10 Draft statement of commitments

This chapter outlines the draft statement of commitments (key actions) proposed by RMS to avoid, minimise, manage, mitigate, offset and/or monitor impacts identified in the environmental assessment. The RMS is committed to implementing the project as described in **Chapter 4**, inclusive of the mitigation measures outlined in **Chapter 7** and **Chapter 8**. The RMS intends to achieve the outcomes and key actions detailed in the draft statement of commitments (SoC). Any consortium or contractor involved in the design, construction and/or operation phases of the project would be required to undertake all works in accordance with these commitments.

Director-General's requirements	Where addressed
*A **draft Statement of Commitments (SoC).***	
The SoC must incorporate or otherwise capture all measures to avoid, minimise, manage, mitigate, offset and/or monitor the impacts of the project and the residual impacts.	Table 10.1

From an early stage, the environmental assessment considered the project's potential environmental issues and identified the desired environmental outcomes. This influenced how the concept design was developed and highlighted the management measures required to avoid or reduce environmental impacts.

The commitments, which are listed in **Table 10–1**, are designed to avoid, manage, mitigate, offset and/or monitor the environmental impacts of the project during pre-construction, throughout construction and into the operational phase. The table outlines the desired outcome, the actions that the RMS will undertake to achieve this outcome, and the timing (that is, when the commitment would be implemented). It is presented in a format that is readily auditable and transparent.

Table 10-1 Draft statement of commitments

Outcome	Ref #	Key action	Timing	Reference document
Environmental management				
Compliance and continuous improvement in environmental management.	M1	The head contractor for the project will have an ISO14001 accredited environmental management system.	Pre-construction and construction.	ISO 14001:2004 Environmental Management Systems – requirements with guidance for use. RMS QA specification G36 – environmental protection.
	M2	Suitably qualified and experienced personnel will develop, implement and regularly audit the project specific environmental management plans, procedures and training for all personnel.	Pre-construction and construction.	Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources (DIPNR) 2004). RMS QA specification G36 – environmental protection. All relevant RMS policies, specifications, guidance notes and environmental directions.
	M3	The environmental management plans and procedures will incorporate all necessary environmental management measures including those identified in Chapters 7 and 8 of the environmental assessment and, where appropriate, subsequent environmental management measures arising from the submissions report.	Pre-construction and construction.	Chapters 7 and 8 of the environmental assessment. Submissions Report Conditions of approval.
	M4	An environmental performance and compliance program will be prepared and maintained for the duration of the project to enable tracking and progressive reporting on achievement of stated commitments, compliance with conditions of approval and other regulatory or licensing aspects of the project.	Pre-construction, construction and operation, as required.	

Outcome	Ref #	Key action	Timing	Reference document
Community consultation				
The community is informed about the project.	C1	The community will be informed through: • Letter box drops, media releases and community updates. • An internet site established and maintained for the duration of the project. • The Berry project office • Email to registered stakeholders • Road signs (electronic and static). • Targeted consultation with affected individuals or groups. • Notification of the environmental assessment.	Pre-construction and construction.	Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). Community Involvement Plan.
	C2	Changes to property access will be negotiated with affected residents prior to the commencement of the relevant construction activity.	Pre-construction.	Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). Community Involvement Plan.
	C3	Affected residents will be informed of work outside of extended construction hours prior to the commencement of that work.	Pre-construction.	Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). Community Involvement Plan.
The community can make enquiries and complaints and will receive a timely response.	C4	The community will be able to make enquiries or complaints using the project's postal, email and web page addresses, the Berry project office or the project's business hours toll free number. These contact details will be publicised. All complaints will be acknowledged within 24 hours (or as otherwise specified in the Environment Protection Licence (EPL)), and tracked until resolved.	Pre-construction and construction.	Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). AS 4269 Complaints Handling. Community Involvement Plan. Environmental Protection Licence.

Outcome	Ref #	Key action	Timing	Reference document
Traffic and transport				
Construction traffic impacts on the highway and local traffic are minimised.	T1	A Traffic Management Plan (as part of the Construction Environmental Management Plan) will be developed to ensure traffic impacts are managed and minimised.	Pre-construction	
Continuous access to local roads will be provided.	T2	Construction staging will be planned to maintain access, in some capacity, to the local road network during the proposed road closures.	Pre-construction and construction.	RMS *Traffic Control at Work Sites* (RTA 2003). RMS QA Specification G10 Control of Traffic. *Community Involvement and Communications. Draft: A resource manual for staff* (RTA, June 2008). Section 7.1 of the environmental assessment.
Efficiency for highway users is improved once operational.	T3	Traffic levels and operational performance will be monitored six and 12 months after construction, particularly during peak periods.	Operation.	Section 7.1 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Noise and vibration				
Construction noise and vibration impacts are minimised.	NV1	A Noise and Vibration Management Plan (as part of the Construction Environmental Management Plan) will be developed to ensure noise and vibration impacts are managed and minimised.	Pre-construction	*Interim Construction Noise Guidelines 2009* (Department of Environment, Climate Change and Water (DECCW), 2009). RMS *Environmental Noise Management Manual* (RTA, 2001). NSW Government's *Environmental Criteria for Road Traffic Noise* (Environment Protection Authority (EPA) 1999). AS 2436-1981 Guide to noise control on construction, maintenance and demolition sites. *Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration* (Australian and New Zealand Environment Conservation Council (ANZECC), 1990). *Assessing Vibration: A Technical Guideline* (Department of Environment and Conservation (DEC), 2006). German Standard DIN 4150 Part 3. Section 7.2 of the environmental assessment. Submissions report. Conditions of approval.

Outcome	Ref #	Key action	Timing	Reference document
	NV2	Construction would generally be confined to approved construction hours, including any extended working hours, which will be specified in the approved Construction Environmental Management Plan for the project. Specific exceptions identified within this Environmental Assessment would also be included for out of hours work for emergency situations, traffic safety and efficiency or safe transport of plant or materials. Specific out-of-hours work activities would be assessed on a case-by-case basis by the EPA.	Construction.	Section 7.2 of the environmental assessment.
	NV3	Potentially affected sensitive receivers will be given adequate prior notice of the construction program in accordance with the EPL, kept informed throughout the construction period, and provided with a 24-hour hotline number for complaints. A specific notification procedure will be developed for loud noise generating activities, extended hours or out-of-hours activity. Noise complaints will be dealt with through a standard complaints management procedure identified in the community involvement plan.	Construction.	Section 7.2 of the environmental assessment.
Operational noise impact is minimised.	NV4	Increases to operational noise above the Environment Protection Authority (EPA) base criteria at noise-sensitive receivers (modelled for up to 10 years after project opening) will be mitigated where feasible and reasonable. The mitigation measures will be developed in consultation with a qualified and experienced acoustic specialist and the affected property owner.	Pre-construction and construction.	NSW Government's *Road Noise Policy* (Office of Environment and Heritage (OEH), 2011). RMS *Environmental Noise Management Manual* (RTA, 2001). Section 7.2 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
	NV5	Operational noise monitoring will be undertaken within one year of project opening in accordance with the RMS *Environmental Noise Management Manual* (RTA, 2001). If monitoring indicates a clear trend that traffic noise levels exceed those predicted, all feasible and reasonable measures will be investigated in consultation with a qualified and experienced acoustic specialist and the affected property owner.	Operation.	NSW Government's *Road Noise Policy* (OEH, 2011). RMS *Environmental Noise Management Manual* (RTA, 2001). Section 7.2 of the environmental assessment.
	NV6	Where feasible and reasonable, existing noise levels that are >65 dBA $_{Leq(15hr)}$ (day) and >60 dBA $_{Leq(9hr)}$ (night) at noise sensitive receivers will be mitigated using feasible and reasonable measures and in consultation with a suitably qualified and experienced acoustic specialist and the affected property owner.	Pre-construction and construction.	NSW Government's *Road Noise Policy* (OEH, 2011). RMS *Environmental Noise Management Manual* (RTA, 2001). Section 7.2 of the environmental assessment.
Biodiversity				
Minimise impacts on flora.	F1	A Flora and Fauna Management Plan and Vegetation Management Plan (as part of the Construction Environmental Management Plan) will be developed to ensure flora and fauna impacts are managed and minimised.	Pre-construction	Chapter 7.3 of the environmental assessment. Submissions Report. Conditions of Approval.
	F2	Prior to construction, areas containing river flat eucalypt forest will be identified and marked. Disturbance will be limited to areas specified for removal and all other areas will be avoided.	Pre-construction and construction.	Chapter 7.3 of the environmental assessment.
	F3	Ancillary facilities and stockpile sites will be located at least 50 metres away from sensitive areas and stockpiling materials on adjacent vegetation will be avoided.	Pre-construction and construction.	Section 7.3 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Minimise impacts on fauna.	F4	A suitably qualified and experienced ecologist will conduct a pre-clearance fauna survey prior to any clearing of native trees. Habitat trees and nests will be identified marked and retained where possible. Clearing and felling procedures will be implemented to reduce the risk of injury to any nesting fauna. An ecologist will be present to supervise the removal of hollow bearing trees.	Pre-construction and construction.	Section 7.3 of the environmental assessment. *RMS Biodiversity Guidelines:* Guide 1 - Pre-clearing process for fauna rescue associated with road works (RTA, 2011). RMS *Biodiversity Guidelines*: Guide 4 - Clearing of vegetation and removal of bushrock (RTA, 2011) DEC (2004) Threatened species survey and assessment: Guidelines for developments and activities (working draft).
	F5	Natural and artificial habitat features, such as bat roost and nest boxes, will be installed to replace hollow-bearing trees that are removed.	Pre-construction and construction.	Section 7.3 of the environmental assessment. *RMS Biodiversity Guidelines:* Guide 8 - Nest Boxes (RTA 2011) Threatened species survey and assessment: Guidelines for developments and activities (working draft).
Minimise impacts on wildlife corridors and connectivity.	F6	Fauna mitigation structures, such as fauna underpasses, fauna overpasses and fauna fencing will be provided as detailed in Section 7.3. These structures will be designed to assist the safe passage of fauna underneath or over the highway.	Pre-construction, construction and operation.	Section 7.3 of the environmental assessment.
	F7	Riparian vegetation will be retained, where possible, under bridges, at temporary creek crossing sites, adjacent to ancillary sites and in the vicinity of rope bridges. Roadside vegetation will be retained in the vicinity of rope bridges.	Pre-construction, construction and operation.	Section 7.3 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Manage pest and weed species.	F8	Weed and pest species will be proactively managed throughout the project, and training will be provided to staff.	Pre-construction, construction and operation.	Section 7.3 of the environmental assessment. *RMS Biodiversity Guidelines:* Guide 6 - Weed management (RTA, 2011). *RMS Biodiversity Guidelines:* Guide 10 – Aquatic habitats and Riparian Zones (RTA 2011). *Noxious Weeds Act 1993.*
Minimise impacts on water quality and aquatic ecology.	F9	Erosion and sediment control measures will be implemented. These will include scour protection and water quality basins.	Pre-construction, construction and operation.	Section 7.3 and 7.4 of the environmental assessment.
Minimise alterations to natural flow regimes and impacts on fish passage.	F10	Permanent and temporary waterway crossings will be designed and constructed in accordance with the fish habitat classification of each waterway.	Pre-construction and construction.	Why do fish need to cross the road? Fish passage requirements for waterway crossings (NSW Fisheries, DPI, 2003)
Offset residual vegetation loss.	F11	A biodiversity offset package will be developed in accordance with the biodiversity offset strategy and in consultation with OEH and DTIRIS. The area of restoration would be guided by a simulated assessment of the project impacts and potential offsets using the BioBanking Assessment Methodology with a minimum of 2:1 for riparian vegetation to meet DTIRIS requirements. A simulated BioBanking assessment undertaken for the project determined that native vegetation removed would be offset at an average ratio of 5.3:1 in order to achieve the ‘improve or maintain’ standard.	Pre-construction.	Section 7.3 and Appendix F of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Monitor the effectiveness of flora and fauna management and mitigation measures.	F12	Undertake bi-annual monitoring of nest boxes and bat roost boxes by a qualified and licensed ecologist during construction and annual monitoring for a period of three years post completion of construction with the provision to review the continuation and/or frequency of monitoring after the completion of three years monitoring Undertake bi-annual monitoring of dedicated fauna underpasses and rope bridges (using equipment such as remote cameras) by a qualified and licensed ecologist for a period of three years post completion of construction with the provision to review the continuation and/or frequency of monitoring for a further two years in the event a negative impact on species is detected. Conduct regular checks of fauna fencing to identify and fix any damage. Conduct road kill monitoring during operation of the project over a 12 month period at weekly intervals. The monitoring would include a record of the species (if possible) and the GPS location.	Operation.	Section 7.3 of the environmental assessment. RMS Biodiversity Guidelines (RTA 2011).
Surface water and groundwater				
Minimise water quality impacts during construction and operation.	SG1	Detailed design will confirm the configuration and location of water quality basins, swales and biorentention systems at sensitive receiving environments to ensure that the project water quality design criteria are achieved in response to any design refinements.	Pre-construction.	*Managing Urban Stormwater: Council Handbook* (EPA, 1998). Section 7.4 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Minimise water quality impacts and impacts to the flow regimes of Town Creek and Bundewallah Creek.	SG2	During detailed design, the design and revegetation strategy of the Town Creek diversion will include measures to maintain flushing efficiency and to mitigate erosion risk at the connection with Bundewallah Creek. The design of the diversion would be finalised in consultation with OEH, DPI (Fisheries), the NSW Office of Water (NOW) and effected landowners.	Pre-construction.	Section 7.4 of the environmental assessment.
Minimise impacts on farm dams.	SG3	Detailed design will verify if there might be any potential permanent losses to farm dam catchments, in consultation with affected landowners and investigate reasonable and feasible options to mitigate possible impacts.	Pre-construction.	Section 7.4 of the environmental assessment.
Minimise impacts on groundwater levels.	SG4	As the detailed design progresses any potential for changes in the groundwater table and any resulting impacts will be reviewed in response to any design refinements. Where necessary, measures to manage the changes will be designed and implemented during construction and operation.	Pre-construction, construction.	*NSW State Groundwater Quality Protection Policy* (Department of Land and Water Conservation (DLWC), 1998). *(Draft) NSW State Groundwater Quantity Management Policy* (DLWC, n.d.). Section 7.4 of the environmental assessment.
	SG5	The need for dewatering and groundwater monitoring program(s) will be reviewed as the detailed design is refined, and appropriate discharge and treatment strategies for construction activities will be prepared, if required.	Pre-construction, construction.	*NSW State Groundwater Quality Protection Policy* (DLWC, 1998). *(Draft) NSW State Groundwater Quantity Management Policy* (DLWC, n.d.). *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC, 2000). Section 7.4 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Maximise water efficiency and minimise water quality impacts.	SG6	A Soil and Water Management Plan (as part of the Construction Environmental Plan) will be developed to ensure water resources are used in the most efficient manner with a focus on achieving water savings, targeting water recycling and re-use and appropriate use of treated effluent, where feasible.	Pre-construction, construction.	TIP Sheet – Use of Reclaimed Water TO10 (RTA, December 2006). The National Guidelines for Water Recycling: Managing Health and Environmental Risks (Natural Resource Management Ministerial Council et al, 2006). Section 7.4 of the environmental assessment.
Flooding				
Minimise impacts of ancillary facilities.	F1	Ancillary chemical storage facilities will be located above the 1 in 100 year flood level.	Construction.	Section 7.5 of the environmental assessment.
	F2	Sites for ancillary facilities will satisfy the criteria provided in Chapter 4 of the environmental assessment unless otherwise approved through the CEMP.	Construction.	Section 7.5 of the environmental assessment. *Stockpile Site Management Procedures* (RTA, 2011).
	F3	A weather monitoring and response program will be considered to proactively respond to major weather events.	Construction.	Section 7.5 of the environmental assessment.
Minimise changes in current flow regimes.	F4	Waterway structures will be designed to maintain existing flow regimes, where possible.	Pre-construction, construction and operation.	Section 7.5 of the environmental assessment.
Manage the impacts associated with changes to flooding and drainage.	F5	Detailed design will seek to further minimise any increase in the peak flood levels in the 1 in 100 year flood event.	Pre-construction.	Section 7.5 of the environmental assessment.
	F6	Any potential increases in flood levels at Berry in the 1 in 100 year flood event that result from the construction of the project will be verified in response to any design refinements as the detailed design is developed and necessary mitigation will be implemented in consultation with landowners, where relevant.	Pre-construction.	Section 7.5 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
	F7	Stock refuge will be maintained at Broughton Creek bridge 2 and will be determined during detailed design in consultation with landowners.	Pre-construction, construction and operation.	Section 7.5 of the environmental assessment.
Minimise impacts on channel structure.	F8	In response to any design refinements, the development of the detailed design will include ongoing consideration to limit impacts on overland flow paths at the embankment between Broughton Creek bridge 2 and Broughton Creek bridge 3, and upstream and downstream channel structures, including the Town Creek diversion (eg through culvert sizing, energy dissipation measures, scour protection and other design features to control flow intensity and direction).	Pre-construction, construction and operation.	Section 7.5 of the environmental assessment.
	F9	Stream bank/bed erosion controls will be installed and maintained in accordance with the provisions of the 'Blue Book'.	Pre-construction, construction and operation.	Managing Urban Stormwater – Soils and Construction Volume 1 (Landcom, 2004). Managing Urban Stormwater – Soils and Construction, Volume 2D – Main Road Construction (DECCW, 2008).
Landscape character and visual amenity				
Community acceptance, support for and ownership of the design of the project are maximised.	LVA1	Continued engagement with the local community to gather feedback as the design develops with consideration for the urban and landscape design strategy for the project.	Pre-construction.	Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). Section 7.6 of the environmental assessment.
Loss of pedestrian and cyclist amenity is minimised and the project integrates with existing pedestrian access mobility plans (PAMP) for Berry.	LVA2	Continued engagement with the local community to gather feedback as the design develops and facilitate integration of the project with the existing PAMP for Berry.	Pre-construction.	Existing PAMP for Berry. Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). Section 7.6 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Landscape character and visual amenity impacts associated with major elements of the project are minimised.	LVA3	The detailed design will be developed with reference to the minimum reference design requirements and the findings of the CM+ Urban Design Study for the following project components: • All bridges within the project, with consideration of the Bridge Aesthetics Design Guidelines (RTA 2003). • Embankments across Broughton Creek west of Toolijooa Ridge. • Noise attenuation measures along the length of the project.	Pre-construction.	Bridge Aesthetics Design Guidelines (RTA 2003). Noise Wall Design Guideline (RTA 2006). Section 7.6 of the environmental assessment.
Visual amenity impacts during construction are minimised.	LVA4	Construction areas will be clearly identified to reduce the extent of vegetation requiring removal. Soil that has been stripped, stockpiled and/or reinstated as part of the construction works will be appropriately managed.	Pre-construction and construction.	RMS QA Specification G40 Clearing and Grubbing. RMS QA Specification R178 Vegetation. RMS QA Specification R179 Landscape Planting. Section 7.6 of the environmental assessment.
Aboriginal cultural heritage				
Aboriginal sites to be avoided are protected from impact.	AH1	A Heritage Management Plan (as part of the Construction Environmental Management Plan) will be developed to ensure heritage impacts are managed and minimised.	Pre-construction	Section 7.7 of the environmental assessment. Submissions Report. Conditions of approval.
	AH2	Aboriginal sites to be avoided will be fenced and signposted as exclusion zones before and during any works in the vicinity.	Pre-construction and construction.	Section 7.7 of the environmental assessment.
	AH3	Disturbance to the natural soil profile of G2B A13 and G2B A14 will be avoided, where possible.	Pre-construction and construction.	Section 7.7 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
	AH4	All construction personnel will receive training in the management of Aboriginal cultural materials, including legal obligations, the application of protocols and the recognition of Aboriginal cultural materials.	Pre-construction and construction.	Section 7.7 of the environmental assessment.
Any unknown Aboriginal objects and/or places encountered are assessed.	AH5	If skeletal remains or unknown Aboriginal objects or places are encountered, all works that would potentially impact the find will stop immediately. Works will not re-commence until appropriate clearance has been received or as determined through the implementation of the Unexpected Finds Procedure (RMS, 2012).	Construction.	*National Parks and Wildlife Act 1974.* RMS *Unexpected Heritage Finds Procedure.* *Environmental Planning and Assessment Act 1979.* Skeletal remains - Guidelines for the management of human skeletal remains under the *Heritage Act 1977* (NSW Heritage Office, 1998).
	AH6	Should previously unidentified Aboriginal objects or items be located during the works, all work will cease in the vicinity of the find until specialist Aboriginal heritage advice is received.	Construction.	*National Parks and Wildlife Act 1974.* RMS *Unexpected Heritage Finds Procedure.* *Environmental Planning and Assessment Act 1979*.
Non-Aboriginal (historic) heritage				
Impacts to Non-Aboriginal heritage items are avoided or minimised.	H1	Non-Aboriginal heritage items to be avoided that are located inside the construction footprint will be fenced and signposted as exclusion zones before and during any works in the vicinity.	Pre-construction and construction.	Chapter 7.8 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
	H2	An archival recording of Glen Devan (G2B H11) and its grounds will be conducted prior to the commencement of construction. This recording would include documentation of construction methods and materials exposed during any demolition works. The RMS would remain open to the possibility of a third party or agent proposing to conserve all or part of the G2B H11 structure by moving it to a new location within or near Berry, at that party's expense. RMS would seek third parties who may be interested in conserving all or part of the G2B H11 structure(s). If no interested third party or agent is identified, it would be demolished. In the event of demolition, recover and reuse (with commemorative identification) suitable demolition material in appropriate local, infrastructure such as interpretive or entrance features, way-side stop facilities, landscaping or artwork.	Pre-construction.	Chapter 7.8 of the environmental assessment.
Any unknown non-Aboriginal heritage encountered is assessed.	H3	If any unknown non-Aboriginal heritage items are encountered, all works that would potentially impact the find will stop immediately. Works will not recommence until appropriate clearance has been received or as determined through the implementation of the Unexpected Finds Procedure (RMS, 2012).	Pre-construction and construction.	*Heritage Act 1977.* RMS *Unexpected Heritage Finds Procedure.* *Environmental Planning and Assessment Act 1979.*

Outcome	Ref #	Key action	Timing	Reference document
Archival records are prepared and made available to the public.	H4	Prior to any actual impact, an archival record will be prepared for any directly impacted item. Copies will be kept in the RMS library and distributed to the Kiama library and Shoalhaven library (Nowra branch).	Pre-construction.	*How to prepare archival records of heritage items* (NSW Heritage 1998). Chapter 7.8 of the environmental assessment.
Land use and property				
Appropriate compensation will be paid for property acquisition.	P1	Negotiation for all property acquisitions will be in accordance with the RMS' *Land Acquisition Information Guide* (RTA, 2011) Compensation assessment will be in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991*.	Pre-construction.	*Land Acquisition Information Guide* (RTA, 2011). *Land Acquisition (Just Terms Compensation) Act 1991.* Section 7.9 of the environmental assessment.
Property access will be maintained.	P2	Property access will be maintained during construction. If temporary or alternative access is required, it will be provided in consultation with the affected landowner/s.	Construction.	*Community Participation and Communications. A Resource Manual for Staff* (RTA, 2010). Section 7.9 of the environmental assessment.
Socio-economic impact				
Minimise impacts on agricultural businesses.	S1	Ongoing consultation with affected agricultural business owners will be undertaken. RMS will acquire properties in accordance with *Land Acquisition (Just Terms Compensation) Act 1991*. Impact on business is considered in accordance with this Act..	Pre-construction, construction and operation.	Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). Community involvement plan. Land Acquisition Information Guide (RTA, 2011). Land Acquisition (Just Terms Compensation) Act 1991.

Outcome	Ref #	Key action	Timing	Reference document
Minimise impacts on tourism and highway reliant businesses.	S2	Sign posting and traffic management to encourage highway traffic to visit Berry for a rest stop will be provided. Continued discussions with Shoalhaven City Council will be held to assist in developing strategies to encourage the ongoing viability of businesses in the town and to encourage new businesses.	Pre-construction, construction and operation.	Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). Community involvement plan.
Maintain access and connectivity to local roads, properties and between Berry and west Berry during construction and operation.	S3	Through the implementation of the Traffic Management Plan and the Community Involvement Plan, residents and road users will be advised in a timely manner before any changes to local road or property accesses are implemented. Functional and safe access will be provided to all local roads and properties in the study area.	Pre-construction, construction and operation.	Community involvement plan. Traffic management plan.
Minimising amenity impacts during construction.	S4	Implementation of the Construction Environmental Management Plan (CEMP) which will include: • Notifying residents prior to undertaking noisy activities. • Establishment of a 24 hour hotline and complaints process. • Avoiding vegetation clearance where possible and progressively revegetating areas to minimise visual impacts.	Pre-construction and construction.	Construction noise and vibration management plan. Air quality management plan. Erosion and sedimentation management plan.

Outcome	Ref #	Key action	Timing	Reference document
Minimising amenity impacts during operation.	S5	Noise barriers will be constructed in the vicinity of North Street and Huntingdale Park Road. Architectural treatments will be provided for 16 properties (subject to confirmation during detailed design). The management measures outlined in Section 7-6 and Appendix I will be implemented to minimise the visual impact of the project.	Operation.	Operational noise and vibration management plan. Urban and landscape design strategy.
Minimising impacts to recreational facilities during construction and operation.	S6	Access to recreational facilities will be maintained during construction and operation of the project, where practicable. Negotiations will be conducted with Berry Riding Club and Shoalhaven City Council to determine a new location for Berry Riding Club, and the two smaller riding clubs (where impact is likely), and if necessary to determine a temporary location during construction. Access to local creeks, including access to the existing Broughton Creek bridge will be maintained during construction and operation to provide access for recreational fishers.	Pre-construction, construction and operation.	Community Involvement and Communications. Draft: A resource manual for staff (RTA, June 2008). Community involvement plan. Traffic management plan.
Geology and soils				
Potential for erosion and sedimentation is minimised.	GS1	The area of soil exposure and disturbance will be restricted to the minimum amount necessary for construction.	Construction.	RMS QA Specification G40 Clearing and Grubbing.
	GS2	Detailed design will refine the requirements for construction erosion and sediment control, including the requirements for works within and adjacent to waterways.	Pre- construction and construction.	Section 8.1 of the environmental assessment. Erosion and Sedimentation Management Procedure (RTA, 2008).

Outcome	Ref #	Key action	Timing	Reference document
	GS3	Management measures will be designed and installed in consultation with a soil conservation specialist for areas of high risk of erosion and sedimentation.	Pre- construction and construction.	Section 8.1 of the environmental assessment. Erosion and Sedimentation Management Procedure (RTA, 2008). Managing Urban Stormwater – Soils and Construction Volume 1 (Landcom, 2004). Managing Urban Stormwater – Soils and Construction, Volume 2D – Main Road Construction (DECCW, 2008).
Effective erosion and sediment control measures	GS4	Monitoring of water quality upstream and downstream of the project site will be undertaken before and during construction, in accordance with the EPL. This monitoring will assess the effectiveness of impact mitigation and management strategies. Implementation of additional feasible and reasonable management measures will then occur, if found to be necessary.	Pre- construction and construction.	Section 8.1 of the environmental assessment. Erosion and Sedimentation Management Procedure (RTA, 2008). Managing Urban Stormwater – Soils and Construction Volume 1 (Landcom, 2004). Managing Urban Stormwater – Soils and Construction, Volume 2D – Main Road Construction (DECCW, 2008). RMS QA Specification G38 Soil and Water Management. RMS QA Specification G39 Soil and Water Management (Erosion and Sediment Control Plan).
Acid sulfate soils (ASS) to be avoided are protected.	GS5	Areas of ASS to be avoided will be fenced and signposted as exclusion zones before and during any works in the vicinity.	Pre- construction and construction.	Section 8.1 of the environmental assessment. Guidelines for the Management of Acid Sulfate materials: Acid Sulfate Soils, Acid Sulfate Rock and Monosulfidic Black Ooze (RTA 2005).

Outcome	Ref #	Key action	Timing	Reference document
Impact of exposing acid sulfate soils is minimised.	GS6	Exposed ASS will be neutralised and protected from surface run-on. Any acid runoff or acid material will be contained and treated.	Pre-construction and construction.	Section 8.1 of the environmental assessment. Guidelines for the Management of Acid Sulfate materials: Acid Sulfate Soils, Acid Sulfate Rock and Monosulfidic Black Ooze (RTA 2005). Protection of the Environment and Operations Act 1997.
Impact of exposing unforseen occurrences of contaminated soils is minimised.	GS7	Targeted soil contamination investigations will be undertaken during detailed design, if required. A Remedial Action Plan will be developed if contamination is found to pose unacceptable risks to the environment and human health.	Pre-construction and construction.	Section 8.1 of the environmental assessment. Contaminated Land Management Guideline (RTA 2005).
Air quality				
Dust generation and impact to sensitive receivers is minimised.	AQ1	Appropriate dust suppression measures including stabilising disturbed areas and watering unsealed roads and stockpiles, providing wind breaks, controlling truck speeds and movements on site to designated roadways and maintaining construction equipment will be implemented during construction. Dust generating activities will stop when and as required under the EPL.	Construction.	Section 8.2 of the environmental assessment.
Air quality environmental management measures are effective.	AQ2	Monitoring will be undertaken monthly to assess the effectiveness of the air quality environmental management measures. Where required, additional feasible and reasonable environmental management measures will be used.	Pre-construction and construction.	Section 8.2 of the environmental assessment. AS 3580.10.1-1991 Methods of Sampling Analysis of Ambient Air. DECC guideline Approved Methods for Modelling and Assessment of Air Pollutants in New South Wales (August 2005). AS 2922 Ambient Air Guide for Siting of Sampling Equipment.

Outcome	Ref #	Key action	Timing	Reference document
Hazard and risk				
Risk of an incident during construction is minimised.	HR1	During construction, bunds will isolate hazardous liquids and materials.	Pre-construction and construction.	Section 8.3 of the environmental assessment. AS 1940 The Storage and Handling of Flammable and Combustible Liquids.
	HR2	Appropriate controls will be put in place for all hazardous and potentially contaminating activities to prevent contamination of watercourses.	Construction.	Section 8.3 of the environmental assessment.
	HR3	All work health and safety measures will be in accordance with relevant legislation.	Construction.	Section 8.3 of the environmental assessment. *Work Health and Safety Act 2011.* Work Health and Safety Regulation.
Impacts to the eastern gas pipeline are to be avoided.	HR4	Protection measures for the eastern gas pipeline and suitable construction methods when working in the vicinity of the pipeline will be implemented in consultation with Jemena.	Pre-construction and construction.	Australian Standard AS 2885.1-2007 Pipelines – Gas and liquid petroleum – Design and Construction.
Hazards and risks during operation are minimised.	HR5	Permanent water quality basins will be designed during the detailed design phase to protect waterways from spills.	Operation.	Section 8.3 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Waste management				
Waste disposal is minimised.	WR1	Waste management will follow the waste hierarchy. The generation of waste will be avoided. Waste materials will be recovered and re-used on-site or alternative re-use arranged wherever feasible and reasonable. Disposal will be a last resort.	Construction.	*Waste Avoidance and Resource Recovery Act, 2001.* *Protection of the Environment and Operations Act, 1997.* Waste Avoidance and Resource Recovery Strategy (DECC 2006). NSW Government's Waste Reduction and Purchasing Policy. DECC (1999) Environmental guidelines – assessment, classification and management of liquid and non-liquid waste. RTA Stockpile Management Procedures 2001.
Greenhouse gas and climate change				
Minimise greenhouse gas emissions and energy consumption	GC1	Wherever feasible and reasonable, detailed design will consider whole of life reductions in greenhouse gas emissions and energy consumption.	Pre-construction and construction.	Section 8.5 of the environmental assessment. AS/NZS 1158:1.1.2005.
	GC2	Energy efficient work practices, including selection of materials and equipment, will be adopted to minimise energy use and greenhouse gas emissions associated with construction and ongoing maintenance where feasible and reasonable.	Pre-construction, construction and operation.	Section 8.5 of the environmental assessment.
	GC3	The use of renewable energy sources required to operate the Variable Message Signs would be investigated during detailed design phase.	Pre-construction and construction.	Section 8.5 of the environmental assessment.

Outcome	Ref #	Key action	Timing	Reference document
Ancillary facilities				
Impacts of ancillary facilities are minimised	AF1	Sites for ancillary facilities will satisfy the criteria provided in Chapter 4 of the environmental assessment unless otherwise approved through the CEMP.	Pre-construction and construction	Section 4.4.7 of the environmental assessment