

Consolidated Mitigation Measures

SSD-86270706

The collective measures required to mitigate the impacts associated with the proposed works are detailed below. These measures have been derived from the assessment in **Section 7.0** of the Environmental Impact Statement (EIS) and those detailed in the appended consultants' reports.

Ref No.	Mitigation Measure
View and Visual Impact (Appendix V)	
VVI-1	Mitigation measures against view and visual impacts should be considered as part of the design development and as part of conditioning a development consent. As visual impact was a key consideration of the design process, with potential adverse visual impacts avoided, no further large-scale amendments or further implementation measures are considered necessary.
Pedestrian Wind (Appendix W)	
W-1	Mitigation in the form of raised planters with dense planting placed at spaced intervals across the plaza would aid in baffling oncoming winds and pushing some flow overhead to improve wind comfort, enabling longer-term stationary use in the central plaza area.
W-2	Further localised mitigation measures are recommended if outdoor spaces are intended for seating or outdoor dining.
Noise and Vibration (Appendix X)	
NV-1	At North Sydney Station, replacement of the existing ballast track on Platforms 1 and 4 with a concrete slab track design and highly resilient Egg type rail fasteners could be utilised to reduce vibration levels entering the future building. Egg type rail fasteners are utilised at several locations on the existing Sydney Trains network and could be suitable for this project.
NV-2	The structural design of the refurbished building should maximise the vibration attenuation (structural damping) within the building and avoid floor vibration modes that align with the dominant train vibration frequencies. Local stiffening of floor slabs could be undertaken to adjust the resonant frequencies.

- On the lowest residential occupancy levels, ground-borne noise levels can be minimised in sleeping areas by minimising the reverberation time of the internal spaces, by providing carpet, soft furnishings and other absorptive finishes, rather than timber floorboards or tiles. Floating floors could be installed to minimise the re-radiated structural noise from the floor slabs.

Traffic and Transport (Appendix L)

T-1	• Vehicles to enter and exit the site in a forward direction unless under the supervision of strict traffic control.
T-2	• Restrict heavy vehicle activity to designated routes.
T-3	• Construction access driveways to be managed and controlled by certified site personnel.
T-4	• Pedestrian movements across construction access driveways will be managed and controlled by site personnel where required.
T-5	• Pedestrian warning signs and construction safety signs/devices to be utilised in the vicinity of the site and to be provided in accordance with WorkCover requirements.
T-6	• Construction activity to be carried out in accordance with the approved hours of work.
T-7	• Vehicle loads would be covered during transportation off-site.
T-8	• Activities related to the works would not impede traffic flow along local roads.
T-9	• Materials would be delivered during approved construction hours.
T-10	• During site induction, workers will be informed of the public transport network servicing the site.
T-11	• Construction vehicles not to queue on public roads and be wholly accommodated within the site or the approved loading zones.
T-12	• Construction traffic movements to/from the site to be minimised in peak periods to reduce the impact on the wider road network.
T-13	• Seven (7) days notification would be provided to adjoining property owners prior to the implementation of any temporary traffic control measures.
T-14	• All staff employed on the head contractor (including sub-contractors) would be required to undergo a site induction. The induction would include permitted access routes to and from the construction site for site staff and delivery vehicles, limited parking arrangements, as well as standard environmental, workplace health and safety, driver protocols and emergency procedures.

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| T-15 | <ul style="list-style-type: none">• The appointed contractor will include the following in all subcontract procurement packages:<ul style="list-style-type: none">- a copy of the approved heavy vehicle routes as previously detailed in this document.- the approved maximum truck size.- any other entry restrictions, or site access restrictions as agreed to by the authorities. |
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| T-16 | <ul style="list-style-type: none">• The appointed contractor will be responsible for managing all site access points and monitoring subcontractor behaviour and subcontractor truck access arrangements to ensure compliance with conditions of the contract. They will be responsible for ensuring there is no access to or from the site before or after approved construction hours and no queueing occurs on the surrounding road network. |
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Waste Management (Appendix M)

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| WM-1 | <ul style="list-style-type: none">• The recommended waste management measures within the Waste Management Plan prepared by MRA Consulting Group will be incorporated into the detailed design of the development |
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Geotechnical Impact (Appendix T)

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| G-1 | <ul style="list-style-type: none">• Further investigation of the existing footings will be required to confirm their founding conditions. It is also recommended that boreholes be completed during the design stage, both from street level to confirm the soil and weathered profile, and from platform level to confirm the depth and strength of the rock beneath the station. |
| G-2 | <ul style="list-style-type: none">• Detailed mapping of the exposed rock faces within the station will be required in order to assess the lateral load capacity of the columns. |
| G-3 | <ul style="list-style-type: none">• Further numerical modelling will be required to predict ground movements due to the unloading and reloading of the existing columns in order to assess differential settlements between footings and the impact on the rail infrastructure. |
| G-4 | <ul style="list-style-type: none">• A Geotechnical Inspection and Test plan and a Geotechnical Monitoring Plan will be prepared once design has been finalised and prior to commencing with construction. |

Contamination (Appendix Q)

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| C-1 | <ul style="list-style-type: none">• An unexpected finds protocol should be developed and implemented during redevelopment works to manage any unexpected contamination finds. |
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Water Management (Appendix K)

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| W-1 | <ul style="list-style-type: none">• An on-site stormwater detention should be provided to limit the proposed discharge to pre-development stormwater discharge rates. |
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| W-2 | <ul style="list-style-type: none">• Erosion and sediment controls will be reviewed during the detailed design and construction phase to ensure compliance with the relevant standards and guidelines. |
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Social Impact

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| SI-1 | <ul style="list-style-type: none">• Design shared spaces thoughtfully that enable social activities. This should include open kitchens, versatile seating and areas that enable shared hobbies. |
| SI-2 | <ul style="list-style-type: none">• Consider implementation of local procurement strategies for the commercial spaces proposed at ground floor level. |
| SI-3 | <ul style="list-style-type: none">• Implement a complaints management system during construction to ensure residents have a process to report any issues. |
| SI-4 | <ul style="list-style-type: none">• Regular construction notification letters to inform nearby residents and businesses of activities (particularly noisy activities) or any changes to vehicle access conditions. |

Economic Impact

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| EI-1 | <ul style="list-style-type: none">• Further investigation of short-term mitigation measures to minimise disruption to access and typical business operation during the construction stage of the project. |
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Heritage

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| H-1 | <ul style="list-style-type: none">• Detailed design development will continue to have regard to the surrounding heritage context, particularly in relation to the final selection and resolution of materials, finishes and landscaping. This should ensure that the lower-level presentation of the building responds appropriately to the fine-grain character and material qualities of adjacent heritage items and maintains a complementary relationship with the established streetscape and the setting of nearby heritage items. |
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