

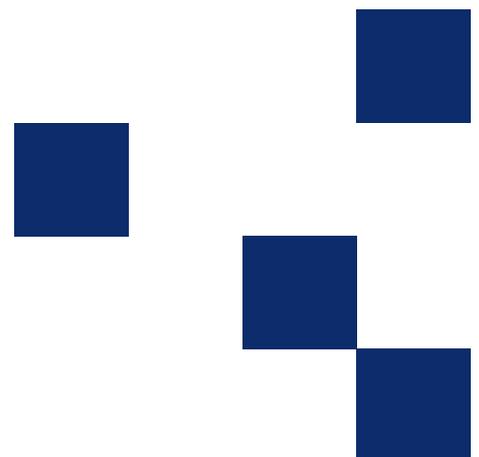


APPENDIX H

Campbelltown Road MR177

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

RMS 2013



Factor	Impact
<p>b. Any transformation of a locality?</p> <p>The proposal would result in changes (amenity, visual aspects) to the locality through provision of a wider road. Changes to intersection designs are also included in the new road design. A number of mitigation measures have been provided to minimise any negative impacts (Section 7.2).</p> <p>Some changes to the locality would be positive, such as greater pedestrian and cycling provisions and improved access potential in the south-west region. Urban design principles would improve the landscape character and visual amenity of the area.</p>	<p>Long-term negative and positive impacts</p>
<p>c. Any environmental impact on the ecosystems of the locality?</p> <p>The proposal would involve the loss of native vegetation, including threatened ecological communities. A total of 1.66 hectares of native vegetation will be directly impacted within non-certified areas. The areas to be cleared consist predominantly of degraded edge habitat. The proposal may result in the expansion of edge effects associated with the new road edge, including weed invasion, altered hydrology and increased sedimentation and runoff.</p> <p>The proposal would result in loss of flora and fauna habitat, including potential habitat for threatened flora and fauna species. The already fragmented habitat in the proposal area would be further fragmented, primarily affecting less mobile, cover-dependent species such as reptiles, amphibians and the Cumberland Plain Land Snail.</p> <p>The proposed realignment of Maxwells Creek would alter and potentially degrade the riparian and aquatic habitats in and adjoining the creek.</p> <p>Measures, as outlined in Section 6.1 of this REF, would be implemented to minimise impacts on the ecosystems associated with 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, waterways 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 (see Section 6.10 and Figures 3-18 to 3-24).</p>	<p>Long-term minor negative impacts</p>

Factor	Impact
<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 proposed upgrade would potentially impact a number of Aboriginal and Non-Aboriginal heritage items (refer to Sections 6.4 and 6.5). The study area includes five Non-Aboriginal heritage listed items. These include Denham Court House, three 19th century milestones along Campbelltown Road and parts of the former Ingleburn Defence Site (Mont Street Quentin Oval and associated features including Bardia Barracks and Ingleburn Village). For Aboriginal heritage three identified Aboriginal sites would be directly impacted by the proposal: CRSC1 and associated sites CR01 and CR02. Where unavoidable, mitigation measures such as those outlined in Section 6.2 and 6.3 would be implemented. Permits and applications would be required (as per Section 7.3 of this REF, prior to construction works that may impact on identified aboriginal and non-aboriginal heritage sites.</p>	<p>Long-term negative</p>
<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>All native fauna species fall within the meaning of protected fauna under the <i>National Parks and Wildlife Act 1974</i>. A total of 32 native fauna species, including 20 bird species, 7 mammal species, 3 amphibian species, 1 reptile species and 1 invertebrate species were recorded in the study area.</p> <p>The proposal will result in removal of fauna habitats, including remnant woodland, riparian habitat and modified fauna habitats in cleared and disturbed and developed areas. The removal of vegetation in remnant woodland and riparian habitat would result in the loss of specific fauna habitat components, including live trees, tree hollows, foraging resources, ground layer habitats such as ground timber and well-developed leaf litter.</p> <p>Safeguards recommended in Section 6.1 would minimise impacts. Permits as outlined in Section 7.2 would be required prior to relocation of endangered Cumberland Plain Land Snails.</p>	<p>Long-term negative</p>

Factor	Impact
<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>The proposal will have impacts on threatened species, populations and communities listed under the EPBC Act and TSC Act.</p> <p>The proposal area contains potential habitat for threatened flora species, including one species with a high likelihood of occurrence, <i>Pimelea spicata</i> (Spiked Rice-flower) (listed under the TSC Act and EPBC Act) and three species with a moderate likelihood of occurrence, <i>Acacia pubescens</i> (Downy Wattle), <i>Cynanchum elegans</i> (White-flowered Wax Plant) (listed under the TSC Act and EPBC Act) and <i>Pultenaea pedunculata</i> (Matted Bush-pea) (listed under the TSC Act).</p> <p>One threatened fauna species listed under the TSC Act, <i>Meridolum corneoviriens</i> (Cumberland Plain Land Snail) is known to occur within the study area and is likely to be impacted by the proposal. Three threatened fauna species listed under the TSC Act, <i>Pteropus poliocephalus</i> (Grey Headed Flying Fox), <i>Myotis macropus</i> (Southern Myotis) and <i>Mormopterus norfolkensis</i> (Eastern Free-tail Bat) had a high likelihood of occurrence in the study area. One threatened fauna species listed under both the EPBC Act and the TSC Act, <i>Lathamus discolor</i> (Swift Parrot) and 3 species listed under the TSC Act, <i>Miniopterus schreibersii oceanensis</i> (Eastern Bentwing-bat), <i>Hieraaetus morphnoides</i> (Little Eagle) and <i>Glossopsitta pusilla</i> (Little Lorikeet) had a moderate likelihood of occurrence in the study area.</p> <p>Assessments of significance under the TSC Act and Significant Impact Assessments under the EPBC Act were undertaken for all threatened species, populations and communities recorded or considered to have a high to moderate likelihood of occurrence in non-certified areas. The assessments concluded that the proposal would not have a significant impact on any of the threatened species, populations or communities considered.</p> <p>Safeguards recommended in Section 6.1 would minimise impacts on threatened species and communities.</p>	<p>Nil.</p>

Factor	Impact
<p>h. Any long-term effects on the environment?</p> <p>The proposal would result in short-term environmental impacts, largely restricted to the construction period. Some of the long-term impacts such as clearing of vegetation shall be offset. The 1.13 ha reduction in the proposed Edmondson Regional Park would be offset by a 5.93 ha addition to the north-west of the proposed Edmondson Regional Park. The 0.41 ha area of EPBC CPW to be removed would be offset through conservation of 0.41 ha of mapped EPBC CPW in the proposed offset area. This direct offset will maintain the minimum 79 ha of EPBC CPW that must be retained and protected in the proposed Regional Park under the terms of the Conservation Agreement. The 0.80 ha of ENV to be removed would be offset through conservation of 0.41 ha of mapped EPBC CPW, which also meets the criteria for ENV, and 0.39 ha of RFEF in the proposed offset area. Visual impacts shall be minimised through application of urban design principles.</p>	<p>Long term positive and negative impacts</p>
<p>i. Any degradation of the quality of the environment?</p> <p>The proposed upgrade has the potential to degrade the quality of the environment through noise, visual, water, air, erosion and sedimentation pollution, as well as accidental spills during construction. These potential impacts would be managed using a suite of safeguards and mitigation measures. The construction footprint would be reduced as far as practicable and the site would be rehabilitated as work progresses to minimise impacts. Removal of vegetation would be kept to a minimum and appropriate mitigation incorporated to minimise impacts on native flora and fauna.</p> <p>Long-term impacts on vegetation communities shall be offset, and the proposal will reduce congestion and thus likelihood of associated air, visual, noise, water, erosion and sedimentation pollution in the local environment.</p>	<p>Short-term negative</p> <p>Long-term positive</p>
<p>j. Any risk to the safety of the environment?</p> <p>The proposal is likely to reduce safety along the road during construction. This would be managed through appropriate signage and a traffic management plan.</p> <p>The proposal would provide a shared pedestrian and bicycle path and signalise intersections. This would improve road user safety.</p>	<p>Short-term negative</p> <p>Long-term positive</p>

Factor	Impact
<p>k. Any reduction in the range of beneficial uses of the environment?</p> <p>The proposal would result in traffic impacts during construction which would include an increase in the volume of heavy vehicles, interruption of traffic flow and speeds, and temporary impacts to access. These traffic impacts would reduce the beneficial use of Campbelltown Road during the construction phase.</p> <p>In the long-term, the proposal would be consistent with future uses and there would be no reduction in the range of beneficial uses of the environment.</p>	<p>Short-term negative</p> <p>Nil</p>
<p>l. Any pollution of the environment?</p> <p>There would be some potential noise, visual, air, water, erosion and sedimentation impacts associated with construction of the proposed upgrade. There is also potential for accidental chemical spill, which could impact surrounding land and waterways. Construction activities would be carefully managed with numerous safeguard for protection of the environment from pollution (refer to Chapter 7).</p>	<p>Short-term negative</p>
<p>m. Any environmental problems associated with the disposal of waste?</p> <p>Waste would be generated across a number of waste streams during construction. These streams would be managed in accordance with RMS specification, the <i>Waste Avoidance and Resource Recovery Act 2001</i> and recycled where possible.</p> <p>It is not anticipated that there would be any issues associated with the disposal of waste during the operation of the proposal.</p>	<p>Short-term, negative.</p> <p>Nil.</p>
<p>n. Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</p> <p>None of the resources required to effect this proposal are, or are likely to become, in short supply.</p>	<p>Nil.</p>

Factor	Impact
<p>o. Any cumulative environmental effect with other existing or likely future activities?</p> <p>The proposal would likely be effected at the same time as the development of the Sydney SWGC and the SWRL. Cumulative noise, traffic, visual and air quality impacts may result during construction. These would be short-term and manageable.</p> <p>There would also be a cumulative effect on the vegetation communities. These cumulative impacts would be addressed by way of offsets and other mitigation measures.</p> <p>All cumulative impacts are considered justifiable by the long-term positive impacts of the proposal.</p>	<p>Short-term negative.</p> <p>Long-term, positive.</p>
<p>p. Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</p> <p>Proposed works are located in western Sydney outside of the coastal zone and would not impact coastal processes or coastal hazards.</p>	<p>Nil.</p>

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.

If an impact is likely, state whether it is likely to be minor or significant. If no impact is likely, write "nil".

Factor	Impact
<p>a. Any impact on a World Heritage property?</p> <p>The proposal would not impact on a World Heritage property. No sites in or near the proposal area are included on the World Heritage List.</p>	Nil
<p>b. Any impact on a National Heritage place?</p> <p>The proposal would not impact on a National Heritage property. No sites in or near the proposal area are included on the National Heritage List.</p>	Nil
<p>c. Any impact on a wetland of international importance?</p> <p>The proposal would not impact on a wetland of international importance. There are no wetlands of international importance (listed under the Ramsar Convention) in or near the proposal area.</p>	Nil
<p>d. Any impact on a listed threatened species or communities?</p> <p>There were six listed threatened species and one community (CPW) identified as potentially occurring (or occurring) within the proposal area.</p> <p>Assessments of significance were undertaken for all threatened species, populations and communities recorded or considered to have a high likelihood of occurrence in the non-certified areas within the study area. Assessments of significance followed the <i>Threatened Species Assessment Guidelines</i> (DECC 2007).</p> <p>Identified threatened species within the proposal area under the EPBC Act and TSC Act were assessed as not likely to be significantly affected.</p> <p>EPBC-listed CPW within the proposed Edmondson Regional Park would be impacted; however, this vegetation falls under the Edmondson Park Conservation Agreement. All impacts would be managed through a proposed offsetting strategy (Appendix K).</p>	minor

Factor	Impact
<p>e. Any impacts on listed migratory species?</p> <p>A search of the SEWPaC Protected Matters Search Tool found 7 migratory species listed under the EPBC Act that are known or likely to occur within 10 kilometres of the study area. It was found that only one species, <i>Ardea ibis</i> (Cattle Egret), had a moderate likelihood of occurrence in the study area. All other species, <i>Apus pacificus</i> (Fork-tailed Swift), <i>Ardea alba</i> (Great Egret), <i>Hirundapus caudacutus</i> (White-throated Needletail), <i>Merops ornatus</i> (Rainbow Bee-eater), <i>Monarcha melanopsis</i> (Black-faced Monarch) and <i>Myiagra cyanoleuca</i> (Satin Flycatcher) had a low likelihood of occurrence in the study area. Identified threatened species within the proposal area under the EPBC Act were assessed as not likely to be significantly affected.</p>	Nil
<p>f. Any impact on a Commonwealth marine area?</p> <p>The proposal would not impact on a Commonwealth marine area. There are no Commonwealth marine areas in or near the proposal area.</p>	Nil
<p>g. Does the proposal involve a nuclear action (including uranium mining)?</p> <p>The proposal would not involve a nuclear action.</p>	Nil
<p>Additionally, any impact (direct or indirect) on Commonwealth land?</p> <p>Additionally, any impact (direct or indirect) on Commonwealth land? The proposal would not impact (either directly or indirectly) on Commonwealth land.</p>	nil

