

Proposed Mitigating Measures

ITEM	MITIGATION MEASURES
Asbestos Management	All asbestos-containing material is to be removed by a licenced asbestos removal contractor prior to commencing general building demolition work. The removal of asbestos is to be undertaken in accordance with the Code of Practice, Removal and NSW WorkCover Authority (WCA) guidelines. Persons conducting earthmoving works are to be made aware of the potential presence of asbestos in buried pipes and cement fragments. Suitable precaution will be taken to remove such items if they are found. Asbestos will be managed in accordance with the Taronga Conservation Society Asbestos Management Plan (AMP). The AMP has been prepared in accordance with the NSW Work Health & Safety Legislation (2011) and Code of Practice, Control requirements. Compliance with the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 'asbestos waste'. Consultation with Workcover NSW concerning the handling of any asbestos waste.
Heritage Management	The recommended mitigative measures provided in the Heritage Impact Statement and the supplemental report by Urbis Heritage will be implemented in respect to: ▪ Detailed design is to be undertaken prior to construction to minimise impacts on heritage items within and in the vicinity of the site. This includes clarifying the relative levels of the existing significant vegetation and the rock shelf above koalas and the proposal. ▪ Retaining appropriately skilled conservation advice throughout the design and construction of the project. ▪ A detailed assessment by an appropriately skilled specialist of the remnant natural vegetation is to be carried if it is to be disturbed during construction works. The landscape design is then to be revised to be consistent with the regeneration of the remnant bushland. ▪ Surrounding significant bushland is to be protected by bush regeneration activities and by detailed design to limit overshadowing and any changes to drainage conditions. ▪ A full archival recording of the building is undertaken prior to demolition works. This includes a photographic archival recording of the site generally and the Former Staff Amenities Building in any other items unexpectedly revealed during works or made accessible during the works. This is to include architectural measured drawings of the former

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	Staff Amenities Building. ▪ If any unexpected historical archaeological relics are found cease work and notify the NSW Heritage Office. ▪ Where required, relevant approvals to be obtained for archaeological excavations if excavation requires disturbance of the original paths or of the original fabric of the Aviaries. If unexpected historical archaeological relics are found cease work and notify the NSW Heritage Office as required under Section 146 of the Heritage Act 1977 (NSW). ▪ Inclusion of conditions in specification about contractor responsibilities for heritage and conduct contractor inductions for heritage issues along with WHS inductions. ▪ Include conditions in specifications for contractors and subcontractors about protection of heritage items and identify heritage items to be protected on drawings. Monitor compliance with protection requirements. ▪ Identify and protect landscape heritage items during construction and in documentation. Overshadowing and changes to drainage conditions are to be considered and monitored. ▪ Retention of the archival record of item 78B and enable them to be made available for research. This may be as physical records or electronic documents. ▪ Preservation of the adjacent significant bushland including by implementing bush regeneration activities. Conservation of the remnant stone wall and removal of any cement pointing and replacement with compatible lime-based mortar pointing. ▪ All relevant on-site staff and contractors should generally be made aware of their statutory obligations for heritage under NSW National Parks and Wildlife Act 1974 and the NSW Heritage Act 1977. ▪ If Aboriginal archaeological material is found during works, works must cease immediately and the Office of Environment and Heritage and the MLALC must be contacted. The proposal should be modified to avoid these relics and if their removal is necessary or damage to rock features is possible, then an Aboriginal Heritage Impact Permit (AHIP) would be required under the NSW NPWS Act 1979 with the associated research, advertising, consultation and reporting. ▪ In the unlikely event that historical archaeological relics are encountered during construction, works are to cease and the NSW Heritage Office be notified, pursuant to Section 146 of the Heritage Act 1977 (NSW). If unexpected historical archaeological relics are found cease work and notify the NSW Heritage Office as required under Section 146 of the Heritage Act 1977 (NSW).
Operational Management	The proposed 'sleepovers' will operate under the submitted Operational

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	Management Plan. ▪ Bus / coaches to drop off/collect attendees from dedicated bus drop off/parking area accessed from the Whiting Beach Road entry. ▪ No public address system, loud speakers or amplified music / speech is to be used externally during night time hours. ▪ Students are required to be in bed by 9.30pm. ▪ Tours of the Zoo will be supervised by Taronga staff and school teachers/designated carers to ensure noise levels do not affect neighbours and zoo animals. Noise impacts on surrounding noise sensitive receivers will be managed by: ▪ Establishing and fostering a good relationship with surrounding residents (including facilitation of the logging noise complaints and of obtaining an active and timely response to those complaints). ▪ Undertaking a noise monitoring program at various periods after commencement of operation of each project element to verify that measured noise levels do not exceed the maximum criteria outlined in the submitted Environmental Noise Assessment and acceptable levels identified in the NSW Industrial Noise Policy, January 2000.
Waste Management	Waste will be continued to be managed on site in an environmentally responsible manner and in accordance with legislative requirements, increased resource recovery and minimising environmental impact. All waste generated from the TISL will be managed in accordance with the Taronga Conservation Society Australia waste management policies and waste management operational plan.
Construction Management	Construction management will be undertaken in accordance with the recommendations of the Construction Management Plan (CMP). This includes: ▪ Establishing an appropriate communication group to keep its residential neighbours and other relevant groups informed of the construction works. ▪ Development of a Communication Plan that will determine the appropriate communication with neighbours and other Taronga Zoo operations are consulted during the construction stage of the project. ▪ Fitting construction equipment with noise mitigation equipment where possible. ▪ Identifying neighbours of noisy work in advance. ▪ Erecting site hoarding to minimise dust pollution. ▪ Using silt traps and filters at required location along the stormwater system to control sedimentation.

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	▪ Construction work will be carried out between the following hours: – Monday to Friday: 7.00am – 6.00pm – Saturday: 7.00am – 1.00pm if inaudible on adjoining premises, otherwise 8.00am – 1.00pm ▪ Limiting the entering of construction vehicles into the Zoo only between the hours of 6:00am to 5:00pm Mondays to Friday inclusive and 7:00am to 1:00pm Saturdays, but excluding public holidays. ▪ Requiring construction vehicles to access and park on the site as detailed in the CMP. All large vehicles if required are retained in this area and only during approved construction hours. ▪ A full construction noise and vibration impact assessment and management plan will be prepared by the contractor once the structure and likely construction methods are developed further. ▪ Adoption of the recommended noise mitigation measures as detailed in the submitted Acoustic report and ▪ Collection and treatment of waste water from construction activities prior to disposal. Other measures will include: ▪ Intra-day 'respite periods' will be scheduled for construction activities identified in the EPA's Interim Construction Noise Guideline as being particularly annoying to noise sensitive receivers, including surrounding residents. ▪ Undertaking a safety risk assessment of construction activities to determine whether it is practicable to use audible movement alarms of a type that would minimise the noise impact on surrounding noise sensitive receivers, without compromising safety. ▪ The body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste, or spoil from the vehicles or trailer; and ▪ Mud splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site, is removed before the vehicle, trailer or motorised plant leaves the premises.

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Tree removal and retention	▪ Implementation of tree protection measures to the trees within the Section 170 Register, item 240L and other identified trees prior to, and during, site establishment. ▪ Removal of hazardous trees identified in the Arborist report to ensure safety to people and buildings. ▪ Development of pruning specifications following determination of the type of construction machinery to be utilised to enable the appropriate pruning of trees to avoid damage during construction. ▪ Non-destructive root investigations to be undertaken for trees that are desired to be retained but are within close proximity to demolition works to determine whether the tree will remain viable.
Bushfire Protection	▪ Provision of an Asset Protection Zone/Defendable Space, to be maintained as an Inner Protection Area and the use of standard fire safety provisions for the relevant building classification. ▪ Bushfire maintenance in respect to landscaping, involving the revision of the existing Vegetation Management Plan to incorporate the new development. ▪ Compliance with the 'general fire safety provisions' of the BCA (2014) in terms of Building Construction Standard. ▪ Provision of fire fighting water equipment in accordance with AS 2419.1-2005 and all 'general fire safety provisions' of the BCA (2014). ▪ Underground provision of new or re-located power line connections. ▪ Any future proposed gas supply connections to be designed and located in accordance with the PBP 2006. ▪ Revision of existing bushfire specific emergency / evacuation plan to include the proposed use and occupancy of the new development and prepared consistent with the RFS guidelines. ▪ Vegetative groundcovers proposed in the landscape plans are to be maintained at a minimum height (e.g. lawns and grass maintained at <50mm) to provide an appropriate IPA.
Management of Noise and Vibration Impacts	Prior to construction, in consultation with the contractor, a further noise assessment as detailed on page 18 of the Acoustic report will be undertaken to ensure the noise and vibration goals as outlined in the Acoustic report will be achieved. Implementation of a noise and vibration control measures will be undertaken where required. This may include: ▪ Fitting of noise mitigation equipment to construction equipment where possible; ▪ Advanced notice to stakeholders and applicable neighbouring residents of scheduled noisy activities; and ▪ Site hoardings placement around the site.

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General Waste and Waste Water Management	General waste and waste water will be managed in accordance with the TCSA management procedures. All waste generated during the project is assessed, classified and managed in accordance with the "Waste Classification Guidelines Part 1: Classifying Waste" (Department of Environment Climate Change and Water, December 2009).