and management (concrete and concrete rinse water) The EPA anticipates that during the project concrete deliveries and pumping are likely to generate significant volumes of concrete waste and rinse water. The proponent should ensure that concrete waste and rinse water is not disposed of on the project site and instead that: - a) waste concrete is either returned in the agitator trucks to the supplier or directed to a dedicated watertight skip protected from the entry of precipitation, and - b) concrete rinse water is directed to a dedicated watertight skip protected from the entry of precipitation or a suitable water treatment plant. Recommendation The proponent be required to ensure that concrete waste and rinse water are - a) not disposed of on the development site, and - b) prevented from entering waters, including any natural or artificial watercourse.	Noted.
3. Operational phase The EPA considers that environmental impacts that arise once the development is operational should be able to be largely averted by responsible environmental management practices, particularly with regard to: a) feasible and reasonable noise mitigation measures; b) waste management in accordance with the waste management hierarchy; c) water sensitive urban design; and d) energy conservation and efficiency.	Noted.

Issue	Response
3.1 Noise impacts The EPA anticipates the proposed development (especially out of hours use of school facilities by external parties) may have significant operational noise impacts on nearby sensitive receivers, especially surrounding residences. The EPA notes the proximity of the surrounding residences and is aware from long experience of the need for appropriate operational noise mitigation and management measures, particularly regarding: • a) the nature of and times during which school facilities are made available for community use; • b) the design and operation of the school public address/bell system; • c) the design and location of waste storage facilities; • d) time restrictions on waste collection services; • e) design, selection and operation of mechanical ventilation plant and equipment; and • f) time restrictions on grounds maintenance using powered equipment (e.g. leaf blowers, brush cutters and lawn mowers).	Noted.

Out of hours' community use of school facilities

The EPA is aware of government policy to encourage out of hours community use of school facilities provided that use does not cause noise emissions that interfere unreasonably with the comfort or repose of persons not on the premises. The EPA considers that, in relation to the school hall, noise from normal school activities in class hours would not be acoustically significant. However, the use of the hall for other events, particularly outside school hours, has the potential to adversely impact on residences.

The EPA considers the proposed community use of school facilities (especially the hall and sports field) outside normal school hours needs to be carefully managed to ensure noise impacts on nearby residences are minimised. Sections 4.6.3 and 5.2.2 to EIS Appendix O indicate that evening and night time use of the school hall (i.e. outside normal school hours) may cause noise emissions that exceed "... the noise criteria at several nearby residential receivers ...".

Recommendation

The proponent be required to:

- a) undertake comprehensive noise compliance monitoring of representative uses of the school hall and associated facilities (e.g. parking) outside school hours to demonstrate that the level, nature, quality and character of noise emitted by those uses and the time at which and frequency of those uses would not interfere unreasonably with or be likely to interfere unreasonably with the comfort or repose of persons not on the development site, especially the occupants of nearby residences.
- b) submit a detailed noise compliance monitoring report with noise measurements reported against relevant noise criteria and the outcomes of appropriate community consultation together with detailed recommendations concerning any additional feasible and reasonable noise mitigation and management measures, including further or more relaxed restrictions on the times at which and the frequency of each type of use of the school hall and outdoor sports courts and associated facilities (e.g. parking) outside school hours.
- c) ensure that noise compliance monitoring referred to in paragraph (a) above, would include quantitative noise impact assessment to address noise emissions arising from amongst other things –
 - audience/spectator noise,
 - training sessions as well as sporting events,
 - any amplified sound during sporting events and any associated training sessions, and
 - post-event audience/spectator noise, including vehicle door slamming and departure noise.

Recommendation

Noted. Once operational, noise compliance monitoring of all proposed uses of the hall and associated facilities should take place. Note, this cannot be undertaken until such a time as the hall is operational.

The proponent be required to ensure that out of hours community use of the school hall does not occur after 10.00 pm or on Sundays and public holidays.

Issue	Response
Mechanical plant and equipment Section 5.2.1 to EIS Appendix O states that details of mechanical services, plant and equipment are not yet available. Recommendation The proponent be required to: a) provide a comprehensive quantitative assessment of operational noise impacts on surrounding noise sensitive receivers, especially the adjoining child care facility and surrounding residences; b) ensure mechanical plant and equipment installed on the development site does not generate: i) noise that exceeds the project noise trigger levels (day, evening and night) measured at the boundary of the development site and at the boundary of the most affected residence, and ii) noise that exhibits tonal or other annoying characteristics.	Noted. Section 5.2.1 of the Day Design 'Environmental Noise Assessment' report, 6395-1.1R Rev A, dated 8 November 2018, recommends a detailed acoustic assessment of the mechanical plant at the Construction Certificate / detailed design stage of the development process. This can be undertaken once the mechanical engineer is nearing completion of their design of all mechanical plant to be installed at the school. Once operational, noise compliance monitoring of the general operations on the site (typical school use) should take place at all nearby sensitive receivers.
Public address and school bell system The EPA has previously received numerous reports of community concern arising from inadequate design and installation as well as inappropriate use of school public address and bell systems and considers that appropriate design, installation and operation of those systems can both – - meet the proponent's objectives of proper administration of the school and ensuring the safety of students, staff and visitors, and - avoid interfering unreasonably with the comfort and repose of occupants of nearby residences. Recommendation The proponent be required to design, install and operate the school public address/bell system to implement all such other measures as may be necessary to ensure use of that system does not interfere unreasonably with the comfort and repose of occupants of nearby residences.	Noted.

Issue	Response
Waste collection services Similarly, the EPA has received numerous reports of community concern arising from waste collection services undertaken at schools and especially during evening and night times. Recommendation The proponent be required ensure waste collection services are not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday. Grounds maintenance using powered equipment Again, the EPA has received numerous reports of community concern arising from grounds maintenance involving the use of powered equipment (example: leaf blowers, lawn mowers, brush cutters) at schools during early morning and evening periods as well as on weekends and public holidays. Recommendation The proponent be required ensure grounds maintenance involving the use of powered equipment is not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday.	Noted.
3.2 Waste management The proponent should manage waste in accordance with the waste management hierarchy outlined above. Recommendation The proponent be required to identify and implement feasible and reasonable opportunities for the reuse and recycling of waste, including food waste.	Noted.
3.3 Water sensitive urban design and energy conservation and efficiency The EPA acknowledges that EIS Appendix Y comprises an environmentally sustainable development report that proposes – • a) a range of water sensitive urban design measures, including water efficient fixtures; and • b) a range of measures to maximise energy efficiency and minimise energy consumption, including installation of rooftop solar photovoltaic arrays on building Q. The EPA is concerned that section 5.10 to EIS Appendix Y does not adequately address practicable measures to implement water sensitive urban design principles, such as rainwater harvesting and reuse. Recommendation The proponent be required to undertake a more detailed assessment of practical opportunities to implement the principles of water sensitive urban design, including rainwater harvesting and re-use.	The project team considered the possible uses of rainwater for the Samuel Gilbert Public School project. A rainwater tank has been allowed for in the design with a gravity fed tap so that rainwater can be reused for landscape irrigation to reduce potable water consumption. The team also investigated the inclusion of pump, filter and pipework for more extensive rainwater reuse. After due deliberation and consideration, the hose tap options was preferred to suit the operation and maintenance needs of the development. Where possible the landscaping is comprised of hardy, low water use, indigenous plant species suited to the local environment that can survive with minimal irrigation other than natural rainfall. Planted swales and/or on site detention basins to be provided to capture, store and treat runoff/overland flow where appropriate.

Issue	Response
NSW Rural Fire Service	
I refer to your correspondence dated 20 November 2018 seeking key issue and assessment requirements regarding bush fire protection for the above Part 3A/State Significant Development Application in accordance with section 75F (4) of the 'Environmental Planning and Assessment Act 1979'. The New South Wales Rural Fire Service (NSW RFS) has considered the information submitted and provides the following advice:	
1. At the commencement of building works and in perpetuity, the enclosed area of the school grounds bounded by the existing fence, (excluding the two small areas of EEC Turpentine-Ironbark Forest labelled as significant Vegetation zone) shall be managed as an inner protection area (IPA) as outlined within Appendices 2 & 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.	Noted.
2. The provision of water, electricity and gas supplies shall comply with sections 4.1.3 and 4.2.7 of 'Planning for Bush Fire Protection 2006'	Noted.
3. A Bush Fire Emergency Management and Evacuation Plan shall be prepared for the school or the existing plan amended to include the new buildings. The Plan shall be consistent with 'Development Planning – A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan December 2014'.	Noted.
4. Proposed Building N shall comply with Sections 3 and 5 (BAL 12.5) Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection 2006'	Noted.
5. New works proposed to Building A shall comply with Sections 3 and 5 (BAL 12.5) Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of 'Planning for Bush Fire Protection 2006'.	Noted.
6. Landscaping within the site shall comply with the principles of Appendix 5 of 'Planning for Bush Fire Protection 2006'.	Noted.
This letter is in response to a further assessment of the application submitted and supersedes our previous key issue and assessment requirements regarding bush fire protection dated 8 May 2018.	