



planning consultants

Appendix 3 to SEC and Peace Park EIS

Mitigation Measures

Prepared for: Sutherland Entertainment Centre
March 2020

Mitigation Measures

Mitigation Measures		
Environmental Impact/Risk	Mitigation Measure	Responsibility
Sustainability		
Brownouts/Blackouts	A 'link-box' will be installed which will allow for a plug in generator to be used in the case of a power outage. An uninterruptible power supply (UPS) will be available for IT equipment to facilitate soft shutdowns.	Electrical Engineer, Building manager
Structural material fatigue and degradation of façades, leading to increased maintenance and repair costs	Review material specifications for maintenance regimes Select materials which have a lower maintenance requirements.	Architect Structural engineer Building manager
Water restrictions during prolonged droughts	Select water saving appliances for fit out Select low water usage/drought resistant plants	Architect Landscape architect Building manager Grounds maintenance staff
Water saving strategies	The proposed development has been designed to achieve water usage targets by using a minimum of AAA rated water fixtures and appliances which are all to have a minimum 5-star water rating.	
Section J	The building is to include the Minimum Insulation & Glazing Requirements as set out in the JN Consulting Section J Assessment report dated 03/02/2020 Reference: 19010144	Architect Certifier
Building Design and Maintenance		
Parapet roof retains water due to blockage or insufficient capacity leading to structural failure.	Ensure design includes overflow outlets in parapet. Capacity of overflow slots and drainage system to be designed to allow for increased rainfall intensity and mitigate roof leaks.	Architect, Hydraulic engineer
Onsite Water Detention Tank (OSD) cannot deal with increased flows leading to overflow and flooding of basement.	Ensure secondary overflow system provided and check if systems can manage increased flows. Implement further measures if required.	Architect, Hydraulic engineer
Vandalism	Graffiti and vandal resistance building materials and fixtures should be used in the construction of the development. Management policy should be to remove Graffiti within 48 hours of its appearance	Architect Building manager Grounds maintenance staff
CCTV	Surveillance management (ie CCTV) be applied to external and internal areas.	Architect Building manager Grounds maintenance staff
Lighting	Lighting shall be designed in accordance with AS 1158.1. Where damaged or broken, lighting shall be repaired within 48 hours. Pathways / line of pedestrian travel should be lit with low lighting to mark the path of travel and reduce opportunity for concealment	Architect Landscape Architect Building manager Grounds maintenance staff
Landscaping	Ensure landscaping does not create concealment opportunities over time and landscaping is appropriately maintained.	Landscape Architect Building manager Grounds maintenance staff

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Wayfinding signage	Directional signage should be provided throughout the development	Architect Building Manager
Acoustic		
Noise from Plant	During the detailed design stage, the acoustic consultant will provide advice to the architect and mechanical engineer to ensure that noise emissions from mechanical plant are effectively controlled to meet the relevant criteria at the nearest receiver boundaries.	
Outdoor activities	The sound system noise from the courtyard and venues are controlled to meet the allowable sound levels presented in Table 9 of the Acoustic Studio acoustic assessment [Reference No. 20200221.NBR3309.0007.Rep-SSDA-revC.docx] dated 21 February 2020	Building manager Event manager(s)
Patron Numbers	Patron numbers are restricted as per the terms of the venue hire agreements	Building manager Event manager(s)
Operational Noise Management - General	<ul style="list-style-type: none"> Shift managers and Sutherland Entertainment Centre staff are to be briefed on the need to manage the premises such that excessively noisy or rowdy patron activity is not tolerated, particularly for outdoor events. Outdoor noise events will require sound system volume limits, particularly for 10pm to midnight events. Signs reminding patrons of the need to restrict high noise levels should be installed. 	Building manager Event manager(s)
Construction noise management – Plant and equipment	<ul style="list-style-type: none"> Use quiet work methods. Use quiet equipment. Use mobile noise curtains for external works with noisy hand-held tools For noisy works, consider carrying out in continuous blocks not exceeding 3 hours each, with a minimum respite period of one hour between each block Operate plant in a quiet and effective manner. Plant used intermittently to be throttled down or shut down. Use mains power supply where possible, rather than generators. Use one larger generator to power multiple plant items (ensuring safe cabling). Use petrol generators instead of diesel generators. Switch off generators when not in use, particularly during out-of-hours work periods. Maintain equipment regularly. Where appropriate, obtain acoustic test certificates for equipment. 	Building contractor
Construction Noise management – On site noise management	<ul style="list-style-type: none"> Strategically locate equipment and plant. Locate generators away from sensitive receivers. Avoid the use of reversing alarms through site layout to minimise reversing, or provide for alternative systems such as non-tonal reversing alarms. Maximise shielding in the form of existing structures or temporary barriers. Enclose the work site as far as possible from receivers, and use hoarding. Noise reductions of at least 10dB are expected due to hoarding. Schedule the construction of barriers and structures so they can be used as early as possible. Consider signage at walkways affected by construction noise. Manage waste removal from the site to minimise noise impacts. Reduce noise from metal chutes and bins by placing damping material in the bin. Locate waste deposit bins as far as possible from sensitive receivers. Where possible, carry out noisy fabrication work at another site (for example, within enclosed factory premises) and then transport to site. Delivery vehicles should be fitted with straps rather than chains for unloading, wherever possible. Keep windows closed during all internal works. 	Building contractor

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Construction Noise – Consultation, notification and Complaints Handling Procedures	<ul style="list-style-type: none"> Provide information to affected receivers before and during construction as required. Maintain good communication between the community and project staff. Have a documented complaints process and keep register of any complaints. Give complaints a fair hearing and provide for a quick response. Implement all feasible and reasonable measures to address the source of complaint. 	Building contractor
Construction Noise – Works Scheduling	<ul style="list-style-type: none"> Schedule activities to minimise noise impacts. Ensure periods of respite are provided in the case of unavoidable maximum noise levels events. Avoid simultaneous operation of noisy plant within discernible range of a sensitive receiver. Ensure noisy plant schedules are clear in Works Plan. Keep truck drivers informed of designated routes, parking locations and delivery hours. Schedule deliveries to planned construction hours only. 	Building contractor
Construction Noise - Mandatory site rules of conduct	<ul style="list-style-type: none"> Avoid the overuse of public address systems, radios or stereos outdoors. No swearing or unnecessary shouting. No unnecessary dropping of materials from height, throwing of metal items, and slamming of doors. No extended periods of engine idling. 	Building contractor
Construction Vibration management	<ul style="list-style-type: none"> Undertake dilapidation surveys of structures within 50m of the work site, including the adjacent heritage listed church. Preliminary vibration survey on site will determine the actual vibration levels generated by each activity, Preparation of a vibration management strategy. Review vibration criteria and amend vibration management strategy as required. Selection of low vibration work methods where possible and appropriate; Vibration monitoring and management controls for historic or heritage structures. Vibration monitoring be implemented and that this be undertaken by a specialist vibration engineer/scientist. 	Building contractor Specialist vibration engineer/scientist
Geotechnical considerations in building design	The recommendations contained in the GeoEnviro Consultancy Pty Ltd Geotechnical Investigation report (Ref: JG19178A-r1, dated November 2019) are to be implemented in the design of the building	Architect Structural Engineer Geotechnical Engineer
Contamination – Unexpected Finds	An Unexpected Finds Protocol (UFP) for the development be prepared and implemented. The UFP will outline the measures to be implemented in the event asbestos or any other potential contamination issues are detected during the development works.	Building contractor Qualified contaminated land consultant
Waste Management – Off site disposal of excess spoil	Testing to confirm the waste classification of soil prior to off-site disposal be undertaken.	Building contractor Qualified contaminated land consultant
Hazardous Materials	<ul style="list-style-type: none"> The findings of the Hazardous Materials Survey prepared by Airsafe (Project No. 46702, dated 13/08/2019) will need to be taken into account when works within those sections of the building wherein hazardous materials have been detected are undertaken. All demolition works will be required to be undertaken in accordance with AS 2601 - 2001 The Demolition of Structures and Code of Practice: How to Safely Remove Asbestos [Safe Work Australia, 2018] and any other relevant standards/Codes of Practice. 	Building Contractor
Operational		
Security	Security personnel should be provided for major events, especially for events where alcohol is sold.	Building Manager Event Manager Council

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	Events will be subject to a safety and risk assessment to determine whether a booking is accepted and the need for security personnel to be provided. Security should also always ensure patrons are acting in an appropriate manner and if any patrons are displaying disorderly conduct they should promptly be removed from the site.	
Access	Doors should be locked when not in use. Loading areas should be locked when not in use	Building Manager
Booking the Space	Ensure smaller productions are still able to use the facilities to ensure all societies and companies can have access to the new facilities. This could be achieved by using only the central seats for a performance and offering a lower price to rent the space. Maintain the offer of lower rates for non-Saturday events and off-peak times to local voluntary community groups.	Council
School Holidays	Opportunities for school holiday programs and activities should be prioritised. Activities should include free activities to ensure inclusivity	Council
Alcohol Service	Ensure all staff serving alcohol have up to date RSA training.	Council Supervisor on duty
General	All events/operations are to be conducted in accordance with the Plan of Management	Building Manager Event Manager Council
Tree Protection		
Protection of trees to be retained	Implement tree protection measures as detailed in the Arborist Assessment report prepared by Rennie Bros [Report Ref 7772, dated 14/02/2020]. Tree protection measures to be implemented prior to works commencing on site.	Building Contractor
Replacement trees	Replacement tree planting of suitable endemic species be undertaken to offset the loss of Tree 11 and Tree 29	Landscape Architect Landscape Contractor
Structural Integrity		
Adjoining structures and infrastructure, including Council assets	Undertake a dilapidation survey of adjoining buildings and structures, including any Council owned assets, prior to commencement of works	Building Contractor
Confirm initial findings of structural integrity due diligence	A detailed building condition inspection be undertaken to confirm the structural integrity of those parts of the building to be retained	Structural Engineer Architect
Construction - General		
Construction Management Plan (CMP)	A detailed construction management plan, including a detailed construction management plan, is to be prepared. The CMP is to be submitted to Council for approval prior to commencement of works.	Building Contractor Council
Protection of War Memorial	The area in the vicinity of the War Memorial is to be suitably protected during the construction phase to ensure no damage to the heritage listed War Memorial, commemorative wall or obelisks occurs	Building Contractor
Archaeological Deposits	The CMP is to include an unexpected finds protocol in the event that any archaeological deposits are uncovered during excavation	Building Contractor Heritage consultant
Erosion and Sediment Control Measures	Install erosion and sediment control measures	
Construction Traffic and Pedestrian Management		
Parking	A works zone on Merton Street and Eton Street is to be provided to facilitate parking of construction vehicles The site manager is to promote the use of carpooling amongst staff and public transport usage to reduce the construction staff on-street car parking demand.	Building Contractor Council

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Crane delivery	Mobile crane delivery is to occur outside peak hours of operation of the town centre, i.e. after 9.00am	Building Contractor
Demolition and Construction Waste Management		
Minimise waste diverted to landfill	<p>Implementation of the recommendations of the Elephants Foot Recycling Solutions Construction & Demolition Waste Management Plan dated 10/03/2020 [Reference No. SO422/Rev C) including:</p> <ul style="list-style-type: none"> • Stakeholder roles and responsibilities • Monitoring and reporting recommendations • Maximising opportunities for reuse and recycling • Managing hazardous wastes appropriately • Managing excavated material appropriately • Implementing the site operational measures • Ensuring waste storage receptacles are appropriately located and managed and that sufficient storage facilities are provided • Ensuring waste is collected regularly 	<p>Building contractor Waste collection service Environmental management representative</p>