

Consolidated Mitigation Measures for Review of Environmental Factors

Department of Education Projects - New High School for Medowie

Determination Date – 20 June 2025

Document Control

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Version History

Version	Date	Description	Prepared by	Approved by
1	07/02/25	Final version for exhibition	Gyde Consulting	Mel Krzus, Director
2	13/05/25	Updated post exhibition for determination	Gyde Consulting	Mel Krzus, Director
3	03/06/25	Updated to incorporate the department's standard Mitigation measures	Gyde Consulting	Mel Krzus, Director
4	09/09/25	Consolidated Mitigations - Post Determination (amendments and deletions in strike through and additions in <u>bold underline text</u>) Spelling corrected.	Natalie Lawrie, Planning Officer Assessments	Jenny Chu, Manager Assessment

Part 5 Mitigation Measures

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
General / Operational			
General	GEN1	The activity must be carried out in accordance with the REF dated 13 May 2025 prepared by Gyde Consulting, in accordance with the approved plans, and generally in accordance with the supporting documentation (outlined above in Table 1), except where a mitigation measure listed in Table 2 expressly requires otherwise.	To ensure the activity is constructed and operated generally in accordance with the approved plans and supporting documentation.
GEN2	General	Ongoing engagement is required to take place throughout the lifecycle of the project with all relevant First Nations people, including relevant groups, communities, and individuals who identify as Aboriginal and/or Torres Strait Islanders.	To enhance and protect Aboriginal heritage and culture.
GEN3	General	These Mitigation Measures do not remove the obligation to obtain all other licences, permits, approvals and consents as required under any other legislation.	To obtain all relevant licences, approvals, and consents required related to the activity.

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GEN4	General	All works must comply with the relevant Australian Standards.	To comply with Australian Standards.
GEN5	Prior to construction	A Crown Certificate under Section 6.28 of the Environmental Planning and Assessment Act 1979 must be obtained for any Crown building work.	To certify Crown building work on behalf of the Crown to comply with the Building Code of Australia
GEN6	Prior to construction	Landowners consent must be obtained in writing from the relevant landowner or authority.	To obtain consent from all landowners as relevant.
GEN7	During operation	All operational plant and equipment must be maintained and operated in a proper and efficient manner and in accordance with the user manual.	To maintain proper operation of plant and equipment.
GEN8	During operation	Landscaping at the site associated with the works must be maintained. This includes the undertaking of: (a) Mulching (b) Concrete/paving maintenance and replacement (c) Outdoor furniture maintenance and replacement (d) Turf replacement (e) Planting and tree replacement (f) Planting and tree maintenance (trimming) (g) Watering (h) Irrigation maintenance (i) Mowing	

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		(j) Spraying and pest treatment	
Community			
CE1	Prior to construction	The department'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.	To notify the community of the commencement of construction works.
CE2	Prior to construction	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: A. 24-hour contact person for the site; B. Telephone and email addresses; C. Site works and timeframes; and D. Details of where accessible project information can be sourced.	To notify the community of key project status and contacts.

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CE3	All stages	All complaints must be managed in accordance with the department's Stakeholder and Community Participation Plan.	To ensure complaints are managed correctly.
Compliance			
PAC1	All stages	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 Measures.	To ensure activity is undertaken a
PAC2	All stages	The relevant Project Lead and the department'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. <i>Note: Non-compliance and incident notifications</i>	To comply with mitigation measures.

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		<i>processes are set out in the Post Approvals Guide.</i> <i>All notifications must be recorded using the digital Non-Compliance Notification Form or the Incident Notification Form.</i>	
PAC3	All stages	A risk-based program of independent audits must be prepared for the work, having regard to the AS/NZS ISO 19011-2019 Guidelines for Auditing Management Systems. Audits are to be undertaken by suitably qualified personnel independent to the works and documented in an audit report which: (a) Assesses how the Mitigation Measures are being satisfied; (b) Outlines the adequacy of any documents required under the Mitigation Measures; (c) Outlines the performance of the works with respect to any impacts on the surrounding environment including the local community; and (d) Recommends any measures or actions to improve the performance of the works, if deemed required. The independent audit program is to be provided to the relevant department Project Lead and the	To comply with mitigation measures.

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		department's Post Approval and Compliance Team for agreement.	
PAC4	All stages	The Independent Audits must be carried out in accordance with the approved audit program. Each Independent Audit Report is to be finalised within four weeks from the auditor's site inspection or where an alternative timeframe is agreed to by the Post Approval and Compliance Team. Each Independent Audit Report is to be provided to the relevant department Project Lead and the department's Post Approval and Compliance Team within 7 days of completion of the report.	
PAC5	One week prior to the commencement of operation	The Project Lead must submit a Status Report to the department's Post Approvals and Compliance Team demonstrating compliance with the Mitigation Measures upon completion of the works.	To comply with mitigation measures.
Traffic, Access and Parking			
TR1	During operation	Bell times of the proposed school are to be staggered with the bell times of the nearby Medowie Public School by at least 20 minutes (currently	To reduce cumulative traffic impacts between the proposed school and the existing primary school.

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		occurring at 8:55am and 2:50pm) to minimise the peak traffic conditions during pick-up and drop-off times. Bell times are to be staggered in accordance with the School Transport Plan at Appendix 27 .	
TR2	During operation	On-going monitoring of the traffic conditions (e.g. identifying any bottlenecks and monitoring of the kiss and ride drop-off zone) is to be undertaken to support the continuing management of traffic conditions in accordance with Appendix D of the approved School Transport Plan.	To reduce cumulative traffic impacts between the proposed school and the existing primary school.
TR3	Prior to the school operating and during operation—	Prior to the operation of the school, a Travel Access Guide (TAG) is to be developed and provided to all parents/ guardians of the school. The TAG is to encourage parent pick-up and drop-offs at the kiss and ride drop-off zone, to minimise the disruptions to on-street parking, and to encourage the provision of active and public transport to and from the school. The TAG is to be provided to all parents/ guardians of the school upon enrolment.	To encourage use of kiss and ride drop-off zone and to use active and public transport to the school.
TR4	Prior to the school operating	Prior to the operation of the school, students and parents are to be notified of the proposed access routes to the site as recommended in the approved	To ensure people accessing the school via roads use the preferred route(s).

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	and during operation	School Transport Plan. Any new students and parents (or guardians) are to be notified of these proposed access routes upon enrolment.	
TR5	During operation	Prior to the commencement of operations, a School Transport Plan (STP) must be prepared to the satisfaction of the department's Transport Planning Team. The approved STP is to be implemented and subject to an annual monitoring and review program for the duration of the operation of the school, that includes (but is not limited to) the following: a) A suitably qualified Travel Coordinator who shall implement the objectives and strategies for the STP (including but not limited to the implementation of the Behaviour Change Strategies within Appendix D of the School Transport Plan) within the first three years of operation b) The annual review/ audit by the Travel Coordinator that ensures that mode share targets are being achieved, and complaints are, where possible, resolved and the drop off and pick up management sub plan is being adhered to by guardians. The result of the annual review is to be provided to Council and TfNSW for information within 2 months of	To encourage and facilitate use of public and active transport, to reduce private car dependency.

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		completing the annual review/ audit. e) Where the annual review/ audit required by (b) above, identifies that mode share targets are not being met and the pre-registration system of the drop-off and pick up management plan is not being adhered to, the school is to implement further measures in consultation with Council and TfNSW to meet the targets prior to the next annual review/ audit cycle. d) Evidence of this consultation in the form of a report must include a description of the proposed measures and a schedule for implementing the measures. e) A review of the adequacy of the existing school bus services and public bus services to cater for school demand and consultation with TfNSW and other bus providers in the area to increase bus services if required to meet demand. f) Identifications of measures to be implemented where demand exceeds capacity of the bus services. g) The demand for bicycle services should also be considered in this annual review/ audit and provisions made for increasing bicycle parking on-site delivered if demand is generated. The need to revise, extend or conclude the audit / review program may be required when:	

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		I. The school can demonstrate that mode share targets are being achieved on a consistent basis, or II. Mode share targets are not being consistently achieved, or III. Where mode share targets are not consistently being achieved, but suitable evidence is provided detailing how impacts from the departure of mode share targets have been implemented. The methodology and review of the mode share splits in the annual review /audit identified in this mitigation measure must be reviewed and confirmed by an independent suitably qualified traffic/ transport professional prior to the commencement of the operation of the school. A copy of the STP is to be provided to the relevant department Project Lead for implementation during operations.	
TR6	During operation	Prior to the operation of the school, the proposed shared footpath along the Abundance Road school frontage as well as the proposed raised pedestrian crossing (as outlined in the Civil Plans and Reports at Appendix 8) are to be constructed and operational, to support safe access for students walking and cycling to school.	To facilitate safe foot and bike access to school from Day 1 operations.

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TR7	During operation	Prior to the operation of the school, a plan for the visibility and on-going maintenance of the active transport infrastructure is to be prepared and implemented on site.	To encourage and facilitate active transport.
TR8	During operation	Prior to the operation of the school, a school zone travel speed restriction is to be approved by the relevant roads authority and implemented along Ferodale Road and Abundance Road with any other traffic calming measures required (such as kerb build outs and speed humps if needed). The surrounding community is to be notified of these changes prior to implementation.	To increase road safety.
TR9	Prior to and during construction	During the construction process, a traffic controller is to be present on the site to support construction vehicle access and egress entrance to the site.	To increase road safety.
TR10	Prior to and during construction	Prior to construction commencing, a detailed Construction Traffic Management Plan is to be prepared and approved by either the department or a suitably qualified traffic engineer. The Construction Traffic Management Plan is to identify and provide	To increase road safety.

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		management strategies for the future construction activities at the site and ensure that the Construction Vehicle Traffic Route as outlined in the approved TAIA at Appendix 26 is identified and followed by heavy vehicles. The Construction Traffic Management Plan is to be incorporated into the general Construction Environmental Management Plan for the site.	
TR11	Prior to and during construction	Construction vehicle access to the site is to be timed so as to not interfere with the AM and PM peaks as well as pick-up and drop-off times at Medowie Public School (8:30-9:00am and 2:30-3:15pm).	Reduce the impacts of construction traffic to the locality.
TR12	Prior to construction	If required, a Section 138 Roads Act approval is required to be obtained from Port Stephens Council prior to the undertaking of any works within the road reserve.	To ensure all requisite approvals are obtained prior to undertaking works.
TR13	Prior to construction	Prior to the issue of any Crown Construction Certificate, updated plans are to be prepared and provided which demonstrates the provision of 69 on-site bicycle parking spaces.	To ensure the bicycle parking provision reflects Council's requirement and supports implementation of the STP.

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TR14	During operation	Prior to the operation of the school, an operational management plan is to be prepared which includes monitoring of the bus bay to ensure efficiency in operations.	To support the efficient working of the bus bay.
TR15	Prior to operation	The location of the proposed School Speed Zones is to be submitted to and approved by the relevant road authority prior to the installation of the signage. The School Speed Zones are to be in place prior to Day 1 of the school commencing.	To ensure that the road authority approves the location of the School Speed Zones required to service the new school.
TR16	Prior to operation	Any additional public and street signage required as a result of the public domain works are to be submitted to and approved by Council prior to their installation. Any required signage is to be in place prior to the school commencing.	To ensure that any street signage approved is compliant with Council's requirements.
TR17	During operation	The Travel Plan Coordinator and school administration are to communicate regularly in writing with parents regarding the approved pick up and drop off arrangements on Abundance Road and Ferodale Road	To help minimise the risk of U-Turns on Abundance Road.

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TR18	During operation	Within 12 months of the school opening, a formal warrant assessment including traffic and pedestrian counts is to be conducted to identify (by a suitably qualified traffic engineer/consultant) if an upgrade to the pedestrian refuge on Ferodale Road to a formal crossing is required.	To ensure the pedestrian crossing is not too narrow for the increased foot traffic.
TR19	Prior to construction	Prior to construction commencing in the road reserve, a construction set of drawings are to be prepared which outlines all works proposed within the road reserve and to be prepared to the relevant standards and guidelines. This is to also include any additional line marking as required. The construction set of drawings is to be submitted as part of the S138 application (Mitigation Measure TR12) if required.	To ensure that any works proposed in the road reserve are designed to Council's requirements.
TR20	Prior to operation	All works in the public domain (as required under Mitigation Measure TR19) are to be constructed prior to Day 1 of the school commencing.	To ensure all relevant public works are in place prior to the school operations commencing.
TR1	Prior to operation and during operation	<u>A School Transport Plan (STP) is to be prepared prior to the operation of the school to the satisfaction of DoE Transport Planning Team. A</u>	

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		<u>copy of the STP is to be provided to the relevant department Project Lead for implementation during operations.</u> <u>The STP must include:</u> • <u>measures, informed by those set out in the preliminary STP prepared as part of the School Transport Plan prepared by WSP dated 31 January 2025 included at Appendix 27 of the REF, to encourage and facilitate use of public and active transport, to reduce private car dependency and minimise traffic impacts.</u> • <u>a Travel Access Guide to be prepared to encourage parent pick-up and drop-offs at the kiss and ride drop off zone, to minimise the disruptions to on-street parking, and to encourage the provision of active and public transport to and from the school, which is to be provided to all parents/ guardians of the school upon enrolment. Road safety sessions for students must also be held at the commencement of each school year for</u>	

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		<u>newly enrolled students.</u> • <u>consideration of the following measures:</u> ○ <u>monitoring of drop kiss and drop operations until at least 15 bus services are operational per hour to support travel mode share targets.</u> ○ <u>monitoring of bus bay operations for the first 12 months to ensure efficiency in operation.</u> ○ <u>monitoring of traffic conditions for the first 12 months during kiss and drop operations to identify any bottlenecks or road safety issues.</u> ○ <u>staggering of bell times of the high school and nearby Medowie Public School by at least 20 minutes.</u> ○ <u>the potential for a turnaround facility to be provided on Abundance Road as the student population increases.</u>	

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		○ <u>investigation within 12 months of the school opening, into the potential need for a pedestrian crossing to the east of the development site on Ferodale Road, such as an upgrade to the existing pedestrian refuge to a wombat crossing.</u>	
<u>TR2</u>	<u>Prior to operation</u>	<u>Facilitate Transport Working Group (TWG) meetings during the detailed design to finalise road safety measures, including consideration of:</u> a) <u>The detailed design and location of the proposed wombat crossing on Abundance Road.</u> b) <u>The installation of double centre line marking to prevent u-turns on Abundance Road.</u> c) <u>Swept Path Analysis particularly for Ferodale Road/Abundance Road and proposed bus stop locations including queueing analysis to ensure the safe</u>	

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		<u>operation of the bus stop in its location close to the intersection.</u> d) <u>Proposed speed zone restrictions and other traffic calming measures required (such as kerb build-outs and speed humps if needed).</u> e) <u>Proposed pedestrian and transport infrastructure upgrades to the public domain.</u> <u>Agreed road safety measures must be implemented prior to commencement of operation.</u>	
<u>TR3</u>	<u>Prior to and during construction</u>	<u>Prior to construction commencing, a detailed Construction Traffic Management Plan (CTMP) is to be prepared by a suitably qualified traffic engineer for implementation during construction.</u> <u>The Construction Traffic Management Plan is to identify management strategies for construction activities and ensure that the Construction Vehicle Traffic Route as outlined in the Transport and Accessibility Impact Assessment prepared by WSP dated 31 January 2025 at included</u>	

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		<u>Appendix 26 of the REF is identified and followed.</u> <u>The Construction Traffic Management Plan is to be incorporated into the Construction Environmental Management Plan for the site.</u> <u>The CTMP must include (but is not limited to) the following measures:</u> a) <u>Construction vehicle access to the site is to be timed so as to not significantly interfere with pick-up and drop-off times at Medowie Public School (8:30-9:00am and 2:30-3:15pm).</u> b) <u>A traffic controller is to be present on the site to support construction vehicle access and egress to the site.</u>	
<u>TR4</u>	<u>Prior to operation</u>	<u>Prior to the commencement of operation, 69 on-site bicycle parking spaces shall be provided on site.</u>	
<u>TR5</u>	<u>During Operation</u>	<u>A Post-Completion Road Safety Audit shall be carried by a qualified and independent Road Safety Auditor within three months of the</u>	

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		<u>commencement of operation. A copy of the final Road Safety Audit Report, along with a response to each audit finding, must be submitted to the satisfaction of DoE's Transport Planning Team.</u>	
<u>TR6</u>	<u>During Operation</u>	<u>The STP must be reviewed annually (with the final review undertaken after 5 years or once the maximum capacity of the school has been reached, whichever is reached first). The annual review of the STP must consider the following:</u> a) <u>Confirmation that mode share targets are being achieved, and complaints are, where possible, resolved.</u> b) <u>Where mode share targets are not being met, further measures must be identified.</u> c) <u>A review of the adequacy of the existing school bus services and public bus services, and if required, consultation with TfNSW and other bus providers in the area to consider an increase of bus servicing or other measures to manage demand.</u> d) <u>The demand for bicycle facilities and</u>	

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		<u>provisions for increasing bicycle parking if required.</u> <u>The annual update of the STP must be provided to the satisfaction of DoE Transport Planning Team within one month of the update being completed.</u>	
Noise and Vibration			
AC1	General	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, as set out in the NVIA at Appendix 28. This is to be demonstrated in the relevant Crown Construction Certificate Application.	Achieve internal and external building services noise and vibration criteria.
AC2	During construction, prior to operation	Prior to the operation of the school commencing, acoustic louvres are to be installed within the Gymnasium and Covered Outdoor workshop areas where required by the NVIA Report at Appendix 28 to achieve environmental noise emission criteria.	To minimise disruption to nearby residential receivers.

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AC3	During operation	Usage of the Public Address system is to be restricted to daytime hours only (7am to 6pm). Directional speakers are to be used, and volume levels set to the minimum required to ensure clarity and audibility.	To minimise disruption to nearby residential receivers.
AC4	During operation	Where practicable, all loading dock activities, waste removal and noisy cleaning activities are to take place between 7:00am and 10:00pm, excluding peak drop off and pick up times for the school.	To minimise disruption to nearby residential receivers.
AC5	Prior to construction	Façade glazing and lightweight elements and doors are to be designed to control noise break-in to sensitive areas. This is to be demonstrated on the Crown Construction Certificate drawings and verified in writing by a suitably qualified acoustic engineer.	To control noise intrusion into sensitive spaces throughout the school.
AC6	Prior to construction	Prior to the issue of the relevant Crown Construction Certificate, the plans are to be amended to incorporate acoustic louvres over the natural ventilation openings in the upper east and west façade of the gymnasium in Block C where noise break-in is required to be controlled, in accordance with the NVIA Report at Appendix 28 . These are to	To control noise intrusion into sensitive spaces throughout the school.

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		be installed on the building prior to the operation of the school commencing.	
AC7	Prior to construction	Prior to the issue of the Crown Construction Certificate, the plans are to be amended to show the installation of acoustically absorptive finishes to the underside of outdoor learning areas to control reverberation build up and mitigate noise intrusion. These are to be installed on site prior to the operation of the school commencing.	To control noise intrusion into sensitive spaces throughout the school.
AC8	Prior to construction	Prior to the issue of the Crown Construction Certificate, a construction noise and vibration management plan (CNVP) is to be prepared and submitted to the Crown Certifier for approval. The CNVP is to provide specific details of proposed construction activities and be based on the preliminary measures outlined in the NVIA Report at Appendix 28 . All measures outlined within the approved CNVP are to be incorporated on site during the construction works.	To effectively manage construction noise and vibration impacts to the surrounding community.
Contamination and Hazardous Materials			

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CON1	Prior to and during construction	A Construction Environmental Management Plan (CEMP) is to be prepared and implemented during demolition and construction of the activity. The CEMP must be prepared prior to the commencement of works on the site. The CEMP is to consider community consultation in accordance with SI4.	To manage the impact of construction during site works.
CON2	Prior to and during construction	Prior to the issue of a Crown Construction Certificate, a soil and water management plan (as part of the CEMP) is to be prepared and implemented during construction, to prevent erosion and generation of sediment.	To manage the impact of erosion and sediment control during site works.
CON3	Prior to and during construction	Prior to the issue of a Crown Construction Certificate, an unexpected finds protocol is to be prepared and submitted to the Crown Certifier prior to any site works and is to be implemented during the demolition and construction phase of the activity. The approved Unexpected Finds Protocol is to form part of and be implemented as part of the Construction Environmental Management Plan (CEMP) on site.	To manage the impact of any potential unexpected find during site works.
CON4	During construction	All soil to be removed from the site as "waste" is to be classified in accordance with NSW EPA (2014) prior to leaving the site and disposed of at an	To ensure waste removed from the site is appropriately classified prior to off-site transportation and disposal.

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		appropriately licensed waste management facility.	
CON5	During construction	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 department 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 department 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 an NSW	To manage unexpected contaminants.

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		EPA-Accredited Site Auditor to confirm site suitability. A copy of the Site Remediation and Validation Report is also to be provided to the relevant department Project Lead and the department'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 State Environmental Planning Policy (Resilience and Hazards) 2021.	
HAZ1	During demolition (asbestos)	All external walls (represented by positive sample ASB02) and gable ends are to be removed (positive sample ASB01) prior to demolition. If the amount of non-friable asbestos containing material is greater than 10 square meters, removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring is to be implemented on site during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the removal of greater than 10 square meters of non-friable asbestos containing material.	To appropriately manage the removal of asbestos containing materials from the site in accordance with the relevant guidelines.

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		Where asbestos or asbestos-containing material is to be disturbed or uncovered, compliance with SafeWork NSW requirements shall be adhered to. Asbestos shall be removed by a suitably qualified and experienced contractor, licensed by SafeWork NSW. The removal of such material shall be carried out in accordance with the requirements of SafeWork NSW and the material transported and disposed of in accordance with NSW Environment Protection Authority requirements, the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> with particular reference to Part 7 'Transportation and Management of Asbestos Waste', and the guidelines outlined in the Hazmat Survey at Appendix 14.	
HAZ2	During demolition (synthetic mineral fibres (SMF))	Prior to the demolition of any buildings on site, any ceiling cavity insulation batts (sampled as ASB05) are to be removed to minimise the generation of fibres and dust during refurbishment or demolition works. This is to be undertaken by a hazardous materials removal contractor and in accordance with	To manage the risk of SMF exposure to the site and site occupants during demolition, in accordance with relevant requirements.

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		the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glass wool and Rockwool.	
HAZ3	During demolition (ODS)	Ozone Depleting Substances (ODS) are to be removed and disposed of in accordance with the Australia and New Zealand Refrigerant Handling Code of Practice 2007 Part 1 – Self-Contained Low Charge System and the Australia New Zealand Refrigerant Handling Code of Practice 2007 Part 2 – Systems Other than Self-Contained Low Charge System.	To manage the risk of impact of ODS when the decommissioned air conditioning unit in the dwelling is removed as part of the demolition works.
Hazards (Blast Assessment)			
HAZB1	Prior to operation	Prior to the operation of the school, the department and the principal of the new high school in Medowie is to liaise with the adjacent petrol station operator to ensure the school is informed in the event of an emergency at the petrol station, so that evacuation of people present in the school car park can be initiated if necessary. This procedure is to be incorporated as part of a school site emergency plan.	To minimise risk from LPG release at the petrol station on the school site (carpark).
HAZB2	Prior to operation	Prior to the operation of the school, a School	To minimise risk from LPG release at the petrol

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		Emergency Management Plan is to be developed by the school, to address general school emergencies including (but not limited to) mitigation measure HAZB1 above. The School Emergency Management Plan can also capture the requirements set out in mitigation measures FL1, FL3, FL6 and BF6 with respect to bushfire risk and flooding.	station on the school site (carpark).
Hydrology, Flooding and Water Quality			
FL1	Prior to operation	Prior to the operation of the school, an Emergency Planning Committee is to be established for the school. The Committee is to prepare a site-specific School Emergency Management Plan, which is to include the required details set out in the Flood Emergency Response Plan (FERP) and updated on an annual basis (alongside the FERP update, see FL2 below). The School Emergency Management Plan may also capture other risk/emergency management related requirements such as those outlined in HAZB1 and BF6.	To ensure site occupants can be safely evacuated during a flood event.
FL2	Prior to and during operation	Prior to the operation of the school, the FERP is to be updated to ensure it is consistent with the	To mitigate risk to students and staff during severe flooding and ensure the FERP is up to date to

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		construction drawings and to confirm estimated flood depths, onset time and time of flood inundation time over the surrounding roads for evacuation. The FERP must be updated annually in consultation with Council and the SES to incorporate updated data and information as relevant.	ensure risk is appropriately managed.
FL3	Operation	Once the School Emergency Management Plan has been approved, staff are to be delegated responsibility in the event of an emergency. This is to ensure all staff are aware of their specific roles and associated flood response actions.	To ensure all responsibilities are delegated in case of emergency.
FL4	Operation	As part of the ongoing operation of the school, and as part of the preparation for a flood event, all staff and students will be made aware and advised of the flood risks present on site and the flood protocols and procedures. The Flood Warning Notice must be maintained and permanently visible on site.	To improve knowledge and safety on flooding, flood protocols and procedures.
FL5	Operation	As part of the ongoing operation of the school, a flood drill is to be held by staff annually to ensure all staff workers and students are familiar with the	To maintain awareness on correct flood protocols and procedures.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		procedures to follow in the event of the alert sounding and their subsequent flood response actions. Annual evacuation preparations and evacuation drill(s) must be undertaken prior to the commencement of the wet season (typically November to April);	
FL6	Prior to operation	Prior to the operation of the school, a flood emergency kit should be prepared and regularly checked to ensure that supplies within the kit are sufficient and in working condition. The flood emergency kit is to be reviewed and restocked after any flood event on the school site. The flood emergency kit is to be included as part of the School Emergency Management Plan referred to in FL1.	To prepare for a flood emergency.
FL7	Operation	As part of the ongoing operation of the school, staff and parents are to be notified (i.e. via SMS or equivalent communication tool at the earliest opportunity upon BOM issuing severe weather warning for the area) as soon as practically possible once the decision has been made to close the	To communicate to all relevant stakeholders prior to severe weather.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		school.	
FL8	Operation	Evacuation is to be prioritised over shelter-in-place by closing the school before the school day if flood events are forecasted and the SES advises. In the instance that staff, students and visitors are present at the school during a flood event, they are to be notified and guided to the appropriate building areas within the school to shelter-in-place. A nominated Site manager/Chief Warden is to ensure that no one is present outdoors during a flood event.	To enhance safety during a flood event.
<u>FL9</u>	<u>Prior to Operation</u>	<u>The Flood Emergency Response Plan (FERP) is to be updated to be consistent with the Shelter in Place Guideline for Sheltering Practices for Emergency Sheltering in Australia.</u>	
<u>FL10</u>	<u>Prior to Construction</u>	<u>The project must be designed to ensure that the change in flood depths on the industrial properties on the opposite side of Abundance Road would not exceed 50mm during any flood event up to and including a one per cent AEP flood event, unless agreed with the affected property owner(s). If the change in flood depths on the industrial properties are to exceed 10mm,</u>	

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		<u>updated flood modelling, supported by appropriate justification and consultation for the flood level increases, is to be submitted to the satisfaction of the DoE Assessments team within three months of commencement of construction.</u>	
Bushfire			
BF1	All stages	The required Asset Protection Zone (APZ) is to be established on site and maintained in perpetuity to the specifications detailed in Appendix A of the approved Bushfire Protection Assessment (Appendix 35).	To ensure the required APZ is established and maintained to minimise bushfire risk to the school.
BF2	All stages	Landscaping is to continue to be designed (in detailed design) and managed in accordance with Appendix 4 of PBP (Appendix A of the Bushfire Protection Assessment) and allow for vehicular movement through the site (i.e. so as to not obstruct potential emergency access routes) throughout the duration of the activity.	To minimise bushfire risk to the school.
BF3	Prior to and	Prior to the issue of the Crown Construction	To minimise bushfire risk to the school.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
	during construction	Certificate, the construction plans are to demonstrate that the proposed activity will be constructed to BAL19 based on the construction specifications detailed in AS 3959-2018, including additional ember provisions detailed in section 7.5 of PBP as required. If necessary, written confirmation by a suitably qualified bushfire professional is to accompany the Crown Construction Certificate.	
BF4	Prior to construction	Prior to the issue of the Crown Construction Certificate, written confirmation that the reticulated water supply is to meet PBP acceptable solution specifications for a SFPP Class 9 development is to be provided by a suitably qualified professional.	To ensure the school is provided with adequate water supply in the event of a bushfire attack.
BF5	Prior to operation	Prior to the operation of the school commencing, gas services (if installed) are to be installed and maintained in accordance with AS/NZS 1596:2014 (SA 2014).	To minimise hazards / risk to the school in the event of a bushfire attack.
BF6	Prior to operation	Prior to the operation of the school commencing, a Bushfire Emergency Management and Evacuation Plan to be completed as part of the broader School Emergency Management Plan required by FL1, FL3,	To manage bushfire risk for the proposed school and its occupants.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		FL6, and HAZB1.	
BF7	Prior to operation	Prior to the operation of the school commencing, an Emergency Planning Committee is established to consult with the school community (including parents of students and staff) to develop and implement an Emergency Procedures Manual. The Emergency Planning Committee may be the same that the one that is required to be established under mitigation measure FL1.	To manage bushfire risk for the proposed school and its occupants.
BF8	Prior to and during operation	Prior to the operation of the school commencing, detailed plans of all emergency assembly areas including 'on-site' and 'off-site' arrangements as stated in AS 3745:2010 are to be clearly displayed. An annual (as a minimum) trial emergency evacuation is to be conducted as part of the school operations.	To manage bushfire risk for the proposed school and its occupants.
BF9	Prior to construction	An application is to be prepared and submitted to the NSW Rural Fire Service (RFS) for approval under Section 100B of the Rural Fires Act 1997. This approval is to be obtained in writing prior to construction commencing on site. <u>The activity is to</u>	To ensure that the school meets the relevant bushfire requirements as prescribed by the NSW Rural Fire Service.

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		<u>comply with the conditions specified by NSW Rural Fire Service (RFS) in the Bush Fire Safety Authority (BFSA) dated 30 April 2025.</u>	
Ecology and Biodiversity			
ARB1	General	All trees to be retained as outlined in the Arboricultural Impact Assessment (Appendix 34), are to be retained and protected in accordance with the instructions for each tree. These instructions are to be included within the approved CEMP for the site. All trees to be protected are to be clearly identified and all TPZs surveyed. Particularly the Wallangarra White Gum (Threatened species) and trees within PCT 3995 - Hunter Coast Paperbark – Swamp Mahogany Forest part fit with the Threatened Ecological Community (TEC) to be preserved. Provide NO GO areas to clearly delineate the area of bushland to be protected.	To manage and ensure trees are managed in accordance with the Arboricultural Impact Assessment.
ARB2	Prior to construction	Trees not approved to be pruned or removed are to be protected and maintained in accordance with AS 4970-2009 <i>Protection of Trees on Development Sites</i> and are to remain in place until the completion	To comply with AS4970-2009.

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		of all construction work in the vicinity of the protected trees. Prior to any works commencing on site, , a suitably qualified and experienced Project Arborist (PA) (minimum Consulting Arborist AQF Level 5) must be appointed by the principal contractor at the start of the project.	
ARB3	Prior to construction	During construction works, the Principal Contractor is required to ensure that all tree protection zones (TPZs) that are close to construction activities are established and maintained in accordance with the standard protection measures and ongoing advice from the Project Arborist (PA).	To ensure trees are protected accordingly.
ARB4	Prior to and during construction	Prior to works commencing on site and during construction, The PA is required to conduct inspections as per the schedule below, and provide evidence that this has been completed: • Pre-clearing inspection to positively ID all trees listed for removal. • Inspection of all tree protection as per the requirements of this report. • Inspection of TPZ prior to removal of Tree	To ensure trees are correctly identified and protection measures are implemented.

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		Protection upon completion of works. Final report certifying that all protection measures have been completed throughout the life of the project.	
ARB5	During construction	The PA must approve any access and works that are to occur inside any TPZ prior to the works occurring. All works inside the TPZ of a retained tree must be supervised by the PA.	To ensure that all compounding effects over the course of the project can be properly assessed.
ARB6	During construction	Any additional encroachment to retaining trees that becomes necessary as the site works progress must be reviewed by the project arborist and confirmed as being acceptable to the determining authority before being carried out.	To ensure that any additional are assessed accordingly.
ARB7	Prior to construction	Approved tree removal and pruning are to be carried out before the installation of tree protection measures.	To ensure safe removal and pruning.
ARB8	Prior to construction	Activities generally excluded from the TPZ include but are not limited to— - machine excavation including trenching; - excavation for silt fencing;	To ensure protection and survival of retained trees,

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		• cultivation; • storage; • preparation of chemicals, including preparation of cement products; • parking of vehicles and plant; • refuelling; • dumping of waste; • wash down and cleaning of equipment; • placement of fill; • lighting of fires; • soil level changes; • Stockpiling of materials; • Backfilling; • temporary or permanent installation of utilities and signs, and • physical damage to the tree. Construction measures on site must ensure that spoil and excavations are kept away from TPZs and that wind-blown materials like cement do not harm trees. Contaminants stored properly with spill measures. These measures are to be incorporated into the approved CEMP for the site.	

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
ARB9	Prior to construction	Protective fencing (for tree protection) is to be erected before any machinery or materials are brought onto the site and before the commencement of works including demolition. 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. Once erected, protective fencing must not be removed or altered without approval by the project arborist. Fence posts and supports should have a diameter greater than 20mm and be located clear of roots. Existing perimeter fencing and other structures may be suitable as part of the protective fencing.	To restrict access to the TPZ.
ARB10	Prior to construction	Tree protection signage must be attached to tree protection zones before works begin. Signs are to 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.	To inform all visitors to the site of TPZ locations.

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		Signs identifying the TPZ should be placed around the edge of the TPZ and be visible from within the development site.	
ARB11	Prior to construction	When tree protection fencing cannot be installed or where it requires temporary removal, other tree protection measures should be used, including those set out below: • Trunk and branch protection • Ground protection • Root protection during works within the TPZ • Installing underground services within the TPZ • Scaffolding • Mulching • Watering • Weed removal These alternative measures are to be reviewed and approved by the PA before they are installed on site.	To ensure protection and survival of retained trees.
ARB12	Prior to construction	Trunk and branch protection:	To ensure protection of tree trunks and branches.

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		Where necessary, install protection to the trunk and branches of trees. The materials and positioning of protection are to be specified by the PA. A minimum height of 2m is recommended. It is recommended not attach temporary powerlines, stays, guys and the like to the tree, or to drive nails into the trunks or branches.	
ARB13	Prior to construction	Ground protection: If temporary access for machinery is required within the TPZ ground protection measures will be required. Measures may include a permeable membrane such as geotextile fabric beneath a layer of mulch or crushed rock below rumble boards. These measures may be applied to root zones beyond the TPZ. These measures are to be approved by the project arborist on site before they are installed.	To prevent root damage and soil compaction within the TPZ.
ARB14	Prior to construction	Root protection during works within the TPZ: All excavation inside the TPZ is to be carried out under the supervision of the PA to identify roots critical to tree stability. Relocation or redesign of works may be required, depending on actual location	To prevent adverse impacts to root systems.

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		of roots. Where the project arborist identifies roots to be pruned within or at the outer edge of the TPZ, they should be pruned with a final cut to undamaged wood. Pruning cuts should be made with sharp tools such as secateurs, pruners, handsaws or chainsaws. It is not acceptable for large roots within the TPZ to be 'pruned' with machinery such as backhoes or excavators. Where roots within the TPZ are exposed by excavation, temporary root protection should be installed to prevent them drying out. This may include jute mesh or hessian sheeting as multiple layers over exposed roots and excavated soil profile, extending to the full depth of the root zone. Root protection sheeting should be pegged in place and kept moist during the period that the root zone is exposed. Approval from the PA is required if other excavation works in proximity to trees, including landscape works such as paving, irrigation occurs.	
ARB15	Prior to construction	Installing underground services in the TPZ: All services are to be routed outside the TPZ. If underground services must be routed within the TPZ, they are to be installed by directional drilling or in manually excavated trenches. The directional	To ensure servicing does not intercept any TPZ.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		drilling bore should be at least 600 mm deep. The PA must assess the likely impacts of boring and bore pits on retained trees and approve the procedure before the works occur. For manual excavation of trenches the project arborist must advise on roots to be retained and must monitor the works. Manual excavation may include the use of pneumatic and hydraulic tools.	
ARB16	Prior to construction	Scaffolding: Where scaffolding is required, it is to be erected outside the TPZ. Where it is essential for scaffolding to be erected within the TPZ, branch removal should be minimized. This can be achieved by designing scaffolding to avoid branches or tying back branches. Where pruning is unavoidable it must be specified by the project arborist in accordance with AS 4373. Ground below the scaffolding should be protected by boarding (e.g. scaffold board or plywood sheeting. Where access is required, a board walk, or other surface material should be installed to minimize soil compaction. Boarding should be placed over a layer of mulch and impervious sheeting to prevent soil contamination.	To ensure scaffolding does not impact any TPZ.

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		The boarding should be left in place until the scaffolding is removed. Any scaffolding procedures within the TPZ are to be approved by the PA prior to their installation on site. All scaffolding works are to be monitored by the PA on site as required.	
ARB17	Prior to construction	Mulching: The area within the TPZ should be mulched prior to works commencing and in perpetuity, the mulch must be maintained to a depth of 50–100 mm using leaf or forest mulch. Where the existing landscape within the TPZ is to remain unaltered (e.g. garden beds or turf) mulch may not be required.	To preserve moisture and improve soil conditions.
ARB18	Prior to and during construction	Watering: Soil moisture levels should be regularly monitored by the project arborist. Temporary irrigation or watering may be required within the TPZ. An above-ground irrigation system should be installed and maintained by a competent individual.	To regulate soil moisture levels.
ARB19	Prior to and during construction	Weed removal: All weeds are to be removed by hand without soil	To correctly remove weeds.

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		disturbance or should be controlled with appropriate use of herbicide.	
NVM1	During operation	As part of the ongoing operation of the school, maintenance requirements which involve the regular removal of non-native flora species using manual techniques should be undertaken to prevent exotic flora from establishing within the management zones.	To prevent exotic flora from establishing within management zones.
NVM2	During operation	As part of the ongoing operation of the school maintenance requirements which involve the regular monitoring of the establishing vegetation through monthly inspections throughout the duration of the five-year NVMP.	To meet the objective of the NVMP.
NVM3	During operation	Weed removal to be conducted by hand around the protected vegetation found on site by professional bush regenerators.	To remove weeds correctly.
NVM4	During operation	Weed removal for vines, woody weeds, and herbaceous is to be carried out in accordance with the management practices set out in Section 4.1 of the NVMP (Appendix 28).	To remove weeds correctly.
NVM5	During operation	Any adoption of broad acre herbicide application that	To damage to herbicide or to student health.

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		is required as a treatment (i.e. back spray), is to be undertaken during the school holidays to prevent students walking over herbicide before it has the opportunity to dry.	
NVM6	During operation	All proper Personal Protective Equipment is to be worn by the qualified user and the herbicide manual recommendations for preparing the herbicide such as the correct quantities and ventilation should be followed.	To ensure safety to the qualified user.
NVM7	During operation	Selective manual chemical application may be appropriate for the vines and larger saplings where manual removal of weeds in the early stage of growth has proven to be complicated. Chemical use is to be used minimally and only for selective individual plants, to avoid the chemical absorbing into the soil and into the TEC mapped on site.	To prevent unnecessary chemical use on site.
NVM8	During operation	Prior to the operation of the school commencing on site, the APZ is to be established by the removal of shrub layer at the bases of trees, creating a canopy gap of a minimum of 2m and removing the lower branches up to 3m from the ground, while	To prevent bushfire damage and allow safe access to bushfire if required.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		maintaining a consistent mowing regime as part of the management of the APZ in perpetuity.	
NVM9	During operation	Prior to the operation of the school commencing on site, the Outer Protection Zone (OPZ) is to be established. This OPZ requires vegetation management such as removing shrubs growing directly underneath canopy trees and the removal of lower branches up to 3m from the ground.	To minimise the potential for fire outbreak.
NVM10	During operation	Within the APZ located to the boundary of the biodiversity zone, a 2m canopy gap between the treetops and large vegetation patches is required.	To mitigate the risk of bushfire impacting koala habitat.
NVM11	During operation	Understorey vegetation such as grasses are to be controlled through regular mowing.	To control understory vegetation.
NVM12	During operation	Revegetation is to occur along the school fence line on Abundance Road and planted 10-20m apart. It is recommended that additional trees are planted of koala preferred species in accordance with the NVMP at Appendix at Appendix 32 .	To increase koala habitat
NVM13	During operation	All plants should be sourced from local native plant	To support local species.

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		nurseries, where practical and feasible.	
NVM14	During operation	Where specified plants (in the landscape plans) are not available, seed is to be collected from the local area such as the mapped PCT zone in accordance with seed collection guidelines by qualified ecologists and propagated on site before transplanting into prepared areas. Substitution with similar native species may occur where there will be a lengthy delay in obtaining those species.	To support local species
NVM15	During operation	All plants are to be sourced as either tube stock (groundcover plants) or minimum 10cm (4 inch) pot-sized for the shrubs and small trees.	To support plant vitality.
NVM16	During operation	An area surrounding the planting site is to be completely removed of all exotic plants and mulched to a depth of 10cm. To prevent unnecessary plant mortality, mulch should not be placed around the stems of any plants. Jute matting can be placed over the dense paddock grasses, but any other weeds taller than 10cm may need to be removed for maximum efficiency.	To prevent plant mortality.

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NVM17	During operation	All plants are to be watered at the time of the planting. Follow up watering is only required if a dry period is experienced after the initial planting.	To ensure plants are hydrated.
NVM18	During operation	Installation of individual tree guards surrounding the shrubs and small trees is required to protect the vegetation from kangaroos and rabbits. They must be tall enough so the kangaroos will not be able to reach over the top. Wire meshing that is bent inwardly may be suitable for this.	To protect fauna on site.
NVM19	During operation	During monthly inspections, if there is a high mortality within the revegetation works, follow up planting is to be conducted in the second year to maintain adequate vegetation coverage of the Vegetation Regeneration Zone (VRZ). Species selection should be determined based on the success of the initial planting; as well as including those species growing successfully in the adjoining TEC zone.	To prevent plant mortality.
NVM20	During operation	If there is any historical waste on site, care is to be taken with the use of the correct PPE such as gloves	To ensure any waste found is disposed of safely.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		and steel-capped boots. Rubbish removal is to be carried out by a suitably qualified professional.	
NVM21	During construction	Construction fencing is required to protect the Wallangarra White Gum (<i>Eucalyptus scoparia</i>) (Tree 1 to be retained). A qualified arborist is to be present when working around this tree and setting up the protective fencing to ensure it is undertaken correctly and making sure the root zone is also being protected.	To protect Tree 1.
NVM22	During operation	During the ongoing management of the vegetated buffer, a photo monitoring system is to be established to assess the condition of vegetation post activity works. Note: indications of degradation may include increased weed establishment.	To document the revegetation on site.
NVM23	During operation	Photos showing before and after images to illustrate the extent of the rehabilitation work are to be taken after the completion of the rehabilitation works then annually to document changes in vegetation condition and structure.	To document the revegetation on site.
NVM24	During operation	A final NVMP is to be prepared by a suitably qualified ecologist for the department at the end of	To meet the objective of the NVMP.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		the five-year period of the operation of the school. This report is to list: • The number and species of all plants planted in the revegetation process; • The extent of weed management required, and treatments applied; • Photographs taken annually from the reference points to document the changes in the condition and structure of the rehabilitation works; and • Any issues associated with the rehabilitation works that may affect the future survival of the vegetation	
KOA1	During construction (specifically, during tree removal)	A suitably qualified ecologist must be on site during any tree removal operations to ensure koalas are not present within trees proposed for removal. All trees removed during the construction works stage should be checked for koala presence prior to felling No trees with koala present should be cleared. If a koala is present on a tree proposed for removal, it is the responsibility of the ecologist to: • Ensure the koala is safely removed from the tree and relocated to the vegetation patch on site (or other suitable location), or	To protect koala habitat.

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		- Wait until the koala moves itself i.e. leave the tree alone and continue to work as far away from the tree as reasonably possible so as not to disturb or cause distress to the koala. - Commence works to remove the tree if the ecologist confirms the koala has safely moved on from the tree.	
KOA2	General	The implementation of the native vegetation management practices as described in the NVMP (Water Technology 2025 - Appendix 32) is required as part of the ongoing operations of the activity.	To help control and manage weeds in the bushland on site and help restore koala habitat on site.
KOA3	During construction	Preferred koala food tree species should be integrated into the landscape scheme (in detailed design) where possible. The seedlings should be propagated from local seed stock. Note that all fire management strategies (fire breaks, access etc.) need to be adhered to when revegetating.	To enhance the habitat value on site.
KOA4	During construction	Prior to the operation of the school, consultation with Council is required regarding the installation of koala warning signs, if necessary, along the adjacent	To prevent koala road strike.

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		roads warning incoming traffic about koala presence in the area and for any approvals (if required) for the signs to be installed.	
KOA5	During construction	Koala movement across the site should be minimally compromised by avoiding the installation of fences and other restricting structures in any of the koala habitat zones.	To support koala conservation through movement.
KOA6	During operation	Education about koala conservation is to be included in the school program, e.g. koala habitat restoration, revegetation using preferred koala feed tree species, what to do if an injured koala is encountered, responsible dog ownership, and dangers of traffic to koalas.	To educate students and staff on koala protection and conservation.
KOA7	During operation	The school is to participate in Port Stephens Council's existing koala education program or koala habitat and population monitoring program (as feasible and relevant).	To support koala protection.
KOA8	During operation	No dogs should be permitted on site during and after construction operations, unless otherwise permitted	To support koala protection and limit risk of dog attacks on koalas.

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		under the <i>Companion Animals Act 1988</i> .	
KOA9	During operation	The likelihood of high intensity fires (e.g. canopy fires) occurring within koala habitat is to be minimised through vegetation management as covered within the NVMP (Water Technology, 2025).	To support koala protection
KOA10	During operation	High frequency of hazard reduction burns within koala habitat is to be avoided.	To support koala protection.
ECO1	Prior to construction	Use AS 4454 leaf mulch with 90% recycled content within the tree protection zone. 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).	To ensure compliance with relevant Australian Standards.
ECO2	Prior to construction	All trees and shrubs for hollows and nests are to be inspected prior to construction. If fauna (excluding koalas, as addressed in KOA1) is discovered an ecologist may be required to remove and relocate any fauna if the tree or vegetation is to be removed.	To confirm if any fauna resides in trees or shrubs.
ECO3	Prior to construction	Induction of all contractors and staff outlining the ecological sensitivity of the site, no-go areas, the	To inform contractors and staff adequately.

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		need to minimise ecological impact, and all other required mitigation measures is to be undertaken.	
ECO4	During construction	All trees to be retained on site are to be protected from harm. Avoid tying ropes, cables, or similar items to trees. No staff members, plant, machinery, or materials can enter the tree protection fencing.	To protect the TPZ.
ECO5	During construction	Do not fill or compact soil 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.	To prevent soil compaction.
ECO6	During construction	Trenching is not allowed in TPZs or tree protection fencing. Approval needed for trenching, must be done by hand with arborist supervision.	To protect the TPZ.
ECO7	During construction	Contractors are to maintain plants are watered. Apply water at an appropriate rate suitable for the plant species during periods of little or no rainfall.	To regulate soil and plant water levels.
ECO8	During	Basic hygiene protocols are to be implemented for	To reduce the potential for invasion by plant

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	construction	construction personnel and machinery on site to reduce the potential for invasion by plant pathogens including <i>Phytophthora cinnamomi</i> , the fungus myrtle rust <i>Uredo rangelli</i> and amphibian chytrid fungus.	pathogens.
ECO9	During construction	Any fauna that migrates to the construction site is to be relocated by a trained professional, to the nearest available habitat (out of the construction area).	To protect fauna on site.
ECO10	During construction	Works are generally to be carried out in daylight and no unnecessary vehicular movements (including lights) are to be performed at night.	To protect fauna during nighttime hours.
ECO11	During construction	All lighting is to face away from bushland area and vegetation clusters. The lights can attract predatory species.	To prevent predatory species on site.
ECO12	During construction	Weed infestations are to be controlled in accordance with the NVMP in Appendix 32 to prevent rabbit harbour on site.	To prevent unwanted species on site.
ECO13	During operation	Weed management control is to be undertaken on site in accordance with the FFA in Appendix 31 and using qualified bush regenerators.	To manage weeds on site.

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ECO14	During operation	Prevent security lighting and sporting lighting from facing towards bushland and accompanying habitat.	To protect bushland and habitat on site.
ECO15	During operation	Pest management control is to be undertaken by qualified pest control experts.	To manage pests on site.
Surface, Groundwater, and Stormwater Management			
SWGW1	During construction	If the water table is unexpectedly intercepted during construction works, all works are to cease immediately. The contractor will be required to liaise with the department, as well as the relevant water authority, to ensure: - Dewatering measures are known and if required, a dewatering plan/groundwater management plan is prepared and implemented during site works before works recommence on site; - All relevant approvals for dewatering are obtained prior to the continuation of works; and - A suitably qualified geotechnical engineer is to be engaged to advise on any further measures	To ensure groundwater impacts are minimised, if groundwater is unexpectedly encountered on the site during works.

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		to be implemented to ensure no adverse impact to the quality or quantity of groundwater.	
SWG2	During construction	Erosion and sediment control measures, in accordance with Council's requirements, and the plan in the FIRA at Appendix 8 as well as the Soil Management Plan approved under Mitigation Measure CON2, are to be implemented during construction works.	To ensure protection of downstream drainage lines, assets, ecosystems or existing hydrological systems from silt, waste and sediment from the site.
SWG3	Prior to and during construction	Prior to construction commencing on site, the mitigation measures outlined in the Supplementary Geotechnical Investigation Report at Appendix 13 are to be adopted, as required as part of the approval for the CEMP.	To ensure the geotechnical constraints of the site are managed and the proposed buildings built to the relevant soil and groundwater characteristics.
SWG4	During construction	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 department's Post Approval	To protect the environment.

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		and Compliance Team on request.	
SWG5	During construction	Imported fill must be compatible with the existing soil characteristics of the site and limited to the following: • Virgin excavated natural material (VENM); and/or • Excavated natural material (ENM) certified as such in accordance with Protection of the Environment Operations (Waste) Regulation 2014; and/or • 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. Certificates from a suitably qualified person/contractor proving that the imported fill material complies with these requirements must be provided to the relevant department Project Lead prior to filling works.	To ensure that imported fill is compatible with the existing soil characteristics of the site.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
SWG6	During construction	Any imported mulch must comply with the Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 and the Mulch Order 2016 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 Resource Recovery Mulch Order 2016 is to be provided to the relevant department Project Lead prior to importing the mulch.	To comply with relevant mulch guidelines and legislation.
SWG7	During construction	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> .	To manage unexpected groundwater.
SWG8	During construction	The operational stormwater management system must be designed by a suitably qualified civil engineer. The system must: a) Ensure that the system capacity has been designed in accordance with the relevant Australian	To manage stormwater.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		Standards; and b) Ensure that the system has been designed in accordance with the Australian Rainfall and Runoff (Engineers Australia, 20016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) Guidelines.	
SWG9	During construction	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> .	To manage acid sulfate soils.
SWG10	Prior to the commencement of operations	Prior to the commencement of operations, a Stormwater Operation and Maintenance Plan is to be prepared and include the following: a) Maintenance schedule of all stormwater quality treatment devices; b) Record and reporting details; and c) Work Health and Safety requirements. A copy of the Stormwater Operation and Maintenance Plan is also to be provided to the relevant department Project Lead for implementation.	To manage stormwater operation and maintenance.
Odour and Air Quality			

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
AQ1	During construction	Prior to construction commencing on site, a CEMP is to be prepared. The CEMP for the project (as per CON1) is to include (but not be limited to) air quality and dust control measures.	To minimise the impact of dust generation on air quality in the locality during construction works.
Aboriginal Heritage			
AH1	During construction	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 department's 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 department's Heritage Team. Should Aboriginal objects be identified, these are to be registered in the Aboriginal Heritage Information Management System (AHIMS). An Aboriginal	To ensure protection of Aboriginal places and objects under the NSW National Parks and Wildlife Act 1974.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		Heritage Impact Permit (AHIP) would also need to be obtained to impact the site.	
AH2	During construction	A Stop Works Procedure is to be approved prior to the issue of the Crown Construction Certificate and implemented on site as part of the construction works in the instance that any suspected human remains are discovered during construction works. Any such discovery will result in: a) If suspected human remains are discovered, all works must be stopped, the remains must be left in place and protected from harm or damage. b) The department's Heritage Team is to be notified and a specialist archaeologist engaged to assess the find. c) Once discovered, NSW Police must be notified immediately in accordance with the <i>Coroners Act 2009</i>. d) If the remains are found to be likely Aboriginal in origin, the remains are to be reported to relevant Aboriginal parties and Heritage NSW.	To protect any discovered human remains.

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		e) If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW are to be notified of the find under s.146 of the Heritage Act 1977. f) 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>.	
AH3	Prior to construction	Prior to any site works, a heritage induction for all site workers and contractors should be undertaken. The heritage induction should provide: a) Relevant legislation b) Locations of identified Aboriginal heritage sites, and areas of archaeological sensitivity within proximity to the study area.	To prevent any unintentional harm to any unexpected Aboriginal objects.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		c) Basic identification skills for Aboriginal artefacts, non-Aboriginal artefacts, and human remains. d) Procedure to follow in the event of an unexpected heritage item find during construction works.	
Non-Aboriginal Heritage and Archaeology			
NAH1	During construction	If any unexpected archaeological relics (or potential relics) are uncovered during the work, then: a) all works must cease immediately in that area, the area must be appropriately protected, and notice is to be given to Heritage NSW and the Department of Education heritage team, b) Materials should not be removed from the ground where possible. c) an archaeologist is to be engaged to undertake a site inspection to ascertain whether the finds are significant relics. d) depending on the possible significance of the relics, an archaeological assessment and	To ensure an appropriate unexpected finds protocol is established for implementation during construction works.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		management strategy may be required before further works can continue in that area as determined in consultation with Heritage NSW. e) should significant relics be identified, external approvals to impact the relics may be required. f) works may only recommence if advised by the archaeologist, with the written approval of the department's heritage team.	
Waste Management			
WAS1	During construction	The contractor is to implement the Construction and Demolition Waste Management Plan prepared by Elephant's Foot Consulting at Appendix 24 . This will include, all monitoring, reporting, safety, signage, recycling measures, site specific operational measures and other general requirements set out in Section 7 of the report.	To ensure effectiveness of waste mitigation measures during all site works.
WAS2	Prior to and during operation	Prior to the commencement of operations, the school is to implement operational waste management measures detailed in the Operational Waste	To ensure waste is appropriately managed during operations.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		Management Plan (OWMP) prepared by Elephant's Foot Consulting at Appendix 25. 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 department Project Lead for implementation during operations. An updated OWMP may be prepared by the school during operations, if deemed necessary, with approval of the department.	
WAS3	Prior to and during operation	All stakeholders responsible for managing waste on the site, as set out in Section 7 of the OWMP, are to be subject to an induction regarding respective roles and responsibilities. The induction is to occur prior to operation of the school, and then prior to each new staff member commencing at the school that will have a role in waste management.	To ensure waste is appropriately managed during operations and key roles and responsibilities are known prior to operation of the school and prior to the commencement of any new staff (with waste responsibilities).
WAS4	During operation - education	Educational material encouraging correct separation of general waste and recycling must be provided to all staff members and contractors. This should	To ensure all personnel are aware of their waste management responsibilities.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		include the correct disposal process for bulky waste such as desks, chairs, large, discarded items, and other materials including electronic and chemical wastes. School management must ensure that information is provided in multiple languages to support correct behaviours, and to minimise the possibility of contamination in communal bins.	
WAS5	During operation - education	Education and communication must be provided consistently on a regular basis to encourage behaviour change and account for transient building personnel such as new students and staff, or cleaning staff. Information should include: • Descriptions of items accepted in the general waste and recycling streams (refer to Council guidance); • How to dispose of bulky waste and any other items that are not general waste or recycling; • Staff and students obligations to health and safety as well as building management; and • How to prevent cross contamination among waste streams.	To ensure all personnel are aware of their waste management responsibilities.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
WAS6	During operation - signage	Waste signage within the school grounds is to include: • Clear and correctly labelled bins, • Instructions for separating and disposing of waste items. Different languages should be considered, • Locations of, and directions to, the waste storage areas with directional signs, arrows, or lines, • The identification of all hazards or potential dangers associated with the waste facilities, and • Emergency contact information should there be issues with the waste systems or services in the building. School management is responsible for waste room signage including safety signage. Appropriate signage must be prominently displayed on doors, walls and above all bins, clearly stating what type of waste or recyclables is to be placed in each bin. All signage should conform to the relevant Australian Standards.	To ensure waste receptacles and management areas are clearly marked.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
WAS7	During operation – pollution prevention	School management shall be responsible for the following to minimise dispersion of site litter and prevent stormwater pollution to avoid impact to the environment and local amenity: • Promoting adequate waste disposal into the bins • Securing all bin rooms (whilst affording access to staff/contractors) • Prevent overfilling of bins, keep all bin lids closed and bungs leak-free • Taking action to prevent dumping or unauthorised use of waste areas • Require collection contractor/s to clean up any spillage when clearing bins	To prevent litter generation and spread.
WAS8	During operation – bin washing	The bins are to be cleaned by the contractor to the school and/or cleaners periodically to ensure hygiene and minimise odour. Bin washing can occur within the bin rooms, using the room clean down facilities (i.e., tap connection and drain). Alternatively, a specialist bin washing contractor can be engaged to clean the bins to an agreed schedule. The specialist bin contractor is to collect the bins	To ensure bins are washed to prevent odour and hygiene impacts.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		from the bin holding area and clean the bins with their specialised vehicle. It is recommended that a dustpan and a broom is provided in this room for staff and cleaners to clean up unexpected spillages when using bins	
Social Impact			
SI1	During operation	The Expandable School Model plan is to be used for the growth of a school based on projected figures and enrolments.	This allows for the provision of additional facilities when required.
SI2	During operation	School Management are to ensure that promotion of the availability of shared-use and the Department of Education's Share our Space program is undertaken in the community.	To provide community members access to quality outdoor facilities during school holidays.
SI3	During operation	If required, shading is to be provided at school bus stop shelters.	To reduce risk of urban heat impacts on students.
SI4	Prior to and during construction	Future preparation of a Construction and Environmental Management Plan (CEMP) (as per CON1) should contain measures to effectively communicate and engage with the surrounding	To manage the impacts of construction on the local community.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		community to minimise disruption, including notification requirements for periods of high impact, key contacts for enquiries and a complaints management process.	
SI5	During operation	Provide CCTV for surveillance of areas of high importance or where there is limited passive surveillance such as the bike store, which will remain locked between arrival and departure times.	To ensure safety through technical/mechanical surveillance.
Soils and Geology			
GEO1	During construction	Shallow foundations and bored pile foundations are to be used, where feasible, as techniques to reduce noise and vibration impact on surrounding areas.	To decrease the generation of significant noise and vibration.
GEO2	During construction	After selection of the foundation system, a settlement analysis is to be undertaken to confirm that the total and differential settlements are within the specified tolerance, outlined in the Geotechnical Investigation at Appendix 12 .	To determine if total and differential settlements are within the design tolerance.
GEO3	Prior to construction	The design must consider applied loading and settlement, with the pile foundation likely the most	To ensure the foundations for the site are most suitable.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		suitable foundation option for the site.	
GEO4	During construction	All loose/soft soil within the footprint of proposed structures is to be removed, including grubbing out of tree roots, if present. These layers may be backfilled with suitably engineered fill layers to the designed subgrade level. Any fill unsuitable for re-use, deleterious/surplus material (if present) such as timber, concrete, rubble, should be identified and disposed off-site.	To comply with AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Developments".
GEO5	During construction	Prior to the issue of the Crown Construction Certificate, written validation of the foundation to be completed by an experienced geotechnical engineer is to be submitted to the Certifier.	To identify locations of soft or unsuitable material and remediate prior to backfilling and construction of foundation.
Aviation			
OLS1	Prior to construction	If cranes, other construction measures or, machinery required during construction exceed 45m and result in intrusion into the prescribed airspace for Williamstown Airport, the appropriate controlled activity approval (Defence Aviation Area (DAA) approval from Defence Aviation Safety Authority	To protect the operations of Williamstown Airport airspace.

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		(DASA)) is to be obtained through the relevant approval (aviation) authority prior to works commencing on site.	
Services, Utilities, and Infrastructure			
SER1	Prior to construction	Prior to the issue of the Crown Construction Certificate, all requisite utility approvals are to be obtained prior to the commencement of the relevant construction work. 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 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.	To ensure the school can be adequately serviced.
SER2	During construction	The approved noise and vibration management plan is to be implemented during all construction activities.	To limit disturbance during trenching, substation installation, and generator placement.
SER3	During	Any generator used during construction or operation	To ensure no adverse noise impacts occur.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
	construction and operation	is to comply with noise and operational requirements as set out in the Arup Acoustic Specification (Appendix 28).	
SER4	During construction	Any trenching areas during site works are to be minimised, where feasible, by careful planning of services routes.	To prevent disturbance to soil and vegetation.
SER5	During construction	Excavated soil is to be reused for backfilling where possible.	To reduce waste.
SER6	During construction	Exposed soil is to be stabilised immediately after trenching by applying mulch, planting native vegetation, or using erosion control mats where necessary.	To prevent soil erosion.
SER7	During construction	Silt barriers and sediment control measures are to be implemented during all site works to prevent runoff into nearby water bodies.	To prevent soil erosion.
SER8	During construction	All noisy construction related activities are to be restricted to standard working hours to reduce disturbance to nearby residents.	To prevent noise impacts to surrounding uses.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
SER9	During construction and operation	Noise barriers or acoustic screens near sensitive areas are to be utilised on the site during construction activities.	To prevent noise impacts to surrounding uses.
SER10	During construction and operation	All equipment is to be well-maintained and fitted with noise-dampening devices, such as mufflers or silencers (where required).	To prevent noise impacts to surrounding uses.
SER11	During construction and operation	Nearby residents and businesses are to be notified about high-noise activities and expected duration prior to any such activities taking place.	To prevent noise impacts to surrounding residents and businesses.
SER12	Prior to construction	A Construction Traffic Management Plan is to be prepared prior to demolition/construction and implemented during all site works, including details of alternate routes, detour signs, and detailed layouts of the construction site.	To reduce traffic disturbance during trenching for new water connections.
SER13	During construction	Clear and visible warning signs, cones, and barriers are to be installed during site works to guide drivers and pedestrians safely through or around the construction area. Reflective materials should be used by construction staff used for nighttime	To ensure safety during trenching for new water connections.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		visibility.	
SER14	During construction	Trained personnel are to be employed to direct traffic during active construction hours, especially in high-risk zones.	To ensure safety during trenching for new water connections.
SER15	During construction	Construction works are to be scheduled in phases to limit the road sections affected at any given time.	To maintain partial road functionality during trenching.
SER16	During construction	Local communities and commuters are to be notified about road closures or delays via public announcements, social media, and signage well in advance.	To ensure the community are well informed.
SER17	During construction	Safe pedestrian crossings, maintenance of emergency access routes, and creation of buffer zones for workers are to be established. 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.	To create access points and safety zones during trenching.

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SER18	During construction	Biodegradable mats are to be used to stabilize exposed soil on slopes and embankments.	To protect nearby waterbodies and support vegetation growth.
SER19	During construction	Vegetated strips between construction areas and water bodies are to be established to filter runoff.	To filter water runoff from eroded materials.
SER20	During construction	Drainage channels or culverts are to be established during site works to manage water flow and direct it away from vulnerable areas.	To protect nearby waterbodies.
SER21	During construction	Local, native plant species are to be used for re-vegetation where possible.	To ensure better adaptability, biodiversity retention, and minimal maintenance needs.
SER22	During construction	Reapply stripped topsoil over disturbed areas.	To provide nutrients essential for plant growth.
SER23	During construction	Re-vegetation efforts on the site should be aligned with favourable growing seasons.	To maximise survival rates.
SER24	Prior to construction	A Section 50 compliance certificate and/ or written approval for sewer and water supply is required from Hunter Water Corporation. <u>An assessment of the potential environmental impacts of the agreed sewer connection is to be provided to the</u>	To confirm that the activity has met Hunter Water's requirements to be serviced by water and sewer.

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		<u>relevant determining authority two weeks prior to the commencement of construction of the sewer connection.</u>	
SER25	Prior to construction	A Pre-Construction Dilapidation Report must be prepared by a suitably qualified expert and submitted to Council when works relate to Council assets, the relevant asset/service infrastructure owners, and the relevant department Project Lead. The report must provide an accurate record of the existing condition of adjoining private properties that are likely to be impacted by the works (and that have agreed to an offer for a dilapidation survey), and assets/service infrastructure that is likely to be impacted by the works.	To protect Council/public assets, services, and infrastructure.
SER26	Post construction	A Post-Construction Dilapidation Report must be prepared by a suitably qualified expert and submitted to Council, the relevant asset/service infrastructure owners, and the relevant department Project Lead. The report must determine whether the construction work has resulted in any structural damage to items assessed in the Pre-Construction Dilapidation Report. If the report determines that there is damage	To protect Council/public assets, services, and infrastructure.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		as a result of construction works the identified damage must repaired or pay the full costs associated with repairing any damage within an agreed timeline between the owner of the identified property.	
SER27	Prior to, and during construction	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.	To ensure no obstruction occurs of public way.
Ecologically Sustainable Development (ESD)			
ESD1	Prior to construction	Finalise and demonstrate all Green Star strategy targeted credits, through the award of a Green Star Design Review certification. 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 department's Sustainability Team. For enquiries on requirements please contact the department's Sustainability Team on Sustainability.ESD@det.nsw.edu.au.	To enhance sustainability of the project and minimise impact on the locality, community, and/or the environment.

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ESD2	Prior to construction	If any departures arise from the sustainability strategy outlined in the ESD Report prepared by Arup, a review of the strategy is required. Any revised strategy is to be prepared by a suitably qualified ESD consultant and submitted to the department for approval.	To ensure the activity still meets the ESD initiatives and targets.
ESD3	Prior to construction – detailed design	Prior to the issue of the Crown Construction Certificate, a services and maintainability review is to be undertaken in consultation with a suitably qualified ESD Consultant. The review is to ensure that the activity still complies with a minimum 4-star Green Star rating as the detailed design evolves. Written confirmation of compliance with the Green Star Rating required for the project is required to be submitted to Certifier.	To ensure the activity is designed for optimum management and operations.
ESD4	Prior to construction	The Contractor is responsible for adopting responsible construction practices, including the development of a project-specific best-practice Construction Environmental Management Plan (CEMP).	To reduce impacts and promote opportunities for improved environmental and social outcomes.
ESD5	Prior to	The Contractor is responsible to demonstrate	To promote diversity and reduce physical and

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
	construction	policies that promote diversity and reduce physical and mental health impacts.	mental health impacts.
ESD6	Prior to construction	Prior to the issue of the Crown Construction Certificate, the Contractor is responsible for the preparation of a NABERS Embodied Emissions Material Form, in accordance with State Environment Planning Policy (Sustainable Building SEPP) 2022.	To reduce carbon emissions released throughout the entire process of construction.
NZ1	Prior to construction	Prior to the issue of the Crown Construction Certificate, the annual emissions estimate of Bunsen burners and kitchen cooktops required for the activity is to be quantified by a suitably qualified professional. This is to be submitted to the project Certifier.	To quantify the percentage of the activity's operational greenhouse gas emissions.
NZ2	Prior to construction	Prior to the issue of the Crown Construction Certificate, confirmation in writing by a suitably qualified professional is required to confirm the future expansion capabilities of PV to a 99kWp system.	To encourage greater renewable energy production on site.
Accessibility and BCA			

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
BCA1	Prior to construction	All building work is to be designed and undertaken in accordance with the National Construction Code Series, Building Code of Australia, Volume 1 and 2, as relevant.	To ensure the activity complies with relevant BCA standards and guidelines.
AC1	Prior to construction	All building work is to be designed and undertaken in accordance with the Building Code of Australia 2022 Volume 1, the Disability (Access to Premises - Buildings) Amendment Standards 2010 and 2020 (Premises Standards), relevant Australian Standards (AS), and the intent of the Disability Discrimination Act 1992 (DDA).	To ensure the activity complies with relevant access standards and guidelines.
Hazards (Electric and Magnetic Fields)			
EMF1	Prior to construction	Before the commencement of any construction works, written approval is required from Ausgrid for any activities in the easement.	To ensure the electricity easement will not be affected.
Dial before you dig			
DBYD1	Prior to construction	Prior to the commencement of any excavation or ground-disturbing activities, the proponent shall undertake a 'Dial Before You Dig' (DBYD) enquiry to	To ensure that excavation is conducted safely and in accordance with the requirements of utility asset owners.

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		identify the presence and location of any underground utilities and infrastructure within the proposed work area. Evidence of the DBYD and all relevant utility plans shall be kept on site at all times. The proponent shall ensure that all personnel involved in ground works are informed of the identified underground services and that appropriate exclusion zones, protective measures, and procedures are implemented to prevent damage, service disruption, or safety incidents.	
Construction			
C1	During construction	Any demolition work must be undertaken in accordance with the provisions of Australian Standard AS 2601-2001 The Demolition of Structures.	To comply with Australian Standards.
C2	During construction	The Construction Environmental Management Plan (CEMP) is to be prepared and implemented having regard to the Environmental Management Guidelines for Construction Procurement (Edition 4), and is to include where relevant, but not limited to, the following information, as well as any project specific	To ensure construction activities are planned and managed to minimise environmental impacts, protect public amenity, and comply with regulatory requirements.

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		matters raised across other mitigation measures: a) Details of: - o Hours of work; - o 24-hour contact details of site manager; - o Management of dust and odour; - o Stormwater control and discharge; - o Measures to ensure that sediment and other materials are not tracked onto the roadway by vehicles leaving the site; - o Any other specific environmental construction Mitigation Measures detailed in the REF; - o Any requirements outlined in any relevant approvals, permits, licences or landowner consents; and - o Community consultation and complaints handling in line with the department's Stakeholder and Community Participation Plan. b) Aerial Site Plan showing the location of the works; c) The following, where required by Mitigation Measures: - o Construction Traffic and Pedestrian Management; - o Construction Worker Transport Strategy - o Construction Noise and Vibration Management;	

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		- o Construction Waste Management (including details on contaminated waste); - o Construction Air Quality and Dust Management; - o Construction Soil and Water Management; - o Construction Flood Management; - o Aboriginal/Non-Aboriginal Heritage Management; and - o 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 National Parks and Wildlife Act 1975, Heritage Act 1977 and any other relevant legislation, as relevant to the works.	
C3	During construction	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.	To ensure safety to, and around the construction site.
C4	During	The use and storage of hazardous materials and	To safely use and store hazardous and dangerous

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
	construction	dangerous goods, including petroleum, distillate and other chemicals, shall be in accordance with the relevant legislation including, but not limited to: • Protection of the Environment Operations Act 1997; • Work Health and Safety Regulation 2017; • AS 1940:2017 The Storage and Handling of Flammable and Combustible Liquids; and • Safe Work NSW Code of Practice – Managing Risks of Hazardous Chemicals in the Workplace.	goods if utilised.
C5	During construction	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.	To safely contains spills.
C6	During construction	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	To prevent pollution to drains or watercourses.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		pollute drains or watercourses.	
C7	During construction	Building methods such as brick cutting, mixing mortar and the washing of tools, paint brushes, form-work and concrete trucks shall be undertaken in the construction site in a location so as to prevent air, land or water pollution.	To prevent air, land, or water pollution.
C8	During construction	All equipment and machinery shall be secured to prevent vandalism outside of construction hours.	To prevent vandalism outside of construction hours.
C9	During construction	All contractors must meet all workplace safety legislation and requirements.	To comply with all relevant safety legislation and requirements.
C10	During construction	No vehicle maintenance is permitted in the construction areas except in emergencies.	To reduce the risk of accident or injury.
C11	During construction	The work site is to be left tidy and rubbish free each day prior to leaving the site and at the completion of works.	To ensures that the site remains safe, environmentally responsible, respectful of the community, and professionally managed throughout the project.
C12	During construction	All construction lighting shall not cause a nuisance to adjoining neighbours and comply with AS/NZS	To prevent construction lighting impacting adjoining neighbours.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		<i>4282:2019 Control of the Obtrusive Effects of Outdoor Lighting.</i>	
C13	During construction	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: (a) Monday to Friday inclusive: Between 7.00am to 6.00pm; (b) Saturday: Between 8.00am to 1.00pm; and (c) Sunday and Public Holidays: No work permitted. Where noise levels are not expected to exceed the existing background noise level plus 5dB, and noise monitoring is undertaken in accordance with the Approved Methods for Measurement and Analysis of Environmental Noise in NSW (EPA, 2022), works may also be undertaken during the following additional work hours: (a) Mondays to Friday inclusive: Between 6:00pm to 7:00pm; and	To minimise impacts of construction work on the surrounding environment.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		(b) Saturday: Between 1:00pm to 4:00pm. Construction work may be undertaken outside of the standard and additional work hours outlined above, but only if notification has been 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: (a) By the police or a public authority for the delivery of vehicles, plant or materials; or (b) In an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or (c) Where the works are completely inaudible at the nearest sensitive receiver; or (d) 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	

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		seven days prior to the works; or (e) 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 (f) Public infrastructure works where work outside the recommended standard hours is supported by the affected community to shorten the length of the project; and (g) where it is demonstrated and justified for the need to work outside the recommended construction hours. 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.	

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		Any departure from this Mitigation Measure must be immediately notified to the department's Post Approvals and Compliance Team.	
C14	During construction	Use of any rock excavation machinery, sheet piling, pile driving or jack-hammering and the like is restricted to the following hours: (a) Monday to Friday inclusive: 9:00am to 12:00pm; (b) Monday to Friday inclusive: 2:00pm to 5:00pm; and (c) Saturday: 9:00am to 12:00pm.	To limit the impacts of rock excavation to appropriate hours of construction.
C15	During construction	Vibration levels induced by demolition activities must be in accordance with the AS4236 – Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites. The operation of plant and equipment must not give rise to the transmission of vibration nuisance or damage to other premises. Prior to commencement of vibration-generating activities, a specific vibration monitor must be set up either at the property boundary or nearest sensitive	To minimise impacts from vibration levels during demolition.

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
		receiver to monitor and record the vibration levels affecting buildings on adjacent land using the Assessing Vibration: A Technical Guide (DECC, 2009). Any departures from this Mitigation Measure must be notified to the Post Approvals and Compliance Team.	
C16	During construction	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 the advice of a suitably qualified engineer the works must: (a) Protect and support the building, structure or work from possible damage from the excavation, and (b) Where necessary, underpin the building, structure or work to prevent any such damage.	To prevent structural damage from excavation.
Visual and Amenity			

MM ID	Aspect/Section	Mitigation Measure	Reason for Mitigation Measure
VA1	Prior to, and during construction	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 the visual amenity assessment in the REF. For enquiries on requirements please contact the department's Design and Infrastructure Standards Team on DesignAndInfrastructureStandards@det.nsw.edu.au.	To minimise impacts on visual amenity

Dictionary

Term	Definition
Aboriginal object	Has the same meaning as the definition of the term in Section 5 (Definitions) of the <i>National Parks and Wildlife Act 1974</i> .
Aboriginal place	Has the same meaning as the definition of the term in Section 5 (Definitions) of the <i>National Parks and Wildlife Act 1974</i> .
Bushfire prone land	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.
Category 1 Remediation	Remediation work needing consent that is: (a) designated development, or (b) carried out or to be carried out on land declared to be a critical habitat, or (c) likely to have a significant effect on a critical habitat or a threatened species, population or ecological community, or (d) development for which another State environmental planning policy or a regional environmental plan requires development consent, or (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: (i) coastal protection, (ii) conservation or heritage conservation, (iii) habitat area, habitat protection area, habitat or wildlife corridor, (iv) environment protection, (v) escarpment, escarpment protection or escarpment preservation, or escarpment preservation,

	(vi) floodway, (vii) littoral rainforest, (viii) nature reserve, (ix) scenic area or scenic protection, (x) wetland, or (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).
Category 2 Remediation	Remediation work not needing consent that is: (a) a remediation work that is not a work of a kind described as Category 1 remediation, or (b) a remediation work (whether or not it is a work of a kind described as Category 1 remediation that: (i) by the terms of a remediation order, is required to be commenced before the expiry of the usual period under the Contaminated Land Management Act 1997 for lodgement of an appeal against the order, or 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. (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 (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 (iv) is carried out or to be carried out under the Public Land Remediation Program administered by the Broken Hill Environmental Lead Centre.

Certification of Crown building work	Certification under section 6.28(2) of the <i>Environmental Planning and Assessment Act 1979</i> .
Construction	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: • Building and road dilapidation surveys; • Investigative drilling or investigative excavation; • Archaeological Salvage; • Establishing temporary site offices (in locations identified by the Mitigation Measures of this REF determination); • Installation of environmental impact mitigation measures, fencing, enabling works; and • Minor adjustments to services or utilities.
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site.
DoE	Department of Education
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings.
Green Star	The building sustainability rating scheme management by the Green Building Council of Australia.
Post Approval and Compliance	To contact the Post Approval and Compliance Team email postapproval@det.nsw.edu.au
Gross Floor Area	Refer to the National Construction Code 'Gross Floor Area' definition.
Project Lead	The DoE primary contact for the project i.e. Project Director or Asset Manager.

Reasonable	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.
REF	Review of Environmental Factors
Suitably qualified person	A professional with the necessary qualifications having regard to the nature of their technical services.