

Appendix A

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

Clause 228(2) Checklist

In addition to the requirements of the *Is an EIS required?* guideline (DUAP 1995/1996) and the *Roads and Related Facilities EIS Guideline* (DUAP 1996) as detailed in the REF, the following factors, listed in clause 228(2) of the *Environmental Planning and Assessment Regulation 2000*, have also been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Impact
<p>a. Any environmental impact on a community?</p> <p>The proposal would result in short-term negative impacts to the local community as a result of construction noise, visual impacts, dust and traffic disruptions. Safeguards and management measures outlined in section 7.2 would be implemented to minimise these impacts.</p> <p>Operational traffic noise at the 'Rest-down' residence would increase as a result of the new road alignment north of Gee Gee Bridge. The predicted noise levels are likely to be less than the applicable noise criteria, as assessed in section 6.7.</p> <p>The visual amenity of the river for recreational users would be affected by the new Gee Gee Bridge. Implementing the safeguards in section 6.9 would reduce the visual impact.</p> <p>The proposal is likely to have benefits for the local community due to improved road infrastructure and improved access across the Wakool River.</p>	<p>Short-term moderate negative</p> <p>Long-term minor negative</p> <p>Long-term moderate negative</p> <p>Long-term positive</p>
<p>b. Any transformation of a locality?</p> <p>The proposal would involve the construction of a new bridge and road embankment over the Wakool River floodplain and the demolition of the existing bridges. As a result, the visual amenity of the river for recreational users would be affected by the proposal (see section 6.9). The implementation of the safeguards would reduce the visual impact. The proposal would be consistent with the current use of the site as a bridge crossing over the Wakool River.</p>	<p>Long-term moderate negative</p>
<p>c. Any environmental impact on the ecosystems of the locality?</p> <p>During construction there is an increased risk of impacts to local flora and fauna through erosion leading to water quality impacts, chemical and fuel spills, construction noise and spread of pathogens. These risks would be minimised by implementing the safeguards detailed in sections 6.2, 6.4 and 6.7.</p>	<p>Short-term minor negative</p>

Factor	Impact
<p>The proposal would remove 2.1 hectares of native vegetation, and would potentially impact 17 listed bird species, five listed mammal species, three listed fish species and one listed ecological community. Habitat loss would include 13 hollow-bearing trees. The proposal is unlikely to have a significant impact on any listed biota, as detailed in sections 6.2 and 6.3. Detailed design and implementation of safeguards and management measures would aim to minimise impacts on biodiversity.</p>	<p>Long-term moderate negative</p>
<p>d. Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>During construction, the proposal would reduce the aesthetic quality of the locality as a result of visual impacts, dust generation and traffic movements. Noise impacts would occur from construction plant, machinery and vehicles. Access to the Wakool River at the proposal site would be restricted during construction. These impacts would be minimised through implementation of safeguards outlined in section 7.2.</p> <p>The proposal would have long-term moderate visual impacts due to the construction of a new bridge and new road alignment through native vegetation next to the Wakool River. The visual amenity of the river for recreational users would be affected by the proposal (see section 6.9). Implementing safeguards would reduce the impact.</p> <p>Operational traffic noise at the 'Rest-down' residence would increase as a result of the new road alignment north of Gee Gee Bridge. The predicted noise levels are likely to be less than the applicable noise criteria, as assessed in section 6.7.</p>	<p>Short-term minor negative</p> <p>Long-term moderate negative</p> <p>Long-term minor negative</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 would remove the heritage-listed Gee Gee Bridge. The Statement of Heritage Impact completed for the proposal recognises the need to demolish the bridge and has assessed the impact in its strategic context. The bridge will be delisted from the State Heritage Register before demolition. The impacts of the proposed demolition would be minimised by implementing the mitigation measures identified in section 6.1.</p> <p>No known sites of Aboriginal significance with the potential to be impacted by the proposal have been identified.</p>	<p>Long-term major negative, but will be mitigated</p> <p>Nil</p>

Factor	Impact
<p>Long-term moderate visual impacts to the Wakool River environment would occur as described in (d) above.</p>	<p>Long-term moderate negative</p>
<p>f. Any impact on the habitat of protected fauna (within the meaning of the National Parks and Wildlife Act 1974)?</p>	
<p>The proposal would remove 2.1 hectares of native vegetation, which is known to provide habitat for a large number of native fauna species protected under the NPW Act. Habitat loss would include 13 hollow-bearing trees. The proposal is unlikely to have a significant impact on any listed species (see section 6.2). Detailed design and implementation of safeguards and management measures would aim to minimise biodiversity impacts.</p>	<p>Long-term moderate negative</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>The proposal would remove 2.1 hectares of native vegetation, and would potentially impact 17 listed bird species, five listed mammal species, three listed fish species and one listed ecological community. Habitat loss would include 13 hollow-bearing trees. The proposal is unlikely to have a significant impact on any listed biota, as detailed in section 6.2 and 6.3. Detailed design and implementation of safeguards and management measures would aim to minimise biodiversity impacts.</p>	<p>Long-term moderate negative</p>
<p>h. Any long-term effects on the environment?</p> <p>The proposal would cause long-term ecological impacts as described in (g) above. Detailed design and implementation of safeguards and management measures would aim to minimise biodiversity impacts as described in sections 6.2 and 6.3.</p> <p>Long-term moderate visual impacts to the Wakool River environment would occur as described in (d) above.</p> <p>The proposal would cause long-term minor noise impacts as described in (a) above. These impacts would be minimised through implementation of safeguards in section 6.7.</p> <p>The proposal is likely to benefit the local community due to improved road infrastructure and improved access across the Wakool River.</p>	<p>Long-term moderate negative</p> <p>Long-term moderate negative</p> <p>Long-term minor negative</p> <p>Long-term positive</p>

Factor	Impact
<p>i. Any degradation of the quality of the environment?</p> <p>The proposal would result in short-term negative impacts to the local community as a result of construction noise, visual impacts, dust and traffic disruptions. Safeguards and management measures outlined in section 7.2 would be implemented to minimise these impacts.</p>	<p>Short-term moderate negative</p>
<p>Water quality could be affected during construction as a result of pollutants such as sediment, soil nutrients and waste entering drainage lines, particularly during high rain events. Fuel spillage during refuelling and leakage of hydraulic and lubricating oil from plant and equipment or rinse water from plant washing and concrete slurries would also have the potential to enter the Wakool River. Safeguards and management measures would be implemented to reduce impacts to water quality. With the implementation of safeguards in section 6.4, the risk of these impacts would be minor.</p> <p>The proposal would cause long-term moderate ecological impacts as described in (g) above. Detailed design and implementation of safeguards and management measures would aim to minimise biodiversity impacts as described in section 6.2.</p> <p>Long-term visual impacts to the Wakool River environment would occur as described in (d) above.</p> <p>The proposal would cause long-term minor noise impacts as described in (a) above. These impacts would be minimised through implementation of safeguards in section 6.7.</p>	<p>Short-term minor negative</p> <p>Long-term moderate negative</p> <p>Long-term moderate negative</p> <p>Long-term minor negative</p>
<p>j. Any risk to the safety of the environment?</p> <p>There is potential for road safety to be affected during construction due to changed traffic conditions near existing roads. Traffic management safeguards described in section 6.6, including the preparation of a traffic management plan, would address safety risks.</p> <p>The proposal would improve the safety of the Wakool River crossing for the community by providing improved road infrastructure that meets current road design standards.</p>	<p>Short-term minor 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 minor traffic impacts during construction, including an increase in the volume of heavy vehicles, interruptions to traffic flow and temporary speed limit changes when new roads are connected to existing roads. These impacts would be mitigated by the measures outlined in section 6.6.</p> <p>The proposal would acquire about 1.57 hectares of land from a rural property, which is unlikely to substantially affect the property owner or the leaseholder. The proposal would not result in a reduction in the range of beneficial uses of the environment.</p>	<p>Short-term minor negative</p> <p>Long-term minor negative</p>
<p>The proposal would increase the range of beneficial uses of the environment by providing access across the Wakool River for higher mass limit and oversized vehicles, for which access is currently restricted.</p>	<p>Long-term positive</p>
<p>l. Any pollution of the environment?</p> <p>The proposal would result in short-term pollution impacts as a result of construction noise, visual impacts and dust. Safeguards and management measures outlined in section 7.2 would be implemented to minimise these impacts.</p> <p>Contaminants in soils next to the flood relief bridge piers (AB-S5 to AB-S8) could be exposed and released into the environment if excavation in these areas is required. Contaminated soils would be managed through implementation of a contamination management plan.</p> <p>Water quality could be affected during construction as a result of pollutants such as sediment, soil nutrients and waste entering the Wakool River. Fuel spillage during refuelling and leakage of hydraulic and lubricating oil from plant and equipment or rinse water from plant washing and concrete slurries would also have the potential to enter the Wakool River. Safeguards and management measures would be implemented to reduce impacts to water quality. With the implementation of safeguards in section 6.4, the risk of these impacts would be minor.</p> <p>Waste generated during construction could pollute the environment. Waste would be managed in line with the safeguards outlined in section 6.13.</p>	<p>Short-term moderate negative</p> <p>Short-term minor negative</p> <p>Short-term minor negative</p> <p>Short-term minor negative</p>

Factor	Impact
<p>Operation of roads leads to the build-up of contaminants (such as oil and heavy metals) on road surfaces, median areas and roadside corridors. General stormwater runoff from the road has the potential to transport these contaminants and impact on the surrounding environment.</p> <p>The proposal would cause minor long-term noise impacts as described in (a) above. These impacts would be minimised through implementation of safeguards in section 6.7.</p> <p>Fuel or chemical spills could occur through truck incidents, with the potential for pollutants to enter the surrounding environment. The risk of this occurring would be reduced by a new Gee Gee Bridge constructed to road design standards.</p>	<p>Long-term minor negative</p> <p>Long-term minor negative</p> <p>Long-term positive</p>
<p>m. Any environmental problems associated with the disposal of waste?</p>	
<p>The proposal would generate contaminated waste through the excavation of soils with elevated levels of benzo(a) pyrene and lead, and through the removal of contaminated bridge timbers during demolition. These wastes would be classified as restricted solid waste and hazardous waste, and would be disposed of at a facility appropriately licensed to receive these wastes.</p> <p>Other waste streams generated during construction are common and would pose no difficulty in their disposal. Waste would be recycled wherever possible. Waste would be managed in line with the safeguards outlined in section 6.13.</p>	<p>Short-term minor 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>All resources required for the proposal are readily available and are not in short supply.</p>	<p>Nil</p>
<p>o. Any cumulative environmental effect with other existing or likely future activities?</p> <p>The cumulative impacts of the proposal relate to the proposed removal of other timber truss bridges around NSW. The Roads and Maritime 'Timber Truss Bridge Conservation Strategy Submissions Report and Revised Conservation Strategy' identifies 22 heritage-listed timber truss bridges that would be removed around NSW and 27 that would be retained. Gee Gee Bridge is one of seven Dare truss bridges identified for removal. Under the strategy, six Dare truss bridges would be conserved as representative samples of this bridge type. The strategy has been prepared to maintain adequate representation of the different types of timber truss bridges around the state.</p>	<p>Long-term moderate negative</p>

Factor	Impact
<p data-bbox="252 271 1066 371">p. Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</p> <p data-bbox="252 405 1038 499">The proposal is not located within a coastal area, and would not cause any impact on coastal processes and coastal hazards.</p>	Nil

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 the Environment and Energy.

A referral is not required for proposed actions that may affect nationally listed threatened species, populations, endangered ecological communities and migratory species. Impacts on these matters are still assessed as part of the REF in line with Australian Government significant impact criteria and taking into account relevant guidelines and policies.

Factor	Impact
<p>a. Any impact on a World Heritage property? The proposal would not have any impact on a World Heritage property. There are no World Heritage properties within 10 kilometres of the proposal.</p>	Nil
<p>b. Any impact on a National Heritage place? The proposal would not have an impact on a National Heritage place.</p>	Nil
<p>c. Any impact on a wetland of international importance? The NSW Central Murray State Forests (including the Werai State Forest,) is located eight kilometres north of the proposal site on the Niemur River, in a different sub-catchment to that of the proposal site. The wetland is unlikely to be impacted by the proposal. No other wetlands of international importance are located near the proposal site.</p>	Minor
<p>d. Any impact on listed threatened species or communities? The proposed removal of habitat is unlikely to have significant impacts on threatened species due to the relatively small area of habitat that would be affected by the proposal, the mobility of the species assessed and due to the proposal being unlikely to significantly fragment habitat for these species.</p>	Moderate
<p>e. Any impacts on listed migratory species? The proposed removal of habitat is unlikely to have significant impacts on migratory species due the relatively small area of habitat that would be affected by the proposal, the mobility of the species assessed and due to the proposal being unlikely to significantly fragment habitat for these species.</p>	Moderate

Factor	Impact
<p>f. Any impact on a Commonwealth marine area? The proposal is not located near a marine area and would be unlikely to have an impact on a marine area.</p>	Nil
<p>g. Does the proposal involve a nuclear action (including uranium mining)? The proposal does not involve a nuclear action (including uranium mining).</p>	Nil
<p>h. Any environmental impact on the Great Barrier Reef Marine Park? The proposal would not result in any impacts to the Great Barrier Reef Marine Park due to its distance from the park.</p>	Nil
<p>i. Any environmental impact on a water resource, in relation to coal seam gas development and large coal mining development? The proposal is not a coal seam gas or large coal mining development.</p>	Nil
<p>j. Any impact (direct or indirect) on Commonwealth land? The proposal would not have an impact (direct or indirect) on Commonwealth land.</p>	Nil
<p>k. The environment, where Commonwealth agencies are proposing to take action? Roads and Maritime is not a Commonwealth agency.</p>	Nil