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Prepared for
Children's Medical Research Institute

Date
14 November 2024

Appendix C – Mitigation Measures

Gene Technologies Building, Westmead

Acknowledgement of Country

Architectus acknowledges the Australian Aboriginal and Torres Strait Islander peoples of this nation as the Traditional Custodians of the lands on which we live and work.

We pay our respects to Elders, past and present and emerging.

Architectus is committed to honouring Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to the land, waters, and seas and their rich contribution to society.

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A	19 December 2022	Draft
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C	14 November 2024	Final for Test of Adequacy

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1. Mitigation Measures

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1. Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed development are detailed in **Table 1** below.

Table 1 Recommendations and Mitigation Measures

Item	Mitigation Measures	Timing
Traffic		
Operational Traffic and Parking		
<u>Transport Infrastructure</u>	<p>A Transport and Accessibility Impact Assessment (TAIA) prepared by TTW at Appendix Y identifies new and upgraded infrastructure necessary for this project to achieve acceptable performance and safety including:</p> <ul style="list-style-type: none"> • Cycling infrastructure upgrades including 58 bike spaces and 14 showers; • Ambulance Road alterations designed to be a shared pedestrian and vehicle zone; • Boom gates to control entry to basement car park; and • Roller door to control loading dock <p>The abovementioned infrastructure will be provided in accordance with the TAIA prior to occupation of the development.</p>	Prior to occupation
<u>Green Travel</u>	<p>A preliminary Green Travel Plan (GTP) is included within the TAIA prepared by TTW at Appendix Y. The plan includes several measures aimed at increasing the mode share of sustainable models and decreasing car usage. These initiatives would improve parking and environmental outcomes overall:</p> <ul style="list-style-type: none"> – Promoting sustainable travel options such as public and active transport and implementing sustainable transport initiatives to decrease the environmental impact of the development and reduce private car usage; – Providing active transport infrastructure including 58 bicycle parking spaces and end-of-trip facilities; – Providing end of trip facilities including 14 showers and 4 changerooms on-site to increase active transport mode share; – Providing a transport access guide to users in the form of a brochure or leaflet which provides information on public and active transport facilities near the site to employees and visitors (particularly new users); – Providing periodic reminders of transport options within employee newsletters or updates; – Nominating lockers to be used only by staff who travel via active transport modes to encourage more active transport users; – Wayfinding to improve accessibility of end-of-trip facilities and bicycle parking; – Promoting bicycle parking and end-of-trip facilities through correspondence with staff e.g. staff newsletters or staff meetings; – Investigating avenues to promote active transport events such as 'Ride2Work Day' and encourage staff involvement; – Promoting carpooling; – Supporting working from home options; and – Regularly reviewing the Travel plan and allocating this responsibility to a designated Transport Coordinator. <p>A Detailed Green Travel Plan will be developed for the project as a condition of consent for implementation during operation of the development.</p>	During Construction & Operation
Construction Traffic and Parking		
<u>General</u>	<p>A Preliminary Construction Traffic Management Plan (PCTMP) has been prepared as part of the TAIA at Appendix Y. The PCTMP includes the following measures to mitigate impacts associated with construction traffic.</p> <p><u>Interactions between construction vehicles and general traffic</u></p> <ul style="list-style-type: none"> – Temporary signage and a communications plan are recommended to advise about changed traffic conditions in the local area. – Traffic Guidance Schemes (TGS) are to be prepared which include advance warning signage indicating construction vehicles are active within the local area. – Loading and unloading activities will occur within the site, at the nominated vehicle zones, or within any approved Works Zone. Truck movements to and from the site will be scheduled outside peak hours where possible to reduce impacts to the local and state road network. <p><u>Pedestrian and cyclist activity near the site</u></p>	Prior to commencement of work / During construction

Item	Mitigation Measures	Timing
	<ul style="list-style-type: none"> - Footpaths will be fully separated from the construction site with fencing. Pedestrians and cyclists will be re-routed around any footpath closures with appropriate signage. - Where construction vehicles are required to cross pedestrian or cyclist paths, traffic controllers are to be stationed to ensure safety. - Where pedestrian access passes beneath scaffolding, B-Class hoarding will be installed for full protection. - Pedestrians and Cyclists to be safely re-routed around any footpath closures with clearly marked detours and appropriate signage. - Heavy truck movements to be scheduled outside of peak hours where possible to minimise the overlap between construction vehicle and pedestrian or cyclist activities. <p><u>Construction vehicle manoeuvres occurring within the roadway</u></p> <ul style="list-style-type: none"> - Traffic controllers should be stationed to ensure safety for all road users and maximise efficiency during these instances. - Traffic Guidance Schemes (TGS) are to be prepared which include advance warning signage indicating construction vehicles are active within the local area. <p><u>Emergency vehicle access to CHW is adjacent to the construction site</u></p> <ul style="list-style-type: none"> - Construction works along the northeast side of the site must not obstruct access for emergency vehicles. <p><u>Community notification</u></p> <ul style="list-style-type: none"> - Community notification shall be undertaken as per TfNSW requirements and includes (but is not limited to): <ul style="list-style-type: none"> o Temporary notification signage installed around the site and affected areas highlighting the upcoming changes / impact. o Door knocks to immediately surrounding stakeholders advising them of the upcoming works. o Mailbox drops within a set radius around the project distributing the monthly project updates. o Project specific website containing project updates, notifications, planning documents, and contact numbers. o Project specific distribution lists that can be signed up to by members of the public who wish to receive notifications electronically. <p>A detailed CTMP will be prepared by the builder with consideration of all final design selections and with consultation with TfNSW and PLR. The preliminary CTMP is intended to provide a framework within which a future CTMP can be developed and implemented, and to demonstrate the potential operation of the construction site.</p>	
<u>General</u>	<p>A Preliminary Construction Management and Staging Plan (Appendix V) has been prepared by Empire Project Management and includes the following mitigations for managing traffic during construction:</p> <ul style="list-style-type: none"> - All loading and unloading activities will occur within the work area, away from the flow of traffic; - Where possible, vehicles will exit the site in a forward direction and use suitable gaps to re-enter the roadway to not disrupt traffic flow; - Where this is not possible, traffic controllers should be stationed at the site entries to ensure safe and efficient movement of construction vehicles, general traffic, pedestrians and workers; - All deliveries are to be made within the approved work hours. Truck movements to and from the site should be scheduled outside of network peak hours to reduce impacts to local roads; and - During days of high estimated vehicle movements, communication between delivery depots and waste management centres should be maintained to stagger the arrival of vehicles, to ensure vehicles can be accommodated within the work area which will minimise traffic disruptions 	Prior to commencement of work / During construction
<u>Parking</u>	<p>The PCTMP prepared by TTW at Appendix Y notes that due to spatial constraints within the site, no on-site parking will be available for construction workers. Workers will be advised to utilise nearby public transport options such as train or bus and will be responsible for finding parking in the streets surrounding in the site if they choose to travel by car.</p> <p>It is noted that a detailed CTMP will be prepared by the builder with consideration of all final design selections in accordance with the project SEARs.</p>	During construction
Construction Management		
<u>Construction Hours</u>	<p>In addition to the ICNG recommended standard construction hours, approval is being sought to extend Saturday construction hours to 5pm.</p> <ul style="list-style-type: none"> - Monday to Friday: 7am to 6pm; - Saturday: 8am to 5pm; - Sunday and public holidays: No work. 	During construction

Item	Mitigation Measures	Timing
<u>Disruption Notices</u>	<p>Any planned Disruptions to Hospital operations and services will be managed through the process of Disruption Notices (DNs). For such stoppages, the DN will describe the applicable works, timetable, issues and contingency plans.</p> <p>DNs will be submitted by the Contractor to the Project Manager and CMRI stakeholders for approval.</p> <p>Depending on the nature of the works, these are required 10 days prior to commencement of works, however this doesn't take into consideration the review and approval process, which depending on the scope of works can take upwards of 4 weeks.</p>	During construction
<u>Dust Management</u>	<p>To control dust generation, water will be sprayed at the source of origin and surrounding areas to prevent airborne dust particles migrating into the surrounding environment. Management of dust prevention is to be developed by the Contractor and agreed by the Project stakeholders.</p> <p>The need for measures to prevent tracking of soil onto roadways outside of the site will be assessed by the Contractor and provided where necessary. Options available to the Contractor include:</p> <ul style="list-style-type: none"> - Wheel shaker - Wheel wash - Hosing - Manual cleaning <p>Additional precautions that will be implemented during the works include the covering of all haulage trucks with tarpaulins, monitoring of weather conditions (including wind). Management and contingency plans will be developed to prevent any foreseeable impacts from dust.</p>	During construction
<u>Odour Control</u>	<p>The scope for demolition activity for the Site will be minor and odour problems will be minimal. All plant and machinery involved in the Works will be regularly serviced and checked for exhaust emissions and catalytic converters.</p>	During construction
<u>Stormwater Management</u>	<ul style="list-style-type: none"> - Measures will be employed on the site overall, to control soil erosion during construction. These measures will be in accordance with requirements provided by the Project Engineering Consultants. - The site will be continually cleaned of rubble to minimise possible sediment flow during rainfall periods. - Stormwater kerbs and drainage lines will have sediment controls in the form of sedimentation socks or similar (to be approved by the project civil engineer). - Stormwater grate intakes surrounding works will be covered with geotextile fabric to allow water to enter while retaining sediments. - Should external surface run-off flow into works areas, it may need to be diverted to reduce sediment transportation using sedimentation socks or similar (to be approved by the project civil engineer). - All drainage control devices will be maintained regularly during and following heavy rainfall periods. Any remedial works required to these controls will be undertaken as a priority. 	During construction
<u>Tree Protection</u>	<p>Where any trees are required to be retained and are within proximity to the works, the contractor will be required to maintain procedures for their protection at every stage of the development process.</p>	During construction
<u>Traffic Management</u>	<p>Construction vehicle routes</p> <p>Dedicated construction vehicle routes have been developed with the aim to provide the shortest distances to/from the arterial road network, whilst minimising the impact of construction traffic on the local road network in the vicinity of the site. Alternative routes would not be used without specific prior approval from the appropriate stakeholders.</p> <p><u>Pedestrian Protection</u></p> <p>Pedestrian and vehicle passage to and around the site will be maintained, or alternate routes determined where necessary and be defined by clear signage. Temporary hoarding appropriate to the interaction between pedestrians and construction works (as per SafeWork NSW requirements and Australian Standards) will be constructed to prevent unauthorised access to the site. These hoardings and fences will be staged to allow access to in-use areas during the works.</p> <p><u>Parking</u></p> <p>Workers will be advised of the available public transport within proximity to the site including the bus stop outside the site and Westmead station a short walk away. Workers will be encouraged to utilise alternative transport options, but where workers choose to travel via car, they shall be responsible for finding their own parking and are to park in accordance with all signposted parking restrictions.</p>	During Construction
<u>Service Disconnections</u>	<p>All Service authorities will be consulted prior to the works commencing to ascertain lead times and correct termination locations. All termination works will be undertaken in accordance with project design engineers' specifications and instructions. All termination works will be undertaken by suitably licensed contractors.</p>	During Construction
Hazardous Materials		
<u>Asbestos Containing Materials</u>	<p>Identified and suspected hazardous building materials were observed throughout the site as a result of visual identification and laboratory analysis. A number of the identified hazardous building materials present a significant exposure risk to future site occupants and demolition workers if they are not appropriately managed/removed.</p> <p>The following broad recommendations are made for the removal of the identified hazardous materials to potentially mitigate harmful effects as a result of the proposed works program.</p>	During construction

Item	Mitigation Measures	Timing
	<p>Further detail on the appropriate removal and management methods for identified and suspected hazardous building materials shall be included in the site hazardous materials management plan. The person with management or control of the site, must ensure, so far as is reasonably practicable, that the identified hazardous materials are removed prior to the commencement of the proposed demolition works.</p> <p><u>Asbestos Containing Materials</u></p> <ul style="list-style-type: none"> – The waterproofing membrane to the roof level is suspected to contain asbestos. Prior to the demolition of the structures, it is recommended that the following work is undertaken: <ul style="list-style-type: none"> a) A suitably qualified occupational hygienist or licensed asbestos assessor is engaged to undertake an assessment of the waterproofing membrane, determine the presence or absence of asbestos within the membrane material and provide appropriate recommendations for management and/or removal (if required), OR b) Assume the waterproofing membrane does contain asbestos and engage a Class A or B licensed asbestos removalist to remove the assumed asbestos hazard. Removal and disposal of asbestos materials shall be undertaken in accordance with the Work Health and Safety Act (2011), Work Health and Safety Regulation (2017) and SWNSW 2019a including air monitoring and clearance certification requirements. – Specialist Class A licensed contractors will be used to remove material classified as hazardous. These materials will be removed separately first and disposed of in accordance with EPA and statutory requirements. Certification will be provided that identified hazardous materials have been removed. <p><u>Inaccessible Areas</u></p> <ul style="list-style-type: none"> – Areas inaccessible during the current HBMS should be inspected by a suitably qualified competent person prior to any works commencing. Suspected ACM should be sampled by a suitably qualified competent person prior to any works commencing. <p><u>Unexpected Finds</u></p> <ul style="list-style-type: none"> – Any materials deemed to be consistent with those detailed in the Hazardous Materials Register that have not been previously identified should be assumed to have the same content and be treated accordingly. – Should any additional suspected hazardous materials be observed during or prior to demolition works, works should cease until a suitably qualified occupational hygienist can assess the suspected hazardous material and provide appropriate recommendations for management and/or removal. 	
<u>Lead Based Paints</u>	<ul style="list-style-type: none"> – The lead based paints, as identified in Hazardous Materials Register, were observed in a good condition and should be managed in accordance with the AS4361.2-2017. Where peeling or deteriorated they should be removed under controlled conditions by an experienced contractor prior to demolition. Stable lead based paints adhered to building fabric can be disposed as general solid waste in accordance with NSW EPA 2014 provided care is taken to minimise any potential for paint flakes to be dispersed onto ground surfaces and building and demolition waste is not proposed to be recycled. – Where building and demolition wastes are proposed to be recycled that are impacted by lead paints, the lead paints must be stripped prior to demolition works commencing . any removed lead paint waste must be disposed of as hazardous waste in accordance with NSW EPA 2014. 	During construction
<u>Synthetic Mineral Fibres</u>	<ul style="list-style-type: none"> – The synthetic mineral fibres encountered during this inspection were generally contained and deemed to be low risk. These SMF materials can be removed with the building and demolition waste with care taken not to generate fibres. Appropriate PPE is recommended including the use of P2 respirator as minimum and appropriate removal methodology as outlined in [NOHSC: 1004(1990)] and [NOHSC: 2006(1990)]. 	During construction
<u>Inaccessible Areas</u>	<ul style="list-style-type: none"> – Any materials deemed to be consistent with those detailed in the Hazardous Materials Register that have not been previously identified should be assumed to have the same content and be treated accordingly. – Should any additional suspected hazardous materials be observed during or prior to demolition works, works should cease until a suitably qualified occupational hygienist can assess the suspected hazardous material and provide appropriate recommendations for management and/or removal. 	During construction
<u>Unexpected Finds</u>	<ul style="list-style-type: none"> – Any materials deemed to be consistent with those detailed in the Hazardous Materials Register that have not been previously identified should be assumed to have the same content and be treated accordingly. – Should any additional suspected hazardous materials be observed during or prior to demolition works, works should cease until a suitably qualified occupational hygienist can assess the suspected hazardous 	During construction
<u>Hardware Safeguards</u>	<p>The hardware safeguards contained in Section 7.2 of 'Preliminary hazard analysis for the Stage 2 development of the children's medical research institute following State Environmental Planning Policy (Resilience and Hazards) 2021 guidelines' prepared by CETEC dated 15 March 2024 includes safeguards for:</p> <ul style="list-style-type: none"> – Gas leaks; – Cryogenic stage, use, spills and fires; and 	During construction

Item	Mitigation Measures	Timing
	<ul style="list-style-type: none"> - Chemical vapour release. 	
Noise and Vibration		
<u>Operational Noise and Vibration</u>	<p>A detailed acoustic review is undertaken prior to construction to determine acoustic treatments to control noise emissions from the mechanical plant to satisfactory levels. These may include duct lining, acoustic silencers and enclosures if required.</p> <p>Vibration impacts are associated with the construction phase of the proposed development only.</p>	Prior to commencement of works
<u>Construction Noise</u>	<p>The Noise and Vibration Assessment at Appendix S notes that whilst exceedances of the noise management levels are expected during the excavation and structural works, given the relatively short duration further mitigation is not recommended, as this could have the consequence of extending the duration of construction (and therefore noise impacts).</p> <p>The report makes the following recommendations for the mitigation of construction noise impacts:</p> <ul style="list-style-type: none"> - Establishing an open line of communication with the community which is maintained throughout the construction process; - Notifying nearby sensitive receivers of the duration of excavation works as well as planned concrete pours required at the site; - Trucks and bobcats are to use a non-tonal reversing beacon (subject to OH&S requirements) to minimise potential disturbance of neighbours; - Avoiding careless dropping of construction materials into empty trucks; and - Trucks, trailers and concrete trucks (if feasible) should turn off their engines during idling to reduce noise impacts (unless truck ignition needs to remain on during concrete pumping). <p>Additionally, construction activities will be limited during the following periods to minimise disruption to nearby sensitive receivers:</p> <ul style="list-style-type: none"> - Monday to Friday 7am-9am and 5pm-6pm; and - Saturday 8am-9am and 1pm-5pm. <p>During these hours permitted construction activities include:</p> <ul style="list-style-type: none"> - Works for which the noise levels do not exceed the existing background noise level plus 5dB; and - No rock breaking, rock hammering, sheet piling or pile driving. 	During Construction
<u>Construction Vibration</u>	<p>The report makes the following recommendations for the mitigation of vibration impacts during construction:</p> <ul style="list-style-type: none"> - Undertake sample testing to determine likely vibration impact from works; - Use alternative construction processes to minimise vibration impacts, such as: <ul style="list-style-type: none"> - Use of concrete cutting and excavator rather than pneumatic hammer during demolition or excavation; - Avoiding the use of vibratory rollers; and - Where the new construction processes are used on site, careful attention should be paid to any exceedances detected by vibration monitors within the site. <ul style="list-style-type: none"> - Where it is expected that vibration levels would impact operation of the hospital and alternative processes are not possible, works should be scheduled to minimise impact; and - There is to be a nominated representative from main contractor who handles any potential complaints and implements appropriate mitigation measures. <p>Refer to Appendix S for further proposed mitigation strategies in the event of complaints.</p>	During Construction
Heritage		
<u>Built Heritage</u>	<p>As identified by the Statement of Heritage Impact prepared by Extent Heritage at Appendix Q, the site does not contain any heritage items and is not located within a heritage conservation area. Proposed works have a negligible impact upon the heritage significance of heritage items in the vicinity of the site, including Cumberland Hospital and Parramatta Park .</p> <p>In the event that a potential heritage artefact/item/object/site is encountered during works, they would be managed in accordance with the Unexpected Find Procedure in Appendix Q which details the actions to be taken when previously unidentified relics are found during construction/demolition activities.</p>	-
<u>Historical Archaeology</u>	<p>As identified in the Statement of Heritage Impact at Appendix Q, any potential historical archaeological remains within the study area have been assessed as unlikely to hold any significance according to the NSW Heritage criteria. Therefore, no further historical archaeological reporting for the proposed works is required.</p> <p>If archaeological deposits are encountered, they would be managed in accordance with the Unexpected Find Procedure in Appendix Q which details the actions to be taken when previously unidentified relics are found during construction/demolition activities.</p>	-
<u>Aboriginal Heritage</u>	<p>An ACHAR was prepared by Niche Environmental at Appendix N. The report makes the following recommendations for mitigating potential impacts to Aboriginal cultural heritage due to the proposed development:</p> <ul style="list-style-type: none"> - CMRI should continue to consult with the Aboriginal community in accordance with the consultation guidelines and in accordance with any future Aboriginal Heritage Impact 	Prior to commencement of work/ During construction

Item	Mitigation Measures	Timing
	<p>Permit (AHIP). To ensure that the current consultation records remain valid to support any future AHIP/s for the Subject Area, the proponent should send project updates to RAPs at a minimum of every six months for the duration of the Project.</p> <ul style="list-style-type: none"> - All workers should be inducted into the Subject Area, so they are made aware of their obligations under the National Parks and Wildlife Act 1974 and any conditions of any future AHIP prior and during and after construction activities. - All workers should attend cultural awareness session/s with the Project RAPs. The session/s will present an opportunity for the Project RAPs to share knowledge and/or their cultural perspective of the Subject Area and the surrounding region with the Proponent. - In the event that previously unknown Aboriginal object(s) and/or sites are discovered during the proposed activity, work must stop, and an appropriately qualified archaeologist be contacted to assess the nature, extent, and significance of the identified sites and notification is provided to Heritage NSW. Works should not proceed without advice from Heritage NSW or an appropriately qualified archaeologist. - In the unlikely event that suspected human remains are encountered during construction, all work in the area that may cause further impact, must cease immediately and: <ul style="list-style-type: none"> - The location, including a 20 m curtilage, should be secured using barrier fencing to avoid further harm; - The NSW Police must be contacted immediately; - No further action is to be undertaken until the NSW Police provide written notification to CMRI; and - If the skeletal remains are identified as Aboriginal, CMRI or their agent must contact Heritage NSW's Enviroline on 131 555 and representatives of the RAPs. No works are to continue until Heritage NSW provides written notification to the proponent or their Agent. 	
<u>Contamination</u>	<p>Preliminary Site Investigations were conducted by Douglas Partners (at Appendix AB). Due to limited access around the site buildings, Detailed Site Investigations will be completed in a staged manner (for the Phase 2A building and then for the Phase 2B building) following the demolition of existing structures on site.</p> <p>Subject to the findings of the DSI, the Remediation Action Plan (RAP) may need to be updated. Accordingly, the following measures are recommended:</p> <ul style="list-style-type: none"> - DSI is carried out following demolition of buildings on site; - The RAP is amended as required, and is then to be reviewed and approved by a NSW EPA Accredited Site Auditor prior to implementation; and - A Site Audit Statement is to be prepared certifying suitability for the proposed use, at the completion of the remediation and validation. 	During construction (Subsequent to demolition of existing structures)
<u>Flooding</u>	<p>A Flooding Report was prepared by TTW and is contained within the Civil Report at Appendix Z. Flood mitigation measures relevant to the subject site are outlined below:</p> <p><u>Floor Level</u></p> <ul style="list-style-type: none"> - It is recommended that all habitable floor levels to be above the 100-year ARI flood level plus 500mm freeboard. <p><u>Car Parking and Driveway Access:</u></p> <ul style="list-style-type: none"> - The entrance to the proposed basement carpark area is to be raised to provide freeboard to the external level. Levels are to be raised to provide a crest to the basement entry ramp to ensure no overland flow from Research Lane enters the basement. <p><u>Management and Design:</u></p> <ul style="list-style-type: none"> - It is recommended that hazardous materials are not stored in the basement level. 	Prior to commencement of works / during operation.
<u>Ecology</u>	<p>Environmentally Sustainable Design (ESD) principles addressing water and energy use, material selection and waste management have been incorporated into the design of the proposed development.</p> <p>An ESD Report has been prepared by Steensen Varming detailing the ESD credentials of the proposed development. Refer to this report at Appendix L.</p> <p>ESD initiatives to mitigate the environmental impact of the proposed development include the following:</p> <ul style="list-style-type: none"> - Resource conservation (energy, water) measuring including: <ul style="list-style-type: none"> - Energy Conservation: The proposed development's approach to sustainability and energy related systems is based on applying an "energy hierarchy" methodology. This methodology has the reduction of energy use as its first priority, and then seeks to meet the remaining energy demand by the most efficient means available, before the inclusion of on-site generation and importation of green power; and - Water Conservation: The proposed development seeks to conserve water through water efficient fixtures/fittings, use of sensors to identify leaks, recycled water/rainwater harvesting and reuse, and consideration of a separate fire services water tank and drip and demand-controlled irrigation. <ul style="list-style-type: none"> - The selection of environmentally preferable materials; - Building system design measures including zoning of HVAC and lighting services, high efficiency plant, free cooling and use of heat recovery systems; and 	Prior to Construction

Item	Mitigation Measures	Timing
	<ul style="list-style-type: none"> Adopting the target of an equivalent/self-certified 5 Star Green Star rating utilising the Green Building Council of Australia's (GBCA) Design and As-built rating tool (DAB) version 1.3. A 5 Star Green Star rating is considered 'Australian excellence' level. 	
<u>Wind</u>	None deemed required.	-
<u>Aviation</u>	<p>An Aviation Report has been prepared by Rehbein Airport Consulting at Appendix R. Construction methodology, including crane types, height, reach, weathervaning, recall and lock-off outside operational hours must all be considered and agreed with Ambulance NSW prior to construction.</p>	Prior to commencement of works
<u>Geotechnical</u>	<p>A Geotechnical Assessment was prepared by Douglas Partners at Appendix AA to provide information on the subsurface stratification, and comment on excavation, foundations, and groundwater levels. The assessment outlines the following mitigation measures:</p> <p><u>Excavation</u></p> <ul style="list-style-type: none"> Vertical excavations will require both temporary and permanent lateral support during and after excavation Excavation in shale, siltstone and laminite will also need to consider jointing and potential wedges that may be formed. Where excavation is proposed close to existing footings and ground floors slab, additional lateral support will likely be required. Careful consideration of the depth, loading and sensitivity to movement of any nearby slabs and footings will be given during the shoring design. Batter slopes will be used as required for unsupported excavation up to three metres deep, and where batter slopes cannot be supported retaining wall systems will be used to support the soils and rock. Regular inspections of the excavation works by experienced engineering geologists or geotechnical engineers to identify adversely oriented joints and other rock defects are recommended. <p><u>Foundations</u></p> <ul style="list-style-type: none"> The buildings will be supported by piles and footings Piles and footings should be poured without delay after excavation to prevent deterioration of the founding material. All bored piles or excavations for shallow footings should be inspected by an experienced geotechnical professional during construction to check the adequacy of the foundation material and to check the socket cleanliness and roughness. 	During construction
<u>Construction and Demolition Waste</u>	<p>A Construction and Demolition Waste Management Plan (WMP) has been prepared by Waste Audit at Appendix W. The WMP outlines the following key mitigation measures:</p> <ul style="list-style-type: none"> Adhering to the waste management hierarchy and associated waste management principles (avoid, reduce, reuse, recycle/recover and treat/dispose). Record keeping of all wastes and recyclables generated and either re-used on site or transported off-site. These records will be made available to relevant authorities on request. All waste and recycling materials will be stored in bins provided by the appointed contractor(s). These bins will be appropriately coloured and signed to indicate what materials are to be deposited into them and located to maximise recovery of reusable/recyclable materials. Liquid waste will be managed in accordance with Sydney Water requirements A licensed contractor will be used to manage the removal of any asbestos-containing materials (including soils) and other material that may be contained in the buildings. Requirements under Clause 42 of the <i>Protection of the Environmental Operations (Waste) Regulation 2005</i> regarding asbestos waste management will also be adhered to. All contractors and sub-contractors, once appointed, will be required to detail all intended and actual disposal facilities used, in order to ensure the guiding principles of the waste hierarchy are upheld and maximum diversion from landfill is achieved. <p>During construction, all site personnel and subcontractors will be inducted into the requirements of this plan in accordance to their level of responsibility. As such, the induction is expected to include the following components:</p> <ul style="list-style-type: none"> The waste hierarchy and associated waste management principles; Procedures for handling and storage of wastes. Location of waste disposal and storage facilities. Actions to be undertaken in the event of a hazardous material spill. Staff and contractors with specific responsibilities for waste management including for the handling and disposal of hazardous waste will be given additional training as required. 	Demolition stage/ Prior to construction/ During construction

Item	Mitigation Measures	Timing
<u>Operational Waste</u>	<p>An Operational Waste Management Plan (OWMP) has been prepared by Waste Audit at Appendix X. The OWMP outlines the following key mitigation measures:</p> <ul style="list-style-type: none"> - A designated waste storage room is to be provided on the premises. - Provision of a sufficient number of waste receptacles on the premises to accommodate the volume and type of waste generated; - An appropriate licensed private contractor will be engaged to dispose of any hazardous waste; - Adherence to existing CMRI waste spills management procedures; - Education and training for personnel involved in spill management; - Appropriate management of clinical waste (including sharps) - Appropriate management of Cardboard and paper recycling, commingled recycling, specialised recycling and residual/putrescible waste; and - The provision of internal bin receptacles with 3-stream bins for cardboard recycling, commingled recycling and general waste. 	During Operation
<u>Social Impact</u>	<p>A Social Impact Assessment has been prepared by Ethos Urban (Appendix U) which includes the following recommendations to further manage the potential impacts from the proposal:</p> <ul style="list-style-type: none"> - Ensure affected receivers are given advance notification (at least 1 week) of expected noisy or vibration-intensive works. This may allow people to prepare for impacts (e.g., someone who works from home may choose to seek an alternate location on affected days). - Where noise levels are expected to be more than 5dB(A) above the noise affected level for residential receivers, provide respite vouchers for residents to partake in activities outside of the home while works occur. - Consult with hospital stakeholders throughout construction to ensure vibration intensive works do not impact regular operations. - Implement the Green Travel Plan (TTW, 2024) to encourage construction workers to minimise use of private vehicles. - Ensure affected receivers are given advance notification (at least 1 week) of expected noisy or vibration-intensive works. This may allow people to prepare for impacts (e.g., someone who works from home may choose to seek an alternate location on affected days). - Consult with other projects and agencies to understand the cumulative impacts and coordinate activities where possible. - Ongoing community consultation during construction to enable feedback and monitoring of impacts. Consider cultural diversity of area in consultation approach. - Implement a strategy to procure local contractors and workers where possible and practicable, to ensure some benefits flow to local community members. - Implementation of sustainability initiatives as outlined in the ESD Report (Steensen Varming, 2024). - 	Prior to the commencement of work/ During construction/ During Operation
Fire Safety		
<u>Fire safety report</u>	<ul style="list-style-type: none"> - A fire engineering report will be prepared and submitted to FRNSW by the certifier. 	Prior to occupation
<u>Fire hydrants</u>	<ul style="list-style-type: none"> - Building will be designed in accordance with AS 2419.1-2021, subject to any performance solutions where necessary. 	Prior to the commencement of work
Arboriculture		
<u>Tree removal works</u>	<ul style="list-style-type: none"> - All tree removal works are to be undertaken by a suitably qualified, experienced and insured Arboricultural contractor with a minimum AQF level 3 qualification in Arboriculture. 	During construction