

Appendix D

Draft Statement of Commitments

D.1 Draft Statement of Commitments

The environmental assessment of the proposed upgrade and associated infrastructure has identified a range of environmental outcomes and management measures that would be required to avoid or reduce its environmental impacts. These have been converted into specific commitments and are described in this Appendix.

Overview

Chapters 10 to 21 of the Environmental Assessment identified a number of mitigation and management measures with the aim of minimising and or mitigating, as far as practical, the negative impacts associated with the proposed upgrade. These measures have informed the development of the draft Statement of Commitments that the RTA will undertake as part of the construction and operation of the proposed upgrade. The draft Statement of Commitments may be revised in response to stakeholder and community input during the display of the Environmental Assessment. Following approval of the proposed upgrade, the revised commitments will guide subsequent phases of design development to minimise impacts on the environment. Any consortium or contractor involved in the future planning approvals, design, construction and/or operation phases of the proposed upgrade will be required to undertake all works in accordance with this Statement of Commitments.

Draft commitments

The draft Statement of Commitments, including commitments relating to key issues assessed in Chapters 10 to 20 and other issues assessed in Chapter 21 are provided in Table D-1. The draft Statement of Commitments includes:

- an objective
- details of the commitment
- reference to the timing of when the commitment applies (pre-construction, construction and post construction)
- reference to any guiding principle influencing the objective and implementation of the commitment.

Table D-1 contains the draft commitments of the RTA. Specialist consultants may have recommended various measures in their Technical Reports; these will not necessarily be the same as the following draft commitments. Only those measures in Table D-1 are proposed by the RTA.

Table D-1 **Draft Statement of Commitments**

Objective	Ref #	Commitment	Timing	Guiding principle
Compliance and auditing				
Implement a system of audit and inspection that ensures the successful performance of Environmental management Plans and this Statement of Commitments (SoC).	A1	The proposed upgrade will be carried out consistent with: - the procedures, safeguards and mitigation measures identified in the Environmental Assessment - additional measures identified in the Submissions Report - this SoC.	All	
	A2	Notify, in writing, the D-G of the DoP, relevant Government Departments and relevant Councils 4 weeks prior, unless otherwise agreed, of the commencement of construction.	Pre-construction	
	A3	Prepare and submit a Pre-construction Compliance Report at least 4 weeks before construction commences (or other time-frame as agreed), including: - details of how the pre-construction commitments were complied with - the time when each was complied with, including date of submissions of any required reports and of any approvals - details of any approvals or licences required prior to the commencement of construction.	Preconstruction	
	A4	Prepare and implement an audit and inspection plan, which may be incorporated into the CEMP.	All	
	A5	Prepare the first Construction Compliance Report to report on the first 6 months of construction and submit it no more than 6 weeks following completion of this period (or at another agreed time interval). The second, and subsequent, Construction Compliance Reports will be submitted at no longer than every six months from the date of submission of the first (or other agreed time). The reports will include information on: - compliance with the CEMP and SoC - compliance with any approvals or licences issued by relevant government departments for construction - the implementation and effectiveness of environmental controls (assessment of effectiveness to be based on a comparison of actual impacts against performance criteria identified in the CEMP) - environmental monitoring results, including analysis - number and details of any complaints, including action taken, response given and strategies to be applied to reduce recurrences - details of review/amendment to the CEMP - any other matter relating to compliance with the SoC or as requested by the D-G. Copies of the report will be provided to relevant Councils or government departments as nominated by the D-G and will be made publicly available.	Construction	

Objective	Ref #	Commitment	Timing	Guiding principle
	A6	Notify in writing the D-G, DoP, relevant government departments and council four weeks prior (unless otherwise agreed) of that start of operation of the proposed upgrade.	Construction	
	A7	Undertake at least 6-monthly audits to ensure compliance with the CEMP and all sub-plans and report on the results of each audit. The Environmental Impact Audit Report – Construction will: • identify the major environmental controls used during construction and assess their effectiveness • summarise the main environmental management plans and processes implemented during construction and assess their effectiveness • identify any innovations in construction methodology used to improve environmental management • discuss the lessons learnt during construction, including recommendations for future Activities.	Construction	
	A8	Submit a pre-Operation Compliance Report to the D-G at least 4 weeks before operation commences (or within any other agreed timeframe), this report should include: • details of how the commitments required to be addressed before operation complied with • the timing of compliance with each relevant commitment, including dates of submissions of any required reports and/or approval dates • details of any approvals or licences issued.	Operation	
	A9	Submit an Environmental Impact Audit Report to the D-G no more than 24 months after commencement of operation, including submission to other relevant government departments as required by the D-G. The report will: • compare the operation impact predictions made in the EA Submissions Report and any other supplementary studies with actual impacts • assess the effectiveness of implemented mitigation measures and safeguards • assess compliance with the systems for operation maintenance and monitoring • discuss the results of consultation with the local community, particularly feedback or complaints • be made publicly available.	Operation	
Environmental Management				
Manage the potential environmental impacts of the Project to meet the requirements identified in the EA.	EM1	Prepare a CEMP with reference to the relevant guidelines and incorporating the mitigation measures identified in the Project Application Report, EA and Submissions Report and obtain D-G approval of the CEMP prior to the commencement of construction.	Preconstruction	DIPNR Guideline for the Preparation of Environmental Management Plans and Section 4.1.1, RTA QA Specification G36
	EM2	Implement the CEMP in accordance with this SoC and all relevant Acts and Regulations.	Operation	
	EM3	Periodically review the CEMP with the aim of continuous improvement.	Operation	

Objective	Ref #	Commitment	Timing	Guiding principle
	EM4	Prepare and submit to the D-G an OEMP or provide details of any existing system to meet the environmental management requirements for the operation of the activity. D-G approval of the OEMP (or alternative management system) will be sought prior to the commencement of operation.	Operation	
Communication and consultation				
Maintain clear and open communication with the local community and road users throughout all phases of the activity	C1	Prepare a Community Involvement Plan, which will: - include the requirement of the PAR, EA and Submissions Report - where relevant, be consistent with the principles of Community Engagement in the NSW Planning System (PlanningNSW 2003) - be provided to the D-G before construction commences.	Pre-Construction	RTA Community Involvement Practice Notes and Resource Manual (RTA 1998) Community Engagement in the NSW Planning Systems (PlanningNSW 2003)
	C2	Advertise in relevant newspapers before construction commences and then at least at 3-monthly intervals: - the nature of the works for the next 3 months - where the works are proposed to be undertaken - construction hours - a contact telephone number.	Pre-Construction	RTA Community Involvement Practice Notes and Resource Manual (RTA 1998)
	C3	Establish an Activity Internet Site before construction commences, and maintain this until construction ends. The site will include: - periodic updates of work progress, consultation activities and planned work schedules - a description of relevant approval authorities and their areas of responsibility - a list of publicly available reports and plans and details of how they can be accessed - contact names and telephone numbers of relevant communications staff - the 24 hour toll-free complaints number.	Pre-construction	RTA Community Involvement Practice Notes and Resource Manual (RTA 1998)
	C4	Consult with property owners about implementing mitigation measures that affect their property. These measures will be implemented according to a program derived from this consultation if consistent with this SoC.	All	RTA Community Involvement Practice Notes and Resource Manual (RTA 1998)

Objective	Ref #	Commitment	Timing	Guiding principle
Ensure effective management of complaints	C5	Prepare a Construction Complaints Management System to be implemented and maintained throughout construction, including: • a 24 hour, toll-free telephone number listed with a telephone company and advertised • a system to receive, record, track and respond to complaints within a specified timeframe • a process for the provision of a written response to the complainant within 10 days, if the complaint cannot be resolved by the initial or follow-up verbal response • a mediation system for complaints unable to be resolved.	Preconstruction	RTA Community Involvement Practice Notes and Resource Manual (RTA 1998) AS 4269 Complaints Handling
	C6	Include all information on all complaints received, including the means by which they were addressed and whether resolution was reached with or without mediation, in the Construction Compliance Report. This report will be made available to the D-G on request.	Construction	
	C7	Implement the Complaints Management System and Community Involvement Plan.	Construction	
Traffic and access				
Maintain access to property and maintain traffic movements on the road network through all phases of the activity.	T1	Prepare pre-construction road dilapidation reports for all roads likely to be used by construction traffic.	Pre-construction	
	T2	Prepare post-construction road dilapidation reports for the roads assessed prior to construction following the completion of construction. Any damage resulting from construction, except for normal wear and tear, will be repaired at the RTA's cost.	Operation	
	T3	Provide copies of road dilapidation reports to the relevant roads authority.	All	

Objective	Ref #	Commitment	Timing	Guiding principle
	T4	Prepare and implement a Construction Traffic Management Sub Plan, the plan will include: - the requirements included in the EA and Submissions Report - identification of all public roads to be used by construction traffic - management methods to ensure construction traffic uses identified roads - identification of all public roads that may be partially or completely closed during construction and the expected timing and duration of closures - impacts on existing traffic (including pedestrians, vehicles, cyclists and disabled persons) - temporary traffic arrangements including property access - access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on public roads - a response plan for any construction traffic incident - monitoring, review and amendment mechanisms.	Pre-construction and construction	RTA QA Specification G10 Control of Traffic
	T5	Ensure that access to properties is maintained during construction and, where necessary and feasible, provide temporary alternative access.		
	T6	Ensure that where any legal access is permanently affected alternative access to an equivalent standard to and from a public road is provided where a property has no other legal means of access and where such alternative access is feasible and practical. Where alternative access arrangements are not feasible or practical and a property is left with no access to a public road, negotiations will be undertaken with the relevant property owner for acquisition of the property in accordance with the provisions of the Land Acquisition (Just Terms Compensation) Act 1991.	Construction	Land Acquisition (Just Terms Compensation) Act 1991
Construction noise and vibration				
Establish baseline conditions prior to the start of construction	N1	As necessary, condition surveys will be undertaken on buildings and structures within the potential area of vibration impact prior to commencement of rock-breaking and blasting activities.	Pre-Construction	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC 1990)

Objective	Ref #	Commitment	Timing	Guiding principle
Manage noise and vibration generated during construction and minimise the effects of construction noise and vibration on the community.	N2	Prepare a Construction Noise and Vibration Management (NVM) Sub Plan in consultation with the relevant Authorities, Council and the community. The plan will include noise and vibration management measures as identified in the EA and Submissions Report. The vibration and construction noise and goals in the plan will be obtained from the relevant guidelines.	Pre-Construction	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC 1990) German Standard DIN 4150 Part 3 Structural Vibration in Buildings British Standard BS 6472 – Guide to Evaluate Human Exposure to Vibration in Buildings Chapter 171, Construction Site Noise, NSW EPA Environmental Noise Control Manual
	N3	Implement measures as identified in the NVM Sub Plan to reduce the impact of construction activities, including blasting, to nearby residences.	Construction	
	N4	Ensure that public address systems used at any Construction site are not used outside the normal construction hours unless otherwise approved through the NVM Sub Plan. Public address systems will be designed to minimise noise spillage off-site.	Construction	AS 2436-1981 Guide to Noise Control on Construction, Maintenance and Demolition Sites
	N5	Schedule rock breaking, rock hammering, sheet piling, pile driving and any similar activity that could potentially impact on noise sensitive receivers only between the following hours unless otherwise approved in the NVM Sub Plan: • 7 am to 6 pm, Monday to Friday • 8 am to 1 pm, Saturday.	Construction	RTA Environmental Noise Management Manual Practice Note vii – Roadworks Undertaken Outside of Normal Working Hours
	N6	Ensure that wherever practical, and where sensitive receivers may be affected, driven piles are not used. If driven piles are required they will only be installed where approved in the NVM Sub Plan.	Construction	
	N7	Undertake blasting trials if blasting is to be used (Results from the trials will be used to determine site-specific blast designs that will enable the performance criteria specified in the Construction Noise and Vibration Sub Plan to be satisfied).	Construction	
	N8	Make all reasonable attempts to contact sensitive receivers located within 500 metres of a blast location. The contact will be made at least 48 hours before a blast and advice given to the receiver will include a schedule of blast time(s) and a telephone number and contact name.	Construction	
	N9	Undertake noise monitoring during construction as specified in the NVM Sub-Plan.	Construction	

Objective	Ref #	Commitment	Timing	Guiding principle
Operational noise and vibration				
Design and construct operational noise treatments to achieve noise goals and minimise the operational noise impact on nearby residences	ON1	Prepare and implement Operation Noise Management Report detailing its investigation of "Reasonable and Feasible" Operation noise mitigation methods. The RTA will submit the plan to and seek the approval of the D-G. The Operation Noise Management Report will: - consider the NSW Government's Environmental Criteria for Road Traffic Noise and the RTA's Environmental Noise Management Manual - identify the Operation noise criteria - identify Sensitive Receivers - predict noise levels at all Sensitive Receivers - detail Reasonable and Feasible noise mitigation measures, physical and managerial. An analysis for the entire Activity will be undertaken in accordance with Practice Note IV of the RTA's Environmental Noise Management Manual - consider urban design issues relating to noise control measures - identify which noise mitigation measures will be implemented, including their location, type and when they would be implemented - detail noise monitoring, reporting and complaint response procedures.	Pre-construction and operation	RTA Environmental Noise Management Manual (RTA 2001) NSW Government's <i>Environmental Criteria for Road Traffic Noise</i>
	ON2	Undertake monitoring of Operation noise.	Operation	Practice Note VIII of the RTA's <i>Environmental Noise Management Manual</i> .
	ON3	Assess the adequacy of the implemented traffic noise mitigation measures between 6-12 months after opening the Activity. Should the assessment indicate traffic noise levels exceeding those predicted in the Operation Noise Management Report, the RTA will: advise the D-G investigate and implement further reasonable and feasible mitigation measures. The selection of these measures will be undertaken in consultation with affected property owners and be consistent with the Operation Noise Management Report.	Operation	RTA Environmental Noise Management Manual (RTA 2001) NSW Government's <i>Environmental Criteria for Road Traffic Noise</i>
Flora and fauna				
To minimise adverse impacts on native vegetation, fauna and their habitats, and threatened flora and fauna in accordance with the strategies contained in the EA.	BI	Refine design and identify ancillary areas in light of biological knowledge and design constraints so as to avoid and minimise impacts to biodiversity.	Detailed design	

Objective	Ref #	Commitment	Timing	Guiding principle
	B2	Maintain connectivity by providing fauna underpasses at key locations identified in the project Application report (Parsons Brinckerhoff 2006).	Detailed design	
	B3	Follow the principles of Fish Friendly Waterway Crossings (Fairfull & Witheridge 2003) for the design and construction of waterway crossings.	Detailed design	
	B4	Design and construct artificial frog breeding ponds suitable for the Green-thighed Frog. Discussions should be held with recognised experts regarding current knowledge of breeding requirements in this species. These ponds should be considered experimental and an adaptive monitoring program should be put in place to determine their effectiveness.	Detailed design	
	B5	Finalise and implement the translocation plan for <i>Maudinia triglochoides</i> in consultation with the Department of Environment and Climate Change should translocation be considered a suitable option. The plan should include monitoring the effectiveness of the translocation.	Detailed design	
	B6	Prepare and implement a flora and fauna management sub-plan as part of the Construction Environmental Management Plan.	Preconstruction	
	B7	Undertake ongoing management and monitoring of weed invasion through a weed management sub-plan as part of the Construction Environmental Management Plan.	Preconstruction and construction	
	B8	Prepare a comprehensive offset strategy and package for the proposed upgrade in consultation with relevant government authorities.	Detailed design	
	B9	Provide for ancillary areas in order to minimise the overall impact of the construction and avoid unnecessary vegetation and habitat removal.	Detailed design	

Objective	Ref #	Commitment	Timing	Guiding principle
	B10	Pre-clear the disturbance areas, using a trained ecologist, prior to construction activities commencing in order to: - mark the limits of clearing and install temporary fencing in sensitive areas (e.g. endangered ecological communities) to avoid unnecessary vegetation and habitat removal - collect native seed for use in the revegetation of disturbed areas - identify and place transportable habitat features such as large logs and boulders in adjacent retained areas to allow their continuation as potential fauna refuge sites - implement pre-clearing surveys for fauna including: - Identifying (by survey) and marking all habitat trees in the area to be cleared. - Leaving marked habitat trees and corridors of retained trees linking marked habitat trees with the nearest uncleared (secure) habitat areas standing after initial vegetation clearing for a period of at least 48 hours (to encourage animals to disperse into adjacent uncleared habitat). - After the 48 hour waiting period, felling standing habitat trees and corridors, commencing with the most distant trees from secure habitat. - Where possible, clearing should be undertaken in the spring to autumn period to facilitate survival of displaced animals. If habitat trees are in short supply (<4 suitable trees per hectare) artificial nest sites (nest boxes) should be installed in adjacent (secure) habitat before clearing.	Preconstruction	
	B11	Implement 'best practice' stormwater treatment measures to maximise: - onsite pollutant retention and removal - infiltration and sub-surface discharge of stormwater.	Construction and operation	
	B12	Achieve ANZECC Water Quality Guidelines (2000) for all water discharge into streams and creeks.	Construction and operation	
	B13	Replace riparian vegetation disturbed by the project with appropriate endemic species to maintain creek bank stability.	Construction/ post construction	
	B14	Rehabilitate areas within the road reserve that are not necessary for the operation of the road in a progressive manner as construction proceeds. This should include: - planting of a range of locally occurring and sourced native shrubs, trees and groundcover plants - inclusion of logs, dead trees and stumps in the landscaping works - inclusion of foraging species, such as <i>Allocasuarina</i> for Glossy Black-cockatoos - incorporation of existing natural vegetation where possible - maintenance of plantings through a revegetation plan included in the Construction Environmental Management Plan.	Construction/ post construction	

Objective	Ref #	Commitment	Timing	Guiding principle
Hydrology and flooding	BI5	Implement an adaptive monitoring program for at least three years post construction, focussing on rehabilitated areas as well as mitigation strategies.	Post construction	
	FL1	The need for earthworks and other mitigation measures (such as scour protection) will be further assessed and negotiated with affected land owners prior to construction of the proposed upgrade.	Pre-construction	
	FL2	Subject to landholder preferences and where possible, identified flood-affected houses will be raised so that the floor level is a minimum of 0.5 metres higher than the 100 year ARI peak flood level. Premises that cannot be raised will require alternative strategies to reduce damage during flooding. Strategies could include constructing a ring embankment around the building or flood proofing lower levels of the properties to ensure damage is kept to a minimum.	Pre-construction	
	FL3	Subject to landholder preferences, small levees will be constructed around houses and some sheds on properties that would be affected by localised increases in velocity.	Pre-construction	
	FL4	Stock mounds and truck-loading facilities will be provided for affected landholders along South West Rocks Road to assist in the refuge and/or evacuation of stock during floods.	Pre-construction	
Indigenous heritage	FL5	A levee wall will be constructed prior to commencement of construction on the Macleay River floodplain.	Pre-construction	
	AH1	Prepare and implement an Indigenous Heritage Management Sub Plan as part of the CEMP. The RTA will consult with all relevant Aboriginal groups and the DEC when preparing the Sub Plan. The Sub Plan will include: - Aboriginal heritage measures listed in the Environmental Assessment - details of the archaeological investigations to be undertaken and any associated licences or approvals required - procedures to be implemented if previously unidentified Aboriginal objects are discovered during Construction - an education program for Construction personnel on their obligations for Aboriginal cultural materials.	All	
	AH2	All personnel working on site will receive training in their responsibilities under the National Parks and Wildlife Act 1974. Site-specific training will be given to workers when working in the vicinity of identified heritage items.	Pre-Construction and Construction	National Parks and Wildlife Act 1974

Objective	Ref #	Commitment	Timing	Guiding principle
	AH3	Aboriginal heritage items within the construction corridor not directly impacted will be marked on construction plans, fenced and signposted where necessary.	Pre-Construction and Construction	
	AH4	Should presently unknown Aboriginal heritage items be uncovered during works, all works in the vicinity of the find will cease until Aboriginal heritage specialist advice is obtained.	Construction	
	AH5	Where heritage items are not directly impacted, care will be taken to not disturb them. This will include briefing of the construction works team to protect such assets during the construction phase, minimising access and clear delineation of items including fencing and signage will be provided where necessary in consultation with a heritage specialist. Identified heritage items will be clearly marked on construction plans.	Construction	
Non-Indigenous Heritage				
To manage adverse impacts on heritage items and structures in accordance with the strategies contained in the EA.	H1	The RTA will prepare and implement a Non-Indigenous Heritage Management Sub Plan as part of the CEMP. The Sub Plan will be prepared in consultation with the Heritage Office and relevant Councils and include: • details of any investigations to be undertaken and any approvals required • procedures to be implemented if previously unidentified historical relics are discovered during Construction. If such relics are discovered all work likely to affect the relic(s) will cease immediately and the Heritage Council notified in accordance with the Heritage Act 1977 • an education program for Construction personnel on their obligations for historic relics.	Pre-Construction and Construction	RTA Heritage Guidelines and <i>Heritage Act 1977</i>
	H2	Where heritage items are not directly impacted, care will be taken to not disturb them. This will include briefing of the construction works team to protect such assets during the construction phase, minimising access and clear delineation of items including fencing and signage will be provided where necessary in consultation with a heritage specialist. Identified heritage items will be clearly marked on construction plans.	Pre-Construction and Construction	
	H3	All personnel working on site will receive training in their responsibilities under the Heritage Act 1977. Site-specific training will be given to workers when working in the vicinity of identified heritage items.	Pre-Construction and Construction	
	H4	Should heritage items be uncovered during works, all works in the vicinity of the find will cease until specialist heritage advice is obtained.	Construction	
	H5	The extent of the construction zone impact in the area around the avenue will be kept to a minimum as far as practical.	Construction	
	H6	Archival recording will be conducted prior to the commencement of construction.	Preconstruction	
	H7	The proposed upgrade includes provision of pedestrian access between the two parts of the avenue separated by the proposed upgrade via the realigned Ferry Lane.	Construction, Operation	

Objective	Ref #	Commitment	Timing	Guiding principle
	H8	Following a review of the condition and health of the remaining avenue trees, an appropriate level of restoration will be directed at the significant elements of the avenue. This may include: • pruning • removal of weeds and unwanted vegetation • planting of appropriate replacement trees.	Operation	
	H9	RTA will provide assistance to identify more suitable species to replace those to be removed and for use by local groups in their longer term replacement program.	Operation	
	H10	Consideration will be given to erecting signage and an appropriate form of permanent memorial highlighting the trees and their meaning and listing the names of those commemorated by the avenue.	Operation	
	H11	Input from appropriate stakeholders, such as the Kempsey Shire Council and Kempsey Macleay RSL Sub Branch, will be sought prior to finalising the management of the avenue.	Operation	
	H12	Consideration will be given to facilitating the development of a plan of management for the long-term maintenance of the avenue by the relevant stakeholders. Long-term maintenance will be the responsibility of the local community, the Kempsey Macleay RSL Sub Branch and Kempsey Shire Council.	Operation	
Soil and water management				
Manage soil and water impacts.	S1	Prepare a Soil and Water Management Sub Plan in consultation with relevant Government Departments and relevant Councils as part of the CEMP. The Sub Plan will: • include the hydrology, water quality and soil management measures listed in Environmental Assessment and Submissions Report • identify the Construction activities that could cause soil erosion or discharge sediment or water pollutants from the site • describe management methods to minimise soil erosion or discharge of sediment or water pollutants from the site including a strategy to minimise the area of bare surfaces during construction • include contingency plans to be implemented for events such as fuel spills.	Pre-construction	Landcom's guideline Managing Urban Stormwater - Soils and Construction (2004) Acid Sulfate Soils Manual (1998) RTA Code of Practice for Water Management DIPNR Constructed Wetlands Manual.
	S2	Prepare an Acid Sulfate Soil Management Sub Plan in consultation with relevant Government Departments as part of the CEMP. The Sub Plan will include a contingency plan to deal with the unexpected discovery of actual or potential acid sulphate soils and include a water quality monitoring program.	Pre-construction	Acid Sulfate Soils Manual (Acid Sulfate Soil Management Advisory Committee, 1998) or update

Objective	Ref #	Commitment	Timing	Guiding principle
Minimise disturbance to landform, geology and soils and prevent erosion and sedimentation	S3	Prepare a Spoil and Fill Management Sub Plan as part of the CEMP. The Sub Plan will include: - the locations of major (defined as a volume greater than 500 cubic metres) spoil stockpiles - the estimated volume and source of imported fill material and where imported fill material will be stockpiled and used - methods to re-use or dispose excess or unsuitable spoil material including estimated volumes and disposal sites.	Pre-construction	
	S4	Investigate the potential for changes in the groundwater table before any major earthworks (defined as a cut or fill area with depth or height exceeding five metres). Where a potential for change is identified the RTA will: - assess the significance of the change and any resultant effects within and outside the road reserve - where necessary, design and implement measures to manage the changes. Management measures will be determined in consultation with the regional office of DNR.	Pre-construction	
	S5	Ensure that all Operation stage controls for stormwater drainage and water pollution will be located, designed, constructed, operated and maintained to meet the requirements of the RTA's Code of Practice for Water Management – Road Development and Management. These controls will be designed in consultation with relevant Government Departments and relevant Councils.	Pre-construction	RTA's Code of Practice for Water Management – Road Development and Management
	S6	The RTA will implement a pre construction water monitoring program in accordance with the Environmental Assessment.	Pre-construction	
	S7	Implement the Soil and Water Management Sub Plan, the Acid Sulfate Soil Management Sub Plan and the Spoil and Fill Management Sub Plan.	Construction	
	S8	Consult an appropriately qualified soil conservationist according to a schedule identified in the Soil and Water Management Sub Plan to: - undertake inspections of temporary and permanent erosion and sedimentation control devices - ensure that the most appropriate controls are being implemented - check that controls are being maintained in an efficient condition - check that controls meet the requirements of any relevant approval and/or licence condition.	Construction	
	S9	Erosion and sedimentation controls will be installed, maintained and managed prior to and during construction. The principles in Managing Urban Stormwater — Soils and Construction, Volume 2 Book 4 — Main Road Construction will apply.	Pre-Construction and Construction	Managing Urban Stormwater – Soils and Construction, Volume 2 – Book 4 – Main Road Construction
	I0	Sediment will be cleared from behind barriers on a regular basis and controls will be monitored and maintained to ensure they work effectively at all times.	Construction	

Objective	Ref #	Commitment	Timing	Guiding principle
Minimise scour impacts	S11	Hardstand material or rumble grids will be installed at entry and exit points to minimise the tracking of soil and particulates onto pavement surfaces.	Construction	
	S12	Stockpiles will be established on slopes less than 2:1 (horizontal to vertical).	Construction	RTA Stockpile Management Procedures 2001
	S13	All stockpile sites will be designed, established, operated and decommissioned in accordance with RTA Stockpile Management Procedures 2001. Stockpiles will be located not less than 100 metres from the high bank of any rivers or drainage lines.	Construction	RTA Stockpile Management Procedures 2001
	S14	Rehabilitation of disturbed areas will be undertaken progressively.	Construction	
	S15	Scour protection will be installed in creek/river bank areas at risk of erosion as necessary taking into account fish and fauna issues in scour design where possible.	Pre-Construction and Construction	RTA QA Specification G38 Soil and Water Management
	S16	Culverts will be installed as early as possible in the construction program to ensure that transverse drainage is in place during early stages of construction. Permanent stream protection measures and other waterway structure requirements will also be established as early as possible.	Construction	
Minimise the risk of water contamination and pollution of local watercourses	S17	Any construction materials and fuels stored or used on site will be managed to minimise the risk of water contamination.	Construction	Managing Urban Stormwater: Soils and Construction (Landcom 2005)
	S18	Operational stormwater controls will be implemented to meet identified receiving water objectives. These may include dispersed stormwater treatment through grassed swales, constructed treatment measures such as operational stormwater retention basins and the use of gross pollutant traps.	Pre-Construction and Construction	
	S19	The requirement for spill containment will be made on the basis of a site-specific assessment that considers the following: - the sensitivity of the receiving environment - the likelihood of an accident occurring that could result in a spill - the proximity of the discharge point to the receiving waters - the condition of the receiving waters.	Pre-Construction and Construction	
	S20	Implement operational water management controls as identified in the EA.	Operation	
	S21	Implement a maintenance and inspection program for operational controls as listed in the EA.	Operation	

Objective	Ref #	Commitment	Timing	Guiding principle
Identification and investigation of potentially contaminated sites	CL1	A review will be undertaken of all land impacted by the Proposal to identify potentially contaminated sites. Potentially contaminated sites will be further investigated in accordance with the RTA's Contaminated Land Management Guideline.	Pre-Construction	Contaminated Land Management Guideline (RTA 2005) Guidelines for Assessing Service Station Sites (EPA 1994) Sampling Design Guidelines (EPA 1995)
Management of previously unidentified contamination	CL2	If site contamination investigations indicate that contaminants are present on the site in concentrations above the intended land use criteria, then an appropriate risk based management plan approach will be developed in accordance with the RTA's Contaminated Land Management Guideline. Where contamination is found to pose unacceptable risk to either the environment or human health receptors a remedial action plan will be developed and remediation works will be undertaken.	Pre-Construction and Construction	Contaminated Land Management Guideline (RTA 2005) SEPP 55 – Remediation of Land Contaminated Land Management Act 1997 DEC Guidelines for NSW Site Auditor Scheme
Air quality				
To manage adverse air quality impacts on the community to meet air quality targets identified in the EA.	AQ1	Prepare and implement an Air Quality Management Sub Plan as part of the CEMP. The Sub Plan will identify: • potential sources of dust • dust management objectives consistent with DEC guidelines • a monitoring program to assess compliance with the identified objectives. Monitoring for dust deposition and particulate concentration will be undertaken according to the DEC Guideline Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales • mitigation measures to be implemented, including measures during weather conditions where high level dust episodes are probable (such as strong winds in dry weather) • a progressive rehabilitation strategy for exposed surfaces with the aim of minimising exposed surfaces.	Pre-construction and construction	
	AQ2	Ensure that construction vehicles using public roads are maintained to prevent any loss of load, whether dust, liquid or soils. Facilities will be provided at exit points of all construction sites/ compounds to minimise tracking mud, dirt or other material onto a public road or footpath. In the event of any spillage, the RTA will remove the spilled material as soon as practicable within the working day of the spillage.	Construction	Australian Design Rules and relevant manufacturers specifications
	AQ3	Ensure that all plant and equipment used in connection with the Activity are maintained and operated in a proper and efficient manner.	Construction	

Objective	Ref #	Commitment	Timing	Guiding principle
Minimise generation of dust	AQ4	Implement a dust monitoring program. Dust will be visually monitored and, where necessary, the following mitigation measures will be implemented: • watering of dry exposed surfaces • covering loads on trucks transporting material to and from site at all times • spray planting cover crop of sterile grasses on long term stockpiles and exposed areas • preventing and, where necessary, removing mud and dirt tracked on to road surfaces.	Construction	Australian Design Rules and relevant manufacturers specifications
Greenhouse gases and energy				
Minimise greenhouse gas emissions	GH1	Plant and equipment will be maintained in a proper and efficient condition and operated in a proper and efficient manner.	Construction	Australian Design Rules and relevant manufacturers specifications
	GH2	Greenhouse gas emission targets for the construction of the Proposal will be in line with government guidelines.	Construction	
	GH3	Promote the reduction of greenhouse gasses by adopting energy efficient work practices including: • developing and implementing procedures to minimise energy use • Conducting awareness programs for all site personnel regarding energy conservation methods.	Construction	
	GH3	Conduct energy audits during the activity to identify and address energy waste.	Construction	
Urban design and landscaping				

Objective	Ref #	Commitment	Timing	Guiding principle
Minimise visual impact and continue existing landscape and vegetation types	V1	Prepare, seek approval for and implement an Urban Design and Landscape Plan before Construction commences. The Plan will present an integrated urban design for the Activity, applying design principles established in the Environmental Assessment. The Plan will include design treatments for: - location and identification of existing vegetation and proposed landscaped areas - built elements including retaining walls, bridges and noise walls - pedestrian and cyclist elements including footpath location, paving types and pedestrian crossings - fixtures such as seating, lighting, fencing and signs. - The Plan will also include: - graphics for key elements such as sections, sketches, perspective views - a schedule of species to be used in landscaping. The derivation of the schedule will be explained including its relationship with the Activity's ecological studies - details of the timing and progressive implementation of landscape works considering related environmental controls such as erosion and sedimentation controls and drainage - procedures and methods to monitor and maintain landscaped or rehabilitated areas both inside and outside the Activity.	Preconstruction and construction	
	V3	The landscaping plans for the Proposal will consider the retention of existing views and vistas from the highway having regard to road user safety requirements.	Pre-Construction and Construction	
	V2	Disturbed areas will be progressively revegetated using plant species of local provenance selected in consultation with a qualified landscape officer.	Construction	RTA QA Specification R178 Vegetation
	V4	Cuttings and embankments will be graded out wherever feasible to reflect and best fit the characteristics of the local landform.	Construction	
	V5	Implement any required remedial measures to maintain landscaping works to the design standard established in the Urban Design and Landscape Report.	Operation	
	V6	Monitor and maintain landscape or rehabilitation works which, following Construction, are not the responsibility of the RTA for a period of three years following completion of any landscaping stage or as otherwise identified in the Urban Design and Landscape Report.	Operation	
Social and economic				
Minimise property impacts to adjacent landholders	E1	All property acquisitions will be negotiated in accordance with RTA Land Acquisition Policy, and compensation provided in accordance with the <i>Land Acquisition (Just Terms Compensation) Act 1991</i> .	Pre-Construction	<i>Land Acquisition (Just Terms Compensation) Act 1991</i> RTA Land Acquisition Policy
Minimise impacts to property access following construction	E2	Negotiations for property acquisition will include consultation on property adjustments where required to maintain farm management practices.	Pre-Construction	

Objective	Ref #	Commitment	Timing	Guiding principle
Minimise the social and economic impact of the construction works on the local community	E4	Property access will be maintained for the duration of construction with any temporary access requirements being provided in consultation with adjacent landowners where necessary.	Construction	
	E5	Advance notification will be given to property owners on project schedules, construction works and access arrangements.	Pre-Construction and Construction	
Hazard and risk				
To manage potential for hazards and reduce the risks associated with the Activity.	RI	Prepare and implement Hazards and Risk Management Sub Plans as part of the Construction and Operation EMPs. These Sub Plans will include: - details of the hazards and risks associated with the Activity - mitigation measures including contingency plans.	All	
Minimise the risk of an incident during construction	RI	Bunded storage areas will be located away from watercourses and will be established for oils and other hazardous liquids in accordance with Australian Standards. Spillages will be contained and collected any spillages for appropriate disposal.	Construction	AS 1940 The Storage and Handling of Flammable and Combustible Liquids
	R2	Activities with the potential for spillage such as refuelling, maintenance of equipment, mixing of cutting oil and bitumen will be conducted in bunded areas to prevent discharge into watercourses.	Construction	AS 1940 The Storage and Handling of Flammable and Combustible Liquids
	R3	Potentially hazardous and contaminating activities (such as washing construction plant, concrete mixers, bitumen surfacing equipment and handling hazardous chemicals) will be conducted in bunded areas away from watercourses.	Construction	AS 1940 The Storage and Handling of Flammable and Combustible Liquids
	R4	Any construction materials and fuels stored or used on-site will be managed to minimise the risk of water contamination.	Construction	
	R5	A maintenance and inspection program will be implemented for construction controls.	Construction	
	R6	Prepare and implement a Site Specific Safety Management Plan and Safe Work Method Statements to apply to all construction personnel and site visitors. The plan will identify hazards associated with work on the site and the hazard control measures or controls to be implemented to ensure that people are adequately protected from risk of injury or illness, including:	Preconstruction and construction	Occupational Health and Safety Act 2000 Occupational Health and Safety Regulation

Objective	Ref #	Commitment	Timing	Guiding principle
		- procedures to comply with all legislative and industry standard requirements for the safe handling and storage of hazardous substances and dangerous goods - procedures for manual handling of heavy loads. The plan will address the following six components: - risk management - identification of the hazards and assessment of the risks associated with the work and documentation of the risk control measures to be taken - statement of responsibilities - nominating individuals responsible for OHS aspects of the work, and who will be available to deal with illness/injury and OHS incidents - OHS training - a statement identifying training needs of personnel on the work site, including site induction - incident management - identifying the processes and personnel to prevent, prepare for, respond to and recover from incidents - site safety rules - these should be displayed in prominent areas around the site. Safe work method statements - for all activities with health or safety risks, including working at height, with or near hazardous substances, in tunnels or confined spaces, with cranes, with compressed air, in deep excavations.		How to prepare site-specific safety management plans and work method statements (NSW Department of Commerce 2004)
Waste Minimisation and Management				
Manage Waste generated as a result of the proposed upgrade in accordance with the relevant guidelines.	W1	Prepare and implement a Waste Management and Re-use Sub Plan(s). The Sub Plan(s) will address the management of wastes during the Construction and Operation stages respectively. The Sub Plan(s) will identify requirements for: - the application of the waste minimisation hierarchy principles of avoid/reduce/re-use/recycle/dispose - waste handling and storage - disposal of wastes. Specific details will be provided for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes - any waste material that is unable to be re-used, re-processed or recycled will be disposed at a facility approved to receive that type of waste.	All	Waste Avoidance and Resource Recovery Act 2001 NSW Government's Waste Reduction and Purchasing Policy
Reduce creation of waste and maximise re-use and recycling.	W2	Ensure that the re-use of material generated from construction is maximised in preference to importing fill. All material excavated from Construction will be re-used or recycled unless otherwise approved in the Spoil and Fill Management Sub Plan.	Construction	Waste Avoidance and Resource Recovery Strategy 2006
	W3	Reuse and recycling and avoidance strategies in accordance with the NSW Government's Waste Avoidance and Resource Recovery Strategy 2006 will be adopted.	Construction	Waste Avoidance and Resource Recovery Strategy 2006

Objective	Ref #	Commitment	Timing	Guiding principle
Ensure waste generated is managed appropriately	W2	Waste materials will be classified and managed in accordance with DEC Environmental Guidelines: Assessment and Classification & Management of Liquid and Non-liquid Wastes.	Construction	DEC Environmental Guidelines: Assessment and Classification & Management of Liquid and Non-liquid Wastes
	W2	Waste materials will be classified and managed in accordance with DEC Environmental Guidelines: Assessment and Classification & Management of Liquid and Non-liquid Wastes.	Construction	DEC Environmental Guidelines: Assessment and Classification & Management of Liquid and Non-liquid Wastes
Miscellaneous issues				
Minimise impacts on utilities and services	M1	Identify the utilities and services (hereafter "services") potentially affected by construction to determine requirements for diversion, protection and / or support. Alterations to services will be determined by negotiation between the RTA and the service providers. The RTA in consultation with service providers will ensure that disruption to services resulting from the Activity are minimised and advised to customers.	All	
Ancillary Facilities	M2	Ensure the sites for ancillary facilities satisfy the criteria provided in the Environmental Assessment unless otherwise approved through the CEMP.	All	
Property Impacts and acquisition	M3	Undertake a risk assessment before construction commences to determine which structures or properties may be affected by construction activities and therefore need to be inspected. The risk assessment will be undertaken by geotechnical and construction engineering experts with appropriate registration on the National Professional Engineers Register.	Preconstruction	
	M4	Conduct property inspections, subject to landowner agreement, on all structures within: • 200 metres of blasting • 50 metres of Construction activities that generate vibration impacts • any other locations identified by the Proponent in the risk assessment.	Preconstruction	
	M5	Undertake the property inspections consistent with AS 4349.1 Inspection of Buildings.	Preconstruction	AS 4349.1 Inspection of Buildings.
	M6	Advise the owners of all properties on which property inspections are conducted at least two weeks before the inspection of its scope and methodology and of the process for making a property damage claim.	Preconstruction	
	M7	Give a copy of the property inspection report to the owner of each property inspected at least three weeks before Construction that could affect the property commences.	Preconstruction	

Objective	Ref #	Commitment	Timing	Guiding principle
	M8	Maintain a register of all properties inspected, indicating whether the owner accepted or refused the property inspection offer. A copy of the register will be provided to the D-G upon request.	All	
	M8	Where liable, rectify any property damage caused directly or indirectly (for example from vibration or from groundwater change) by the Activity's Construction or Operation. At no cost to the property owner(s). Alternatively the RTA may negotiate compensation for the property damage with the property owner.	Construction/ Operation	
	M9	Reinstate a water supply of equivalent quality and quantity where a licensed bore, dam or other property water supply is adversely affected by the Activity. Alternatively the RTA may negotiate compensation for the loss with the landowner.	Construction/ Operation	
	M10	All property acquisitions will be negotiated in accordance with RTA Land Acquisition Policy, and compensation will be assessed under the provisions of the <i>Land Acquisition (Just Terms Compensation) Act 1991</i> .	Preconstruction	
	M11	Negotiations for property acquisition will include consultation on property adjustments where required to minimise impact on farm management practices.	Preconstruction	
	M12	Property access will be maintained for the duration of construction. Temporary access requirements will be assessed in consultation with affected landholders.	Construction	
	M13	Advance notification will be given to property owners on project schedules, construction works and access arrangements.	Construction	