12. Justification and conclusion

This chapter addresses the justification for the project, taking into account the environmental, social and economic impacts of the project, the suitability of the site, whether or not the project is in the public interest, and the sustainability of the project.

DGRs	Where addressed
Project justification:	
Describe the need for and objectives of the project; alternatives considered and justification for the preferred project taking into consideration the objects of the *Environmental Planning and Assessment Act 1979* and the following:	Chapters 4, 12
▪ The environmental, social and economic impacts of the project.	Sections 12.1, 12.2
▪ The suitability of the site.	Sections 12.1, 12.2
▪ Whether or not the project is in the public interest.	Sections 12.1, 12.2 and 12.3

12.1 Justification

12.1.1 Summary of strategic justification

The Hume Highway is the main freight corridor between Sydney and Melbourne, and is an important part of the NSW state and regional road network. Section 3.1 has identified a number of national and state planning policies and provisions of relevance to this project. Particularly, the strategic justification of this project is evident in its consistency with various objectives, strategic directions and priorities within these policies and provisions:

- Increase infrastructure handling and capacity — the project will improve the capacity and performance of the Hume Highway at Holbrook by upgrading the existing single carriageway through the town with a dual carriageway bypass.
- Improve safety and security — the project is expected to improve safety along the proposed bypass and the existing highway. The project will provide a safe bypass of Holbrook with a lower crash rate than the existing highway. Safety will improve along the main street of Holbrook by removing some traffic, reducing the conflict between local and through traffic.
- Improve transport productivity on nationally strategic and export-oriented freight corridors — the project will contribute to improving transport productivity on the significant Melbourne to Sydney freight corridor by providing road users with improved travel efficiency and driving conditions.
- Improve the reliability of travel on the interstate and inter-regional corridors — the project will provide local, inter-regional and interstate travellers with improved reliability of travel in this region through the provision of an efficient and safer section of the highway.
- Be consistent with viable and long-term economic and social outcomes and with the obligation to current and future generations to sustain the environment — the project has been developed to fully integrate sustainable economic and social outcomes. While it is recognised that the project has the potential to have some adverse economic impacts on individual businesses and agribusinesses in and around Holbrook, these are not considered

significant in terms of the overall national and regional benefits. The proposed mitigation and management measures also seek to minimise these impacts as far as possible. While there may be some social implications associated with the adverse economic impacts, the project has the potential to improve the amenity of the town, which may contribute to an improved long-term social environment for Holbrook. Environmental sustainability has also been a key consideration for this project. Where impacts are unavoidable, measures have been identified to mitigate, manage and/or offset these impacts.

12.1.2 Project justification

An environmental risk analysis was undertaken to identify the key risks of the project as they relate to environmental, social and economic issues. A summary of this analysis is provided in Chapter 8. The results of that analysis guided the assessment of the project's potential impacts. Key issues have been addressed in Chapter 9 and other issues have been addressed in Chapter 10. Justification of the project in the context of the identified environmental, social and economic issues is provided below.

Environmental considerations

Consideration of impact on the natural and cultural environment has been fundamental to the design process for the project. As far as possible, impacts have been avoided.

Flora and fauna

A total of approximately 24 hectares of native vegetation, including 22 hectares of threatened ecological community Box-Gum Woodland would be removed. The loss of native vegetation would also lead to loss of fauna habitat, some severance of fauna movement corridors and increased edge effects. Measures would be implemented to mitigate these impacts. Initiatives directed at offsetting the residual impacts on flora and fauna would be developed in consultation with relevant agencies and stakeholders.

Heritage

Aboriginal and non-Aboriginal heritage were carefully considered during design development, however, some impact on sites and items is unavoidable. Where a site/item is to be impacted, measures have been identified to mitigate the impacts.

Surface water and groundwater

The flood study for the project assessed multiple design scenarios to identify a bridge design that minimises change to the existing flooding conditions. The project would alter the distribution of flow within the Ten Mile Creek floodplain both upstream and downstream of the proposed crossing. Changes in flow distribution may lead to increased flood levels (afflux), and changes in flood velocity. These changes are generally minor in extent and are unlikely to affect the flood hazard in the locality. Detailed design development would seek to minimise afflux. Where changes to flooding behaviour are predicted, measures to manage these changes would be developed in consultation with affected landowners and relevant stakeholders.

The project is not predicted to change the duration of inundation or frequency of flooding within the Ten Mile Creek floodplain in the vicinity of Holbrook.

Having regard to the proposed environmental mitigation and management measures identified in Chapters 9 and 10, and the draft statement of commitments identified in Chapter 11, the expected environmental impacts of the project can be managed to reduce impacts to an acceptable level.

Social considerations

The Hume Highway is a dominant feature in the rural landscape. In Holbrook, it provides the setting for the main street through the town.

During construction, the project would have some minor, temporary disruptions to the rural lifestyle and community character in Holbrook in the form of disruptions to local traffic and access, and impacts on amenity (eg noise, dust). These issues would be short-term in nature and managed through the implementation of standard management measures.

Some property acquisition would be required to construct the project. This may have some adverse impacts on landowners. All acquisition would be undertaken in accordance with the *Land Acquisitions (Just Terms Compensation) Act 1991* and the RTA's (1999) *Land Acquisition Policy*.

Social changes (benefits and adverse impacts) during operation of the project would relate to:

- Impacts on businesses, agribusinesses and services (addressed further below).
- Improvements to amenity, including safety benefits through reduced conflict between local and through traffic in the town.
- Changes to community cohesion and severance for residence in the town and for rural residences on the western side of the proposed bypass.
- Maintenance of Holbrook's identity as a regional service town.
- Changes to the noise environment (addressed below).

Noise

Many residences in the centre of Holbrook close to the existing highway would experience a reduction in noise levels as traffic diverts from the existing highway to the project. Residences located on the western side of the existing highway and isolated residences may experience increased noise levels due to the project. Noise mitigation measures (eg at-road or architectural treatment), where appropriate, would be implemented to minimise impacts from the operation of the project.

Visual

The project would have some visual impacts on identified viewpoints in the assessment area, and would result in visual changes to the landscape character. However, the visual amenity and landscape assessment undertaken for the project (refer Section 10.4) indicated that the project would satisfy the relevant urban design objectives of the project, and that the potential visual and landscape character impacts could be mitigated through the measures and commitments identified in Chapters 10 and 11 respectively.

Having regard to the proposed mitigation and management measures identified in Chapters 9 and 10, and the draft statement of commitments identified in Chapter 11, the expected social impacts of the project can be managed to reduce impacts to an acceptable level.

Economic considerations

Holbrook is in a strategic location on the Hume Highway between Sydney and Melbourne, such that a high proportion of the businesses in the town are highway dependent. The economic assessment undertaken for the project (refer Section 9.4) indicated the importance for the local economy of travellers stopping and/or staying overnight or longer in the town.

During the construction period, the presence of construction personnel would likely filter into Holbrook through the local economy. This may include localised economic stimulus and increased business turnover from the workforce purchasing local goods, services and accommodation as well as more regional economic benefits.

During operation, the project is expected to have some adverse impacts on the economy of Holbrook. Previous studies of the impacts of highway bypasses have indicated that there is a reduction in stopping traffic (ie typically short stops for fuel, food, rest facilities) following the opening of a bypass. A reduction in stopping trade can result in a decrease in the value of highway generated trade, the closure of highway dependent businesses, loss of jobs and flow-on effects for other businesses and the community as a whole.

The project would alter patronage to businesses along the existing highway as traffic wishing to access these businesses would have to leave the Hume Highway and enter Holbrook via the Wagga Wagga Road or the southern interchange.

Highway dependent businesses in Holbrook indicated a heavy dependence on passing trade. Accordingly, considerable decreases in turnover as a result of the project are anticipated. This highlights the potential for adverse impacts on the sustainability of highway dependent businesses in Holbrook. By comparison the accommodation sector is likely to be least affected by the project as a result of the improved environmental amenity of the town, appealing to both potential short-term and long-term stayers.

Holbrook will retain its existing role, and its identity as a regional service town. With this identity and with support from community stakeholders, businesses may have the ability to change and adapt to the post-bypass environment. Section 9.4 identifies some strategies that could be adopted by community stakeholders to assist in mitigating certain social and economic impacts from the project.

The project is likely to have some adverse impact on local agribusiness. Land acquisition and severance has been minimised through design, and the RTA has held discussions with all directly affected landholders on how to best minimise the impact on the function and amenity of their land use. The project would result in the loss of some agricultural land and there would be some impact on the viability, profitability, productivity and sustainability of directly affected agribusiness. The project is unlikely to result in the cessation of agricultural practices at any impacted agribusiness. Moreover, the viability of agricultural business at a local and regional level would not be affected.

The project would assist in improving the capacity and performance of the Hume Highway, bringing substantial long-term national and state-wide economic benefits by facilitating the enhanced interstate trade of goods and services. The project is an essential component of the larger Hume Highway duplication project and is fundamental to the realisation of the identified benefits.

Having regard to the proposed mitigation and management measures identified in Chapters 9 and 10, and the draft statement of commitments identified in Chapter 11, the expected economic impacts of the project can be managed to reduce impacts to an acceptable level.

Suitability of the site

As detailed in Section 4.1, selection of the preferred option and development and refinement of the concept design involved careful consideration of the potential environmental, social and economic impacts, as well as the opinions and concerns of the community and relevant agencies. On balance, compared with other options, the preferred option is considered to be the most suitable for the project as:

- It is included in the draft Strategic Land Use Plan for Holbrook, which has influenced a number of planning responses, such as future land use planning and urban sub-division, the need for future residential areas and opportunities and potential increases in commercial and industrial activities.
- Noise impacts could be predominantly minimised or mitigated through further design investigation, which was an outcome supported by the DECCW.
- The main environmental concerns for the other options, such as potential impacts on Aboriginal cultural heritage were largely difficult to mitigate.
- It has less impact on public facilities (hospital, racecourse, Holbrook Golf Course and sporting complex).

Based on the preferred option selection and concept design and the need to appropriately balance potential environmental, social and economic impacts, the site is considered suitable for the project.

Public interest

The Hume Highway is part of the National Highway network servicing inter-regional and interstate users; it is the main road transport corridor linking Sydney and Melbourne. The Hume Highway is also the major road linking local and regional areas surrounding the project.

In March 2009, the Minister for Planning declared the Hume Highway bypass of Holbrook to be a critical infrastructure project because it is essential to the State for economic, environmental and social reasons.

Assessment of the existing traffic conditions of the Hume Highway at Holbrook identified that the heavy vehicle peak occurs around midnight and that traffic volumes are the heaviest during holiday periods. Congestion occasionally occurs during these periods. The project will provide adequate capacity for future traffic growth.

The project will contribute to improved safety along the Hume Highway and within Holbrook by reducing conflicts between local traffic and through traffic in the town. Improved clear zones and sealed shoulders would be provided on the project in addition to a central median, which will reduce the incidence of head-on crashes.

As discussed in Section 3.1, the section of the Hume Highway in Victoria is fully duplicated. In NSW, dual carriageway conditions exist on at least 80 per cent of the highway. Completion of the project is an important element in the completion of the Hume Highway duplication in NSW, critical to the improvement of travel efficiency and driving conditions on this nationally strategic and export-oriented freight corridor. Completion of dual carriageway conditions on the Hume Highway between Sydney and Melbourne will facilitate increased infrastructure handling capacity and improved transport productivity.

For these reasons, the project is considered to be in the public interest.

12.2 Objects of the *Environmental Planning and Assessment Act 1979*

12.2.1 Relevance to the project

Table 12-1 identifies the objects of the *Environmental Planning and Assessment Act 1979* and their relevance to the project.

Table 12-1 Objectives of the *Environmental Planning and Assessment Act 1979* and relevance to the project

Object	Comment
(a) (i) To encourage the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, waters, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment.	The project design and impact mitigation and management measures detailed in this environmental assessment allow for the proper management, development and conservation of natural and artificial resources. The main objective of the project is to provide a bypass of Holbrook that will improve the safety and transport efficiency of the existing Hume Highway. It is recognised that there would be some impact on agricultural land as a result of the project; however, this would not be significant at a regional level.
(a) (ii) To encourage the promotion and co-ordination of the orderly economic use and development of land.	The project will form an important element in the completion of the Hume Highway duplication in NSW. It will assist in the coordination of the orderly economic use and development of land for the region and along this nationally significant freight transport corridor.
(a) (iii) To encourage the protection, provision and co-ordination of communication and utility services.	Utilities affected by the project will be relocated and maintained as described in Section 5.3.11.
(a) (iv) To encourage the provision of land for public purposes.	The project itself is proposed for a public purpose.
(a) (v) To encourage the provision and co-ordination of community services and facilities.	The project has been designed to minimise the impacts on community services and facilities in Holbrook as far as possible. Where there are direct impacts, these will be mitigated and managed. While it is recognised that the project will have some impacts on individual businesses and agribusinesses, these will not adversely affect the ability of the community to access services and facilities in the town and will improve access to other community services and facilities in the region.
(a) (vi) To encourage the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities and their habitats.	The project has been designed to minimise impacts on the environment, including threatened species, populations and ecological communities and their habitats. Additional measures are proposed to manage and offset impacts during and after construction.
(a) (vii) To encourage ecologically sustainable development.	ESD has been considered in Section 12.2.2.
(a) (viii) To encourage the provision and maintenance of affordable housing.	Not relevant to the project.
(b) To promote the sharing of responsibility for environmental planning between different levels of government in the State.	Not relevant to the project.

Object	Comment
(c) To provide increased opportunity for public involvement and participation on environmental planning and assessment.	The project development process has involved extensive consultation with relevant parties and this will continue in the detailed design, construction and operation phases. Community involvement in the planning and assessment of the project is described in Chapter 7.

12.2.2 Ecologically sustainable development

ESD is development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends. The principles of ESD have been an integral consideration for the project. This includes the effective integration of economic and environmental considerations in all decision-making processes.

In accordance with the *Environmental Planning and Assessment Regulation 2000*, the four principles of ESD, as set out in Schedule 2, are:

- The precautionary principle — where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for not implementing mitigation measures or strategies to avoid potential impacts.
- Inter-generational equity — the present generation should ensure that the health, diversity and productivity of the environment are equal to or better for the future generations.
- Conservation of biological diversity and ecological integrity — preserving biological diversity and ecological integrity requires that ecosystems, species and genetic diversity within species are maintained.
- Improved valuation and pricing of environmental resources — this principle establishes the need to determine economic values for services provided by the natural environment, such as the atmosphere's ability to receive gaseous emissions, cultural values and visual amenity.

The RTA is committed to providing its services in an environmentally responsible manner and managing or eliminating any risks that may lead to an adverse effect on the environment. Details of how the principles of ESD have been incorporated into the project are provided in Table 12-2.

Table 12-2 Incorporation of ESD principles in the project

ESD principle	Comment
Precautionary principle	A precautionary approach has been applied throughout the development of the proposal. Specialist studies have been undertaken to evaluate, with a measure of scientific certainty, the risk of environmental damage and avoid impact where possible. An environmental risk analysis was prepared at the project application phase and updated in this environmental assessment. Conservative 'worst case' scenarios have been addressed in the impact assessment. Where impacts have proven unavoidable, specialist studies have recommended measures to mitigate and, where necessary, offset the potential impacts. Where available, best practice management measures have been proposed throughout the environmental assessment and incorporated into the Draft Statement of Commitments.

ESD principle	Comment
Inter-generational equity	Issues that have potential long-term implications, such as consumption of non-renewable resources, waste disposal and greenhouse emissions, removal of vegetation, land use changes, impacts on visual amenity and water access and quality have been avoided and minimised through route selection, concept design and application of management measures as described in Chapter 10. Although the proposal involves the removal of critically endangered Box-Gum Woodland, a biodiversity offset package would be developed to secure an area of this vegetation community for future generations. Travelling stock routes and reserves affected by the proposed bypass would be re-routed and replaced. Holbrook would be promoted as a rest stop location to maintain the sustainability of businesses. The project has been designed to benefit both existing and future generations in the following ways: ▪ Reducing conflict between through and local traffic and pedestrians in the town. ▪ Improving travel and freight efficiency: ▸ Better connections to local, regional, state and national road network. ▪ Improving amenity of the town. ▪ Maintaining Holbrook as a regional service town.
Conservation of biological diversity and ecological integrity	A key objective of the project is to minimise adverse impacts on the environmental values of the area. Conservation of biological diversity and ecological integrity has been considered during route selection and subsequent stages of project development. Impacts have been avoided and minimised where possible. Where impacts have proven unavoidable, mitigation measures are proposed. For example, flow and fish passage would be maintained at waterway crossings in accordance with Department of Infrastructure and Investment policy. Fauna crossing structures would be developed in consultation with DECCW and natural and artificial habitat features would be placed in suitable areas to provide alternate habitat. Where residual impacts remain, offsets would be developed. The removal of 24 hectares of Box-Gum Woodland and fauna habitat would be offset, enabling an area of this vegetation community to be protected.
Improved valuation and pricing of environmental resources.	Environmental and social issues were considered in the strategic planning and establishment of the need for the project, and in consideration of options. The value placed on environmental resources is evident in the extent of the planning, environmental investigations and design of management measures.

12.3 Conclusions

The project would contribute to meeting the primary objective of the Hume Highway Duplication: to achieve dual carriageway conditions along the Hume Highway between Sydney and Melbourne. The project has important economic and road user benefits that assist the Hume Highway Duplication in meeting the AusLink National Network objectives of supporting national economic growth through the development of sustainable transport solutions that:

- Increase infrastructure handling capacity and efficiency.
- Improve safety and security.

- Improve transport productivity on its nationally strategic and export oriented freight corridors.
- Improve the reliability of travel on interstate and inter-regional corridors.
- Are consistent with viable and long-term economic and social outcomes, and with the obligation to current and future generations to sustain the environment.

In meeting the primary objectives of the Hume Highway Duplication, the design development process has sought to minimise the potential environmental, social and economic impacts to meet project-specific objectives.

As with any highway development, the project would result in some adverse impacts. The development of mitigation and management measures to reduce the scale of these impacts has been a key feature of project development and has been reflected through this environmental assessment. The RTA has made firm commitments to implement appropriate mitigation and management measures. Where impacts cannot be avoided or fully mitigated, residual impacts would be offset.

There is the potential for a degree of cumulative impacts associated with this and other projects that form the Hume Highway Duplication program. The precautionary approach taken in the development of mitigation and management measures proposed for this project would provide sufficient mitigation to offset both immediately-identified impacts and potential additional or cumulative impacts that may arise.

The project achieves acceptable environmental, social and economic outcomes, and delivers substantial road safety and wider economic and road-user benefits. The project is considered justified.