

16 June 2016

Environmental Risk Assessment

SSD 15_7387 - Camden Medical Campus, Gledswood Hills

Based on the environmental assessment undertaken in Section 8 of the Environmental Impact Statement prepared by City Plan Strategy and Development (dated June 2016), the following Environmental Risk Analysis assesses the significance of the identified impacts and the ability to manage those impacts to establish a residual risk rating. Refer to Figure 1 below.

Significance of Impact	Manageability of Impact					
	5 Complex	4 Substantial	3 Straightforward	2 Standard	1 Simple	
1 - Low	6 (Medium)	5 (Low-Medium)	4 (Low-Medium)	3 (Low)	2 (Low)	
2 - Minor	7 (High-Medium)	6 (Medium)	5 (Low-Medium)	4 (Low-Medium)	3 (Low)	
3 - Moderate	8 (High-Medium)	7 (High-Medium)	6 (Medium)	5 (Low-Medium)	4 (Low-Medium)	incolution in party
4 - High (High)		8 (High-Medium)	7 (High-Medium)	6 (Medium)	5 (Low-Medium)	puer
5 - Extreme	10 (High)	9 (High)	8 (High-Medium)	7 (High-Medium)	6 (Medium)	

Significance of Impacts:

5 Extreme	E1 - Undisturbed receiving environment E2 - Type or extent of impacts unknown E3 - Substantial level of community concern			
4 High	H1 - Sensitive receiving environment H2 - Type or extent of impacts not well understood H3 - High level of community concern			
3 Moderate	Mo1 - Resilient receiving environment Mo2 - Type or extent of impacts understood Mo3 - Community interest			
2 Minor	Mi1 - Disturbed receiving environment Mi2 - Type or extent of impacts well understood Mi3 - Some level of local community interest			
1 Low	L1 - Degraded receiving environment L2 - Type or extent of impacts fully understood L3 - Negligible level of local community interest			

Manageability of Impacts:

5 Complex	C1 - Extensive/complicated range of mitigation measures required C2 - Safeguards or technology are unproven C3 - Adaptive management not appropriate
4 Substantial	Sub1 - Significant mix of mitigation measures required Sub 2 - Limited evidence of effectiveness of safeguards Sub 3 - Adaptive management feasible
3 Straightforward	Str1 - Straightforward range of mitigation measures required Str2 - Good understanding of effectiveness of safeguards Str3 - Adaptive management readily applicable
2 Standard	Sta1 - Simple range of mitigation measures required Sta2 - Substantial evidence for effectiveness of safeguards Sta3 - Adaptive management unlikely to be required
1 Minimal	Min1 - Minimal/no mitigation measures required Min2 - Safeguards are standard practice Min3 - Adaptive management not required

Figure 1 Environmental Risk Assessment Values

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The significance of identified environmental impacts is assigned a value between 1 (Low) and 5 (Extreme) based on:

- The receiving environment;
- The level of understanding of the type and extent of impacts; and
- The likely community response to the environmental consequence of the project.

The manageability of environmental impact is assigned a value between 1 (simple) and 5 (complex) based on:

- The complexity of mitigation measures;
- The known level of performance of the safeguards proposed; and
- The opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

Refer to Table 1 below for the complete environmental risk analysis. Refer to the complete EIS for the range of measures/recommendations to mitigate the "identified environmental impact".

Issue	Phase C- construction O - operation	Identified Environmental Impact	Risk Assessment		
			Significance of Impact	Manageability of Impact	Residual Impact
Built Form and Urban Design	0	The height, bulk and scale of the new buildings will be greater than that of the existing surrounding developments.	2 Minor	2 Standard	4 Low-Medium
Environmental Amenity	0	As a consequence of the height and required building footprint, there will be minor shadow impacts on some neighbouring existing dwellings.	2 Minor	2 Standard	4 Low-Medium
		Potential impact on amenity of nearby residential (noise, visual)	3 Moderate	2 Standard	5 Low-Medium
		For noise and vibration, refer to below relevant point in table.	N/A	N/A	N/A
Transport and Accessibility	С	Construction traffic impacts on road network.	2 Minor	2 Standard	4 Low-Medium
	0	Impact of additional car parking on traffic generation and operation of road network.	2 Minor	3 Straightforward	5 Low-Medium
Ecologically Sustainable Development (ESD)	All	The proposed ESD measures will have a positive impact on the environment. Hence, there is no environmental risk identified.	N/A	N/A	N/A
Noise and Vibration	С	Noise generated and potential impact on nearby sensitive residential receivers during excavation and construction	2 Minor	2 Standard	4 Low-Medium

TABLE 1: ENVIRONMENTAL RISK ANALYSIS

	0	Noise generated by mechanical plant and traffic noise (carpark) and potential impact on residential receivers.	3 Moderate	3 Straightforward	6 Medium
Heritage	С	No impact identified	N/A	N/A	N/A
Aboriginal Heritage	С	No impact identified	N/A	N/A	N/A
Ecology	All	No impact identified	N/A	N/A	N/A
Sediment, Erosion and Dust Controls	С	Potential sediment pollution as a consequence of excavation and construction activities.	2 Minor	1 Simple	3 Low
Utilities	All	Existing utilities/services may require augmentation/upgrade.	2 Minor	2 Standard	4 Low-Medium
Flooding	0	Council requirements for a minimum freeboard of 300mm above the 100 year ARI flood level.	2 Minor	2 Standard	4 Low-Medium
Drainage	All	The construction of the developments will alter the imperviousness of the site.	2 Minor	3 Straightforward	5 Low-Medium
Servicing and Waste	С	Environmental impacts associated with the disposal of construction and hazardous waste.	2 Minor	1 Simple	3 Low
	0	Health risks associated with contaminated waste (including clinical waste and sharps).	2 Minor	1 Simple	3 Low
Hazards	С	Potential spills or leaking of hazardous substances.	2 Minor	1 Simple	3 Low
	0	Potential spills or leaking as a consequence of handling, use and storage of hazardous substances.	2 Minor	1 Simple	3 Low
Contamination	С	Site suitable for proposed use.	1 Low	1 Simple	2 Low
Salinity	С	Site suitable for proposed use.	1 Low	1 Simple	2 Low
Air and Water Quality	С	Potential for reduced air and water quality during construction	2 Minor	1 Simple	3 Low