## **Appendix B – Mitigation Measures**

The collective measures required to mitigate the impacts associated with the proposed works are detailed in the table below. These measures have been derived from the previous assessment in the Environmental Impact Statement and those detailed in appended consultants' reports.

## **1.0 Stage 1 Early Works Mitigation Measures**

Ref No.	Mitigation Measure
Design and C	Deration
D/O-AH	Aboriginal Heritage
D/O-AH1	Consultation with Registered Aboriginal Parties will continue until the finalisation of the proposed development to provide community input where relevant.
D/O-TIA	Traffic, Access and Parking
D/O-TIA1	The existing median strip along Ryedale Road will be extended to ensure the proposed access point located at the northern boundary of the site operates as left in, left out only. Further investigation will be undertaken to confirm any intersection treatments to be undertaken on Blaxland Road and First Avenue.
Construction	Management
CM-1	A detailed Construction Environmental Management Plan will be prepared prior to the commencement of works on site, including all required technical management plans and with consideration of other nominated mitigation measures.
CM-2	Implement a staging plan for the project (sub-plan to the CEMP) to minimise disruption to the hospital activities.
CM-3	Prior to the commencement of construction works all stakeholders (including surrounding residents, workers, patients, carers, visitors, and other stakeholders) will be made aware of the timing and likely impact of the construction period. Opportunities for feedback and to ask questions will also be provided.
CM-BIO	Biodiversity
CM-BIO1	Construction works will be timed to avoid critical lifecycle events such as breeding or nursing.
CM-BIO2	The Principal Contractor will be responsible for instigating clearing protocols including pre-clearing surveys, daily surveys and staged clearing, the presence of a trained ecological or licensed wildlife handler during clearing events.
CM-BIO3	Artificial habitats for fauna will be installed in adjacent retained vegetation, habitats or human made structures to replace the habitat resources lost and encourage animals to move from the impacted site.
CM-BIO4	Clearing protocols will implemented to identify vegetation to be retained, prevent inadvertent damage, and reduce soil disturbance.

Ref No.	Mitigation Measure
CM-BIO5	Sediment barriers or sedimentation ponds will be installed, as necessary, to control the quality of water released from the site into the receiving environment.
CM-BIO6	Noise barriers and light shields will be installed to reduce impacts of noise and light spill.
CM-BIO7	Adaptive dust monitoring programs will be implemented control air quality.
CM-BIO8	Construction activities will be timed and programmed to the degree possible to avoid impacts to flora and fauna. For example, timing construction activities for when migratory species are absent from the site, or when particular species known to or likely to use the habitat on the site are not breeding or nesting.
CM-BIO9	Temporary fencing will be installed to protect significant environmental features such as riparian zones.
CM-BIO10	Hygiene protocols will be put in place to prevent the spread of weeds or pathogens between infected areas and uninfected areas.
CM-BIO11	Staff training and site briefing will be undertaken prior to the commencement of construction works to communicate environmental features to be protected and measures to be implemented.
CM-TP	Tree Protection
CM-TP1	Where possible, trees with a high retention value will be retained. Appropriate consideration will be given to retaining trees with moderate retention value. Species with high and moderate tree retention value that cannot be retained in their existing location and that can be successfully relocated, should be relocated in preference to being removed.
CM-TP2	All trees approved for removal will be retained until such time as they are required to be removed to facilitate works.
CM-TP3	A project arborist will be engaged for the duration of the project. The project arborist should have AQF level 5 qualification in arboriculture, or equivalent, and relevant experience in tree management on development sites. They will have the following responsibilities:
	Inspect tree protection measures and certify they comply with the Tree Protection Plan and Tree Protection Specification prior to the commencement of works;
	Consult the construction team about critical tree related issues throughout all stages of the redevelopment;
	<ul> <li>Undertake inspections of trees and tree protection at least monthly throughout the project;</li> </ul>
	Immediately prior to tree removal, confirm the correct trees have been identified for removal;
	Supervise all works within any Structural Root Zone (SRZ) and any additional or unplanned work within any Tree Protection Zone (TPZ);
CM-TP4	Prior to the commencement of any works on site, a Tree Protection Plan and Tree Protection Specification will be produced in accordance with the Australian Standard Protection of Trees on Development Sites AS 4970—2009. The Tree Protection Plan and Tree Protection Specification must be implemented and complied with for the duration of the development project.
CM-TP5	Tree removal will be avoided to the degree practical during the months when protected species of mammals and birds are reproducing and raising young - April to October.
CM-TP6	A licenced wildlife rescuer will be present on site when trees that may harbor wildlife are being removed.
CM-TP7	Approved tree removal will be undertaken in accordance with the Guide to Managing Risks of Tree Trimming and Removal Work (Safe Work Australia, 2016) by a practicing arborist who has a minimum qualification of certificate 3 in arboriculture.

Ref No.	Mitigation Measure
CM-TP8	Any pruning that is required will be detailed in a pruning specification prepared by the project arborist and undertaken by an arborist who has certificate 3 in arboriculture, in accordance with the Australian Standard Pruning of Amenity Trees AS 4373—2007.
CM-TP9	Where possible, debris from tree removal and pruning will be chipped and stored on site for future use as mulch after it has dried. Any debris from trees identified as being infected with contagious, damaging pathogens will be disposed of to landfill.
CM-TP10	Where possible, roads and car parks will be constructed to minimise disturbance of soil within Tree Protection Zones (TPZ).
CM-TP11	If excavation or disturbance of soil is undertaken, supervision by the project arborist is required within Structural Root Zones (SRZ) and woody roots within any SRZ shall not be damaged, pruned or severed unless written approval of the project arborist is obtained.
CM-TP12	Upon completion of the construction works, the project arborist will certify in writing that the tree protection has been implemented and complied with in accordance with the Tree Protection Plan, Tree Protection Specification and any additional reasonable directions by the project arborist.
CM-AH	Aboriginal Heritage
CM-AH1	The Stage 1 works will be monitored by an appropriately qualified archaeologist.
CM-AH2	Prior to the commencement of construction, a Monitoring Methodology and Finds Management Strategy will be developed to inform the archaeological monitoring program and to establish protocols for unexpected finds. The protocol for the handling of any Aboriginal objects and archaeological resources that might be uncovered during the monitoring should be developed consultation with the Registered Aboriginal Parties as part of the Monitoring Methodology and Finds Management Strategy.
CM-AH3	<ul> <li>In the unlikely event that human remains are uncovered during any site works, the following protocol must be followed:</li> <li>1. All works within the vicinity of the find must immediately stop. The find must be cordoned-off and signage installed to avoid accidental impact.</li> <li>2. The site supervisor or other nominated manager must notify the NSW Police and Heritage NSW (Enviroline 131 555).</li> <li>3. The find must be assessed by the NSW Police, which may include the assistance of a qualified forensic anthropologist.</li> <li>4. Management recommendations are to be formulated by the NSW Police, Heritage NSW and site representatives.</li> </ul>
CM-EH	European Heritage
CM-EH1	Prior to the commencement of any works on site a Photographic Archival Recording will be undertaken in accordance with the NSW OEH Heritage Division's Guidelines for 'Photographic Recording of Heritage Items Using Film or Digital Capture'. Archival Recording will be provided for the hospital site as a whole. Individual Archival Recordings should also be provided for buildings of moderate heritage significance which are proposed to be demolished and should include interiors, for example, the former Nurses Home (Building 18).
CM-HAA	Archaeological Heritage
CM-HAA1	In the event that works are to be undertaken within the subject area that fall outside the scope of the currently proposed works, the HAA should be updated to reflect the amended scope of works and their potential impact on archaeological resources.

Ref No.	Mitigation Measure
CM-HAA2	If any archaeological deposits or features are unexpectedly discovered during any site works, a chance find procedure must be implemented. The following steps must be carried out:
	• All works within the vicinity of the find must immediately stop. The find must not be moved 'out of the way' without assessment. The find must be cordoned-off and signage installed to avoid accidental impact.
	• The site supervisor or another nominated site representative must contact either the project archaeologist (if relevant) or Heritage NSW (Enviroline 131 555) to contact a suitably qualified archaeologist. 3
	• The nominated archaeologist must examine the find, provide a preliminary assessment of significance, record the item and decide on appropriate management measures. Such management may require further consultation with Heritage NSW, preparation of a research design and archaeological investigation/salvage methodology and notification of the discovery of a relic to Heritage NSW in accordance with S.146 of the Heritage Act 1977.
	• Depending on the significance of the find, reassessment of the archaeological potential of the subject area may be required and further archaeological investigation undertaken.
	• Reporting may need to be prepared regarding the find and approved management strategies.
	• Works in the vicinity of the find would only recommence upon receipt of approval from Heritage NSW.
CM-TIA	Traffic, Access and Parking
CM-TIA	Prior to the commencement of works, a Construction Traffic Management Plan should be prepared by the Principal Contractor.
CM-GEO	Geotechnical
CM-GEO1	All construction work must be undertaken in accordance with the recommendations prepared by PSM in the Geotechnical Investigation (dated 19 June 2019). Where necessary, further geotechnical input and advice must be sought during the construction phase of the project.
CM-CO	Contamination
CM-CO1	Further investigation of soils beneath building footprints across the Stage 1 Early Works area is required following demolition to confirm the findings from the soil investigation as part of the Detailed Site Investigation are consistent with the soils beneath the building footprints proposed for demolition. Subsequent to the additional investigations, a Remediation Action Plan will be prepared (if required) and implemented in accordance with the relevant regulatory requirements that documents the procedures and standards to be followed in order to address the identified asbestos and other isolated soil contamination impacts in such a manner as to make the site suitable for the proposed future uses.
CM-NV	Noise and Vibration
CM-NV1	Construction will be undertaken during the following times:
	<ul> <li>7:00am and 6:00pm Monday to Friday;</li> <li>8:00am to 1:00pm on Saturday; and</li> </ul>

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Ref No.	Mitigation Measure
	No work on Sunday or public holidays.
CM-NV2	Respite Periods will be provided where activities are found to exceed the 75 dB(A) Highly Affected Noise Level at receivers, such as 3 hours on and 1 hour off.
CM-NV3	If, during construction works, an item of equipment exceeds either the noise criteria at any location or the equipment noise level limits, the following noise control measures, together with construction best practices presented in shall be undertaken to minimise the noise impacts on the neighbourhood:
	• Schedule noisy activities to occur outside of the most sensitive times of the day for each nominated receiver. For example, avoiding works during "outside standard hours" at nearby residential receivers;
	• Consider implementing equipment-specific temporary screening for noisy equipment, or other noise control measures recommended in Appendix E of AS2436. This is most likely to apply to noisier items such as jackhammers;
	• For large work areas, solid screening or hoarding as part of the worksite perimeters would be beneficial;
	• Locate specific activities such as carpentry areas (use of circular saws etc) to internal spaces or where shielding is provided by existing structures or temporary screening;
	• Limit the number of trucks and heavy vehicles on site at any given time (through scheduling deliveries at different times);
	Unnecessary idling of vehicles and equipment is to be avoided;
	Traffic routes are to be prepared to minimise the noise impact on the community;
	When loading and unloading trucks, adopt best practice noise management strategies to avoid materials being dropped from a height;
	Adopt quieter methodologies. For example, where possible, use concrete sawing and removal of sections as opposed to jackhammering; and
	• Ensure that any miscellaneous equipment (extraction fans, hand tools, etc), not specifically identified in this assessment, incorporates silencing/shielding equipment as required to meet the noise criteria.
CM-NV4	A comprehensive Construction Noise and Vibration Management Plan will be prepared prior to the commencement of construction works and will consider proposed plant, equipment and construction methodology.
CM-CIV	Civil Works
CM-CIV1	The following construction management methodology has been developed for the Stage 1 Early Works and will be included as part of the soil erosion and sediment control for the site:
	Establish sediment fencing to the downstream perimeter of the zone of disturbed works to protect downstream assets and properties
	Installation of stabilised construction entry and exit grids to prevent construction vehicles tracking debris into adjacent Authority roadways and stormwater systems
	Construction of "clean water" diversion drains with rock check dams to divert unpolluted water to the existing stormwater system in a controlled manner
	Construction of "dirty water" catch drains with rock check dams to divert sediment-laden and silt-laden water to proposed sedimentation basins
	Construction of appropriately sized and maintained sedimentation basins to promote settling of gross pollutants and suspended solids. Dosing and flocculation of fine suspended particulates will also be undertaken depending on tested water quality profiles within the sedimentation basin
	Protection of materials stockpiles by suitable wind protection fencing and / or temporary covering of stockpiles
	Protection of existing and recently constructed surface inlet pits with temporary sediment traps using geotextile filter fabric and sandbags
	Protection of existing and recently constructed overland flow paths with vegetated ground cover
	General expedited revegetation and stabilisation of exposed earthworks to prevent sedimentation of stormwater runoff

# 2.0 Stage 2 Detailed Design Mitigation Measures

Ref No.	Mitigation Measure
Design and Op	eration
D/O-BF	Built Form
D/O-BF1	The detailed design of the proposed building envelope, including fit-out, building materials and operation will be subject to separate Stage 2 Detailed SDDA.
D/O-VIA	Visual Impact
D/O-VIA1	Landscaping will be provided within the proposed publicly accessible open space to achieve an appropriate balance between providing new views to Denistone House from Denistone Road and mitigating visual impact of the main hospital building. Landscaping will also be provided surrounding the built form to soften the appearance of the buildings when viewed from the streetscape.
D/O-VIA2	The detailed design will incorporate modulation and articulation of externally visible building elevations, potentially including delineation of each storey to reduce perception of height.
D/O-BIO	Biodiversity
D/O-BIO1	Development control measures will be implemented to regulate activity in vegetation and habitat adjacent to residential development including controls on pet ownership, rubbish disposal, wood collection, fire management and disturbance to nests and other niche habitats.
D/O-BIO2	A Vegetation Management Plan will be implemented to oversee the ongoing restoration, rehabilitation and maintenance of retained native vegetation on or adjacent to the development site.
D/O-TP	Tree Protection
D/O-TP1	Where possible, trees with a high retention value will be retained and incorporated into the design. Appropriate consideration must be given to retaining trees with moderate retention value and incorporating them into the design. Species with high and moderate tree retention value that cannot be retained in their existing location and that can be successfully relocated, will be relocated in preference to being removed. Species of palms are generally good candidates for relocation due to their relatively contained root balls.
D/O-TP2	The arboricultural assessment will be reviewed to confirm the location of any high and moderate retention value trees that have previously been identified as being located within the maximum building envelope but located outside of the building footprint.
D/O-TP3	All trees identified in the landscape plan must be ordered from a reputable tree grower, who only provides tree stock grown in accordance with the Australian Standard Tree stock for landscape use AS 2303—2018. This will provide time for the trees to grow as much as possible before planting on site, thereby providing maximum benefit when they are planted.
D/O-TP4	The Tree Protection Plan and Tree Protection Specification will be updated following confirmation of the final design. The various stages of the development should be reflected in these documents with appropriate protection measures installed as required to coincide with the relevant works. Pruning specifications, where necessary, should be included with the Tree Protection Specification.

Ref No.	Mitigation Measure
	All new trees should be:
	• Tree stock that is compliant with the Australian Standard Tree Stock for Landscape Sites AS 2303—2018;
	Planted by a qualified arborist or horticulturist with appropriate experience in tree planting;
	Planted in a hole that is no deeper than their root ball and is not backfilled;
	Protected with suitable tree guards but should not be tied to stakes; and
	Maintained in accordance with an appropriate maintenance regime ensuring mulching and adequate watering for at least three years after planting.
D/O-BU	Bushfire
D/O-BF1	Landscaping will be managed to minimise flame contact, radiant heat to buildings, and the potential for wind driven embers to cause ignitions.
D/O-BF2	The proposal will ensure that the fire hydrant, spacing, design and sizing complies with the relevant clauses of Australian Standard AS 2419.1 (SA 2005). The hydrants will not be located within any road carriageway.
D/O-BF3	All above-ground water service pipes will be constructed from metal, including and up to any taps, any above-ground water storage tanks will be made of concrete or metal.
D/O-BF4	The following measures relating to gas supply will be implemented during the detailed design phase:
	• Reticulated or bottled gas will be installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities;
	All fixed gas cylinders will be kept clear of all flammable materials to a distance of 10 m and shielded on the hazard side;
	Connections to and from gas cylinders will be made of metal;
	<ul> <li>Polymer-sheathed flexible gas supply lines will not be used; and</li> </ul>
	Above-ground gas service pipes will be made of metal, including and up to any outlets.
D/O-BF5	A Bushfire Emergency Management and Evacuation Plan will be prepared prior to occupation of the development and will be consistent with:
	The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan;
	Australian Standard AS 3745:2010 Planning for emergencies in facilities; and
	Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities.
	The Plan will include a mechanism for the early relocation of occupants.
D/O-BF6	Detailed plans of all emergency assembly areas including 'on-site' and 'off-site' arrangements as stated in AS 3745:2010 will be clearly displayed, and an annual (as a minimum) trial emergency evacuation is conducted.
D/O-AH	Aboriginal Heritage
D/O-AH1	Consultation with Registered Aboriginal Parties will continue until the finalisation of the proposed development to provide community input where relevant.
D/O-AH2	The Aboriginal Cultural Heritage Assessment will be updated as part of the Stage 2 Detailed SDDA.

Ref No.	Mitigation Measure
D/O-EH	European Heritage
D/O-EH1	A suitably qualified heritage consultant will be engaged to provide ongoing advice throughout the subsequent approvals and during ongoing design development.
D/O-EH2	All future development approvals must have consideration for the Denistone House, in terms of façade articulation, modulation and materiality, and should aim to mitigate any potential impacts of scale and ensure that future development provides a sympathetic backdrop to the heritage building.
D/O-EH3	A Heritage Interpretation Strategy will be prepared in accordance with the methodology outlined by Urbis to interpret the heritage significance of the site.
D/O-EH4	New landscape works, including new designs for gardens, landscape and plantings, particularly within the immediate setting of Denistone House and Stables, will seek to interpret its key phases in a cohesive and meaningful manner, and be designed to reflect its cultural heritage values. New plantings around the Denistone House and Stables will incorporate known historical plantings. A landscape masterplan is to be developed for the site which responds in a cohesive manner to the key phases of the item and its historic landscape uses, including meaningful interpretations of the original residential phase.
D/O-NV	Noise and Vibration
D/O-NV1	Ambulance bays, emergency department, public drop off areas and loading docks will be strategically located and distributed to avoid traffic congestion and incorporate shielding and separation from noise sensitive from surrounding noise sensitive receivers as best practical.
D/O-NV2	The following strategies will be implemented to control noise emissions associated with plant and equipment:
	• Selecting plant and equipment without any annoying characteristics such as low frequency or tonality (which can often be associated with pumps and chillers);
	• Locating of plant strategically (basement, interstitial and on roof) to ensure that the cumulative noise contribution at the receiver boundary is achieved. Where practical, plant will be located facing away from the nearest noise sensitive receivers or controls will be provided as required to reduce noise impact; and
	<ul> <li>Incorporating noise enclosures, screening, acoustic louvres, in-duct attenuation and sound absorptive panels into the building design, as required.</li> </ul>
D/O-WI	Wind Impacts
D/O-WI1	A detailed Wind Impact Assessment will be undertaken as part of the Stage 2 Detailed SDDA, once the location of the main entrances and pedestrian recreational areas are confirmed, to determine the impact of the proposal on pedestrian level wind conditions and potential implications for comfort and safety in and around the site.
Construction M	lanagement
CM-1	Prepare a detailed Construction Environmental Management Plan prior to the commencement of works on site, including all required technical management plans and with consideration of other nominated mitigation measures.
CM-2	Implement a staging plan for the project (sub-plan to the CEMP) to minimise disruption to the hospital activities.
CM-3	Prior to the commencement of construction works all stakeholders (including surrounding residents, workers, patients, carers, visitors, and other stakeholders) should be made aware of the timing and likely impact of the construction period. Opportunities for feedback and to ask questions will also be provided.
CM-BIO	Biodiversity
CM-BIO1	Where possible, construction works will be timed to avoid critical lifecycle events such as breeding or nursing.

Ref No.	Mitigation Measure
CM-BIO2	The Principal Contractor will be responsible for instigating clearing protocols including pre-clearing surveys, daily surveys and staged clearing, the presence of a trained ecological or licensed wildlife handler during clearing events.
CM-BIO3	Artificial habitats for fauna will be installed in adjacent retained vegetation, habitats or human made structures to replace the habitat resources lost and encourage animals to move from the impacted site.
CM-BIO4	Clearing protocols will implemented to identify vegetation to be retained, prevent inadvertent damage, and reduce soil disturbance.
CM-BIO5	Sediment barriers or sedimentation ponds will be installed, as necessary, to control the quality of water released from the site into the receiving environment.
CM-BIO6	Noise barriers and light shields will be installed to reduce impacts of noise and light spill.
CM-BIO7	Adaptive dust monitoring programs will be implemented control air quality.
CM-BIO8	Construction activities will be timed and programmed to avoid impacts to flora and fauna. For example, timing construction activities for when migratory species are absent from the site, or when particular species known to or likely to use the habitat on the site are not breeding or nesting.
CM-BIO9	Temporary fencing will be installed to protect significant environmental features such as riparian zones.
CM-BIO10	Hygiene protocols will be put in place to prevent the spread of weeds or pathogens between infected areas and uninfected areas.
CM-BIO11	Staff training and site briefing will be undertaken prior to the commencement of construction works to communicate environmental features to be protected and measures to be implemented.
CM-TP	Tree Protection
CM-TP1	Where possible, trees with a high retention value should be retained. Appropriate consideration must be given to retaining trees with moderate retention value. Species with high and moderate tree retention value that cannot be retained in their existing location and that can be successfully relocated, should be relocated in preference to being removed. Species of palms are generally good candidates for relocation due to their relatively contained root balls.
CM-TP2	All trees approved for removal must be retained until such time as they are required to be removed to facilitate works.
CM-TP3	A project arborist must be engaged for the duration of the project. The project arborist should have AQF level 5 qualification in arboriculture, or equivalent, and relevant experience in tree management on development sites. They will have the following responsibilities:
	<ul> <li>Inspect tree protection measures and certify they comply with the Tree Protection Plan and Tree Protection Specification prior to the commencement of works;</li> <li>Consult the construction team about critical tree related issues throughout all stages of the redevelopment;</li> <li>Undertake inspections of trees and tree protection at least monthly throughout the project;</li> <li>Immediately prior to tree removal, confirm the correct trees have been identified for removal;</li> <li>Supervise all works within any Structural Root Zone (SRZ) and any additional or unplanned work within any Tree Protection Zone (TPZ);</li> </ul>

Ref No.	Mitigation Measure
CM-TP4	Prior to the commencement of any works on site, a Tree Protection Plan and Tree Protection Specification will be produced in accordance with the Australian Standard Protection of Trees on Development Sites AS 4970—2009. The Tree Protection Plan and Tree Protection Specification must be implemented and complied with for the duration of the development project.
CM-TP5	Tree removal will be avoided during the months when protected species of mammals and birds are reproducing and raising young - April to October.
CM-TP6	A licenced wildlife rescuer must be present on site when trees that may harbor wildlife are being removed.
CM-TP7	Approved tree removal will be undertaken in accordance with the Guide to Managing Risks of Tree Trimming and Removal Work (Safe Work Australia, 2016) by a practicing arborist who has a minimum qualification of certificate 3 in arboriculture.
CM-TP8	Any pruning that is required will be detailed in a pruning specification prepared by the project arborist and undertaken by an arborist who has certificate 3 in arboriculture, in accordance with the Australian Standard Pruning of Amenity Trees AS 4373—2007.
CM-TP9	Debris from tree removal and pruning will be chipped and stored on site for future use as mulch after it has dried. Any debris from trees identified as being infected with contagious, damaging pathogens should be disposed of to landfill.
CM-TP10	Where possible, roads and car parks will be constructed to minimise disturbance of soil within Tree Protection Zones (TPZ).
CM-TP11	If excavation or disturbance of soil is undertaken, supervision by the project arborist is required within Structural Root Zones (SRZ) and woody roots within any SRZ shall not be damaged, pruned or severed unless written approval of the project arborist is obtained.
CM-TP12	Upon completion of the construction works, the project arborist must certify in writing that the tree protection has been implemented and complied with in accordance with the Tree Protection Plan, Tree Protection Specification and any additional reasonable directions by the project arborist.
CM-AH	Aboriginal Heritage
CM-AH1	Prior to the commencement of construction, a Monitoring Methodology and Finds Management Strategy will be developed to inform the archaeological monitoring program and to establish protocols for unexpected finds. The protocol for the handling of any Aboriginal objects and archaeological resources that might be uncovered during the monitoring should be developed consultation with the Registered Aboriginal Parties as part of the Monitoring Methodology and Finds Management Strategy.
CM-AH2	<ul> <li>In the unlikely event that human remains are uncovered during any site works, the following protocol must be followed:</li> <li>5. All works within the vicinity of the find must immediately stop. The find must be cordoned-off and signage installed to avoid accidental impact.</li> <li>6. The site supervisor or other nominated manager must notify the NSW Police and Heritage NSW (Enviroline 131 555).</li> <li>7. The find must be assessed by the NSW Police, which may include the assistance of a qualified forensic anthropologist.</li> <li>8. Management recommendations are to be formulated by the NSW Police, Heritage NSW and site representatives.</li> </ul>
CM-EH	European Heritage

Ref No.	Mitigation Measure
CM-EH1	Prior to the commencement of any works on site a Photographic Archival Recording will be undertaken in accordance with the NSW OEH Heritage Division's Guidelines for 'Photographic Recording of Heritage Items Using Film or Digital Capture'. Archival Recording will be provided for the hospital site as a whole. Individual Archival Recordings should also be provided for buildings of moderate heritage significance which are proposed to be demolished and should include interiors, for example, the former Nurses Home (Building 18).
CM-EH2	Prior to any demolition or redevelopment of Trigg House (Building 9), the building will be subject to an Archival Recording. Any remnant Pixie O'Harris murals will be investigated and recorded.
CM-EH3	Prior to the commencement of works a Schedule of Conservation Works will be prepared for the Stables (Building 8) and will identify any urgent priority works or further works to be undertaken in conjunction with proposed adaptive reuse of the building and broader hospital redevelopment. A structural assessment is required to be undertaken by a structural engineer experienced in the conservation of heritage buildings and should identify priority works.
CM-HAA	Archaeological Heritage
CM-HAA1	In the event that works are to be undertaken within the subject area that fall outside the scope of the currently proposed works, the HAA should be updated to reflect the amended scope of works and their potential impact on archaeological resources.
CM-HAA2	In view of the potential for subsurface archaeological remains having Local historical heritage significance to be retained in the area between the extant Denistone House and Denistone Road, including within the footprint of extant Building 6, an archaeological program should be developed to investigate the nature, extent and significance of the potential archaeological resource. The program should be detailed in an Archaeological Research Design and Excavation Methodology and should include archaeological monitoring of the demolition of Building 6 and removal of hardstand and test excavation to be undertaken prior to any ground disturbing activities in that area.
CM-HAA3	If any archaeological deposits or features are unexpectedly discovered during any site works, a chance find procedure must be implemented. The following steps must be carried out:
	• All works within the vicinity of the find must immediately stop. The find must not be moved 'out of the way' without assessment. The find must be cordoned-off and signage installed to avoid accidental impact.
	• The site supervisor or another nominated site representative must contact either the project archaeologist (if relevant) or Heritage NSW (Enviroline 131 555) to contact a suitably qualified archaeologist. 3
	• The nominated archaeologist must examine the find, provide a preliminary assessment of significance, record the item and decide on appropriate management measures. Such management may require further consultation with Heritage NSW, preparation of a research design and archaeological investigation/salvage methodology and notification of the discovery of a relic to Heritage NSW in accordance with S.146 of the Heritage Act 1977.
	• Depending on the significance of the find, reassessment of the archaeological potential of the subject area may be required and further archaeological investigation undertaken.
	• Reporting may need to be prepared regarding the find and approved management strategies. 6. Works in the vicinity of the find would only recommence upon receipt of approval from Heritage NSW.

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Ref No.	Mitigation Measure
CM-TIA	Traffic, Access and Parking
CM-TIA	Prior to the commencement of works, a Construction Traffic Management Plan should be prepared by the Principal Contractor.
СМ-СО	Contamination
CM-CO1	<ul><li>The following further investigations are to be undertaken prior to commencement of any works associated with the Stage 2 Detailed SSDA:</li><li>Further investigations on the nature and extent of asbestos in soils within building subfloor cavities across the site</li></ul>
	<ul> <li>Further investigation on the nature and extent of asbestos impacted fill and the detailed extent of the proposed redevelopment works behind the engineering building</li> <li>Further investigation on the location and potential contamination status of the UST and AST</li> </ul>
CM-CO2	Prior to the commencement of Stage 2 Detailed SDDA works, a Remediation Action Plan is to be prepared and implemented (if required – pending the outcome of further investigations undertaken in CM-CO1), in accordance with the relevant regulatory requirements that documents the procedures and standards to be followed in order to address the identified asbestos and other isolated soil contamination impacts in such a manner as to make the site suitable for the proposed future uses.
CM-CO3	A project specific Asbestos Management Plan will be prepared prior to the commencement of Stage 2 Detailed DA works to document controls required for the management of asbestos in soil impacts at the site. A Long Term Asbestos Management Plan will be also prepared and will detail on the appropriate removal and management methods for identified and suspected hazardous building materials and asbestos.
CM-CO4	The following investigations will be undertaken as part of the Stage 2 Detailed DA and the finding will be contained within the Remediation Action Plan and Long Term Asbestos Management Plan: <ul> <li>The nature and extent of asbestos in soils within building subfloor cavities across the site;</li> </ul>
	The nature and extent of asbestos impacted fill; and
	The location and potential contamination status of the underground storage tank and above ground storage tank.
CM-GEO	Geotechnical
CM-GEO1	All construction work must be undertaken in accordance with the recommendations prepared by PSM in the Geotechnical Investigation (dated 19 June 2019). Where necessary, further geotechnical input and advice must be sought during the construction phase of the project.
CM-NV	Noise and Vibration
CM-NV1	Respite Periods will be provided where activities are found to exceed the 75 dB(A) Highly Affected Noise Level at receivers, such as 3 hours on and 1 hour off.
CM-NV2	If, during construction works, an item of equipment exceeds either the noise criteria at any location or the equipment noise level limits, the following noise control measures, together with construction best practices presented in shall be undertaken to minimise the noise impacts on the neighbourhood:
	<ul> <li>Schedule noisy activities to occur outside of the most sensitive times of the day for each nominated receiver. For example, avoiding works during "outside standard hours" at nearby residential receivers;</li> </ul>
	• Consider implementing equipment-specific temporary screening for noisy equipment, or other noise control measures recommended in Appendix E of AS2436. This is most likely to apply to noisier items such as jackhammers;
	For large work areas, solid screening or hoarding as part of the worksite perimeters would be beneficial;

Ref No.	Mitigation Measure
	• Locate specific activities such as carpentry areas (use of circular saws etc) to internal spaces or where shielding is provided by existing structures or temporary screening;
	• Limit the number of trucks and heavy vehicles on site at any given time (through scheduling deliveries at different times);
	Unnecessary idling of vehicles and equipment is to be avoided;
	Traffic routes are to be prepared to minimise the noise impact on the community;
	When loading and unloading trucks, adopt best practice noise management strategies to avoid materials being dropped from a height;
	Adopt quieter methodologies. For example, where possible, use concrete sawing and removal of sections as opposed to jackhammering; and
	• Ensure that any miscellaneous equipment (extraction fans, hand tools, etc), not specifically identified in this assessment, incorporates silencing/shielding equipment as required to meet the noise criteria.
CM-NV3	A comprehensive Construction Noise and Vibration Management Plan will be prepared prior to the commencement of construction works and will consider proposed plant, equipment and construction methodology.