

Appendix A

Consideration of clause 228(2) factors and matters of national environmental significance

Matters of National Environmental Significance

Under the environmental assessment provisions of the *Environment Protection and Biodiversity Conservation Act 1999*, the following matters of national environmental significance and impacts on Commonwealth land are required to be considered to assist in determining whether the proposal should be referred to the Australian Government Department of Sustainability, Environment, Water, Population and Communities.

Factor	Impact
a. Any impact on a World Heritage property? There are no World Heritage items within the vicinity of the proposal.	Nil
b. Any impact on a National Heritage place? There are no National Heritage places within the vicinity of the proposal.	Nil
c. Any impact on a wetland of international importance? There are no wetlands of international significance places within the vicinity of the proposal.	Nil
d. Any impact on a listed threatened species or communities? A maximum of 0.05 hectares of the critically endangered ecological community Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest as defined under the EPBC Act would be removed as part of the proposal. It was concluded the proposal is unlikely to have a significant impact on this ecological community given the relatively small amount of direct removal proposed and considering the recommended mitigation measures.	Minor
e. Any impacts on listed migratory species? A total of four migratory species were considered as having some suitable habitat present in the proposal. However, the proposal is unlikely to significantly impact these species, as there would be very little habitat removal and indirect impacts are expected to be negligible.	Minor
f. Any impact on a Commonwealth marine area? There are no Commonwealth marine areas near this proposal.	Nil
g. Does the proposal involve a nuclear action (including uranium mining)? This proposal does not involve a nuclear action.	Nil
Additionally, any impact (direct or indirect) on Commonwealth land? This proposal would have be no direct or indirect impacts on Commonwealth land.	Nil

Factor	Impact
<p>c. Any environmental impact on the ecosystems of the locality?</p> <p>The proposal would require the removal of 3.22 hectares of native vegetation. The native vegetation consists of around 1.44 hectares of vegetation listed as critically endangered ecological community (EEC) Cumberland Plain Woodland under the NSW <i>Threatened Species Conservation Act 1995</i>. Of the 1.44 hectares of the Cumberland Shale Plain Woodland about 0.05 hectares is listed as critically endangered under the Commonwealth <i>Environment Protection Biodiversity Conservation Act 1999</i>. Assessment of significance found that the proposal was unlikely to have significant impact on the threatened fauna and the community. Measures would be implemented to minimise vegetation removal and landscape the proposal</p>	<p>Long term minor negative impacts</p>
<p>d. Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>There would be a minor reduction in the aesthetic quality of the locality due to the removal of vegetation, increase in road width and changes to intersections, and property boundaries. Mitigation measures would be implemented to reduce visual impacts and detailed design would be undertaken in line with the urban design objectives of the proposal. These include revegetation and landscaping of the road corridor and retention of vegetation where possible and minimisation of the vegetation footprint</p>	<p>Long term minor negative impacts</p>
<p>e. Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?</p> <p>The proposal has the potential to impact a number of Aboriginal items (refer to section 6.6). Where impacts could not be avoided measures such as protection fencing would be installed and Aboriginal Heritage Impact permits would be obtained from OEHL to disturb Aboriginal heritage sites and items under the <i>National Parks and Wildlife Act 1974</i>.</p>	<p>Long term negative</p>

Factor	Impact
<p>f. Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)?</p> <p>The proposal would remove approximately 1.44 ha of Cumberland Shale Plains Woodland that provide foraging habitat for the threatened Eastern False Pipistrelle along with one dead stag and one hollow-bearing tree which could be used by this bat for roosting. However, roosting habitat within the site is considered to be low quality due to the low density of hollows and shredding bark trees present. The Assessment of Significance (refer to Appendix H) found that this loss of habitat is unlikely to significantly impact on any local population such that it would be placed at risk of extinction and appropriate measures are to be implemented to minimise impacts on this species. These are identified in Section 7 of this REF.</p>	<p>Minor short term negative impact</p>
<p>g. Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?</p> <p>Seven threatened flora species, 13 fauna species, and one invertebrate species were considered to be potentially be impacted by the proposal. The Assessment of Significance was applied to these species and concluded that the proposal was unlikely to have a significant impact on these species, provided appropriate mitigation measures are implemented.</p> <p>One critically endangered ecological community, Cumberland Plain Woodland in the Sydney Basin Bioregion, was recorded within the proposal. It was concluded that the proposal is unlikely to have a significant impact on this ecological community, given the relatively small amount of direct removal (1.44 ha) providing recommended mitigation measures are implemented.</p> <p>It has been determined that significant impacts are unlikely to result from the proposal. Mitigation measures have been proposed in Section 7 to avoid or minimise impacts.</p>	<p>Nil</p>
<p>h. Any long-term effects on the environment?</p> <p>The proposal would increase the number of traffic lanes, incorporate a wide median, signalise intersections and provide a shared cyclist and pedestrian path would improve traffic conditions, including road user safety and traffic flow. The proposal would also improve access in the WELL precinct.</p> <p>Vegetation would need to be removed resulting in visual impact. However, urban design principles would be incorporated in the detailed design to minimise impacts.</p>	<p>Long term positive and negative impacts</p>

Factor	Impact
<p>i. Any degradation of the quality of the environment? The proposal would potentially locally degrade the quality of the environment (noise and air quality impacts) during construction and operation. However the potential impacts would be minimised with the implementation of the safeguards outlined in Section 7 of this REF.</p>	<p>Minor short term negative impacts</p>
<p>j. Any risk to the safety of the environment? The proposal would provide shared pedestrian and cyclist paths. The carriageway would be divided by a median and traffic lights would be provided at intersections. This would likely improve road user safety and decrease potential conflict at Caddens Road.</p> <p>The proposal is likely to reduce safety along the road during construction due to construction activities. This would be managed through appropriate signage and a traffic management plan.</p>	<p>Long term positive impact</p> <p>Minor short term negative impacts</p>
<p>k. Any reduction in the range of beneficial uses of the environment? The proposal would have a minor traffic delays during the construction of the proposal. There would be no long-term reduction in the range of beneficial uses of the environment as a result of the works.</p> <p>The proposal would improve public transport facilities, pedestrian and cycling facilities, access within the WELL precinct .</p>	<p>Minor short term negative impacts</p> <p>Long term positive impacts</p>
<p>l. Any pollution of the environment? Construction of the proposal would potentially cause localised sediment, noise and air pollution in the immediate works environment, however the potential impacts would be minimised with the implementation of the safeguards outlined in Section 7 of this REF.</p>	<p>Minor short term negative impacts</p>
<p>m. Any environmental problems associated with the disposal of waste? Waste would be managed in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i> and recycled where possible. It is not anticipated that there would be issues encountered with the disposal of waste.</p>	<p>Nil</p>
<p>n. Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply? All resources required are not in short supply and are readily available..</p>	<p>Nil</p>
<p>o. Any cumulative environmental effect with other existing or likely future activities? While there may be some additional development occurring in the same area and time as the proposal, the only cumulative impact could be cumulative traffic delays or noise during construction. However, these impacts are anticipated to be minor.</p>	<p>Minor short term negative impacts</p>

Factor	Impact
p. Any impact on coastal processes and coastal hazards, including those under projected climate change conditions? The proposal would not impact on coastal processes or coastal hazards.	Nil