Appendix R

Recommended Mitigation Measures – 2 June 2023

Issue	Mitigation Measure	Timing
Approved Documentation	The works / activity shall be carried out in accordance with the report, plans, and documents as set out in the Appendix Schedule of the REF proper.	At all times
Traffic, Access and Parking (Construction)	A final demolition and construction-related Traffic Management Plan shal be prepared by a suitably qualified consultant with appropriate training and certification from Transport for NSW and shall form part of the overall Construction Management Plan. It shall address, amongst other things, traffic routes, any required road closures, access and accessibility within the site, construction worker parking, work zones and loading zones, and pedestrian management.	Prior to the commencement of works.
	The demolition and construction-related Traffic Management Plan shall be submitted to Penrith City Council's Asset Management Department for endorsement Approval of the CTMP may require approval of the Local Traffic Committee. Please contact Council's Asset Management Department on 4732 7777 and refer to Council's website for a copy of the Temporary Road Reserve Occupancy Application Form.	Prior to the commencement of works.
	An approval under s138 of the Roads Act shall be obtained from Penrith City Council for the works within Council's road reserve, including the payment of fees and bonds. These works include driveway construction, road reserve occupancy and road reserve opening/excavation.	Prior to the commencement of roadworks
Noise and Vibration (Construction)	A final Construction Noise and Vibration Management Plan shall be prepared addressing physical and noise management measures to be employed during works to limit the likely impacts upon receiver within and outside of the hospital.	Prior to the commencement of works.
	Measures shall include, but not be limited to the followings as set out in Section 5.4 of the EMM Noise and Vibration Assessment:	
	 Stakeholder and community consultation Site hoarding Temporary noise barriers Scheduling of works Plant and equipment Work practices 	
Noise and Vibration (Operation)	With respect to the choice of mechical plant, a detailed review of mechanical plant should be undertaken as part of the detailed design and construction phases to ensure that cumulative noise emissions comply with the PNTLs provided in Table 4.1 and Table 4.2 of the EMM Noise and Vibration Assessment.	Prior to the commencement of works.
	Noise from the compressor enclosure will likely require acoustic treatment to the air intake path where it is drawn from the eastern façade. This may include internally lined duct work, an attenuator or acoustic louvre.	
	Any additional ventilation or extraction equipment (eg dust extraction) is to be acoustically treated to meet a noise target 10dB below the PNTLs at receivers.	

	Noise within each workshop should not exceed 85dB LAeq with the façade open. This would include an open façade not exceeding the following:	During operation.
	\bullet the eastern façade open in each workshop to an extent no greater than 2.5% of the floor area; and	
	• the western façade open in each workshop to an extent no greater than 10% of the floor area.	
	Where noisy works are to be undertaken (eg cutting or grinding) the workshop façade is to be closed (windows and doors).	
Dust and Air Quality	A final Construction Management Plan shall be prepared, addressing dust and air quality measures (amongst a fuller range of construction impact mitigation measures) to limit the potential for dust and air quality impacts upon the hospital and sensitive receivers outside of the hospital.	Prior to commencement of works.
Geotechnical matters	A review of the site's and work's potential to generate soil salinity impacts is to be completed to determine the risk of impact upon degradation in soils, groundwater or vegetation; damage to buildings and infrastructure; and ensure development will not significantly increase the salt load in existing watercourses.	Prior to commencement of works.
Soil Management	To manage run-off from stormwater during works, the Erosion and Sediment Control Plans for the site as prepared and provided by ACOR Consultants shall be employed.	During works.
	The measures applied shall be consistent with Erosion and sediment control - Managing Urban Stormwater: Soils and Construction (Landcom, 2004) (the Blue Book).	
Aboriginal heritage matters	Aboriginal objects are protected under the NPW Act regardless of whether they are registered on AHIMS or not.	During works.
	If suspected Aboriginal objects, such as stone artefacts, are located during future works, works must cease in the affected area and an archaeologist called in to assess the finds. If the finds are found to be Aboriginal objects, Heritage NSW must be notified under section 89A of the NPW Act. Appropriate management and avoidance or approval under a section 90 AHIP should then be sought if Aboriginal objects are to be moved or harmed.	
	In the extremely unlikely event that human remains are found, works should immediately cease, and the NSW Police should be contacted. If the remains are suspected to be Aboriginal, Heritage NSW may also be contacted at this time to assist in determining appropriate management.	
Non-Aboriginal culrural heritage matters	A standard unexpected finds process shall be adopted during works associated with the proposal:	During works.
	 An 'unexpected heritage find' can be defined as any unanticipated archaeological discovery, that has not been previously assessed or is not covered by an existing approval under the Heritage Act 1977 (Heritage Act) or National Parks and Wildlife Act 1974 (NPW Act). These discoveries are categorised as either: Aboriginal objects (archaeological remains, i.e. stone tools); Historic (non-Aboriginal) heritage items (archaeological remains, i.e. artefacts) or moveable objects). Human skeletal remains (reportable deaths, Aboriginal objects, or relics). 	

- Should any unexpected heritage find be uncovered during any future excavation works, the following procedure must be adhered to:
 - Stop all work in the immediate area of the item and notify the Project Manager.
 - Establish a 'no-go zone' around the item. Use high visibility fencing, where practical. Inform all site personnel about the no-go zone.
 - No work is to be undertaken within this zone until further investigations are completed.
 - Engage a suitably qualified and experienced Archaeologist to assess the finds.
 - The Heritage Council must be notified if the finds are of local or state significance. Additional approvals will be required before works can recommence on site.
 - If the item is assessed as not a 'relic', a 'heritage item' or an 'Aboriginal object' by the Archaeologist, works can proceed with advice provided in writing.
- Should any unexpected human skeletal remains be uncovered during future excavation works, the following procedure must be adhered to:
 - Do not further disturb or move the remains; Immediately cease all work at the particular location;
 - Notify NSW Police;
 - Notify Heritage NSW Environment Line on 131 555 as soon as practicable and provide available details of the remains and their location: and

Not recommence any work at the particular location unless authorised in writing by Heritage NSW.

Arboricultural matters

The only trees able to be removed are Trees 82 and 83 and 133, as set out in the Moore Trees Arboricultural Development Assessment Report.

During works.

All tree work shall be carried out by a qualified Arborist and work shall be completed following AS 4373 (Pruning of Amenity Trees, 2007).

Replacement tree planting is to be carried out consistent with the relevant plans and schedules of the approved Taylor Brammer landscaping drawings and specifications. During works.

All other trees must be retained and protected consistent with the Moore Trees Arboricultural Development Assessment Report as set out in Section 5 and Appendix 1 of the report.

During works.

The following recommendations also apply:

A Project Arborist should be appointed to oversee the arboricultural related works for the project. The Project Arborist should be used for arboricultural certification services and also used as a point of contact should any questions arise during the project. As specified in AS 4970, 2009, a Project Arborist is a person with a minimum Australian Qualification Framework (AQF) level 5 Diploma of Arboriculture or Horticulture qualification.

Prior to the commencement of works.

Trees not located near the works (south of Tree 87) will require tree protection fencing Prior to the commencement of as specified in Section 5.2 of the arborist's report. Trees 78-81 shall be fenced prior to

demolition works occurring. Trees 78-81 shall also require trunk protection (See Section 5.3). The specifications for a TPZ are in Section 5.3 of the arborist's report.

Building material storage:

During works.

Areas on the site shall have to be set aside for the exclusive use of:

- Construction access points
- Position of site sheds and latrines and temporary services
- Storage of materials

These points are to be outside of any TPZ area. Any area set aside for the stockpiling of soil and waste shall have the appropriate erosion control measures around this area as specified by an engineer. These erosion control measures shall be monitored and maintained regularly throughout the construction period of the site. These measures are to restrict any waste material entering the TPZ areas of the trees to be retained.

Contamination matters (CAMHS site)

The buildings/structures are to be appropriately demolished and clearance certificates During works. are to be provided following removal of any hazardous building materials. All demolition and clearances should occur prior to removal of the hardstand in order to reduce the potential for cross contamination with the underlying soils.

Following completion of the demolition works, undertake an 'emu pick' of the site for fragments of FCF/ACM at the surface of the site. The pick should be conducted by a suitably licensed asbestos contractor. On completion of the pick, a clearance certificate should be issued by a competent person or SafeWork NSW Licensed Asbestos Assessor to ensure the area is free of visible asbestos.

Following demolition works and prior to the commencement of construction works.

Development and implementation of an unexpected finds protocol shall be undertaken before and during the proposed development works.

Prior to the commrncement of works and during works.

Contamination matters (Accessway site)

Development and implementation of an unexpected finds protocol shall be undertaken Prior to the commrncement of before and during the proposed development works.

works and during works.

Hazardous Building Materials matters (CAMHS)

Prior to demolition or refurbishment work the JK Environments CAMHS Hazardous Building Materials Survey must be provided as a register to the demolition/building contractor.

Prior to the commrncement of works.

All works associated with the disturbance and removal of asbestos containing materials must be undertaken by a Licenced Class B Asbestos Removalist.

During works.

The asbestos removalist must prepare an Asbestos Removal Control Plan for the proposed works. The control plan should include an allowance for asbestos air fibre monitoring during the removal and thorough clean up works upon completion of the removal works.

Prior to the commrncement of works

An asbestos management plan must be prepared for the proposed works in areas containing asbestos.

Prior to the commrncement of works.

A clearance inspection must be undertaken on completion of works and prior to any other construction activities being undertaken.

Following removal of HAZMAT and prior to the commencement of construction works.

If previously unidentified materials (suspected of containing asbestos) are identified during the demolition phase, works should cease and the material should be inspected and classified by an experienced consultant. The area should be isolated and barricaded until the material has been classified as non-hazardous or removed and the area cleared.

During works.

All asbestos containing materials (and materials presumed to contain asbestos) must be removed in accordance with the regulations and codes outlined in Section 3 of the JK Environments CAMHS Hazardous Building Materials Survey and by an experienced asbestos removal contractor.

During works.

PCBs are a scheduled waste with strict guidelines regarding transport and handling.

PCB work is to be conducted in accordance with the Environmental Protection &

Heritage Council's Polychlorinated Biphenyls Management Plan, Revised Edition April 2003. This briefly includes:

Prior to the commrncement of works and during works.

- Prior to demolition when the power is disconnected, inspect the light fittings;
- Metal PCB containing capacitors are to be removed, placed in plastic lined 200 litre drums and disposed of as PCB Scheduled Waste. Any light fitting that shows signs of oil staining from capacitors is to be disposed of as PCB contaminated:
- Protective clothing including eye protection, PCB resistant gloves and overalls are to be worn;
- Contaminated gloves and disposable coveralls are to be disposed of as PCB waste: and
- Contractors licenced to transport and handle PCBs must be used for transport and disposal.

During works.

If any metal cased capacitors are found during demolition works that were previously unidentified, they should be treated as containing PCBs. Details on storing, conveying and disposing of PCB material or PCB wastes can be found in Polychlorinated Biphenyls Management Plan, Environmental Protection & Heritage Council, Revised Edition April 2003.

All SMF containing materials must be removed in accordance with the national Standard and code outlined in Section 3 of the JK Environments CAMHS Hazardous Building Materials Survey and by an experienced hazardous materials removal contractor.

During works.

Hazardous Building Materials matters (Accessway site) If previously unidentified materials (suspected of containing asbestos) are identified during the demolition phase, works should cease and the material should be inspected and classified by an experienced consultant. The area should be isolated and barricaded until the material has been classified as non-hazardous or removed and the area cleared.

During works.

Construction
Management and
Construction Traffic
Management matters

A final Construction Management Plan, including a Traffic and Pedestrian Management Plan, generally consistent with the requirements as set out in the preliminary Construction Management Plan prepared by CBRE / Turner & Townsend and Section 7.0 - Preliminary Construction Traffic Management Plan of the ptc Transport Impact Assessment, shall be developed by the appointed contractor prior to commencement of the works.

Prior to the commencement of works.

The hours of works shall be set out in the preliminary Construction Management Plan, namely:

- Monday to Friday 7:00AM to 5:00PM
- Saturdays 8:00AM to 1:00PM
- Sundays and Public Holidays..... No works.

Traffic and access (Operational)

The largest vehicle required to access the loading dock(s) shall be confirmed with demonstrated compliance achieved though swept path diagrams. The respective facililies' management plans shall be updated to confirm the largest vehicle size and limitation upon vehicles exceeding the maximum available size accessing the loading dock(s).

Prior to commencement of operation of CAMHS