Executive summary

Roads and Maritime Services (Roads and Maritime) proposes to carry out major road upgrades to three segments of the Newell Highway (the highway) north of Moree in northern NSW in the north west of NSW (the proposal). The proposal is located in the Moree Plains Local Government Area (LGA).

The proposal forms part of the Newell Highway Corridor Strategy (Transport for NSW, 2015) to provide an efficient and sustainable corridor that caters for increasing growth and improves safety along the Newell Highway.

The proposal would be delivered in three segments with a combined length of about 30.8 kilometres of upgrades along the highway.

Key features of the proposal include:

- Upgrading and resurfacing three segments of the existing highway north of Moree to a heavy duty (HD) pavement
- Road widening to provide 3.5 metre wide lanes and two metre shoulders
- Provision of one metre wide painted medians
- Upgrade numerous existing intersections along the Newell Highway to dedicated right hand turn intersections, with additional left hand turn intersection treatments
- Provision of three metre wide shoulders for 30 metres on either side of property accesses
- Improving the Newell Highway flood immunity to a minimum of five year average recurrence interval (ARI) where feasible and reasonable
- Utility relocations as required
- Property acquisitions as required
- Establishing temporary facilities, including construction compounds, stockpile sites and erosion and sedimentation measures as required.

The section along the highway has substantial road surface and structural deficiencies. The road was built in the 1960s. Today, 98 per cent of the road along this section of the highway has a remaining life of 10 years or less. Due to its structural limitations, the road is also at heightened risk of surface failure caused by rainfall.

These road surface deficiencies, coupled with a strong freight demand, are affecting travel reliability and travel times for freight movements between Victoria and Queensland, as well as increasing maintenance costs and reducing road safety.

Proposal objectives

The objectives of the proposal are:

- Reduce vehicle operating costs on the Newell Highway
- Reduce the costs of maintaining the Newell Highway
- Improve the safety of the Newell Highway
- Improve flood reliability of the Newell Highway
- Reduce travel times on the Newell Highway.

Options considered

Roads and Maritime considered the following alternatives:

- Do nothing – business as usual
- Replace existing road with a heavy duty pavement entirely within the existing road corridor
- Replace existing road with a heavy duty pavement mostly within the existing road corridor, but with some new section of road to ease curves.

Roads and Maritime found the cost of the do nothing alternative would be marginal when compared with the heavy duty pavement alternative, but it would not meet the proposal objectives. For this reason, it was no longer considered.

Providing a heavy duty pavement with some new section of road to ease curves would best meet the proposal objectives, and is therefore the preferred option.

**Statutory and planning framework**

Clause 94 of State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) permits development, on any land, for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent.

As the proposal meets the definitions of ‘road infrastructure facilities’ provided for by clauses 93 and 94(2) of the ISEPP, and is being carried out by Roads and Maritime, it is permissible without consent under the ISEPP. Accordingly, it can be assessed under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and development consent is not required.

This review of environmental factors (REF) fulfils Roads and Maritime’s obligations to consider the environmental impacts of the proposal under section 5.5 of the EP&A Act, and has been prepared in accordance with the provisions of clause 228 of the *Environmental Planning and Assessment Regulation 2000*. The REF also addresses the relevant considerations of the *Biodiversity Conservation Act 2016* (BC Act), *Fisheries Management Act 1994* (FM Act), *Heritage Act 1977*, *National Parks and Wildlife Act 1974*, and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EBPC Act).

**Community and stakeholder consultation**

A Communications and Engagement Plan (CEP) (Roads and Maritime, 2018) has been prepared for the development and delivery of the Newell Highway, heavy duty pavement upgrade at North Moree (the proposal). The CEP describes the communication and consultation approach and activities for the proposal. It also outlines the proposed communications approach and to keep key stakeholders and the community informed during the development of the proposal.

Roads and Maritime also formally consulted with Moree Plains Shire Council in accordance with the requirements of the ISEPP.

Roads and Maritime invites comments on this REF. Submissions received during the public display period will be addressed in a formal submissions report and, if a decision is made to proceed with the proposal, will be considered during detailed design of the project.

**Environmental impacts**

Roads and Maritime has engaged technical experts to assess the potential environmental impacts of the proposal and to identify mitigation and management measures. The key adverse impacts of the proposal are summarised below.

**Biodiversity**

The proposal would require the removal of about 49.19 hectares of native vegetation. This includes about 3.2 hectares of state (BC Act) listed threatened ecological communities (TECs) and 9.45 hectares of nationally listed TECs. In many instances, the same patches of vegetation are part of both a state listed and a commonwealth listed TEC. An assessment of significance was carried out for each of the threatened species and ecological communities that are known or likely to occur in the proposal area. The
assessments concluded that the proposal would not have a significant impact on any species, population or TEC listed under the NSW BC Act or FM Act.

However, the proposal may have a significant impact on two threatened species, Belson’s Panic and Five-clawed Worm-skink, and a TEC listed under the Commonwealth EPBC Act. The proposal would require the removal of 6.25 hectares of the Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland TEC which is listed as a critically endangered ecological community under the EPBC Act.

In September 2015, a “strategic assessment” approval was granted by the Federal Minister in accordance with the EPBC Act. The approval applies to Roads and Maritime activities being assessed under Division 5.1 of the EP&A Act with respect to potential impacts on nationally listed threatened species, ecological communities and migratory species. The strategic assessment approval means that most Roads and Maritime Division 5.1 activities do not require referral to the Department of the Environment and Energy provided that impacts are assessed using Commonwealth guidelines and the avoid, mitigate and offset hierarchy applied through project determinations. This is the case even, if the activity is likely to have a significant impact.

Further assessment to confirm the presence of this community and species within the study area, and therefore the significance of the impact, would be carried out in consultation with the Department of the Environment and Energy if required. The outcomes of this assessment would be provided in the submissions report prepared for the proposal. If the proposal is confirmed to have a significant impact on this ecological community and these species described below, then the proposal would be subject to the EPBC Act strategic assessment approval.

Biodiversity impacts have been reduced through the adoption of a design and construction option that would affect less native vegetation. Impacts on threatened biodiversity would be avoided or further minimised through the design process and implementation of management and mitigation measures identified in the REF.

Biodiversity offsets would be required for residual impacts to threatened biodiversity in accordance with the EPBC Act strategic assessment approval and the Roads and Maritime Guideline for Biodiversity Offsets (2016).

**Noise and vibration**

During construction, there would be noise impacts at some nearby sensitive receivers near the highway, where noise management levels (NMLs) are predicted to be exceeded. For these receivers noise impacts during some stages of construction may be in the moderate to high range. Measures have been developed to mitigate and manage potential noise impacts during construction, including programming of activities generally within day time hours. Where activities involving vibration-generating equipment such as compaction plant occur within the vicinity of residents and other sensitive areas, work methods have been developed to avoid the potential for human discomfort and any building damage. Noise from additional traffic generated during construction was also assessed and determined to be negligible.

Regarding noise resulting from traffic along the upgraded road segments, levels would not be noticeably different from current noise levels and would not result in levels above the accepted noise criteria. The road surface would be improved as part of the upgrades which would improve wheel-road related noise emissions compared with existing conditions.

**Aboriginal**

As part of Roads and Maritime’s Stage 2 Procedure for Aboriginal Cultural Heritage Consultation and Investigation (PACHCI), a survey of the study area was carried out in conjunction with three Aboriginal groups (Gomeroi People Native Title Claim Group, Narrabri and Moree Local Aboriginal Land Councils). This survey found that the study area is largely disturbed due to the existing roadway and road shoulders.
The survey identified two new Aboriginal heritage items. Neither of these are within the proposal area and would not be impacted.

**Socio-economic and property issues**

The proposal would require a strip acquisition of privately and publicly owned land. Affected properties would be partially acquired by Roads and Maritime and consultation would be carried out with any affected owners. This may result in the relocation or demolition of rural infrastructure. In addition, temporarily leases may be required, for the use as ancillary facilities during construction of the proposal.

During construction, temporary adverse changes in local amenity may be experienced by communities and businesses near the proposal due to increased noise, dust and construction traffic. The proposal may also require temporary changes to access and connectivity within the proposal area.

Once completed, the proposal would provide long-term positive impacts to access and connectivity for local communities, businesses and industry in the proposal and wider region. Roads and Maritime would continue to consult with the community and stakeholders during development of the proposal.

**Traffic and access**

The proposal would cause temporary disruptions to traffic, including reduced speed limits through construction zones, potential changes to property accesses and increased heavy vehicle movements on the existing road network.

The proposal would improve road safety and travel efficiency along the corridor by providing one metre wide painted medians, improved flood immunity and a new road surface.

**Justification and conclusion**

The proposal is considered to be consistent with a number of relevant strategies and plans including:

- National Road Safety Strategy 2011–2020
- Melbourne–Brisbane Corridor Strategy: Building our National Transport Future
- NSW State Plan 2021: A Plan to Make NSW Number One
- NSW Long Term Transport Master Plan
- State Infrastructure Strategy
- NSW Freight and Ports Strategy
- NSW Road Safety Strategy 2012–2021
- New England North West Regional Transport Plan
- Newell Highway Corridor Strategy
- New England North West Strategic Regional Land Use Plan.

While there would be some environmental impacts as a consequence of the proposal, they have been avoided or minimised wherever possible through design and site specific safeguards. The beneficial effects are considered to outweigh the mostly temporary adverse impacts and risks associated with the proposal.

This REF has examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed activity in accordance with Division 5.1 of the EP&A Act. The proposal would be unlikely to cause a significant impact on the environment. Accordingly, neither an environmental impact statement is required to be prepared, nor approval from the Minister for Planning under Division 5.2 of the EP&A Act.

While the proposal is likely to have a significant impact on matters of national environmental significance within the meaning of the EPBC Act, a referral to the Department of the Environment and Energy is not required, because requirements for considering impacts to these biodiversity matters are the subject of a
strategic assessment approval granted under the EPBC Act by the Australian Government in September 2015.