

# Mitigation Measures for Review of Environmental Factors

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Department of Education Projects -Vincentia High School Upgrade

March 2025

DOC25/425584

## Part 5 Mitigation Measures

Aspect	MM ID	MM Name	Mitigation Measure	
General	GMM1	Approvals	These Mitigation Measures do not remove the obligation to obtain all other licences, permits, approvals and consents as required under any other legislation.	Throughout
General	GMM3	Australian Standards	All works must comply with the relevant Australian Standards.	Throughout
General	GMM4	Crown Certificate	A Crown Certificate under Section 6.28 of the <i>Environmental Planning and Assessment Act 1979</i> must be obtained for any Crown building work.	Prior to the commencement of construction
General	GMM5	Landowners Consent	Landowners consent must be obtained in writing from the relevant landowner or authority.	Prior to the commencement of construction on that land

Aspect	MM ID	MM Name	Mitigation Measure	
Community	CEMM1	Work Notification	DoE's Post Approval and Compliance Team, the relevant local Council and the occupiers of any land within 20 metres of the site boundary must be notified in writing of the project. The notice must outline the works to be undertaken, the expected timing for commencement of, and completion of construction works. A minimum period of 48 hours notification prior to the commencement of any construction work must be given.	Prior to the commencement of construction
Community	CEMM2	Site Notice Board	<p>A site notice board must be located at eye level at the entrance or other appropriate location at the site in a prominent position for the benefit of the community. The site notice must be displayed throughout the entire construction period, be A1 sized, durable, weatherproof and include the following information:</p> <ul style="list-style-type: none"> <li>(a) 24-hour contact person for the site;</li> <li>(b) Telephone and email addresses;</li> <li>(c) Site works and timeframes; and</li> <li>(d) Details of where accessible project information can be sourced.</li> </ul>	Prior to the commencement of construction
Community	CEMM3	Complaints Handling	All complaints must be managed in accordance with DoE's Stakeholder and Community Participation Plan.	Throughout
Compliance	PACMM1	Compliance with Mitigation Measures	All relevant personnel, including contractors and their subcontractors, must be made aware of these Mitigation Measures and the requirement to undertake the activity as per these Mitigation	Throughout

Aspect	MM ID	MM Name	Mitigation Measure	
			Measures.	
<b>Compliance</b>	PACMM2	Non-compliance notification	<p>The relevant Project Lead and DOE's Post Approval and Compliance Team must be notified as soon as practical when any non-compliance with a Mitigation Measure is identified. The notification should identify the relevant works, set out the Mitigation Measure that works are non-compliant with, the way in which it does not comply, any known reasons for the non-compliance and what actions have been, or will be undertaken, to address the non-compliance.</p> <p><i>Note: Non-compliance and incident notifications processes are set out in the Post Approvals Guide. All notifications must be recorded using the digital Non-Compliance Notification Form or the Incident Notification Form.</i></p>	Throughout
<b>Compliance</b>	PACMM5	Status Report	The Project Lead must submit a Status Report to the Post Approvals and Compliance Team demonstrating compliance with the Mitigation Measures upon completion of the works.	One week prior to the commencement of Operations

Aspect	MM ID	MM Name	Mitigation Measure	
Construction	CMM1	Demolition	Any demolition work must be undertaken in accordance with the provisions of <i>Australian Standard AS 2601-2001 The Demolition of Structures</i> .	Construction
Construction	CMM2	Construction Environmental Management Plan	<p>A Construction Environmental Management Plan (CEMP) is to be prepared and implemented having regard to the <i>Environmental Management Guidelines for Construction Procurement (Edition 4)</i>, and is to include where relevant, but not limited to, the following:</p> <p>(a) Details of:</p> <ul style="list-style-type: none"> <li>(i). Hours of work;</li> <li>(ii). 24-hour contact details of site manager;</li> <li>(iii). Management of dust and odour;</li> <li>(iv). Stormwater control and discharge;</li> <li>(v). Measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site;</li> <li>(vi). Any other specific environmental construction</li> </ul>	Construction

Aspect	MM ID	MM Name	Mitigation Measure
			<p>Mitigation Measures detailed in the REF;</p> <p>(vii). Any requirements outlined in any relevant approvals, permits, licences or landowner consents; and</p> <p>(viii). Community consultation and complaints handling in line with DoE's Stakeholder and Community Participation Plan.</p> <p>(b) Aerial Site Plan showing the location of the works;</p> <p>(c) The following, where required by Mitigation Measures:</p> <p>(i). Construction Traffic and Pedestrian Management;</p> <p>(ii). Construction Worker Transport Strategy</p> <p>(iii).Construction Noise and Vibration Management;</p> <p>(iv).Construction Waste Management (including details on contaminated waste);</p> <p>(v). Construction Air Quality and Dust Management;</p> <p>(vi).Construction Soil and Water Management;</p> <p>(vii). Construction Flood Management;</p> <p>(viii). Aboriginal/Non-Aboriginal Heritage Management;</p> <p>and</p>

Aspect	MM ID	MM Name	Mitigation Measure
			(ix).Demolition Work Plan  (d) Construction Tree Protection Plan; (e) Erosion and Sediment Control Plan; (f) Unexpected finds protocol for Aboriginal and non-Aboriginal heritage; (g) Unexpected finds protocol for contamination; (h) Construction Emergency Management Plan; (i) Training of responsibilities/heritage site inductions under the <i>National Parks and Wildlife Act 1975, Heritage Act 1977</i> and any other relevant legislation, as relevant to the works.
Construction	CMM3	Construction Fencing	Construction site fencing is to be installed around the site. Construction vehicle and pedestrian access points to / from the site are to be clearly designated, signposted and controlled for authorised access only.
Construction	CMM4	Construction Hazardous Materials	The use and storage of hazardous materials and dangerous goods, including petroleum, distillate and other chemicals, shall be in accordance with the relevant legislation including, but not limited to:

Aspect	MM ID	MM Name	Mitigation Measure
			<ul style="list-style-type: none"> <li>• <i>Protection of the Environment Operations Act 1997;</i></li> <li>• <i>Work Health and Safety Regulation 2017;</i></li> <li>• <i>AS 1940:2017 The Storage and Handling of Flammable and Combustible Liquids; and</i></li> <li>• <i>Safe Work NSW Code of Practice – Managing Risks of Hazardous Chemicals in the Workplace.</i></li> </ul>
Construction	CMM5	Construction Hazardous Materials	A spill containment kit must be available at all times on the construction site. All personnel must be made aware of the location of the kit and trained in its effective deployment.
Construction	CMM6	Construction Materials	All materials must be wholly contained within the construction site. The requirements of the <i>Protection of the Environment Operations Act 1997</i> are to be complied with when placing and stockpiling construction and waste materials, when disposing of waste products and during any other works likely to pollute drains or watercourses.
Construction	CMM7	Construction Operations	Building methods such as brick cutting, mixing mortar and the washing of tools, paint brushes, form-work and concrete trucks shall



Aspect	MM ID	MM Name	Mitigation Measure	
			be undertaken in the construction site in a location so as to prevent air, land or water pollution.	
Construction	CMM8	Construction Equipment	All equipment and machinery shall be secured to prevent vandalism outside of construction hours.	Construction
Construction	CMM9	Construction Contractors	All contractors must meet all workplace safety legislation and requirements.	Construction
Construction	CMM10	Construction Vehicle Maintenance	No vehicle maintenance is permitted in the construction areas except in emergencies.	Construction
Construction	CMM11	Construction Waste	The work site is to be left tidy and rubbish free each day prior to leaving the site and at the completion of works.	Construction
Construction	CMM12	Construction Lighting	All construction lighting shall not cause a nuisance to adjoining neighbours and comply with <i>AS/NZS 4282:2019 Control of the Obtrusive Effects of Outdoor Lighting</i> .	Construction

Aspect	MM ID	MM Name	Mitigation Measure
Construction	CMM13	Construction Hours	<p>The undertaking of any construction work, including the entry and exit of construction and delivery vehicles at the site, is restricted to the following standard work hours:</p> <ul style="list-style-type: none"> <li>(a) Monday to Friday inclusive: Between 7.00am to 6.00pm;</li> <li>(b) Saturday: Between 8.00am to 1.00pm; and</li> <li>(c) Sunday and Public Holidays: No work permitted.</li> </ul> <p>Where noise levels are not expected to exceed the existing background noise level plus 5dB, and noise monitoring is undertaken in accordance with the <i>Approved Methods for Measurement and Analysis of Environmental Noise in NSW (EPA, 2022)</i>, works may also be undertaken during the following additional work hours:</p> <ul style="list-style-type: none"> <li>(d) Mondays to Friday inclusive: Between 6:00pm to 7:00pm; and</li> <li>(e) Saturday: Between 1:00pm to 4:00pm.</li> </ul> <p>Construction work may be undertaken outside of the standard and additional work hours outlined above, but only if notification has been</p>

Aspect	MM ID	MM Name	Mitigation Measure
			<p>given to the occupiers of any land within a minimum of 80 metres of the site boundaries before undertaking the work or as soon as is practical afterwards, and only if it is strictly required:</p> <ul style="list-style-type: none"> <li>(f) By the police or a public authority for the delivery of vehicles, plant or materials; or</li> <li>(g) In an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or</li> <li>(h) Where the works are completely inaudible at the nearest sensitive receiver; or</li> <li>(i) For the delivery, setup and removal of construction cranes, where notice of the crane related works is provided to Council and affected residents at least seven days prior to the works; or</li> <li>(j) Maintenance and repair of public infrastructure where disruption to essential services, required system conditions (such as low-flow conditions for sewers) and/or considerations of worker safety do not allow work within standard hours; or</li> </ul>

Aspect	MM ID	MM Name	Mitigation Measure
			<p>(k) Public infrastructure works where work outside the recommended standard hours is supported by the affected community to shorten the length of the project; and</p> <p>(l) where it is demonstrated and justified for the need to work outside the recommended construction hours.</p> <p>Except in emergencies, these circumstances are not to be interpreted as endorsement for work outside the recommended standard hours and should be justified in each case. Work schedule convenience or project expedience is not considered sufficient justification.</p> <p>Any departure from this Mitigation Measure must be immediately notified to the Post Approvals and Compliance Team.</p>
Construction	CMM14	Construction Methods	<p>Use of any rock excavation machinery, sheet piling, pile driving or jack-hammering and the like is restricted to the following hours:</p> <p>(a) Monday to Friday inclusive: 9:00am to 12:00pm;</p> <p>(b) Monday to Friday inclusive: 2:00pm to 5:00pm; and</p> <p>(c) Saturday: 9:00am to 12:00pm.</p>

Aspect	MM ID	MM Name	Mitigation Measure	
Construction	CMM15	Vibration During Construction	<p>Vibration levels induced by demolition activities must be in accordance with the <i>AS4236 – Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites</i>.</p> <p>The operation of plant and equipment must not give rise to the transmission of vibration nuisance or damage to other premises.</p> <p>Prior to commencement of vibration-generating activities, a specific vibration monitor must be set up either at the property boundary or nearest sensitive receiver to monitor and record the vibration levels affecting buildings on adjacent land using the <i>Assessing Vibration: A Technical Guide (DECC, 2009)</i>.</p> <p>Any departures from this Mitigation Measure must be notified to the Post Approvals and Compliance Team.</p>	Construction
Construction	CMM16	Shoring & Adequacy of Adjoining	If the works involve an excavation that extends below the level of the base of the footings of a building, structure or work on adjoining land (including any structure or work within a road or rail corridor), under	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
		Property	<p>the advice of a suitably qualified engineer the works must:</p> <p>(a) Protect and support the building, structure or work from possible damage from the excavation, and</p> <p>(b) Where necessary, underpin the building, structure or work to prevent any such damage.</p>	
Construction	CMM17	Construction Hoarding	<p>Construction noise for excavation and piling will require a perimeter hoarding as indicated to meet recommended noise levels inside nearest school building.</p> <p>Time managed machinery will be required for the tracked excavator (70 per cent) and dumper truck (50 per cent).</p>	Construction
Construction	CMM18	Construction Access	All construction vehicles will travel along Wool Road and enter the site via the access driveway and then enter the site through the vehicle gate.	Construction
Construction	CMM19	Construction -	Heavy vehicle movement is required to avoid school drop off and	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
		Heavy Vehicle Movements	pick up times	
<b>Construction - Waste</b>	CMW20	Construction Waste	Any material being removed form site must be classified for off-site disposal in accordance with the EPA (2014) <i>Waste Classification Guidelines</i> and/or an applicable NSW EPA Resource Recovery Order.	Construction
<b>Construction - Waste</b>	CMW21	Construction Waste Segregation	Ensure waste from the site is sent to a licensed waste contractor for processing. Where feasible, separate recyclable materials on-site (e.g., metals, concrete, timber) to facilitate direct delivery to a recycling facility.	Construction
<b>Construction - Waste</b>	CMW22	Hazardous Material Management	Identify and safely remove hazardous materials (e.g., asbestos, lead paint) in accordance with applicable regulations. Should an unexpected find of potential contamination be encountered during the works, the Unexpected Finds Protocol (see section Waste Management Strategies) should be followed.	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
<b>Construction - Waste</b>	CWM23	Excavation Waste Classification	All excavation waste removed from the site will be classified by a suitably qualified environmental consultant as per Waste Classification Guidelines Part 1: Classifying Waste (NSW EPA 2014).	Construction
<b>Construction - Waste</b>	CWM23	Waste Management Training	Provide induction training for contractors and workers on the waste management plan, including procedures for material segregation and disposal.	Pre -construction
<b>Construction - Waste</b>	CWM24	Bin and Resource Allocation	Provide designated and clearly labelled bins for recyclables, general waste, and hazardous materials where applicable at the site.	Construction
<b>Construction - Waste</b>	CWM25	Periodic Waste Assessments	Conduct periodic reviews of waste management practices to ensure compliance with recycling and disposal targets.	Construction
<b>Construction - Waste</b>	CWM26	Compliance with Waste Target	Achieve a minimum diversion from landfill of 75% of total waste generated, in line with NSW Waste Resource and Recovery Act	Construction



Aspect	MM ID	MM Name	Mitigation Measure	
			2014.	
Soil & Water	SWMM1	Erosion and Sediment Control	An Erosion and Sediment Control Plan must be implemented in accordance with the Landcom/Department of Housing <i>Managing Urban Stormwater, Soils and Construction Guidelines</i> (Blue Book). The controls must be in place, inspected and managed until the works are complete and all exposed erodible materials are stable relevant to each construction stage. Inspection records must be kept and provided to the Post Approval and Compliance Team on request.	Construction
Soil & Water	SWMM2	Imported Fill Material	Imported fill must be compatible with the existing soil characteristics of the site and limited to the following: <ul style="list-style-type: none"> <li>(a) Virgin excavated natural material (VENM); and/or</li> <li>(b) Excavated natural material (ENM) certified as such in accordance with Protection of the Environment Operations (Waste) Regulation 2014; and/or</li> </ul>	Construction

Aspect	MM ID	MM Name	Mitigation Measure
			<p>(c) Material subject to a Waste Exemption under Clause 91 and Clause 92 of the Protection of the Environment Operations (Waste) Regulation 2014 and recognised by the NSW Environment Protection Authority as being “fit for purpose” with respect to the works under the REF.</p> <p>Certificates from a suitably qualified person/contractor proving that the imported fill material complies with these requirements must be provided to the relevant DoE Project Lead prior to filling works.</p>
Soil & Water	SWMM3	Imported Mulch	<p>Any imported mulch must comply with the <i>Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014</i> and the <i>Mulch Order 2016</i> recognised by the NSW Environment Protection Authority as being “fit for purpose” with respect to the works under the REF. Mulch must not include physical or chemical contaminants and minimise harm to the environment through the introduction, spread or increase in any weed, disease or pest. A written statement provided by the supplier confirming compliance with the <i>Resource Recovery Mulch Order</i></p>

Aspect	MM ID	MM Name	Mitigation Measure	
			2016 is to be provided to the relevant DoE Project Lead prior to importing the mulch.	
Soil & Water	SWMM4	Groundwater	Should any unexpected groundwater be encountered during construction works, works are to cease immediately. Where groundwater needs to be removed, an approval may be required under the <i>Water Management Act 2000</i> .	Construction
Soil & Water	SWMM5	Stormwater Management System	<p>The operational stormwater management system must be designed by a suitably qualified civil engineer. The system must:</p> <ul style="list-style-type: none"> <li>(a) Ensure that the system capacity has been designed in accordance with the relevant Australian Standards; and</li> <li>(b) Ensure that the system has been designed in accordance with the <i>Australian Rainfall and Runoff (Engineers Australia, 20016)</i> and <i>Managing Urban Stormwater: Council Handbook (EPA, 1997) Guidelines</i>.</li> </ul>	Design

Aspect	MM ID	MM Name	Mitigation Measure	
Soil & Water	SWMM6	Acid Sulphate Soils	The management of potential and actual acid sulfate soils shall be conducted in accordance with <i>the Acid Sulfate Soil Guidelines (NSW Acid Sulphate Soils Management Advisory Committee, August 1998)</i> .	Construction
Soil & Water	SWMM7	Stormwater Design	Sediment and erosion control – Sediment control measures, including the provision of sediment basins, straw bales, inlet traps and filters will be implemented.	Construction
Soil	SMM1	Bulk Earthworks	Prior to bulk earthworks, the site shall be cleared of any foreign matter or unsuitable material.	Pre construction
Soil	SMM2	Excavation	Proof roll testing to be carried out using a minimum 12 tonne roller and compact the exposed subgrade to at least 98% Standard Maximum Dry Density (SMDD) at +/- 2% Optimum Moisture Content(OMC)	Pre Construction
Soil	SMM3	Excavation	Should isolated soft/loose areas be encountered during this process,	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
			<p>this material should be removed and replaced with suitable granular structural fill.</p> <p>Structural fill could comprise a select well graded granular material such as processed sandstone and road-base (DGB20)</p>	
Soil	SMM4	Excavation	Backfill excavation with approved structural fill in 150mm layers to a standard compaction of at least 98%.	Construction
Soil	SMM5	Excavation	Surface drainage should be maintained at all times by adopting appropriate cross-falls across the site. Surface drainage should be installed as soon as is practicable in order to capture and remove surface flows to prevent erosion and softening of the exposed surface	Construction
Soil	SMM6	Excavation	Design and construction of temporary and batter cuts should follow recommendations presented in Table below.	Design Construction

Aspect	MM ID	MM Name	Mitigation Measure							
			<table><thead><tr><th>Geotechnical profile</th><th>Temporary Batter (Horizontal to Vertical Ratio)</th></tr></thead><tbody><tr><td>Fill</td><td>2.5H:1V</td></tr><tr><td>Residual Soil</td><td>1.5H:1V</td></tr></tbody></table> <p>Notes:</p> <ul style="list-style-type: none"><li>i) Table 4-1 applies to temporary unsupported cut batters only, for a period of no greater than 3 months once constructed</li><li>ii) Temporary batters apply to cuts no greater than 1.50m in vertical height. Where deeper cuts are proposed for each stratum, further geotechnical designed support or retention systems may be required.</li><li>iii) Excavations in soil have assumed no groundwater table has been encountered;</li><li>iv) The ground surface at the crest of the excavation is horizontal;</li><li>v) There is no surcharge at the crest of the excavation for a distance equal to the depth of the excavation;</li><li>vi) All cuts are protected from erosion.</li></ul>	Geotechnical profile	Temporary Batter (Horizontal to Vertical Ratio)	Fill	2.5H:1V	Residual Soil	1.5H:1V	
Geotechnical profile	Temporary Batter (Horizontal to Vertical Ratio)									
Fill	2.5H:1V									
Residual Soil	1.5H:1V									
Construction Transport	CTMM1	Pedestrian Crossing	Provide safe crossings through the site’s main entry area	Construction						
Construction Transport	CTMM2	CTMP	Prepare a Construction Traffic Management Plan (CTMP) inform construction workers and heavy vehicle movements on safe traffic flow and minimise disruption to the school and surrounding areas. The CTMP must include a Construction Worker Access Management Plan (CWAMP) to outline strategies and measures to manage how	Construction						

Aspect	MM ID	MM Name	Mitigation Measure	
			construction workers access a construction site including carpooling initiatives.	
<b>Construction Transport</b>	CTMM3	Pedestrian Access	Safe pedestrian access in and around the site shall remain unimpeded at all times. Required informative signage and directional information must be provided in appropriate locations ensuring pedestrian safety. Where necessary, traffic control measures will be implemented.	Construction
<b>Construction Transport</b>	CTMM4	Drop off spaces	Provide a formalised Kiss and Drop area. The Kiss and Drop area is to consist of a zone with capacity for 6 to 7 vehicles, plus further queuing space.	Operation
<b>Bushfire</b>	BFMM1	Landscape	Prior to occupation, DoE must ensure new landscaping within the site is designed to meet the requirements of PBP.	Design Construction Operation
<b>Bushfire</b>	BFMM2	BAL requirement	DoE are to ensure the proposed building designed and constructed to the relevant NCC requirements including BAL-19 based on the construction specifications detailed in AS 3959-2018 and additional	Design Construction Operation

Aspect	MM ID	MM Name	Mitigation Measure	
			<p>ember provisions detailed in Section 7.5 of PBP as required.</p> <p>At commencement of construction and during operation, DoE to ensure fencing within 6 m of the building to be constructed of noncombustible material only.</p>	
<b>Bushfire</b>	BFMM3	APZ	<p>The identified APZs are to be established and maintained in perpetuity or until surrounding land is developed to specifications detailed in Appendix 2 of the BAR.</p> <p>Prior to construction, DoE must ensure the identified APZ (Table 3 and shown in Figure 3 of the Bushfire Assessment Report) is maintained to the specifications detailed in Appendix A of the Bushfire Assessment Report. During operation, DoE must ensure APZ are managed in perpetuity.</p>	Throughout the life of the project
<b>Bushfire</b>	BFMM4	Fire Hydrant	DoE to ensure fire hydrants are provided in accordance with AS2419:2021.	Design Construction Operation



Aspect	MM ID	MM Name	Mitigation Measure	
<b>Bushfire</b>	BFMM5	Bushfire Emergency Response	<p>Prior to operation, DoE to update Bushfire and Grassfire Response Plan including:</p> <ol style="list-style-type: none"> <li>1. Designating the new building as the shelter-in-place; and</li> <li>2. Clear signage is to be provided to the new building and identifying it is the designated 'shelter-in-place'.</li> <li>3. Remove Building H as the current shelter-in-place option in the Bushfire and Grassfire Response Plan.</li> <li>4. Updated Bushfire and Grassfire Response Plan to be provided to local brigade(s)</li> </ol>	Prior to operation Operation
<b>Bushfire</b>	BFMM6	Bushfire Emergency Response	<p>Prior to operation, DoE to:</p> <ol style="list-style-type: none"> <li>1. Install clear signage to the new building and identifying it is the designated 'shelter-in-place';</li> <li>2. Ensure external combustible items located away from</li> </ol>	Prior to operation Operation

Aspect	MM ID	MM Name	Mitigation Measure	
			windows/doors (landscaping, hard landscaping, bins, out buildings etc.); and  3. Additional fire extinguishers to be located internally near all entry/exit points for use against combustible materials.	
Bushfire	BFMM7	Bushfire - access	During design and prior to operation, DoE must ensure the upgrades to the internal loop road meet the specifications detailed in Section 4.4.1 of this Bushfire Assessment Report.	Design Construction
Biodiversity	BMM1	Fauna	Inspect all trees to be removed for hollows, nest and other signs of fauna habitat. If fauna is discovered, an ecologist may be required to remove and relocate any fauna if the tree or vegetation is to be removed.	Pre - construction
Biodiversity	BMM2	Fauna protection	Attempt to deter Masked Lapwings from nesting within the activity zone prior to constructing commencing through the following measures:  -Letting the grass grow to a length of around 30 cm in height	Pre - construction

Aspect	MM ID	MM Name	Mitigation Measure	
			<p>-Installing a fake 'predator' cut outs such as eagles, kites or cats ideally with moving parts</p> <p>These measures need to take place prior to the breeding season, i.e. after March and before August. If nests are located within the works area they will need to be relocated under appropriate NSW National Parks and Wildlife Service permits.</p>	
<b>Biodiversity</b>	BMM3	Mulch Integrity	Use AS 4454 leaf mulch with 90% recycled content for tree protection fencing. Chip trees marked for removal and use mulch 100mm deep. Avoid soil, weeds, sticks, and stones. Comply with AS 4454 (1999) and AS 4419 (1998).	Pre construction  Construction
<b>Biodiversity</b>	BMM4	Pathogen mitigation	Basic hygiene protocols are to be implemented for construction personnel and machinery on site to reduce the potential for invasion by plant pathogens including Phytophthora cinnamomi, the fungus myrtle rust Uredo rangelli and amphibian chytrid fungus.	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
<b>Trees</b>	TMM1	Tree Protection	A project arborist (conforms to the AS 4970) is required to be nominated before works start, and they are to be provided with all related site documents.	Pre – construction
<b>Trees</b>	TMM2	Tree protection	A Tree Management Plan (Arboricultural Method Statement) is issued before work starts and measures of protection employed.	Pre-construction
<b>Trees</b>	TMM3	Tree protection	Tree protection must be approved by a Consulting Arborist AQF Level 5. No materials, mixing, parking, disposal, repairs, refuelling, fires, stockpiling, or backfilling is allowed near remaining trees. Removal or lopping of trees needs written permission from the Superintendent.	Pre- construction
<b>Trees</b>	TMM4	Tree removal plan	Trees for removal are to be identified and marked for removal.	Pre-Construction
<b>Trees</b>	TMM5	Tree protection plan	All trees to be protected shall be clearly identified and all TPZs surveyed.	Pre- construction

Aspect	MM ID	MM Name	Mitigation Measure	
<b>Trees</b>	TMM6	Tree protection	Protective fencing around existing trees and within TPZs must be installed before any site work begins. The fence must be 1800mm high chain wire mesh fixed to galvanised steel posts, enclosing an area to prevent damage as defined in the Tree Protection Plan. No storage inside fenced area.	Pre- construction
<b>Trees</b>	TMM7	Tree protection	Tree protection signage must be attached to tree protection zones before works begin. Signs should be displayed prominently and repeated at 10m intervals or closer when the fence changes direction. Signs must include information about the tree protection zone, access restrictions, developer's contact details, and Site Arborist information.	Pre-construction
<b>Trees</b>	TMM8	Tree protection	Site induction; All workers must be briefed about the ecological sensitivity of the site, no-go areas, the need to minimise ecological impact, and all other required mitigation measures is to be undertaken including conditions outlined in Tree Management Plan before the initiation of work. This is required as part of the site	Pre construction

Aspect	MM ID	MM Name	Mitigation Measure	
			induction process.	
<b>Trees</b>	TMM9	TPZ	Tree Protection Zones (TPZs) will be maintained around vegetation to be retained. TPZs will be maintained in accordance with Australian Standard 4970 (2009) Protection of Trees on Development Sites (AS-4970). No activities are to take place within the Structural Root Zones (SRZs) of mature trees. No works, stockpiling of materials, excavation, parking or any other potentially harmful activities will be undertaken within TPZs unless a Level 5 Arborist has provided confirmation that the works will not impact the tree.	Construction
<b>Trees</b>	TMM10	TPZ	No pedestrian or plant access is permissible to TPZs.	Construction
<b>Trees</b>	TMM11	TPZ	All site facilities must be located outside of TPZ. Chemicals and contaminants must be stored properly in an enclosed area with a spill bund to prevent runoff in case of accidents.	Construction
<b>Trees</b>	TMM12	TPZ	Avoid storing bulk or harmful materials near trees. Keep spoil from excavations away from TPZs. Ensure wind-blown materials like	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
			cement don't harm trees.	
<b>Trees</b>	TMM13	TPZ	Ropes, cables or similar items should not be tied to trees.	Construction
<b>Trees</b>	TMM14	Soil compaction	Soil must not be filled or compacted above tree roots enclosed by protection fencing during construction near trees. Guidelines must be followed to prevent soil compaction in these areas. Protection includes using elevated planks attached to scaffolding to prevent ground compression.	Construction
<b>Trees</b>	TMM15	TPZ - trenching	Trenching shall avoid the TPZ's. Proposed routes shall be re-routed outside of the TPZ. Underboring required if unable reroute. Any excavation in the area of a TPZ must be authorised and conditioned by the project arborist.	Construction
<b>Trees</b>	TMM16	Landscape maintenance	Contractors are to ensure new landscaping is watered. Apply water at an appropriate rate suitable for the plant species during periods of little or no rainfall.	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
<b>Trees</b>	TMM17	Replanting – Biodiversity	Plant advanced specimens of the same species in groups.	Construction
<b>Trees</b>	TMM18	Replanting - visual amenity	Plant advanced specimens of the same species in areas that offer visual/noise screening.	Construction
<b>Trees</b>	TMM19	Mulch integrity	Tree protection fencing will use AS 4454 leaf mulch with 90 per cent recycled content. Trees marked for removal will be chipped and mulched to a depth of 100mm, and free from soil, weeds, sticks and stones. The fencing will comply with AS 4454 (1999) and AS 4419 (1998).	Construction
<b>Visual &amp; Amenity</b>	VAMM1	External Materials	<p>The selection of external colours, materials or finishes of the building(s) should aim to minimise impacts on visual amenity and ensure there is no increase in impacts identified in the visual amenity assessment in the REF.</p> <p>For enquiries on requirements please contact the DoE Design and Infrastructure Standards Team on</p>	Design



Aspect	MM ID	MM Name	Mitigation Measure	
			DesignAndInfrastructureStandards@det.nsw.edu.au.	
<b>Land Contamination</b>	LCMM1	Unexpected Site Contamination	During construction works, should any unexpected contamination information or contaminants be identified which have the potential to alter previous site contamination assessments, conclusions and recommendations, the relevant DoE Project Lead must be immediately notified and works must cease in the location of the contamination. Works must not recommence until a suitably qualified and experienced contamination consultant has investigated the unexpected contamination and provided recommendations for the management of necessary remedial work required to render the site suitable for the activity in accordance with any relevant NSW EPA adopted guidelines. A Completion Certification from the contamination consultant shall be submitted to the relevant DoE Project Lead prior to construction works re-commencing. Following completion of the remediation through implementation of the recommendations from the suitably qualified contamination consultation, a Site Remediation and Validation Report is to be submitted to a NSW EPA-Accredited Site Auditor to confirm site	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
			suitability. A copy of the Site Remediation and Validation Report is also to be provided to the relevant DoE Project Lead and DoE's Post Approval and Compliance Team. A notice of completion of remediation work must also be given to Council in accordance with Section 4.14 and Section 4.15 of <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> .	
<b>Land Contamination</b>	LCMM2	Land contamination – scope change	Any modifications will need to be assessed by preparing a new REF or an REF document addendum, in consideration of potential contamination and hazardous materials and in accordance with the EP&A Act.	Future if scope changes
<b>Land Contamination</b>	LCMM3	Land contamination - groundwater	Chemicals and contaminants must be stored properly in an enclosed area with a spill bund to prevent runoff in case of accidents.	Construction
<b>Utilities &amp; Infrastructure</b>	UIMM1	Services & Utilities	All services and utilities in the construction area must be appropriately disconnected and reconnected as required, in consultation with the relevant authorities to determine disconnection	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
			and reconnection requirements. Where services or utilities are found not to be adequate to support the works, appropriate augmentation must be undertaken, subject to obtaining any required approvals or permits.	
<b>Utilities &amp; Infrastructure</b>	UIMM2	No Obstruction of Public Way	Building materials, machinery, vehicles, refuse, skip bins or the like must not be stored or placed in the public way (outside of any approved construction works zone) under any circumstances.	Construction
<b>Utilities &amp; Infrastructure</b>	UIMM3	Pedestrian Access	Safe pedestrian access in and around the site shall remain unimpeded at all times. Required informative signage and directional information must be provided in appropriate locations ensuring pedestrian safety. Where necessary, traffic control measures will be implemented.	Construction
<b>Heritage</b>	HMM1	Non-Aboriginal Heritage	If any unexpected archaeological relic (or potential relic) of heritage significance is discovered during any construction work, all work in the vicinity must cease and the area must be appropriately protected. Materials should not be removed from the ground wherever possible.	Construction

Aspect	MM ID	MM Name	Mitigation Measure
			The DoE Heritage Team is to be notified and an archaeologist engaged to undertake a site inspection to ascertain whether the finds are significant relics. Construction works cannot recommence in that area until advised by the archaeologist, in consultation with the DoE Heritage Team. Should significant relics be identified, external approvals to impact the relics may be required.
Heritage	HMM2	Aboriginal Heritage	<p>If any unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, site or places) are discovered during any construction work, all works in the vicinity must cease and the area must be appropriately protected. The DoE Heritage Team is to be notified and an archaeologist engaged to undertake a site inspection to assess the find in consultation with the Registered Aboriginal Parties (RAPs). Following the on-site assessment, the archaeologist and RAPs (if they attended the site) are to advise on whether further management, mitigation or approvals are required in consultation with the DoE Heritage Team. Should Aboriginal objects be identified, these are to be registered in the Aboriginal Heritage Information Management System (AHIMS). An Aboriginal Heritage Impact Permit</p>

Aspect	MM ID	MM Name	Mitigation Measure	
			(AHIP) would also need to be obtained to impact the site.	
Heritage	HMM3	Human Remains	If human remains are identified, work must cease and the area around where the remains are found must be protected from all disturbance. Finds are not to be displaced from the location where they are found. The DoE Heritage Team is to be notified and a specialist archaeologist engaged to assess the find. If human skeletal material less than 100 years old is discovered, the NSW Police are to be contacted in accordance with the <i>Coroners Act 2009</i> . Aboriginal burials (older than 100 years) are protected under the <i>National Parks and Wildlife Act 1974</i> and should not be disturbed. Should the skeletal material prove to be archaeological Aboriginal remains, Heritage NSW and the Local Aboriginal Land Council must be notified. Notification should also be made to the Commonwealth Minister for the Environment, under the provisions of the <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> .	Construction
Heritage	HMM4	Aboriginal Due	The Aboriginal due diligence assessment must be kept by School	Construction

Aspect	MM ID	MM Name	Mitigation Measure	
		Diligence	Infrastructure NSW so that it can be presented, if needed, as a defence from prosecution under Section 86(2) of the National Parks and Wildlife Act 1974.	
<b>Operational Management</b>	OPMM1	Operation Waste Management Plan	Prior to the commencement of operations, any operational waste management measures shall be detailed in an Operational Waste Management Plan. This Plan must outline how waste will be minimised, handled, stored and disposed of appropriately, in accordance with any relevant guidelines. A copy of the Operational Waste Management Plan is to be provided to the relevant DoE Project Lead for implementation during operations.	Prior to the commencement of Operations
<b>Operational Management</b>	OPMM2	Waste Segregation	Ensure proper segregation of waste streams, including recyclables, organics, and general waste.	
<b>Operational Management</b>	OPMM3	Bin Labelling	Install clearly labelled recycling and general waste bins in accessible locations across the school	
<b>Operational</b>	OPMM4	Staff and	Provide training for staff and students on correct waste disposal and	

Aspect	MM ID	MM Name	Mitigation Measure	
Management		Student Training	recycling practices	
Operational Management	OPMM5	Waste Monitoring and Reporting	Regularly monitor waste volumes to ensure alignment with waste minimisation targets.	
Operational Management	OPMM6	Compliance with Waste Targets	Achieve a minimum diversion from landfill of 75% of total operational waste, in line with sustainability goals	
Operational Management	OPMM7	Operation Stormwater Management Plan	<p>Prior to the commencement of operations, a Stormwater Operation and Maintenance Plan is to be prepared and include the following:</p> <ul style="list-style-type: none"> <li>(a) Maintenance schedule of all stormwater quality treatment devices;</li> <li>(b) Record and reporting details; and</li> <li>(c) Work Health and Safety requirements.</li> </ul> <p>A copy of the Stormwater Operation and Maintenance Plan is also to be provided to the relevant DoE Project Lead for implementation.</p>	Prior to the commencement of Operations

Aspect	MM ID	MM Name	Mitigation Measure	
Operational Management	OPMM8	Operation Plant and Machinery Plan	All operational plant and equipment must be maintained and operated in proper and efficient manner and in accordance with the user manual.	During Operations
Operational Management	OPMM9	Operation Plant and Machinery Plan	Acoustic louvers installed surrounding mechanical plant and fans to have internally lined ducts with acoustic insulation.	During Operations
Operational Management	OPMM10	Operation Plant and Machinery Plan	Mechanical plant room not to operate during night time periods (after 10 pm).	During Operations
Operational Management	OPMM11	Operation Plant and Machinery	Prior to the commencement of operations, it must be demonstrated by a suitably qualified acoustic engineer that noise associated with the operation of mechanical plant or machinery installed does not exceed the relevant project noise trigger levels.	Prior to the commencement of Operations
Operational Management	OPMM12	Landscaping	Landscaping at the site associated with the works must be maintained. This includes the undertaking of:	During Operations



Aspect	MM ID	MM Name	Mitigation Measure	
			<div>(a) Mulching</div> <div>(b) Concrete/paving maintenance and replacement</div> <div>(c) Outdoor furniture maintenance and replacement</div> <div>(d) Turf replacement</div> <div>(e) Planting and tree replacement</div> <div>(f) Planting and tree maintenance (trimming)</div> <div>(g) Watering</div> <div>(h) Irrigation maintenance</div> <div>(i) Mowing</div> <div>(j) Spraying and pest treatment</div>	
Operational Transport	OPTMM1	School Transport Plan	Prepare and implement a School Travel Plan and Travel Access Guide for use by students, parents and staff.	Operation
Flooding	OPFMM1	School Emergency	Upgrade the existing School Emergency Management Plan with respect to flooding.	Operation

Aspect	MM ID	MM Name	Mitigation Measure	
		Management Plan		
<b>Sustainability</b>	SCMM1	Green Star Building Certification	<p>Green Star Building certification must be obtained demonstrating that the activity achieves a minimum 4 Star rating. Evidence of the certification must be provided to the DoE Sustainability Team.</p> <p>For enquiries on requirements please contact the DoE Sustainability Team on Sustainability.ESD@det.nsw.edu.au.</p>	Within 12 months of commencement of Operations

# Dictionary

Term	Definition
<b>Aboriginal object</b>	Has the same meaning as the definition of the term in Section 5 (Definitions) of the <i>National Parks and Wildlife Act 1974</i> .
<b>Aboriginal place</b>	Has the same meaning as the definition of the term in Section 5 (Definitions) of the <i>National Parks and Wildlife Act 1974</i> .
<b>Bushfire prone land</b>	Land mapped on a bushfire prone land map as being subject to bushfire hazard. If part but not all of a lot is mapped as being subject to bushfire hazard, only the specific part of the lot that is mapped as being subject to bushfire hazard is bushfire prone land.
<b>Category 1 Remediation</b>	Remediation work needing consent that is: <ul style="list-style-type: none"><li>(a) designated development, or</li><li>(b) carried out or to be carried out on land declared to be a critical habitat, or</li><li>(c) likely to have a significant effect on a critical habitat or a threatened species, population or ecological community, or</li><li>(d) development for which another State environmental planning policy or a regional environmental plan requires development consent, or</li></ul>

	<p>(e) carried out or to be carried out in an area or zone to which any classifications to the following effect apply under an environmental planning instrument:</p> <ul style="list-style-type: none"> <li>(i) coastal protection,</li> <li>(ii) conservation or heritage conservation,</li> <li>(iii) habitat area, habitat protection area, habitat or wildlife corridor,</li> <li>(iv) environment protection,</li> <li>(v) escarpment, escarpment protection or escarpment preservation, or escarpment preservation,</li> <li>(vi) floodway,</li> <li>(vii) littoral rainforest,</li> <li>(viii) nature reserve,</li> <li>(ix) scenic area or scenic protection,</li> <li>(x) wetland, or</li> </ul> <p>(f) carried out or to be carried out on any land in a manner that does not comply with a policy made under the contaminated land planning guidelines by the council for any local government area in which the land is situated (or if the land is within the unincorporated area, the Minister).</p>
<b>Category 2 Remediation</b>	Remediation work not needing consent that is:

	<p>(a) a remediation work that is not a work of a kind described as Category 1 remediation, or</p> <p>(b) a remediation work (whether or not it is a work of a kind described as Category 1 remediation that:</p> <ul style="list-style-type: none"> <li>(i) by the terms of a remediation order, is required to be commenced before the expiry of the usual period under the <u><a href="#">Contaminated Land Management Act 1997</a></u> for lodgement of an appeal against the order, or</li> </ul> <p style="margin-left: 40px;">Note — The usual period for lodgement of an appeal is 21 days or a period prescribed instead by regulations made under the Contaminated Land Management Act 1997.</p> <ul style="list-style-type: none"> <li>(ii) may be carried out without consent under another State environmental planning policy or a regional environmental plan (as referred to in section 4.16(4)), or</li> <li>(iii) is carried out or to be carried out by or on behalf of the Director-General of the Department of Agriculture on land contaminated by the use of a cattle dip under a program implemented in accordance with the recommendations or advice of the Board of Tick Control under Part 2 of the Stock Diseases Act 1923, or</li> <li>(iv) is carried out or to be carried out under the Public Land Remediation Program administered by the Broken Hill Environmental Lead Centre.</li> </ul>
<b>Certification of Crown building work</b>	Certification under section 6.28(2) of the <i>Environmental Planning and Assessment Act 1979</i> .
<b>Construction</b>	All physical work to enable operation including (unless specifically excluded by a Mitigation Measures) but not limited to the demolition and removal of buildings, the carrying out of works for the purposes of the activity, including bulk earthworks, and erection of buildings and other infrastructure permitted by this REF determination, but excluding:

	<ul style="list-style-type: none"> <li>• Building and road dilapidation surveys;</li> <li>• Investigative drilling or investigative excavation;</li> <li>• Archaeological Salvage;</li> <li>• Establishing temporary site offices (in locations identified by the Mitigation Measures of this REF determination);</li> <li>• Installation of environmental impact mitigation measures, fencing, enabling works; and</li> <li>• Minor adjustments to services or utilities.</li> </ul>
<b>Demolition</b>	The deconstruction and removal of buildings, sheds and other structures on the site.
<b>DoE</b>	Department of Education
<b>Environment</b>	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings.
<b>Green Star</b>	The building sustainability rating scheme management by the Green Building Council of Australia.
<b>Post Approval and Compliance</b>	To contact the Post Approval and Compliance Team email <a href="mailto:postapproval@det.nsw.edu.au">postapproval@det.nsw.edu.au</a>
<b>Gross Floor Area</b>	Refer to the National Construction Code 'Gross Floor Area' definition.
<b>Project Lead</b>	The DoE primary contact for the project i.e. Project Director or Asset Manager.

<b>Reasonable</b>	Means applying judgement in arriving at a decision, considering mitigation, benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements.
<b>REF</b>	Review of Environmental Factors
<b>Suitably qualified person</b>	A professional with the necessary qualifications having regard to the nature of their technical services.