

Appendix 1

Mitigation Measures for Review of Environmental Factors - Preliminary infrastructure works - Liverpool Boys and Girls High Schools

Department of Education Projects

May 2025

Part 5 Mitigation Measures

Aspect	MM ID	MM Name	Mitigation Measure	Timing
General	GMM01	Dial before you dig	Contact “Dial before you dig on 1100” to obtain a service diagram. The sequence number obtained from “Dial before you dig” is to be provided to the “Project Lead”.	Prior to the commencement of construction
General	GMM1	Approvals	These Mitigation Measures do not remove the obligation to obtain all other licences, permits, approvals and consents as required under any other legislation.	Throughout
General	GMM3	Australian Standards	All works must comply with the relevant Australian Standards.	Throughout
General	GMM5	Landowners Consent	Landowners consent must be obtained in writing from the relevant landowner or authority.	General
Community	CEMM1	Work Notification	DoE’s Post Approval and Compliance Team, the relevant local Council and the occupiers of any land within 20 metres of the site boundary must be notified in writing of the project. The notice must outline the works to be undertaken, the expected timing for commencement of, and completion of construction works. A minimum period of 48 hours notification prior to the	Prior to the commencement of construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			commencement of any construction work must be given.	
Community	CEMM2	Site Notice Board	<p>A site notice board must be located at eye level at the entrance or other appropriate location at the site in a prominent position for the benefit of the community. The site notice must be displayed throughout the entire construction period, be A1 sized, durable, weatherproof and include the following information:</p> <ul style="list-style-type: none"> (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. 	Prior to the commencement of construction
General	CEMM3	Complaints Handling	All complaints must be managed in accordance with DoE's Stakeholder and Community Participation Plan.	Throughout
Compliance	PACMM1	Compliance with Mitigation Measures	All relevant personnel, including contractors and their subcontractors, must be made aware of these Mitigation Measures and the requirement to undertake the activity as per these Mitigation Measures.	Throughout
Compliance	PACMM2	Non-compliance notification	The relevant Project Lead and DOE's Post Approval and Compliance Team must be notified as soon as practical when any non-compliance with a Mitigation Measure is identified. The notification should identify the	Throughout

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			<p>relevant works, set out the Mitigation Measure that works are non-compliant with, the way in which it does not comply, any known reasons for the non-compliance and what actions have been, or will be undertaken, to address the non-compliance.</p> <p><i>Note: Non-compliance and incident notifications processes are set out in the Post Approvals Guide. All notifications must be recorded using the digital Non-Compliance Notification Form or the Incident Notification Form.</i></p>	
Compliance	PACMM5	Status Report	The Project Lead must submit a Status Report to the Post Approvals and Compliance Team demonstrating compliance with the Mitigation Measures upon completion of the works.	One week prior to the commencement of Operations
Construction	CMM2	Construction Environmental Management Plan	<p>A Construction Environmental Management Plan (CEMP) is to be prepared and implemented having regard to the <i>Environmental Management Guidelines for Construction Procurement (Edition 4)</i>, and is to include where relevant, but not limited to, the following:</p> <p>(a) Details of:</p> <ul style="list-style-type: none"> (i). Hours of work; (ii). 24-hour contact details of site manager; (iii). Management of dust and odour; (iv). Stormwater control and discharge; (v). Measures to ensure that sediment and other materials are not 	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			<p>tracked onto the roadway by vehicles leaving the site;</p> <p>(vi). Any other specific environmental construction Mitigation Measures detailed in the REF;</p> <p>(vii). Any requirements outlined in any relevant approvals, permits, licences or landowner consents; and</p> <p>(viii). Community consultation and complaints handling in line with DoE's Stakeholder and Community Participation Plan.</p> <p>(b) Aerial Site Plan showing the location of the works;</p> <p>(c) The following, where required by Mitigation Measures:</p> <p>(i). Construction Traffic and Pedestrian Management;</p> <p>(ii). Construction Worker Transport Strategy</p> <p>(iii). Construction Noise and Vibration Management;</p> <p>(iv). Construction Waste Management (including details on contaminated waste);</p> <p>(v). Construction Air Quality and Dust Management;</p> <p>(vi). Construction Soil and Water Management;</p> <p>(vii). Construction Flood Management;</p> <p>(viii). Aboriginal/Non-Aboriginal Heritage Management; and</p> <p>(ix). Demolition Work Plan</p> <p>(d) Construction Tree Protection Plan;</p> <p>(e) Erosion and Sediment Control Plan;</p> <p>(f) Unexpected finds protocol for Aboriginal and non-Aboriginal heritage;</p>	

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			(g) Unexpected finds protocol for contamination; (h) Construction Emergency Management Plan; (i) Training of responsibilities/heritage site inductions under the <i>National Parks and Wildlife Act 1975, Heritage Act 1977</i> and any other relevant legislation, as relevant to the works.	
Construction	CMM3	Construction Fencing	Construction site fencing is to be installed around the site. Construction vehicle and pedestrian access points to / from the site are to be clearly designated, signposted and controlled for authorised access only.	Construction
Construction	CMM4	Construction Hazardous Materials	The use and storage of hazardous materials and dangerous goods, including petroleum, distillate and other chemicals, shall be in accordance with the relevant legislation including, but not limited to: <ul style="list-style-type: none"> • <i>Protection of the Environment Operations Act 1997;</i> • <i>Work Health and Safety Regulation 2017;</i> • <i>AS 1940:2017 The Storage and Handling of Flammable and Combustible Liquids;</i> and • <i>Safe Work NSW Code of Practice – Managing Risks of Hazardous Chemicals in the Workplace.</i> 	Construction
Construction	CMM5	Construction Hazardous Materials	containment kit must be available at all times on the construction site. All personnel must be made aware of the location of the kit and trained in its effective deployment.	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
Construction	CMM6	Construction Materials	All materials must be wholly contained within the construction site. The requirements of the <i>Protection of the Environment Operations Act 1997</i> are to be complied with when placing and stockpiling construction and waste materials, when disposing of waste products and during any other works likely to pollute drains or watercourses.	Construction
Construction	CMM7	Construction Operations	Building methods such as brick cutting, mixing mortar and the washing of tools, paint brushes, form-work and concrete trucks shall be undertaken in the construction site in a location so as to prevent air, land or water pollution.	Construction
Construction	CMM8	Construction Equipment	All equipment and machinery shall be secured to prevent vandalism outside of construction hours.	Construction
Construction	CMM9	Construction Contractors	All contractors must meet all workplace safety legislation and requirements.	Construction
Construction	CMM10	Construction Vehicle Maintenance	No vehicle maintenance is permitted in the construction areas except in emergencies.	Construction
Construction	CMM11	Construction Waste	The work site is to be left tidy and rubbish free each day prior to leaving the site and at the completion of works.	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
Construction	CMM12	Construction Lighting	All construction lighting shall not cause a nuisance to adjoining neighbours and comply with <i>AS/NZS 4282:2019 Control of the Obtrusive Effects of Outdoor Lighting</i> .	Construction
Construction	CMM13	Construction Hours	<p>The undertaking of any construction work, including the entry and exit of construction and delivery vehicles at the site, is restricted to the following standard work hours:</p> <ul style="list-style-type: none"> (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. <p>Where noise levels are not expected to exceed the existing background noise level plus 5dB, and noise monitoring is undertaken in accordance with the <i>Approved Methods for Measurement and Analysis of Environmental Noise in NSW (EPA, 2022)</i>, works may also be undertaken during the following additional work hours:</p> <ul style="list-style-type: none"> (d) Mondays to Friday inclusive: Between 6:00pm to 7:00pm; and (e) Saturday: Between 1:00pm to 4:00pm. <p>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</p>	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			<p>afterwards, and only if it is strictly required:</p> <ul style="list-style-type: none"> (f) By the police or a public authority for the delivery of vehicles, plant or materials; or (g) In an emergency to avoid the loss of life, damage to property or to prevent environmental harm; or (h) Where the works are completely inaudible at the nearest sensitive receiver; or (i) For the delivery, setup and removal of construction cranes, where notice of the crane related works is provided to Council and affected residents at least seven days prior to the works; or (j) Maintenance and repair of public infrastructure where disruption to essential services, required system conditions (such as low-flow conditions for sewers) and/or considerations of worker safety do not allow work within standard hours; or (k) Public infrastructure works where work outside the recommended standard hours is supported by the affected community to shorten the length of the project; and (l) where it is demonstrated and justified for the need to work outside the recommended construction hours. <p>Except in emergencies, these circumstances are not to be interpreted as endorsement for work outside the recommended standard hours and should be justified in each case. Work schedule convenience or project expedience is not considered sufficient justification.</p>	

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			Any departure from this Mitigation Measure must be immediately notified to the Post Approvals and Compliance Team.	
Construction	CMM14	Construction Methods	<p>Use of any rock excavation machinery, sheet piling, pile driving or jack-hammering and the like is restricted to the following hours:</p> <p>(a) Monday to Friday inclusive: 9:00am to 12:00pm;</p> <p>(b) Monday to Friday inclusive: 2:00pm to 5:00pm; and</p> <p>(c) Saturday: 9:00am to 12:00pm.</p>	Construction
Construction	CMM15	Vibration During Construction	<p>Vibration levels induced by demolition activities must be in accordance with the <i>AS4236 – Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites</i>.</p> <p>The operation of plant and equipment must not give rise to the transmission of vibration nuisance or damage to other premises.</p> <p>Prior to commencement of vibration-generating activities, a specific vibration monitor must be set up either at the property boundary or nearest sensitive receiver to monitor and record the vibration levels affecting buildings on adjacent land using the <i>Assessing Vibration: A Technical Guide (DECC, 2009)</i>.</p> <p>Any departures from this Mitigation Measure must be notified to the Post</p>	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			Approvals and Compliance Team.	
Construction	CMM16	Shoring & Adequacy of Adjoining Property	<p>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:</p> <ul style="list-style-type: none"> (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. 	Construction
Construction	CMM17	Traffic and Access	<p>The following measures to be included in the CEMP:</p> <ul style="list-style-type: none"> • number of heavy vehicle movements; • ensure no access through Burnside Drive; • worker parking/public transport usage; • number of workers on site; • street parking survey if workers are parking on street to ensure enough spaces; • whether existing parking is removed (both on and off site); and <p>Large truck movements are to be undertaken preferably outside of</p>	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			peak school times and when unable to be undertaken outside of these hours, measures are to be put in place to ensure the safety of pedestrians.	
Construction	CMM18	Air quality	Design and construction of the activity must be undertaken in accordance with the NLPS Asbestos Management Plan RevA prepared by Alliance 18-01-2024	Construction
Construction	CMM19	Waste	Spoil requiring removal from the site for disposal will be classified in accordance with the Waste Classification Guidelines Part 1: Classifying Wastes (NSW EPA, 2014) and disposed accordingly.	Construction
Soil & Water	SWMM1	Erosion and Sediment Control	An Erosion and Sediment Control Plan must be implemented in accordance with the Landcom/Department of Housing <i>Managing Urban Stormwater, Soils and Construction Guidelines</i> (Blue Book). The controls must be in place, inspected and managed until the works are complete and all exposed erodible materials are stable relevant to each construction stage. Inspection records must be kept and provided to the Post Approval and Compliance Team on request.	Construction
Soil & Water	SWMM4	Groundwater	Should any unexpected groundwater be encountered during construction works, works are to cease immediately. Where groundwater needs to be removed, an approval may be required under the <i>Water Management Act</i>	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			2000.	
Soil & Water	SWMM5	Stormwater Management System	<p>The operational stormwater management system must be designed by a suitably qualified civil engineer. The system must:</p> <ul style="list-style-type: none"> (a) Ensure that the system capacity has been designed in accordance with the relevant Australian Standards; and (b) Ensure that the system has been designed in accordance with the <i>Australian Rainfall and Runoff (Engineers Australia, 20016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) Guidelines.</i> 	Design
Soil & Water	SWMM6	Acid Sulphate Soils	The management of potential and actual acid sulfate soils shall be conducted in accordance with <i>the Acid Sulfate Soil Guidelines (NSW Acid Sulphate Soils Management Advisory Committee, August 1998).</i>	Construction
Soil and Water	SWMM7	Stormwater Management Plan	Design and construction of the activity will be undertaken in accordance with the Stormwater Management Plan prepared by Meinhardt (2025).	Construction
Trees	TMM1	Tree Protection	Trees not approved to be pruned or removed are to be protected and maintained in accordance with <i>AS 4970-2009 Protection of Trees on Development Sites</i> and are to remain in place until the completion of all construction work in the vicinity of the protected trees.	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
Land Contamination	LCMM3	Asbestos Handling	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 and the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> with particular reference to Part 7 'Transportation and Management of Asbestos Waste'.	Construction
Land Contamination	LCMM4	Unexpected Site Contamination	During construction works, should any unexpected contamination information or contaminants be identified which have the potential to alter previous site contamination assessments, conclusions and recommendations, the relevant DoE Project Lead must be immediately notified and works must cease in the location of the contamination. Works must not recommence until a suitably qualified and experienced contamination consultant has investigated the unexpected contamination and provided recommendations for the management of necessary remedial work required to render the site suitable for the activity in accordance with any relevant NSW EPA adopted guidelines. A Completion Certification from the contamination consultant shall be submitted to the relevant DoE Project Lead prior to construction works re-commencing.	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			Following completion of the remediation through implementation of the recommendations from the suitably qualified contamination consultation, a Site Remediation and Validation Report is to be submitted to a NSW EPA-Accredited Site Auditor to confirm site suitability. A copy of the Site Remediation and Validation Report is also to be provided to the relevant DoE Project Lead and DoE's Post Approval and Compliance Team. A notice of completion of remediation work must also be given to Council in accordance with Section 4.14 and Section 4.15 of <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> .	
Land Contamination	LCMM6	Asbestos Containment Cells	<p>Design and construction of the activity must be undertaken in accordance with the <i>NLPS Asbestos Management Plan</i> RevA prepared by Alliance 18-01-2024 including:</p> <ul style="list-style-type: none"> Trenching over: <ul style="list-style-type: none"> Containment Cell 1 should not exceed a depth of 1.2m; Containment Cell 2 should not exceed a depth of 1.5m; and Containment Cell 3 should not exceed a depth of 1.0m. Construction of trenching should not penetrate geofabric marker for each containment cell. 	Construction
Utilities & Infrastructure	UIMM1	Pre-Construction Dilapidation Report	A Pre-Construction Dilapidation Report must be prepared by a suitably qualified expert and submitted to Council, the DoE Heritage Team, relevant asset/service infrastructure owners and the relevant DoE 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	Prior to the commencement of construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			(and that have agreed to an offer for a dilapidation survey), the condition of fabric for heritage items and assets/service infrastructure that is likely to be impacted by the works.	
Utilities & Infrastructure	UIMM2	Services & Utilities	All services and utilities in the construction area must be appropriately disconnected and reconnected as required, in consultation with the relevant authorities to determine disconnection 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.	Construction
Utilities & Infrastructure	UIMM3	No Obstruction of Public Way	Building materials, machinery, vehicles, refuse, skip bins or the like must not be stored or placed in the public way (outside of any approved construction works zone) under any circumstances.	Construction
Utilities & Infrastructure	UIMM4	Pedestrian Access	Safe pedestrian access in and around the site shall remain unimpeded at all times. Required informative signage and directional information must be provided in appropriate locations ensuring pedestrian safety. Where necessary, traffic control measures will be implemented.	Construction
Utilities & Infrastructure	UIMM5	Post-Construction Dilapidation Report	A Post-Construction Dilapidation Report must be prepared by a suitably qualified expert and submitted to Council, the DoE Heritage Team, relevant asset/service infrastructure owners and the relevant DoE Project Lead. The report must determine whether the construction work has	Prior to the commencement of Operations

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			resulted in any structural damage to items assessed in the Pre-Construction Dilapidation Report. If the report determines that there is damage as a result of construction works the identified damage must be repaired or pay the full costs associated with repairing any damage within an agreed timeline between the owner of the identified property.	
Heritage	HMM1	Non-Aboriginal Heritage	If any unexpected archaeological relic (or potential relic) of heritage significance is discovered during any construction work, all work in the vicinity must cease and the area must be appropriately protected. Materials should not be removed from the ground wherever possible. The DoE Heritage Team is to be notified and an archaeologist engaged to undertake a site inspection to ascertain whether the finds are significant relics. Construction works cannot recommence in that area until advised by the archaeologist, in consultation with the DoE Heritage Team. Should significant relics be identified, external approvals to impact the relics may be required.	Construction
Heritage	HMM2	Aboriginal Heritage	If any unexpected Aboriginal objects, sites or places (or potential Aboriginal objects, site or places) are discovered during any construction work, all works in the vicinity must cease and the area must be appropriately protected. The DoE Heritage Team is to be notified and an archaeologist engaged to undertake a site inspection to assess the find in consultation with the Registered Aboriginal Parties (RAPs). Following the on-site assessment, the archaeologist and RAPs (if they attended the site)	Construction

Aspect	MM ID	MM Name	Mitigation Measure	Timing		
			are to advise on whether further management, mitigation or approvals are required in consultation with the DoE Heritage Team. Should Aboriginal objects be identified, these are to be registered in the Aboriginal Heritage Information Management System (AHIMS). An Aboriginal Heritage Impact Permit (AHIP) would also need to be obtained to impact the site.			
Heritage	HMM3	Human Remains	If human remains are identified, work must cease and the area around where the remains are found must be protected from all disturbance. Finds are not to be displaced from the location where they are found. The DoE Heritage Team is to be notified and a specialist archaeologist engaged to assess the find. If human skeletal material less than 100 years old is discovered, the NSW Police are to be contacted in accordance with the <i>Coroners Act 2009</i> . Aboriginal burials (older than 100 years) are protected under the <i>National Parks and Wildlife Act 1974</i> and should not be disturbed. Should the skeletal material prove to be archaeological Aboriginal remains, Heritage NSW and the Local Aboriginal Land Council must be notified. Notification should also be made to the Commonwealth Minister for the Environment, under the provisions of the <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> .	Construction		
Heritage	HMM4	Aboriginal Heritage	<div><div><ul style="list-style-type: none">Implement the management recommendations of the ACHAR summarised in Table.</div><div>Table: ACHAR management recommendations</div><table><tr><th>Site name (AHIMS ID)</th><th>Proposed Management</th></tr></table></div>	Site name (AHIMS ID)	Proposed Management	Before construction
Site name (AHIMS ID)	Proposed Management					

Aspect	MM ID	MM Name	Mitigation Measure	Timing
			Liverpool BHS GHS_AS01 (45-5-5789)	Formal management through AHIP Recovered during test excavation
			Liverpool BHS GHS_IA01 (45-5-5791)	Formal management through AHIP Recovered during test excavation
			Liverpool BHS GHS_IA02 (45-5-5790)	AHIP to harm Surface artefact recovery through community collection
			All other areas	AHIP to harm
			<ul style="list-style-type: none"> As per the Aboriginal Cultural Heritage Assessment Report (see Appendix 7), an Aboriginal Heritage Impact Permit is required for the proposed activity (including trenching works) prior to the commencement of works where harm to Aboriginal objects may occur. Works must adhere to the conditions of the AHIP permit. 	
Heritage	HMM5	Archaeological Relic	Detailed design and construction must avoid impact to the identified relic. Works should not extend within 400mm of the item	Construction

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> .
Construction	<p>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:</p> <ul style="list-style-type: none">• 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.
Post Approval and Compliance	To contact the Post Approval and Compliance Team email postapproval@det.nsw.edu.au
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.