



## CENTRAL PRECINCT SSD-79307746 – ENVIRONMENTAL RISK ASSESSMENT AND MITIGATION MEASURES

The following section provides recommendation for mitigation measures in response to potential impacts identified in **Section 6** of the EIS. The structure of mitigation measures is based on the DPHI's hierarchy of approaches for managing impacts identified in the *Draft Environmental Impact Assessment Guidance Series* released by DPHI in June 2017, as:

- **Performance based measure** – identify performance criteria that must be complied with to achieve an appropriate environmental outcome but do not specify how the outcome is to be achieved.
- **Prescriptive measure** – require action to be taken or specify something that must not be done.
- **Management based measure** – identify one or more management objectives that must be achieved through the implementation of a management plan.

Following the implementation of appropriate mitigation measures as recommended, it is determined that the proposal will not result in any significant adverse impacts on the surrounding environment. The following table illustrates how the matters raised within the SEARs will be addressed.

**N.B.**            **'O' – Operational; 'C' – Construction**

**'Pe' – Performance based mitigation measure; 'Pr' – Prescriptive based mitigation measure 'Ma' – Management based mitigation measure**

<b>SEARS</b>	<b>Potential Impact</b>	<b>Stage of Project</b>	<b>Approach</b>	<b>Mitigation Measure (Pe/Pr/Ma)</b>
<b>Crime Prevention / Security</b>	Risk of crime within Building 2 and the surrounding public domain	O	<ul style="list-style-type: none"> <li>▪ Installation of CCTV within the site including in all public spaces; at building entries; lift lobbies; within lifts; at concierge points; roof access points; and plant room entries</li> <li>▪ Installation of electronic access control located at lifts; entries to building management area; and non-public entries</li> <li>▪ Access control to be installed to the Childcare facility</li> <li>▪ CCTV to be provided to the Childcare facility</li> <li>▪ Implementation of CPTED measures</li> </ul>	Pr
<b>Environmental Amenity</b>	Wind impacts on pedestrian comfort	O	<ul style="list-style-type: none"> <li>▪ The inclusion of porous balustrades along the raised seating area located in the north and north-western part of the site</li> <li>▪ The inclusion of tree planting atop the northern Level 2 green roof</li> <li>▪ The inclusion of impermeable balustrading around the proposed sitting areas located in the western part and south-eastern corner of the Level 3 terrace.</li> </ul>	Pr
<b>Traffic and Transport</b>	Additional traffic on surrounding road network	C and O	<ul style="list-style-type: none"> <li>▪ A detailed Construction Traffic Management Plan (CTMP) will be prepared prior to the commencement of works. The detailed CTMP will be implemented during construction works.</li> </ul>	Ma

SEARS	Potential Impact	Stage of Project	Approach	Mitigation Measure (Pe/Pr/Ma)
			<ul style="list-style-type: none"> <li>▪ A Freight and Servicing Management Plan will be implemented throughout the life of the proposed development</li>   <li>▪ A detailed Green Travel Plan will be prepared prior to the first occupation of the development. The detailed GTP will be implemented throughout the life of the proposed development</li> </ul>	
<b>Noise and Vibration</b>	Impacts of noise on residents, visitors and staff	C and O	<p><b>Construction</b></p> <ul style="list-style-type: none"> <li>▪ 2m high solid acoustic barrier (Class A or Class B hoarding) surrounding the perimeter of the site will be installed during construction;</li>   <li>▪ Short-term vibration monitoring will be undertaken on the structure of the Waterloo Congregational Church during the Level 01 slab pour to ensure the vibration generated on the structure does not exceed the values for cosmetic damage structural damage outlined in British Standard 7385 and German Standard DIN 4150;</li>   <li>▪ Noise monitoring at Waterloo Congregational Church will be undertaken during construction of ground level to level 5 and level 5 to level 10.</li>   <li>▪ Other measures to minimise noise and mitigate its impact, including the use of screening, silencers and alternatives to reversing / warning alarms will be considered</li> </ul> <p><b>Operation</b></p>	Pr/Ma

<b>SEARS</b>	<b>Potential Impact</b>	<b>Stage of Project</b>	<b>Approach</b>	<b>Mitigation Measure (Pe/Pr/Ma)</b>
			<ul style="list-style-type: none"> <li>Acoustically rated glazing and solid facade elements will be installed to mitigate noise in the co-living units and spaces within the child care centre. The solid façade elements will have an acoustic performance of no less than Rw 55;</li> <li>Acoustically treated mechanical ventilation devices to provide an alternative means of ventilation to spaces within the child care centre and co-living spaces that are noise-affected and cannot rely on opening their windows to obtain natural ventilation;</li> <li>Acoustic barriers (solid or louvred) will be installed to mitigate noise emissions from mechanical plant and equipment within the Level 25 plantrooms. The barrier will have a height of at least 0.5m above the cooling towers. Additional mitigation measures will be determined once the plant has been selected</li> </ul>	
<b>Ground and Groundwater Conditions</b>	<p>Impacts on ground and water conditions</p> <p>Impacts of ground and water on building</p>	C	<ul style="list-style-type: none"> <li>Development is to accord with the identified geotechnical design parameters</li> </ul>	Pr
<b>Flooding</b>	Flood risk to future occupants	O	<ul style="list-style-type: none"> <li>A Flood and emergency evacuation plan will be prepared prior to the occupancy of the relevant tenancy.</li> </ul>	Ma
<b>Waste Management</b>	Impacts of waste on amenity of residents	C and O	<p>Operation</p> <ul style="list-style-type: none"> <li>Facilities management will provide education to future residents regarding correct waste disposal practices and general waste management.</li> </ul>	Pr

SEARS	Potential Impact	Stage of Project	Approach	Mitigation Measure (Pe/Pr/Ma)
			<ul style="list-style-type: none"> <li>▪ Signage will be provided to waste rooms, bins and chutes. Signage will be clearly marked with clear instruction of acceptable and non-acceptable materials.</li> <li>▪ The collection contractor will be responsible for providing regular waste collection reports outlining waste collection details of the site.</li> <li>▪ Facilities management will be responsible for collating key outputs of the waste reports and providing a summary to residents</li> <li>▪ Contamination will be monitored by the collection contractor and monitored.</li> </ul>	
<b>Water management</b>	Impact on water resources	Construction	<ul style="list-style-type: none"> <li>▪ Sediment and erosion control measures will be implemented during construction works. These measures may include:</li> <li>▪ Installing a temporary site security fence</li> <li>▪ Erecting sediment fencing downstream of disturbed areas and topsoil stockpiles</li> </ul>	Ma

SEARS	Potential Impact	Stage of Project	Approach	Mitigation Measure (Pe/Pr/Ma)
			<ul style="list-style-type: none"> <li>▪ Implement dust control measures such as covering stockpiles, installing fence hessian, and watering exposed areas</li> <li>▪ Placing hay bales or mesh and gravel inlet filters around existing drains and inlet pits</li> <li>▪ Locating stockpiled material, including topsoil, as far away as possible from natural watercourses or temporary overland flood paths and stabilising all stockpiles and embankment through hydroseeding or hydro mulching.</li> <li>▪ Detailed erosion and sediment control measures will be confirmed prior to the issue of the relevant Construction Certificate.</li> </ul>	
<b>Infrastructure and Utilities</b>	Impact on existing services and utilities	C	<ul style="list-style-type: none"> <li>▪ Disconnection and decommissioning of existing utilities/services within the proposed construction boundaries of the proposed WMQ precinct buildings, to allow for construction.</li> <li>▪ Proceed with Sydney Water Notice of Requirements (NoR) applications for the Central precinct, and associated conditions of consent for the connection of Potable Water and Sewer.</li> <li>▪ Proceed with Ausgrid Contestable works approval process for Central Precinct building, and associated submissions and approvals for the connection of high voltage power and construction of the substation.</li> </ul>	Pr

SEARS	Potential Impact	Stage of Project	Approach	Mitigation Measure (Pe/Pr/Ma)
			<ul style="list-style-type: none"> <li>▪ Proceed with NBN and selected Telecommunications providers applications for communication connections for the Central precinct building. Also address any associated utility authority conditions required for the connection of communications services.</li>   <li>▪ During the detailed design development phase, space-proof the proposed service connections and associated modifications to ensure designs are coordinated and clash free.</li> </ul>	
<b>Construction Environmental Management</b>	Impact on the local environment and community during construction	C	<ul style="list-style-type: none"> <li>▪ Construction waste will be managed in accordance with a detailed Construction Waste Management Plan</li>   <li>▪ Noise generating activities will only be undertaken during standard construction hours.</li>   <li>▪ Vibration sensitive buildings will be protected as far as reasonably possible during construction works.</li>   <li>▪ Air quality impacts will be minimised or avoided by applying appropriate dust suppression and air quality control measures during construction. The construction site layout and placement of plant will have regard to air quality impacts to nearby receivers, pedestrian, commercial receivers, public and road traffic.</li>   <li>▪ Erosion and sediment control measures will be implemented during construction</li> </ul>	Ma

SEARS	Potential Impact	Stage of Project	Approach	Mitigation Measure (Pe/Pr/Ma)
			<ul style="list-style-type: none"> <li>A stakeholder management plan will be developed and community members/stakeholders will be engaged to minimise potential for negative impacts on the community during construction</li> </ul>	