

## APPENDIX E CONSOLIDATED MITIGATION MEASURES FOR SSD-10448 (MOD 10) AND SSD-80331959

The following **Appendix E** outlines the recommended mitigation measures in response to potential impacts identified in Section 6 of this 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.

A consolidated set of mitigation measures required for each of the environmental and social impacts identified in Section 6 of the EIS are outlined in **Table 1** below. The mitigation measures directly respond to each impact and are based upon the range of technical and specialist consultant reports appended to the EIS. The type of mitigation measure as noted within the table below are as follows:

- 'Pe' performance based mitigation measure. or
- 'Pr' prescriptive based mitigation measure, or
- 'Ma' management based mitigation measure.



Table 1 SSD-10448(MOD 10) and SSD-80331959 Mitigation Measures

Issue	Potential Impacts	Mitigation Measures	Type of Measure (Pe/Pr/Ma)
Traffic, Transport and Parking	No cumulative traffic impacts to the to the performance to the transport infrastructure in the area.  The proposal will not result in any additional traffic impacts beyond those anticipated in the original SSD-10448 masterplan approval.  With regard to vehicular access the swept path assessment demonstrates that the modified lot and hardstand layout design remains consistent with the relevant Australian Standards and MRP DCP design requirements.	The road upgrades and management measures approved under SSD-10448 will support the access and traffic demands generated by the proposal. This includes:  Provision of a signalised access at the intersection of Road 01 and Mamre Road.  The management strategies established under the Draft Construction Traffic Management Plan will minimise construction traffic impacts on the surrounding road network and public road network users.  Additionally, a Green Travel Plan has been prepared in support of the approved Warehouse 8 SSDA. With consideration to the MRP DCP rates, a minimum of 44 bicycle spaces and one shower cubicle with ancillary change rooms will be provided to encourage active transport and reduce reliance on private vehicle usage.	Pr
Acoustic	Acoustic impacts to nearby sensitive receivers resulting from the updated Lot/Warehouse 8 layout and the anticipated noise sources for including:  On-Site Traffic  Loading Dock Activities	Potential feasible and reasonable mitigation measures have been considered during the various design phases of the proposal, including several that were considered through the original Concept Approval and others that have been (or can be) conditioned as part of an approval. These measures include:  Optimising site layout to minimise noise emissions from the site.	Pe, Pr, Ma



Issue	Potential Impacts	Mitigation Measures	Type of Measure (Pe/Pr/Ma)
	■ Mechanical Plants  These acoustic impacts across Lot/Warehouse 8 will contribute towards the cumulative impacts generated across the Aspect Industrial Estate (AIE) as well as the developments across the wider Mamre Road Precinct may result in adverse, acoustic impacts to the nearby sensitive receivers.	<ul> <li>Use broadband and/or ambient sensing alarms on trucks and forklifts where they are required to reverse during the night-time.</li> <li>Appropriate design of site layout to minimise the need for trucks to stop or brake outside of loading docks with line of sight to residential receivers.</li> <li>PA systems designed to reduce noise nuisance to receiver areas.</li> <li>No speed humps or uneven pavements.</li> <li>Building services and mechanical plant selection as not to exceed the sound power level limits.</li> <li>Building material selection so that any noise breakout from internal activities would result in negligible increase in overall noise emissions.</li> <li>Review of noise emissions from new tenants.</li> <li>Production of an operational noise management plan.</li> <li>Noise monitoring of the post construction operational period.</li> <li>Further to these mitigation measures, the following table provides an overview of the additional mitigation measures that will be able to reduce the acoustic impacts generated by the proposed external mechanical plant.</li> </ul>	



Issue	Potential Impacts	Mitigation Measure	es	Type of Measure (Pe/Pr/Ma)
		Plant Item	Mitigation Implemented	
		Base build office and dock office fans and condensers	Quieter units will be investigated during detailed design.	
		Warehouse smoke extraction fans	SEF units will run at 50% speed for general daily ventilation / night purge.	_
		Chillers	Quieter units have been sourced from the supplier of the internal equipment that the chillers service. Acoustic screening will be considered during detailed design.	_
		Temperature control PAC units	Quieter units have been sourced from the supplier. Night/quiet mode will be used on all units.	_
		Exhaust flues	Exhaust flue mitigation such as low-noise extraction fans, silencer tips and/or in-duct acoustic lining will be investigated during detailed design.	_
		Waste room exhaust fans	Quieter units will be investigated during detailed design.	_
		Dust extractor	Quieter unit from the supplier will be investigated during detailed design. Acoustic screening will be considered during	_



Issue	Potential Impacts	Mitigation Measures	Type of Measure (Pe/Pr/Ma)
		detailed design.	
Air Quality	Dust, air quality and odour impacts generated by the proposed construction and operations works.  The main air quality issue associated with proposal are the potential Volatile Organic Compound (VOC) emissions from the proposed operations. VOC emissions from the printing processes are expected to be minimal compared to the total emissions in the LGA and since RA106X will not involve combustion processes and will be powered from the grid, emissions from combustion sources are not anticipated.	Notwithstanding the negligible impacts during the worst-case operational scenario, the following mitigation measures are proposed.  VOC Mitigation Measures  Use low-VOC or water-based inks and cleaning solutions where feasible.  Implement best-practice solvent management, including proper storage, handling, and disposal of VOC-containing substances.  Ensure all VOC-emitting equipment is properly maintained and enclosed where possible to minimize fugitive emissions.  If appropriate, install activated carbon filters or other appropriate emission control technologies to capture VOCs from printing and cleaning processes.  Maintain adequate ventilation within the facility to disperse emissions efficiently and minimize worker exposure.  General Air Quality Control Measures  Regularly inspect and maintain air filtration and ventilation systems to ensure optimal performance.  Provide staff training on best practices for minimizing emissions, including proper solvent usage and storage	Ma



Issue	Potential Impacts	Mitigation Measures	Type of Measure (Pe/Pr/Ma)
		<ul> <li>procedures.</li> <li>Consider monitoring air quality in and around the site to assess the effectiveness of mitigation measures and identify any additional control needs.</li> </ul>	
Water and Energy Usage	The proposed development may result in impacts to the water and energy usage.  The development is to be delivered in accordance with the ESD relevant principles. No additional adverse impacts are anticipated.	The development will establish the appropriate ecologically sustainable design elements to mitigate any adverse impacts to water and energy usage. Such elements include on-site renewable energy production, electric car and truck charging dedicated bays, rainwater harvesting, natural ventilation, and efficient HVAC performance.	Pe
Visual Impact Assessment	Visual impacts onto the nearby residential receivers and viewpoints. The proposed Warehouse 8 development will not result in any change in visual impact ratings from the established, estate wide concept proposal.	No additional mitigation measures as part of the approved Warehouse 8 development or beyond the measures established under SSD-10448.	Pe
Bushfire	Warehouse 8 is not required to be subject to any Asset Protection Zone requirements as it is substantially separated from any bushfire hazard.  The Bushfire Attack Level (BAL) is not relevant to Warehouse 8 and subsequently, the building is not required to be constructed in accordance with the Australian Standard requirements for BAL	The original approval was supported with recommendations for an asset protection zone, conditions for fire hydrants be provided and buildings within identified zoned be built in accordance with the Australian Standard. No additional mitigation measures are required to support the proposal.	Pr



Issue	Potential Impacts	Mitigation Measures	Type of Measure (Pe/Pr/Ma)
	affected sites.  The proposal has been assessed and deemed to comply with the requirements of Planning for Bushfire Protection 2019.		
Stormwater and Drainage	Potential impacts to water quantity and quality due to the proposal.	The proposal is to feature the appropriate stormwater quantity and quality management measures including in accordance with Water and Stormwater Management Plan approved at the site and to be modified under the base build modification applications. No additional mitigation measures as part of the approved Warehouse 8 development, and as to be modified under the base build modification applications.	Pr
Soil and Salinity	Potential soil erosion, salinity and infiltration/exfiltration of stormwater impacts generated by the proposal. With regard to stormwater infiltration/exfiltration impacts, the proposed warehouse development will result in the bulk of the site being sealed. In the instance infiltration/exfiltration of stormwater is proposed, the development will have close to no impacts on the site salinity and sodicity as prior to the AIE development.	No additional mitigation measures as part of the approved Warehouse 8 development or beyond the measures established under SSD-10448.	Ma



Issue	Potential Impacts	Mitigation Measures	Type of Measure (Pe/Pr/Ma)
Flood Impacts	The site is affected by 100-year overland flows. Potential impacts to flood flows and runoff into the existing water management infrastructure.	No additional mitigation measures as part of the approved Warehouse 8 development or beyond the measures established under SSD-10448.	Pr