



planning consultants

## Mitigation Measures Table RTS Update

Prepared for: School Infrastructure NSW  
September 2021

Mitigation Measures submitted with EIS		
Environmental Impact	Mitigation Measure	Further discussion
<b>Aboriginal Cultural Heritage</b>	Prior to ground disturbance, an Aboriginal heritage management Plan (AHMP) must be developed by a heritage specialist in conjunction with the Aboriginal Stakeholders and consent Authority to provide the post-approval framework for managing Aboriginal heritage within the study area.	<b>Section 1.2</b> <b>Section 4.5.2</b> <b>Section 6.2.1</b>
	Consultation should be maintained with the RAP's during finalisation of the assessment process and throughout the project	<b>Appendix 10</b>
	A heritage-interpretation strategy must be developed by a heritage specialist to identify the interpretive values of the study area, and specifically Aboriginal heritage values across the study area, and to provide direction for potential interpretive installations and/or devices.	
	A copy of the ACHAR should be lodged with AHIMS and provided to each of the RAPs.	
	Where the heritage consultant changes through the project, suitable hand over should be undertaken to ensure no loss or mistranslation of the intent of the information, findings and future steps in heritage management occur.	
<b>Accessibility</b>	Specific items will require further clarification at the Development Design and Construction Stages to confirm compliance with the relevant detailed access requirements within the BCA 2019 and Premises Standards	<b>Section 6.9</b>
	Minor amendments required to comply with gradients and cross falls for new landscaping works, walkways and ramps	<b>Appendix 21</b>
	Minor amendments required to comply with door way widths and circulation spaces	
	Minor amendments to scissor ramp associated with PCYC building to prevent wheelchair users travelling outside of the boundary	
<b>Air Quality</b>	Preparation of Construction Environmental Management Plan	<b>Section 6.9</b> <b>Appendix 29</b>
<b>Arborist</b>	An AQF level 5 arborist is to carry out preliminary non-invasive excavation and assessment to gain additional information (Root Mapping) to assist with adjustments to design plans which are major encroachments and require alterations to minimise impacts on trees proposed for retention. An addendum should suffice to allow for the alternative design.	<b>Section 6.4.1</b>
	Additional non-invasive excavation is to be carried out by an AQF Level 5 Arborist where below grade encroachments are within the formulated Tree protection Zones of any trees that are proposed for retention. Root protection during works (AS 4373 2007 Section 4.5.4) can be carried out to reduce associated impacts. The encroachments for the top side of the ramp within the TPZ of Tree 42 or the excavation of the driveway and retaining wall under Tree 59 are identifiable areas where these excavation and protection measures will be required.	<b>Appendix 30</b>
	Tree Protection fencing is to be established to reduce the potential impacts on trees to be retained, trunk protection and Modified Tree Protection Zones that use weight displacement boarding can be utilised if additional access closer to the trees is required and a hard surface is not in place.	
	The Tree Protection Plan and Tree Protection Plan Site Diagram is to be utilised by an AQF 5 level arborist (Site Arborist) to establish and oversee all works in the Tree Protection Zones as well as assess tree health and record compliance/non-compliance at each stage of development as per Australian Standard Protection of trees on development sites AS 4970 2009	
	All Work Methodology Statements are to be assessed by the Site Arborist and are subject to approval or decline by the Site Arborist and or, governing or certifying body. If the governing body permits the arborist pruning or removing the trees is to have a minimum certificate 3 in arboriculture, the work is to take no more than 10% total foliage and not significantly alter the trees natural foliage distribution (AS 4373 2007 Section 6). All pruning work in accordance with Australian Standard Pruning of Amenity Trees AS 4373 200713; the arborist must have Workers Compensation insurance and Liability insurance with all work complying with the Amenity Tree Industry Code of Practice and the NSW Work Health and Safety Act 2011	
<b>BCA</b>	Continue to carry out review until completion of the design and prior to the issuing of the s6.28 Crown Works Certificate	<b>Section 6.9</b> <b>Appendix 22</b>
<b>Infrastructure</b>	As the PCYC building is proposed to be part of the SSDA works it should be noted that new incoming telecommunications infrastructure will be co-ordinated to this building. This shall be via a separate application to NBN that will require dedicated	<b>Section 6.9</b> <b>Appendix 15</b>

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	<p>conduits and pits to NBN requirements. Once the PCYC scope has been confirmed to proceed the works can commence.</p> <p>Note that it is assumed that the fire hydrant system is required to protect the existing and refurbished buildings only. It is noted that confirmation on the existing buildings (which are not being refurbished) and their requirement to be protected is to be confirmed by the BCA consultant.</p>	
<b>Sustainability</b>	Prepare a Risk Management Plan	<b>Section 6.7</b>
	Waste Management Plan to be implemented	<b>Appendix 23</b>
	All new lighting and HVAC systems installed in schools must have timed or sensor feedback functionality for energy conservation.	
	To manage the risk of contamination, tanks for drinking and non-drinking water use are to be designed and installed in accordance with HB 230 Rainwater Tank Design and Installation Handbook, Managing Urban Stormwater Harvesting and Reuse AS3500.	
	No rainforest timbers, or timbers from high conservation forests, are to be used unless plantation grown. Sustainable timber shall be specified for at least 95% (by cost) of all timber products used on the project.	
<b>Geotechnical</b>	Precautionary measure should be taken if excavations/ development result in the disturbance of asbestos. The CEMP should include procedures to safely handle/ manage such materials including confirmatory testing where required.	<b>Section 6.9</b> <b>Section 6.11</b>
	A preliminary waste classification of 'General Solid Waste should be considered for excess soils excavated from within the development areas.	<b>Appendix 11</b>
	The CEMP should also include an unexpected finds protocol for the proposed development.	
	Earthworks construction procedures should be in accordance with the Australian Standard AS 3798 (2007)	
	If new trees are proposed for the site they should not be planted closer to the building than a distance equal to the mature height of the tree, as advised in AS 2870 (2011)	
<b>Heritage</b>	Investigate the listing of Building A and B on the DPIE's Section 170 Register	<b>Section 1.3.6</b> <b>Section 4.5.1</b> <b>Section 6.2.2</b>  <b>Appendix 16</b>
<b>Hazardous Building Materials</b>	Removal of HBM should be undertake by a qualified person.	<b>Section 6.9</b>
	HBM should be removed prior to any significant disturbance including from maintenance, refurbishment and demolition work	<b>Appendix 35</b>
	Targeted inspection, sampling and analysis for HBM should be considered prior to any work that may result in the disturbance of such HBM.	
	Develop a Hazardous Materials Management Plan.	
	Undertake HBM remediation and removal in controlled conditions	
	Prepare an Asbestos Management Plan	
<b>Social Impacts</b>	Prepare Detailed Construction Traffic Management Plan	<b>Section 6.9</b> <b>Appendix 27</b>
	Prepare Detailed Construction Environmental Management Plan	
	Implement a complaints and grievance register	
	Regular communication materials including newsletters and on the SINSW and HSC websites	
	Further consultation with local Indigenous representatives	
	Authorised Traffic Controller to be present throughout demolition, excavation and construction stages	
<b>School Transport</b>	Establish a centralised Travel Plan Co-ordinator to take responsibility for the ongoing review and monitoring of the School Transport Plan	<b>Section 6.3</b>
	Lobby Council / DPIE for improved cycle connections in the broader area	<b>Appendix 18</b>
	Advocate for TfNSW to improve public transport services in response to increased development in the surrounding area	
	Review initiatives for staff to promote car-pooling	

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	Consider upgrading existing pedestrian refuge on Owen Street midblock between Gordon Street and Burrawan Street	
	Strictly manage delivery times to ensure minimum movements and occurrence outside of peak school hours	
<b>Safe Student Transfer</b>	SINSW School Operations Review to deliver short, medium, and long-term options to reduce or remove the frequency of trips between campuses and ensure the safety of travel for students.	
	To safely accommodate the current inter-campus trips a transfer stop is proposed to be located on Owen Street utilising the same area as the existing bus stop, on the basis that the transfer occurs outside School Bus operations.	
<b>Active Transport</b>	Provide 152 bicycle spaces for the school and three (3) for the PCYC	<b>Section 6.3 Appendix 17</b>
	Provide one (1) end of trip facility. The end of trip facility is proposed in the PCYC.	
<b>Parking</b>	Consider reconfiguration of parking arrangements on Church and Gordon Streets	
	Provide one accessible space on Owen Street at the main gate	
<b>Construction Traffic</b>	Convert un-restricted on-street parking spaces immediately south of the Owen Street main access to an on-street loading space	
	No on-site parking for construction contractors	
	Construction hours <ul style="list-style-type: none"> <li>Monday to Friday: 7.00AM to 6.00PM.</li> <li>No construction deliveries between 7:30am to 9:00am, and between 1:30pm to 3:00pm on school days. Saturday: 8.00AM to 5.00PM</li> <li>Sunday and Public holidays: No planned work.</li> </ul>	
	All workers and subcontractors engaged on-site would be required to complete a site induction.	
	Authorised traffic controllers to be present throughout the demolition, and construction stages of the project.	
	Forward in – forward out travel direction for construction vehicles	
	A construction fence and Class A Hoarding will be provided along the Owen Street site boundaries to provide safe pedestrian access. The hoardings will consist of a combination of timber and chain wire fencing along the remaining site boundaries, that will be maintained for the duration of the construction program.	
	Traffic control would be required to manage and regulate traffic movements into and out of the site during construction, with pedestrian priority provided during peak hour periods to maintain accessibility to public transport facilities.	
	Disruption to road users would be kept to a minimum by scheduling intensive delivery activities outside of peak network hours.	
	Supervised traffic control will be required where two-way flow is restricted over any length of the roadway, depending on the number of truck movements required and would be managed outside of peak hour vehicle and pedestrian activity.	
	No footpath closure along Owen Street during school term due to high volumes of pedestrian movements and safety considerations within the vicinity of an operational Port Macquarie Campus.	
<b>Wind</b>	Add landscaping at the north east and south east entrances of the school in place of the removed demountable building.	<b>Section 6.9 Appendix 33</b>
	Retain existing vegetation and proposed landscaping around CAPA as per Landscaping plans	
	Retain landscaping along Owen street to south of proposed PCYC, adjacent to MPC	
<b>Erosion and Sediment</b>	Implement erosion and sediment control plans	<b>Section 6.9 Appendix 13 Appendix 14</b>

Mitigation Measures Introduced with Response to Submissions – August 2021		
Environmental Impact	Mitigation Measure	Further discussion
<b>Parking</b>	Delete - Consider reconfiguration of parking arrangements on Church and Gordon Streets	Transport Assessment v8, dated 26 July 2021
<b>Construction Traffic</b>	Construction hours <ul style="list-style-type: none"> <li>Amend - Saturday: 7:00AM to 1:00PM (Work hours may be altered in accordance with COVID-19 Health Orders at the time of construction).</li> </ul>	Transport Assessment v8, dated 26 July 2021 Section 9.4
<b>ESD</b>	<p>To reduce the contribution of the project sites to the urban heat island effect, the project is committed to ensuring at least 75% of the total project site area comprises of any combination of the following:</p> <ul style="list-style-type: none"> <li>Vegetation;</li> <li>Roofing materials with: <ul style="list-style-type: none"> <li>three year SRI of minimum 64 for roof pitched &lt; 15degrees and 34 degrees for roof pitched &gt; 15degrees; or</li> <li>where product's three year SRI is not available, initial SRI of minimum 82 for roof pitched &lt; 15degrees and 39 for roof pitched &gt; 15degrees.</li> </ul> </li> <li>Unshaded hardscaping elements with three year SRI of minimum 34 or initial SRI of minimum 39;</li> <li>Hardscaping elements shaded by overhanging vegetation or roof structures, including photovoltaic panels; or</li> <li>Areas directly to the south of vertical building elements, including areas shaded by these elements at the summer solstice.</li> </ul> <p>Passive Design Principles have been included in the design to minimise the need for active cooling and heating:</p> <ul style="list-style-type: none"> <li>Building orientation</li> <li>External shading devices</li> <li>Window size and location</li> <li>High thermal performance glazing</li> <li>insulation</li> </ul>	SSDA ESD Addendum, 20 July 2021
<b>Acoustic</b>	<p>No openings for mechanical ventilation provided on western façade of PCYC which faces residential receivers, as an acoustic control measure.</p> <p>Noise emissions from the CAPA Building to the Mainsail Building are expected to comply with the Educational Establishments and Child Care Facilities SEPP noise level criteria. Acoustic design of the façade, other external building elements and ventilation openings of the school will need to be reviewed during the design stages in order to confirm compliance of the noise level criteria.</p>	SSDA Acoustic Addendum, 17 August 2021
<b>Visual Impact</b>	<p>Measures taken that seek to avoid and minimise any significant adverse visual impacts:</p> <ul style="list-style-type: none"> <li>siting measures: such as the rotation of the PCYC building 90 degrees so that it is slimmer to the street and retains partial views across to Oxley Oval from Owen Street between the facility and the Bowling Club</li> <li>massing / form measures: such as the size, shape, recessive nature and transparency of the window opening to reduce the bulk and scale and the combination of different yet cohesive materials.</li> </ul> <p>It is further recommended that consideration be given to:</p> <ul style="list-style-type: none"> <li>the treatment of the ground plane setback to Owen Street, including the balance between hard and soft surfaces, the use of landscaping where appropriate (while noting the comprehensive landscaping material submitted as part of the SSDA) and the use of appropriate fencing</li> <li>the use of lower reflectivity and neutral colour materials for the roof to help reduce its visual impact when seen from upper levels of La Mer.</li> </ul>	Visual Impact Assessment, dated 10 September 2021 Revision 3