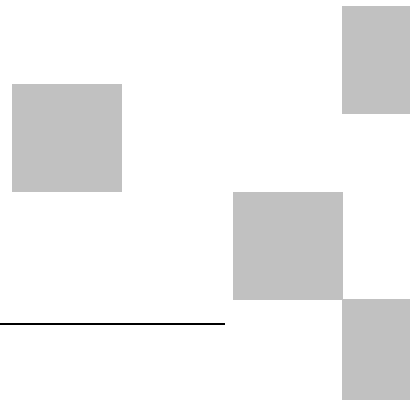


CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

SANCROX TRAFFIC ARRANGEMENT PROJECT
(The Project)

[JUNE 2014]



Document control

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Name	Name	Name
Ferrovial Agroman Project Manager	Ferrovial Agroman Q&E Manager	Roads and Maritime Representative

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Contacts

Position	Name	Phone
*24 hour community information line	NA	1800 154 724
Ferrovial Agroman Project Director	Juan Francisco Rasines	M 0450009595
(*) Ferrovia Agroman Project Manager	Manuel de Miguel	M 0448956114
Ferrovial Agroman Q&E Manager	Jordi Via	M 0437250336
Ferrovial Agroman Environmental Site Representative (ESR)	Brenden Bale	M 0409 753 905
(*) Ferrovia Agroman Site Engineer	TBA	M TBA
Ferrovial Agroman Earthworks, Drainage and Pavement Supervisor	Blake Rosenbaum	M 0437332451
Ferrovial Agroman Structure Supervisor	Greg Croaker	M 0437591486
Environmental Representative	Ben Luffman	M 0415271319
Roads and Maritime Representative	Todd Lyall	W 49240463 M 0437973866
Roads and Maritime Pacific Highway South Environmental Manager	TBA	W TBA M TBA
Roads and Maritime Office Environmental Manager, Pacific Highway	Scott Lawrence	W 66401375 M 0419248483
EPA pollution hotline	N/A	131 555

* To be contactable by EPA on a 24-hour basis

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Glossary/Abbreviations

ASS	Acid sulphate soils
CAQMP	Construction Air Quality Management sub-plan
CEMP	Construction environmental management plan
Compliance audit	Verification of how implementation is proceeding with respect to a construction environmental management plan (CEMP) (which incorporates the relevant approval conditions).
CoA	Condition(s) of approval
CFFMP	Construction Flora and fauna Management sub-plan
CHMO	Construction Heritage Management sub-plan
CNVMP	Construction Noise and Vibration Management sub-plan
CSWMP	Construction Soil and Water Management sub-plan
CWEMP	Construction Waste and Energy Management sub-plan
Director-General	Director-General of the NSW Department of Planning and Infrastructure (or delegate)
DPI	Department of Primary Industries
DP&I	Department of Planning and Infrastructure
EA	Environmental Assessment
Ecological sustainable development	Using, conserving and enhancing the community's resources so that the ecological processes on which life depends are maintained and the total quality of life now and in the future, can be increased (Council of Australian Governments, 1992).
EPA	NSW Environment Protection Authority
ERG	Environmental Review Group comprising representatives of Roads and Maritime, Environmental Representative, FAA, regulatory authorities (EPA, DPI Fishing and Aquaculture, NOW) and council (Port Macquarie Hastings Council). The ERG will be maintained for the duration of the Project and will meet regularly and undertake environmental inspections. The role the ERG is to provide proactive advice on environmental management issues and review the environmental performance of the Project.
EMS	Environmental management system
Environmental aspect	Defined by AS/NZS ISO 14001:2004 as any element of an organisation's activities, products or services that can interact with the environment.
Environmental impact	Defined by AS/NZS ISO 14001:2004 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.

Environmental incident	An unexpected event that has caused, or has the potential to cause harm to the environment and requires some action to minimise the impact or restore the environment.
Environmental objective	Defined by AS/NZS ISO 14001:2004 as an overall environmental goal, consistent with the environmental policy that an organisation sets itself to achieve.
Environmental policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental Representative	A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
Environmental target	Defined by AS/NZS ISO 14001:2004 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
EP&A Act	NSW Environmental Planning and Assessment Act 1979
EPBC Act	Australian Federal Environment Protection and Biodiversity Conservation Act 1999
EPL	Environment Protection Licence
EWMS	Environmental Work Method Statements
ESR	FAA Environmental Site Representative
FAA	Ferrovial Agroman Australia
AS/NZS ISO 14001:2004	International Standard ' <i>Environmental Management Systems – Requirements with Guidance for use</i> ' which describes general requirements for an environmental management system for any organization, establishing a common reference for communicating about environmental management issues
Minister, the	NSW, Minister for Planning and Infrastructure
Non-compliance	Failure to comply with the requirements of the Project Approval or any applicable license, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of Project system documentation including this CEMP or supporting documentation.
NOW	NSW Office of Water
OEH	NSW Office of Environment and Heritage
PESCPs	Progressive Erosion and Sediment Control Plans
PM	FAA Project Manager
POEO Act	NSW Protection of the Environment Operations Act 1997

The Project The Sancrox Traffic Arrangement Project

Q&E Manager FAA Quality and Environmental Manager

SoC Statement of commitments

1 Introduction

1.1 Background

On behalf of the Australian and NSW governments, Roads and Maritime is progressively upgrading the Pacific Highway to dual carriageway between the Hunter and New South Wales/Queensland border.

In December 2006, the Oxley Highway to Kempsey Pacific Highway Upgrade project was declared by the then Minister for Planning to be a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) applies. The order was amended by the then Minister for Planning on 3 December 2012 and gazetted on 10 December 2012. An Environmental Assessment was prepared and placed on public exhibition for 30 days between September and October 2010. Following consideration of submissions made during the exhibition period, the submissions report, including changes to the proposal following consideration of submissions, was submitted to the then Minister for Planning seeking approval. Approval of the Oxley Highway to Kempsey Pacific Highway Upgrade project was granted on 8 February 2012, subject to a number of Conditions of Approval (CoA). On 20 November 2012, a modification of the CoA was issued under Section 75W of the EP&A Act regarding the inclusion of an assessment process for minor ancillary facilities.

Furthermore, the Oxley Highway to Kempsey Pacific Highway Upgrade Project was referred to the (then) Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC). On 21 September 2012, SEWPaC determined that the Oxley Highway to Kempsey Pacific Highway Upgrade Project was a controlled action under section 75 and 87 of the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Oxley Highway to Kempsey Pacific Highway Upgrade Project was approved by the Department of the Environment (formerly SEWPaC) under section 130(1) and 133 of the EPBC Act on 24 January 2014.

The Oxley Highway to Kempsey Pacific Highway Upgrade is 37 kilometres in length, commencing approximately 700 metres north of the Oxley Highway interchange, tying in with the existing dual carriageways to the south and continuing northwards to tie in at Stumpy Creek with the dual carriageways of the approved Kempsey to Eungai Pacific Highway upgrade. The Oxley Highway to Kempsey Pacific Highway Upgrade involves the duplication of the existing highway, except for sections near the Hastings River and Wilson River, which deviates from the existing highway, and a bypass of Telegraph Point. The existing highway would be retained wherever possible for use as a service road or local road connection.

Due to the Oxley to Highway to Kempsey's length and funding models available, the Oxley Highway to Kempsey Pacific Highway Upgrade will be essentially delivered in two main sections – from the Oxley Highway to Kundabung (approximately 24 kilometres) and from Kundabung to Kempsey (approximately 14 kilometres). The delivery of these two sections will be undertaken in four stages (refer to Section 2.2).

The first stage of the Oxley Highway to Kempsey Pacific Highway Upgrade is the Sancrox Traffic Arrangement (the Project), which involves the construction of a bridge over the Pacific Highway (HW10), approximately 600 m south of the existing Sancrox Road Intersection and construction of associated local roads.

1.2 Purpose of this CEMP

This Construction Environmental Management Plan (CEMP) and sub plans have been prepared to comply with the Minister for Planning and Infrastructure’s Conditions of Approval for the Project. A detailed description of the Project is provided in Chapter 2.

The CEMP has been prepared in accordance with Roads and Maritime QA Specification G36 and the Guideline for the Preparation of Environmental Management Plans (DIPNR, 2004). It is also consistent with AS/NZS ISO 14001).

The purpose of this CEMP is to provide a structured approach to the management of environmental issues during construction of the Project. Implementing this CEMP effectively will ensure that the Project team meets regulatory and policy requirements in a systematic manner and continually improves its performance. The CEMP ensures the requirements of Roads and Maritime and the Minister’s conditions of approval (see Appendix A1 and Compliance Tracking Program) are met.

In particular, this CEMP:

- Describes the Project in detail including activities to be undertaken and relative timing.
- Describes the environmental management roles and responsibilities of personnel.
- States objectives and targets for issues important to the environmental performance of the Project.
- Identifies environmental aspects and impacts associated with each activity of the Project.
- Provides specific mitigation measures and controls that can be applied on-site to avoid or minimise negative environmental impacts.
- Provides specific mechanisms for compliance with applicable policies, approvals, licences, permits, consultation agreements and legislation.
- Outlines a monitoring regime to check the adequacy of controls as they are implemented during construction.

This CEMP meets the requirements of CoA B30. The requirements of this condition and where they are met in this CEMP are shown in Table 1-1.

Table 1-1 CoA requirements for CEMP

CoA no.	Requirement	Reference
B30	The Proponent shall prepare and (following approval) implement a Construction Environmental Management Plan for the project. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant agencies and in accordance with the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:	This Plan
B30 (a)	A description of activities to be undertaken during construction of the project or stages of construction, as relevant.	Chapter 2
B30 (b)	Statutory and other obligations that the Proponent is required to fulfil during construction including approvals, consultations and agreements required from agencies and key legislation and policies. Evidence of consultation with relevant agencies shall be included identifying how issues raised by these agencies have been addressed	Compliance Tracking Program, Appendix A1, Section 1.2, Section 1.3

CoA no.	Requirement	Reference
	in the Plan.	
B30 (c)	A description of the roles and responsibilities for relevant employees involved in the construction of the project including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval.	Section 4.2, Section 4.3, Chapter 5
B30 (d)	Identification of ancillary facility site locations, including an assessment against the location criteria outlined in condition C28.	Section 2.4, Appendix A4
B30 (e)	An environmental risk analysis to identify the key environmental performance issues associated with the construction phase and details of how environmental performance would be monitored and managed to meet acceptable outcomes including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the project and/ or concurrent construction works with adjacent Pacific Highway Upgrade projects, as relevant). In particular, the following environmental performance issues shall be addressed in the Plan: <ul style="list-style-type: none"> (i) Measures to monitor and manage dust emissions including dust from stockpiles, blasting, traffic on unsealed public roads and materials tracking from construction sites onto public roads. (ii) Measures to minimize hydrology impacts, including measures to stabilize bed and bank structures as required. (iii) Measures to monitor and manage impacts associated with the construction and operation of ancillary facilities. (iv) Measures for the handling, treatment and management of contaminated materials. (v) Measures to monitor and manage waste generated during construction including but not necessarily limited to: general procedures for waste classification, handling, reuse, and disposal; use of secondary waste material in construction wherever feasible and reasonable; procedures for dealing with green waste including timber and mulch from clearing activities; and measures for reducing demand on water resources (including the potential for reuse of treated water from sediment control basins). (vi) Measures to monitor and manage spoil, fill and materials stockpile sites including details of how spoil, fill or material would be handled, stockpiled, reused and disposed and a stockpile management protocol detailing locational criteria that would guide the placement of stockpiles and management measures that would be implemented to avoid/ minimise amenity impacts to surrounding residents and environmental risks (including to surrounding water courses). Stockpile sites that affect heritage, threatened species, populations or endangered ecological communities require the approval of the Director General, in consultation with the OEH. (vii) Measures to monitor and manage hazard and risks including emergency management. 	<p>Appendix B6</p> <p>Appendix B4</p> <p>Section 2.4</p> <p>Appendix B7</p> <p>Appendix B7</p> <p>Appendix B4</p> <p>Appendix A7</p>
	The issues identified in condition B31.	Appendix B1, Appendix B2, Appendix B3, Appendix B4, Appendix B5
B30 (f)	Details of community involvement and complaints handling procedures during construction, consistent with the requirements of conditions B25 to B28.	Section 6.3.2
B30 (g)	Details of compliance and incident management consistent with the	Chapter 7

CoA no.	Requirement	Reference
	requirements of condition B24.	
B30 (h)	Procedures for the periodic review and update of the Construction Environmental Management Plan and sub-plans required under condition B31, as necessary (including where minor changes can be approved by the Environmental Representative).	Chapter 9
B30	The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of construction, or within such period otherwise agreed by the Director-General. Construction works shall not commence until written approval has been received from the Director-General.	Section 1.4

This CEMP is the overarching document in the environmental management system for the Project that includes a number of management documents. These are described in Section 4.1. It is applicable to all staff and sub-contractors associated with the construction of the Project.

1.3 Consultation

Extensive consultation for the Project commenced during the route selection phase and continued during the environmental assessment of the concept design. The primary objective of consultation was to keep stakeholders well informed and involved during each stage of Project development.

Further consultation with relevant stakeholders and government authorities has continued through the development of this CEMP and sub plans. Those consulted include:

- NSW Environmental Protection Authority (EPA).
- NSW Department of Primary Industries (Fishing and Aquaculture).
- NSW Office of Water (NOW).
- NSW Office of Environment and Heritage (OEH).
- Port Macquarie-Hastings Council.
- Department of the Environment.

Consultation will continue throughout the Project with relevant stakeholders and government authorities. The outcomes of this consultation will be documented, where relevant, in subsequent revisions of the CEMP and in the records of the management review.

1.4 Certification and approval

The FAA Project Manager and Q&E Manager must approve the CEMP prior to submission to the Department of Planning and Infrastructure (DP&I).

Submission to DP&I is required no later than one month prior to commencement of construction or as otherwise agreed.

The CEMP must be approved by the Director-General of DP&I prior to the commencement of construction.

The sub-plans prepared under CoA B31 also require approval by the Director-General prior to commencement of construction. Further explanation and details of these documents are provided in Section 4.1.

Finally, CFFMP requires review and approval by the DoTE prior to commencement of construction. The Roads and Maritime will provide the CFFMP to the DoTE.

1.5 Distribution

This CEMP is available to all personnel and sub-contractors via the Project document control management system. An electronic copy can be found on the Project website. The document is uncontrolled when printed. A controlled hard copy of the CEMP and supporting documentation will be maintained by the FAA Q&E Manager at the Project office.

Registered copies will be distributed to:

- Environment Protection Authority (EPA).
- FAA Project Manager.
- Environmental Representative
- FAA Q&E Manager.
- Supervisors and Site Engineer.

- Environmental Manager ESR
- Communications Manager.
- Roads and Maritime Representative.
- Roads and Maritime Pacific Highway South Environmental Manager.

1.6 Revision

A document review process ensures that environmental documentation including this CEMP is updated as appropriate for the specific works that are occurring on-site. This includes the management review process described in Chapters 9 and 10.

Should the document review process identify any issues or items within the documents that are either redundant or in need of updating, it is the responsibility of the ESR to prepare the revised documents.

Following review by the FAA Q&E Manager, the revised document will then be issued to the Project Manager and the Environmental Representative for certification of the changes. The Environmental Representative can approve minor changes to the CEMP. Minor changes would typically include those that:

- Are editorial in nature e.g. staff and agency/authority name changes.
- Do not increase the magnitude of impacts on the environment when considered individually or cumulatively.
- Do not compromise the ability of the Project to meet approval or legislative requirements.

Where the Environmental Representative deems it necessary, the amended CEMP will be forwarded to the Director-General for DP&I for approval.

Revised versions of the CEMP will be made available through the processes described in Section 1.5.

2 Project description

2.1 General features

The general features of the Oxley Highway to Kempsey Pacific Highway Upgrade are:

- Approximately 37 kilometres of four-lane dual carriageway (two lanes in each direction) with a wide median to allow a future upgrade to six lanes.
- A new alignment across the Hastings River and Wilson River floodplains and minor realignment within Maria River State Forest.
- A 100 year average recurrence interval flood immunity.
- A bypass of Telegraph Point. Access to and from Telegraph Point ~~would~~ will be provided by a new grade separated interchange in the area of Blackmans Point Road south of Telegraph Point and a half interchange in the area of Haydons Wharf Road north of Telegraph Point.
- Overbridges located to the south of Sancrox Road, at Bill Hill Road, Mingaletta Road, Wharf Road, Kundabung Road and Middle Gate Road.
- The existing Pacific Highway near Blackmans Point Road and Yarrabee Road passing under the Project.
- Major cuttings through Cooperabung Hill.
- New major bridge structures for the Hastings River and Wilson River crossings, and the crossing of the North Coast Railway to the north of the Wilson River.
- Smaller bridges for a number of creek crossings.
- Provision of two new rest areas south of Mingaletta Road.
- Provision of a service road network using sections of the existing highway, existing local roads and new roads.
- Provision of a heavy vehicle inspection bay.

The first stage of the Oxley Highway to Kempsey Pacific Highway Upgrade is the Sancrox Traffic Arrangement (the Project).

The scope of the Project is:

1. - Construction of a bridge over the Pacific Highway (HW10), approximately 600 m south of the existing Sancrox Road Intersection.
2. - Construction of associated local roads and drainage.

2.2 Staging

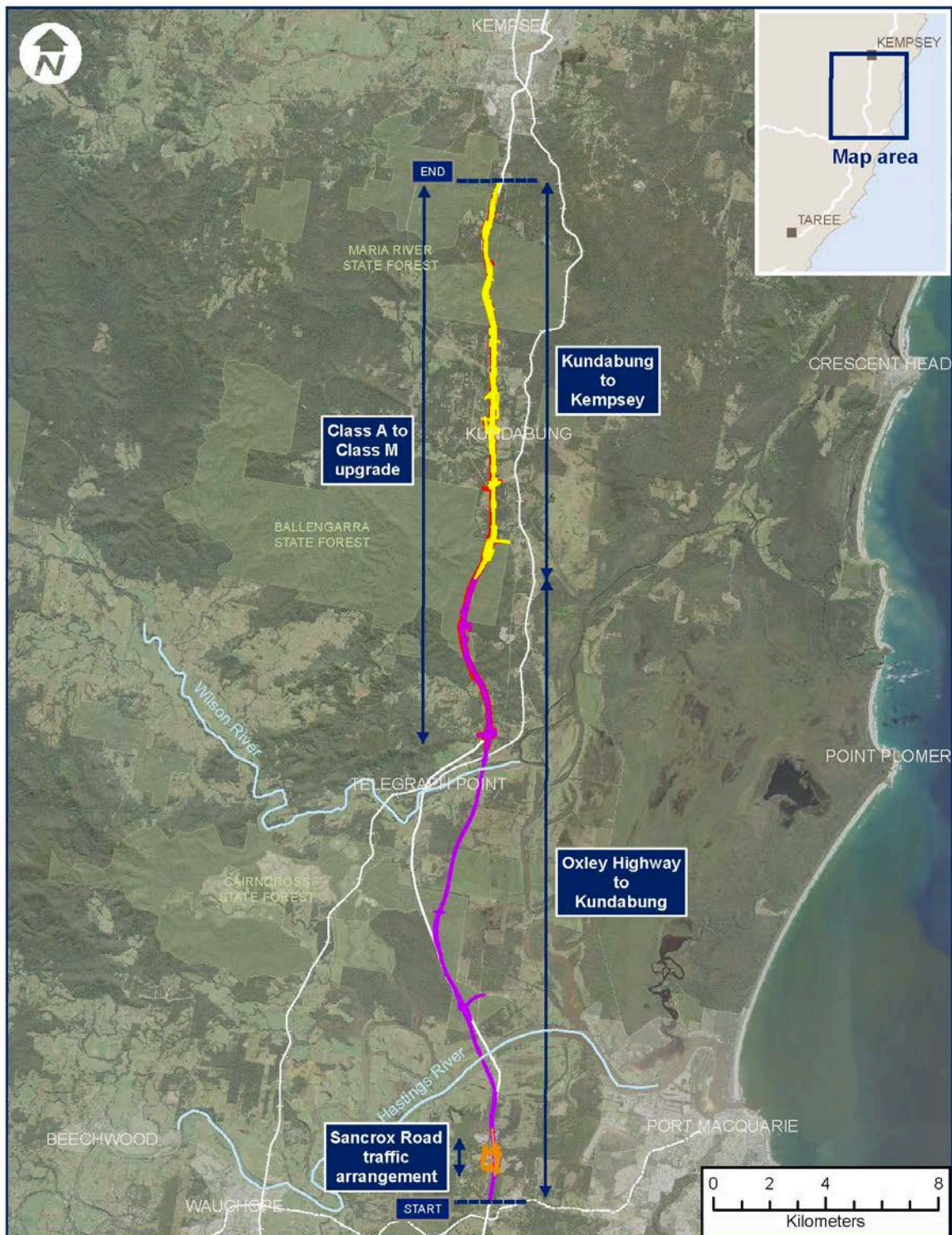
As indicated in Section 1.1, the Oxley Highway to Kempsey Pacific Highway Upgrade is proposed to be delivered in four stages. These stages are listed below in their corresponding chronological order of likely construction commencement. Due to funding, it is likely that the first three stages may all be under construction at the same time. The stages are:

- Sancrox Road traffic arrangement (The Project).
- Kundabung to Kempsey.
- Oxley Highway to Kundabung.
- Class A to Class M.

Figure 2-1 provides an overview of the proposed stages.

In accordance with the requirements of CoA A7, details of the staging, including construction activities and submission of corresponding environmental plans, strategies and protocols, are documented in the Oxley Highway to Kempsey Staging Report (January 2013). The Staging Report will be updated, or advice provided that no changes to staging are proposed, and submitted to the Director-General prior to the commencement of each stage, identifying any changes to the proposed staging or applicable CoA.

Figure 2-2 Overview of the Oxley Highway to Kempsey Pacific Highway Upgrade including the Sancrox Traffic Arrangement (The Project)



KEY	
	Existing Pacific Highway
	Existing Oxley Highway
	North Coast Rail Line
Stages	
	Kundabung to Kempsey
	Oxley Highway to Kundabung
	Sancrox Road traffic arrangement
	Class A to Class M

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2.3 Construction activities and sequence

Typically, the following sequences of activities are anticipated for all project work areas:

- **Site establishment** – Survey site - installing boundary fencing to construction facilities and install environmental controls. carrying out pre-clearing vegetation and fauna surveys
- **Relocation or protection of services** – relocating and protecting electricity, gas, water, sewerage and telecommunications infrastructure affected by the Project.
- **Site preparation** –removal of harvestable timber, clearing and grubbing, topsoil stripping and storage.
- **Earthworks** – undertaking cut and fill works along the alignment to achieve desired levels, removal of unsuitable material, batter and embankment shaping.
- **Structures** – building bridges and drainage facilities.
- **Pavements** – forming sub and base layers and construction final pavement finishes.
- **Road furniture** – installing signage, line marking and safety barriers.
- **Landscaping and restoration** – reuse of topsoil, planting of native plants and seeding disturbed areas with native and cover crops species (note this will take place throughout construction where it is practical in completed sections of the project).
- **Open to traffic** – decommission construction facilities, commissioning new road and related infrastructure.

* fauna underpasses and overpasses not included in the Project (Sancrox)

2.4 Compound and ancillary facilities

A temporary site compound (ancillary facility) will be required to support construction of the Project. This site compound will accommodate the majority of management, engineering, specialist and administrative personnel. This facility will include:

- Office accommodation.
- Staff amenities.
- Light vehicle parking.
- Material and chemical storage.
- Equipment and material storage.

Appendix A4 details the location, composition and purpose of this site compound and ancillary facility required for the Project. An assessment of the ancillary facility against the criteria listed in CoA C28 is provided and also consideration of whether the facility is considered 'minor' in accordance with CoA C29. A summary of the assessment criteria for the ancillary facility is provided in Section 3.7.2.

3 Planning

3.1 Project environmental obligations

All construction personnel working on the Project have the following general obligations:

- Minimise pollution of land, air and water.
- Use pollution control equipment and keep it in proper working order.
- Preserve the natural and cultural heritage environment.
- Give notice to the Roads and Maritime and relevant authorities of a non-Aboriginal or Aboriginal heritage discovery.
- Minimise the occurrence of offensive noise.
- Be a good neighbour to surrounding land users.
- Keep the community informed of Project milestones, upcoming activities and duration of relevant aspects of the works.
- Use equipment with noise control features where available and ensure that it is properly maintained.
- Take all feasible and reasonable steps to ensure compliance with the requirements of this CEMP.

3.2 Legal and other requirements

A register of legal and other requirements for the Project is contained in Appendix A1. This register is maintained as a checklist. This register will be reviewed at regular intervals e.g. during management reviews, and updated with any applicable changes. Any changes made to the legal requirements register will be communicated to the wider team where necessary through team meetings, subcontractor coordination meetings, daily pre-start meetings, toolbox talks, specific training and other methods detailed in Chapter 5.

3.3 Approvals, permits and licensing

A number of approvals permits and licenses have and/or will be obtained for the Project. Appendix A1 contains a register of all relevant environmental approvals, permits and licenses. The register will be maintained by the ESR and will be reviewed prior to the commencement of construction and/or stages of construction, and at regular intervals during construction and at least annually as part of the management review.

The EA recognised that the following approvals and licences identified in the planning approval process would be obtained or are required for the Project:

- Project Approval under the EP&A Act.
- Environmental protection licences (EPL) under the *Protection of the Environment Operations Act 1997* (POEO Act) for Extractive Activities.
- Approvals under the *Water Act 1912* for access to ground or surface water during construction.

In accordance with CoA A6, all necessary licences, permits and approvals required for the development of the Project will be obtained and maintained as required throughout the life of the Project. No condition of the Project Approval removes the obligation for Roads and

Maritime or FAA to obtain, renew or comply with such necessary licences, permits or approvals except as provided under Section 75U of the EP&A Act.

The Project Approval and revised Statement of Commitments (SoC) are contained in the Compliance Tracking Program and provide a reference to where each requirement is addressed by this CEMP or other Project documentation. A checklist of compliance with Roads and Maritime specification G36 is included as Appendix A1.

3.4 Environmental aspects and impacts

A risk management approach will be used to determine the severity and likelihood of an activity's impact on the environment and to prioritise its significance. This process considers potential regulatory and legal risks as well as taking into consideration the concerns of community and other key stakeholders.

The objectives of risk assessment are to:

- Identify activities/aspects, events or outcomes that have the potential to adversely affect the local environment and/or human health/property.
- Qualitatively evaluate and categorise each risk item.
- Assess whether risk issues can be managed by environmental protection measures.
- Qualitatively evaluate residual risk with implementation of measures.

Risk assessments for the Project are based on AS/NZS 4360:1999, the Australian standard for risk assessments.

Appendix A2 includes a list of activities associated with the Project, related aspects and corresponding risks. Measures to minimise the identified environmental risks are also provided.

3.5 Environmental policy

The environmental policy describes **FAA's** commitment to continual improvement in environmental performance and compliance with applicable legal requirements.

The environmental policy is displayed on the Project website and at the site office, and communicated to staff and other interested parties via inductions and ongoing awareness programs.

A copy of the environmental policy is provided in Appendix A3.

3.6 Objectives and targets

As a means of assessing environmental performance during construction of the Project, environmental objectives and targets have been established. These objectives and targets have been developed with consideration of key issues identified through the environmental assessment and risk assessment process. The objectives and targets are consistent with the FAA's environmental policy for the work under the contract and will assist in monitoring whether the commitments of the policy are being met.

The targets are incorporated into relevant environmental management sub-plans.

The performance of the Project against the objectives and targets will be documented in the project construction compliance reports and at least on an annual basis as part of the management review.

Environmental objectives and targets for the Project are provided in Table 3-1 below.

Table 3-1 Environmental objectives and targets

Objective	Target	Measurement tool
Construction of the Project in accordance with environmental approvals.	<ul style="list-style-type: none"> Full compliance with statutory approvals. 	Audits, construction compliance reporting and management review.
Compliance with all legal requirements.	<ul style="list-style-type: none"> No regulatory infringements (PINs or prosecutions). No formal regulatory warning. 	Audits, construction compliance reporting and management review.
Implement a rigorous and comprehensive EMS that meets the requirements of AS/NZS ISO 14001.	<ul style="list-style-type: none"> Address non-conformances and corrective actions within specific timeframes. 	Audits and management reviews.
Engage with the effected and broader community, minimize complaints and respond to any complaints within a suitable timeframe.	<ul style="list-style-type: none"> Disseminate regular Project updates and other information through the Project website and other tools identified in the Community Engagement Strategy. Record and response to complaints within the time frame specified in the Community Engagement Strategy. 	Review complaints register, construction compliance report and audits.
Continuously improve environmental performance.	<ul style="list-style-type: none"> Develop and maintain a program of ongoing environmental training. Capture lessons learnt from environmental incidents to minimise repeat issues. Encourage and reward innovation and effort throughout the works force. 	Construction compliance report and management review.

3.7 Project refinements

3.7.1 General changes

Refinements to the Project may result from detailed design refinement or changed circumstances throughout construction. Roads and Maritime is responsible for formally seeking approval from the Minister for any Project modifications and for documenting refinements that are consistent with the approved Project.

The Roads and Maritime Pacific Highway South Environmental Manager, is responsible for the assessment of the Project refinements and management of the consistency assessment process. The ESR is responsible for incorporating any new environmental impacts and/or new statutory approval requirements into the appropriate environmental management documentation.

Any design changes or changes in scope of works should be communicated to the FAA Q&E Manager. The FAA Q&E Manager will then undertake an additional environmental assessment and consistency review in consultation with the Roads and Maritime Pacific Highway South Environmental Manager, to determine if a Project modification may be required.

Should the consistency review determine that a Project modification maybe required i.e. the impacts are of a nature and scale that it is not considered consistent with the Project Approval, the Environmental Representative will be informed immediately and if determined

necessary, a modification application under Section 75W of the EP&A Act will be prepared submitted to the Director-General DP&I for determination.

The General Manager, Pacific Highway will approve all refinements that are deemed consistent with the Project Approval.

3.7.2 Ancillary facilities assessment criteria

Ancillary facilities are defined as a “temporary facility for construction, including for example an office and amenities compound, construction compound, materials storage compound, maintenance workshop or testing laboratory”. Stockpiles are not included under this definition and are discussed in Section 3.7.3.

The location of the main site compound and ancillary facilities are nominated, assessed and detailed in Appendix A4. Circumstance may arise during construction where additional, or changes to the location of, ancillary facilities are required.

Where this situation arises, an assessment against the criteria detailed in CoA C28 will be undertaken. The criteria require that ancillary facilities:

- a) Be located more than 50 metres from a waterway.
- b) Have ready access to the road network or direct access to the construction corridor.
- c) Be located in areas of low ecological significance and require minimal clearing of native vegetation (not beyond that already required by the Project).
- d) Be located on relatively level land.
- e) Be separated from the nearest residences by at least 200 metres (or at least 300 metres for a temporary batching plant).
- f) Not unreasonably affect the land use of adjacent properties.
- g) Be above the 20 ARI flood level unless a contingency plan to manage flooding is prepared and implemented.
- h) Provide sufficient area for the storage of raw materials to minimise, to the greatest extent practical, the number of deliveries required outside standard construction hours.
- i) Be located in areas of low heritage conservation significance (including identified Aboriginal cultural value) and not impact on heritage sites beyond those already impacted by the Project.

Note: For the purposes of criterion a), a “waterway” is defined as:

- Any Class 1 or Class 2 fish habitat waterways (as described in the NSW Fisheries guidelines).
- Any permanent or ephemeral drainage line with direct drainage to State Environmental Planning Policy No 14 Coastal Wetlands.
- Waters that are used for the purposes of human consumption.
- Waters that have a known *Maundia triglochinos* population.

Where this criterion is unable to be met for any proposed ancillary facility, an assessment demonstrating how adverse impacts from construction or operation of the facility can be mitigated and managed to an acceptable standard will be undertaken and provided to the Director-General for approval.

Notwithstanding the above, CoA C29 facilitates the establishment of minor ancillary facilities (eg lunch sheds, office sheds and portable toilet facilities) that do not comply with the criteria

detailed in CoA C28. However, for CoA C29 to be applicable, the minor ancillary facilities are subject to the following criteria:

- a) are located within an active construction zone within the approved project footprint; and
- b) have been assessed by the Environmental Representative to have:
 - i. minimal amenity impacts to surrounding residences, with consideration to matters such as noise and vibration impacts, traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and
 - ii. minimal environmental impact in respect to waste management, and no impacts on flora and fauna, soil and water, and heritage beyond those approved for the Project; and
- c) have environmental and amenity impacts that can be managed through the implementation of environmental measures detailed in a Construction Environmental Management Plan for the Project.

3.7.3 Stockpile locality assessment

Stockpiles are not defined as an ancillary facility according to the definitions provided in the Project Approval. During construction, a number of temporary stockpiles will be required. Stockpile sites may be required to store material including, but not limited to:

- Excavated materials to be used in fill embankments and other design features.
- ASR subject to treatment prior to reuse.
- Excavated material unsuitable for reuse in the formation.
- Excess concrete, pavement, rock and other material stockpiled for either future use in the Project or prior to removal from site.
- Topsoil, mulch, excess timber for landscaping and revegetation works.

Where these stockpiles are proposed, the locating criteria contained in the Stockpile Management Protocol (See Appendix I of the CSWMP) will be considered and stockpile sites located accordingly.

The protocol also includes standard mitigation measures that will be implemented to minimise or avoid impacts on the environment.

Where a stockpile site has the potential to affect a heritage site, threatened species, populations or endangered ecological communities, an assessment demonstrating how adverse impacts from construction or operation of the stockpile site can be mitigated and managed to an acceptable standard will be undertaken in consultation with EPA and provided to the Director-General for approval.

Any modification to the NSW Department of Planning and Environment approval must remain consistent with the Federal Department of the Environment approval, unless a modification to this approval is also sought.

4 Implementation and operation

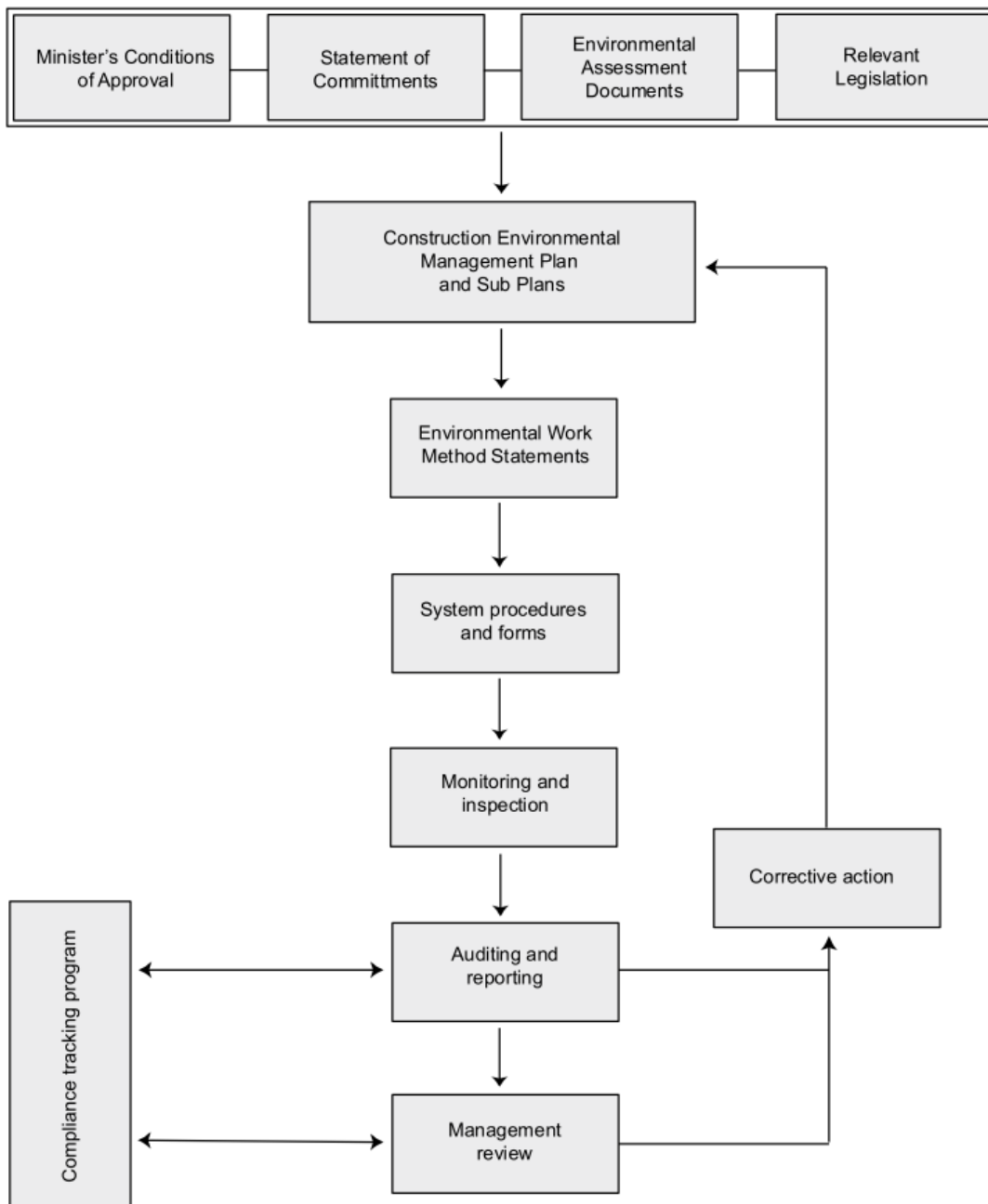
This CEMP is the overarching management plan for a suite of environmental management documents. It provides a structured and systematic approach to environmental management.

The primary purpose of the system of documentation is to:

- Ensure compliance with all applicable environmental laws, obligations and approvals,
- To minimise environmental impacts

The structure of the environmental management system for the Project is shown in Figure 4-1 below.

Figure 4-1 Environmental Management System structure



4.1 Environmental management system documentation

4.1.1 Construction environmental management plan

This CEMP provides the system to manage and control the environmental aspects of the Project during pre-construction and construction. It identifies all requirements applicable to activities described in Chapter 2. It also provides the overall framework for the system and procedures to ensure environmental impacts are minimised and legislative and other requirements are fulfilled. The strategies defined in this CEMP have been developed with consideration of the Project Approval requirement, safeguards and mitigation measures presented in the environmental assessment and approval documents. This CEMP establishes the system for implementation, monitoring and continuous improvement to minimise impacts from the Project on the environment.

This CEMP is consistent with:

- The Guideline for the preparation of Environmental Management Plans (DIPNR, 2004).
- AS/NZS ISO14001: 2004, 'Environmental Management Systems – requirements with guidance for use'.
- Roads and Maritime QA Specification G36.
- The CEMP and sub-plans required under CoA B31 will be provided by Roads and Maritime to the Director-General for approval.

Finally, CEMP and CFFMP requires review and approval by the Department of the Environment prior to commencement of construction. Roads and Maritime will provide these documents to the Department of Environment.

4.1.2 Environmental management sub-plans and strategies

A number of environmental management sub-plans support the CEMP. These documents are prepared to identify requirements and processes applicable to specific impacts or aspects of the activities described in Chapter 2. They address requirements of the CoA, SoC and other measures identified in the environment assessment documentation.

Environmental strategies may also be developed as required throughout the Project. These will also guide environmental management of potential impacts on-site.

A list of construction sub-plans and strategies for the Project, and their approval requirements, are provided in Table 4-1. The Project Staging Report documents the required Project-wide environmental documentation to be prepared for the Project and the timing required for submission where required.

Table 4-1 Environmental management sub-plans and strategies

Document name	Document number	Approval pathway
Construction traffic management sub plan	SCX-ENV-P-002	DP&I
Construction flora and fauna management sub plan	SCX-ENV-P-003	DP&I Department of the Environment (Commonwealth)
Construction noise and vibration management sub plan	SCX-ENV-P-004	DP&I
Construction soil and water quality management sub plan	SCX-ENV-P-005	DP&I
Construction heritage management sub plan	SCX-ENV-P-006	DP&I

Construction Air quality management sub plan	SCX-ENV-P-007	Roads and Maritime
Construction Waste and Energy management sub plan	SCX-ENV-P-008	Roads and Maritime approval
Construction Community Liaison Management Plan	SCX-ENV-P-009	DP&I
Construction Acid Sulfate Soil Management sub Plan	SCX-ENV-P-010	DP&I
Construction Emergency Spill Response sub Plan	SCX-ENV-P-011	Roads and Maritime

4.1.3 Environmental work method statements

Environmental work method statements (EWMS) are prepared to manage and control all activities that have the potential to negatively impact on the environment. EWMS will be prepared prior to the commencement relevant construction activities on site and will incorporate relevant mitigation measures and controls from management sub plans. They also identify key procedures to be used concurrently with the EWMS. EWMS are specifically designed to communicate requirements, actions, processes and controls to construction personnel using plans, diagrams and simply written instructions.

EWMS will be prepared progressively in the lead up to and throughout construction in consultation with relevant members from the Project team, and approved by the FAA Q&E Manager.

EWMS for activities identified as having high environmental risk will undergo a period of consultation with stakeholders and authorities prior to approval. A list of upcoming/future EWMS will be provided to ERG participants during regular meetings. The ERG will determine which EWMS are high risk and require consultation and those that do not.

EWMS for activities likely to be considered high risk include:

- Site compound establishment.
- Public road accesses and managing mud tracking.
- Clearing and grubbing.
- Sediment basin design, construction and management.
- Dewatering.
- Soft soil treatment.
- Piling.
- Milling and Asphaltting.
- Topsoil stripping and stockpiling
- Concrete waste
- Installation of Scour protections and permanent culverts
- Refuelling work
- Drainage and Earthworks

All construction personnel and sub-contractors undertaking a task governed by an EWMS must participate in training on the EWMS, and acknowledge that they have read and understood their obligations prior to commencing work.

Regular monitoring, inspections and auditing against compliance with the EWMS will be undertaken by Project management, quality, and environmental personnel to ensure that all controls are being followed and that any non-conformances are recorded and corrective actions implemented.

A register of EWMS will be maintained in Appendix A5.

4.1.4 Progressive erosion and sediment control plans

Progressive Erosion and Sediment Control Plans (PESCPs) are planning documents that clearly show the site layout and the approximate location of erosion and sediment control structures onsite. They cover all construction stages from initial vegetation clearing through to rehabilitation when erosion and sediment control are no longer required and are removed. PESCPs will be developed and implemented across the Project where there is a risk of erosion and sediment loss.

PESCPs may be produced in conjunction with Environmental Work Method Statement (EWMS) to provide more detailed site-specific environmental mitigation measures.

PESCPs will be developed by Environment staff in consultation with the supervisor, site engineer and other relevant site personnel, as required. They will be modified to reflect site condition at the time of construction. The FAA Q&E Manager will approve PESCPs in the first instance. Minor changes thereafter will be approved by the ESR in consultation with the FAA Q&E Manager, as required.

PESCPs will be developed for all work areas prior to commencing activities. (Refer to Appendix B4 for specific responsibilities including Soil Conservationist).

4.1.5 Sensitive area plans

The Project traverses a diversity of environmental and socially sensitive areas/sites. To assist pre-construction planning and on-site construction management, these site constraints are consolidated on a map that extends the length of the Project. The sensitive area map includes information pertaining, but not limited, to:

- Flora features, including endangered ecological communities.
- Non-Aboriginal heritage sites.
- Local waterways.

The sensitive area plans is presented in Appendix A6. It is a working element of the CEMP and will be revised throughout construction to reflect true ground conditions and the most up-to-date information available on sensitive sites. Sensitive area plans will be used in conjunction with EWMS to help identify key risk areas and to promote ongoing communication to construction personnel during the Project. There have been no Aboriginal heritage items identified within the Project work area however they may be in an area impacted by the Project as such Appendix A6 does identify aboriginal Archaeological actual or potential deposits.

4.1.6 System procedures, forms and other documents

The Project environmental management system procedures, forms and other documents provide instructions and records related to both environmental and non-environmental activities throughout the Project.

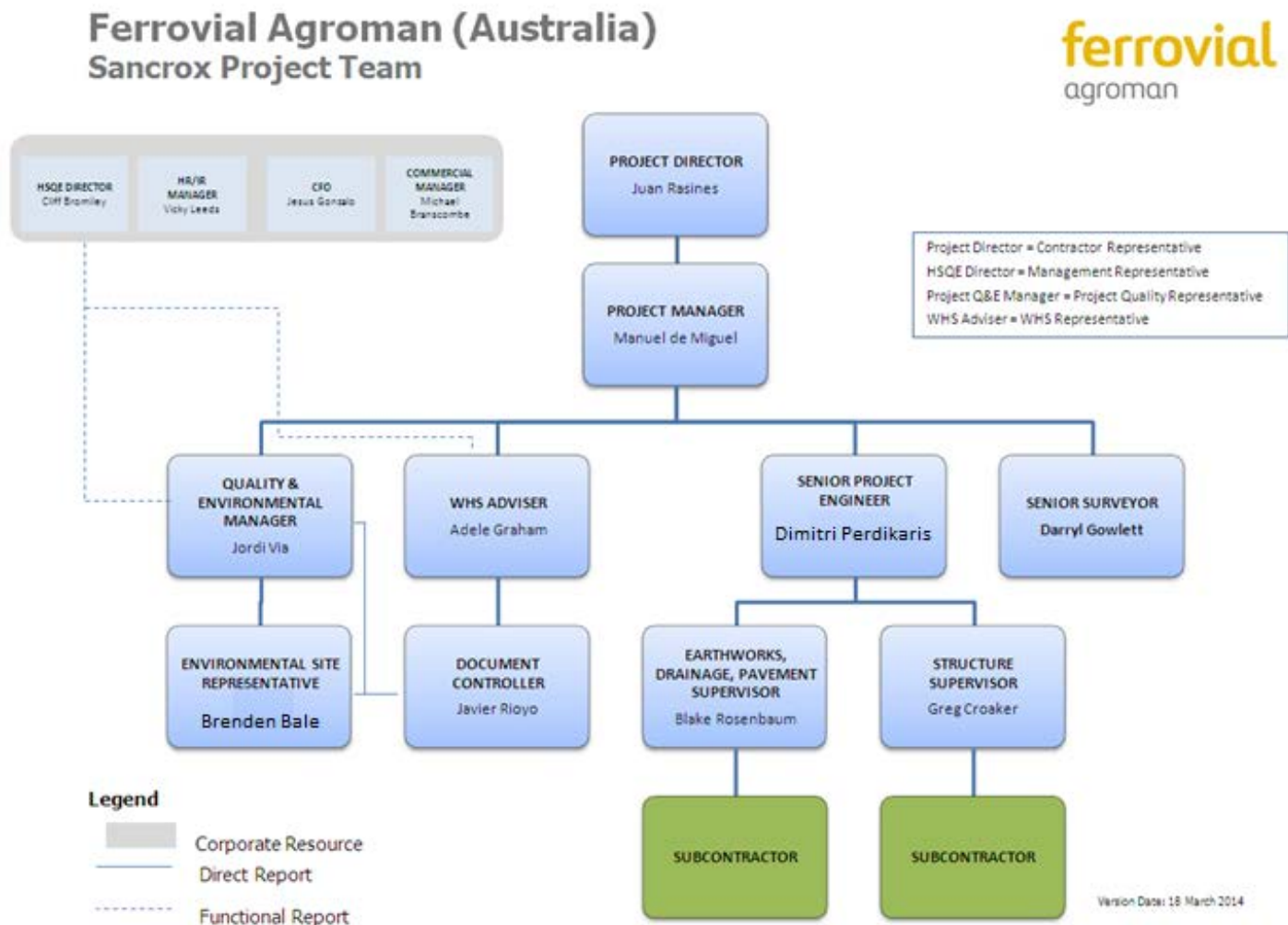
Project specific procedures will be developed in accordance with the requirements for the Project. Where applicable, existing contractor procedures and work instructions will be applied or amended for use on the Project.

A register of relevant environmental procedures and forms is maintained in Appendix A5.

4.2 Resources, roles, responsibilities and authority

The key environmental management roles and responsibilities for the construction phase of the Project are described below. The structure of these roles is shown in Figure 4-2.

Figure 4-2 Management Structure



4.2.1 Environmental Representative (Roads and Maritime appointed)

The responsibilities of the Environmental Representative are defined in CoA B29, including:

- Be the principal point of advice in relation to the environmental performance of the Project.
- Be consulted in responding to the community concerning the environmental performance of the Project where the resolution of points of conflict between the Proponent and community is required.
- Monitor the implementation of all environmental management plans and monitoring programs required under this approval.
- Monitor the outcome of all environmental management plans and advise the Proponent upon the achievement of all Project environmental outcomes.
- Have responsibility for considering and advising the Proponent on matters specified in the conditions of this approval, and all other licences and approvals related to the environmental performance and impacts of the Project.
- Ensure that environmental auditing is undertaken in accordance with the requirements of condition B24 and the Project Environmental Management System(s).
- Be given the authority to approve/reject minor amendments to the Construction Environment Management Plan. What constitutes a "minor" amendment shall be clearly explained in the Construction Environment Management Plan required under condition B30 (see Section 1.6).
- Be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur.

4.2.2 Roads and Maritime Pacific Highway South Environmental Manager

The environmental responsibilities of the Roads and Maritime Pacific Highway South Environmental Manager include, but are not limited to, the following:

- Review any environmental management plans and related documents prepared for the Project.
- Review minor Project refinements that are consistent with the Project environmental assessment and approval documentation and recommend they be approved to the General Manager, Pacific Highway.
- Monitor the environmental performance of the Project in relation to Roads and Maritime requirements.

4.2.3 Roads and Maritime Representative

The environmental responsibilities of the Roads and Maritime Representative include (but are not limited to) the following:

- Evaluate and advise on compliance with Roads and Maritime environmental requirements.
- Review and approve any environmental management plans for the Project or related activities that are not required to be approved by the Director-General of DP&I.

4.2.4 FAA Project Manager

The environmental responsibilities of the Project Manager include (but are not limited to) the following:

- Ensure all works comply with relevant regulatory and Project requirements.
- Ensure the requirements of this CEMP are fully implemented, and in particular, that environmental requirements are not secondary to other construction requirements.
- Endorse and support the Project environmental policy attached at Appendix A3.
- Liaise with Roads and Maritime, Environmental Representative and other government authorities as required.
- Participate and provide guidance in the regular review of this CEMP and supporting documentation.
- Provide adequate resources (personnel, financial and technological) to ensure effective development, implementation and maintenance of this CEMP.
- Ensure that all personnel receive appropriate induction training, including details of the environmental and community requirements.
- Ensure that complaints are investigated and effective resolution achieved as per clause 6.3.2 of this CEMP.
- Stop work immediately if an unacceptable impact on the environment is likely to occur. Refer to section 7 “Incidents and emergencies” of this CEMP and Appendix A7 “Roads and Maritime environmental incident classification and reporting”.
-
- Plan construction works in a manner that avoids or minimises impact to environment-
- Ensure the requirements of this CEMP are fully implemented.
- Ensure construction personnel manage construction works in accordance with statutory and approval requirements.
- Liaise with Roads and Maritime, Environmental Representative and other government authorities as required.
- Stop work immediately if an unacceptable impact on the environment has occurred refer to section 7 “Incidents and emergencies” of this CEMP and Appendix A7 “Roads and Maritime environmental incident classification and reporting”.

4.2.5 FAA Supervisor/s

The environmental responsibilities of the Supervisors include (but are not limited to) the following:

- Communicate with all personnel and sub-contractors regarding compliance with the CEMP and site-specific environmental issues.
- Ensure all site workers attend an environmental induction prior to the commencement of works.
- Co-ordinate the implementation of the CEMP.
- Co-ordinate the implementation and maintenance of pollution control measures.

- Identify resources required for implementation of the CEMP.
- Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to the FAA Q&E Manager/ESR.
- Co-ordinate action in emergency situations and allocate required resources as per section 7 of this plan and Construction Environmental Management Plan.
- Stop activities where there is an actual or immediate risk of harm to the environment and advise the Project Manager, Site Engineer and the FAA Q&E Manager.
- Ensure environmental management procedures and protection measures are implemented.
- Undertake any environmental duties as defined by the Project Manager or Site Engineer.
- Control field works and implement/maintain effective environmental controls.
- Where required, undertake environmental risk assessment of works prior to commencement.
- Ensure site activities comply with EWMS and relevant records are kept.
- Attend to any spills or environmental incidents that may occur on-site.
- Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to the Project Manager, Site Engineer and FAA Q&E Manager.

4.2.6 FAA Quality and Environmental (Q&E) Manager

The environmental responsibilities of the FAA Q&E Manager include (but are not limited to) the following:

- Overall responsibility for the implementation of environmental matters on the Project.
- Development, implementation, monitoring and updating of the CEMP and sub plans in accordance with ISO14001.
- Report to Project Manager and other senior managers on the performance and implementation of the CEMP.
- Ensure management reviews of the CEMP are undertaken annually, documented and actions implemented.
- Ensure environmental risks of the Project are identified and appropriate mitigation measures implemented.
- Identify where environmental measures are not meeting the targets set and where improvement can be achieved.
- Ensure environmental protocols are in place and managed.
- Ensure environmental compliance.
- Obtain and update all environmental licences, approvals and permits as required.
- Lead liaison with Environmental Representative and approval authorities.
- Manage environmental reporting within the Project team and to the Roads and Maritime and regulatory authorities.
- Oversee site monitoring, inspections and audits.

- Manage all subcontractors and consultants with regards to environmental matters, including assessing their environmental capabilities and overseeing the submission of their environmental documents.
- Review and approve PESCP.
- Develop and facilitate induction, toolbox talks and other training programs regarding environmental requirements for all site personnel.
- Notify Roads and Maritime and relevant authorities in the event of an environmental incident and manage close-out of these.
- Stop activities where there is an actual or immediate risk of harm to the environment, or to prevent environmental non-conformities, and advise the Project Manager, ESR, Site Engineer and Supervisors.
- Ensure that complaints are investigated to ensure effective resolution

4.2.7 FAA Environmental Site Representative (ESR)

The environmental responsibilities of the ESR include, but are not limited to, the following:

- Manage environmental document control, reporting, inductions and training.
- Preparing reports on a monthly basis outlining the Project Works undertaken and the achievements that have been met, as well as identifying those areas where improvements were made
- Prepare and/or distribute environment awareness notes.
- Assist in preparing the CEMP (including any future revisions) in accordance with all relevant requirements.
- Develop PESCP in consultation with the Project Manager, FAA Q&E Manager, Supervisors, Site Engineers, and other relevant site personnel, as required.
- Undertake site inspections, carry out monitoring activities and complete site checklists.
- Ensure monitoring records are appropriately maintained, reviewed and any non-compliance issues addressed.
- Manage the day-to-day environmental elements of construction.
- Record and provide written reports to the FAA Q&E Manager of non-conformances or corrective actions with the CEMP. This may include the need to implement additional, or revise existing, mitigation measures.
- Assist in identifying environmental risks.
- Advise the Environmental Manager and Construction Manager of the need to stop work immediately if an unacceptable impact on the environment is likely to occur or to require other reasonable steps to be taken by the Construction Manager or site construction staff to avoid or minimise impacts.
- Provide reports to the FAA Q&E Manager on any major issues resulting from the Project.
- Assist all site staff with issues concerning Project environmental matters.

- Assist in developing training programs regarding environmental requirements and deliver where required, including delivery of the environmental component of toolbox talks
- Stop activities where there is an actual or immediate risk of harm to the environment and advise the Project Manager, Site Engineer, Supervisors and FAA Q&E Manager.
- Ensure that all community consultation activities are carried out.
- Report any environmental issues to the FAA Q&E Manager raised by stakeholders or members of the community.
- Communicate general Project progress, performance and issues to stakeholders including the community as approved by the Project Manager and the FAA Q&E Manager.
- Maintain the 24 hour complaints hotline.

4.2.8 FAA Project/Site Engineer

The environmental responsibilities of the site/Project engineers include (but are not limited to) the following:

- Provide input into the preparation of environmental planning documents as required.
- Ensure that instructions are issued and adequate information provided to employees that relate to environmental risks on-site.
- Ensure that the works are carried out in accordance with the requirements of the CEMP and supporting documentation, including the implementation of all environmental controls.
- Identify any environmental risks and reporting to the Project Manager and FAA Q&E Manager.
- Identify resource needs for implementation of CEMP requirements and related documents.
- Take action in the event of an emergency and allocate the required resources to minimise the environmental impact.
- Report any activity that has resulted, or has the potential to result, in an environmental incident immediately to the Project Manager and FAA Q&E Manager.

4.2.9 Wider project team (including sub-contractors)

Comply with the relevant requirements of the CEMP, or other environmental management guidance as instructed by a member of the Project's management.

- Participate in the mandatory Project/site induction program.
- Report any environmental incidents to the Supervisor immediately or as soon as practicable if reasonable steps can be adopted to control the incident.
- Undertake remedial action as required to ensure environmental controls are maintained in good working order.
- Stop activities where there is an actual or immediate risk of harm to the environment and advise the FAA Project Manager, FAA Site Engineer, Supervisor, FAA Q&E Manager or ESR.

4.3 Sub-contractor management

Environmental requirements and responsibilities are to be specified to sub-contractors in the contract documentation. As part of the selection process, consideration will also be given to their past environmental performance. The FAA Q&E Manager, or delegate (ESR), will participate in the tender assessment and selection process where it is deemed necessary due to associated environmental risks. All sub-contractors will be required to complete a subcontractor questionnaire or similar.

All sub-contractors are required to work in accordance with the approved CEMP.

All sub-contractors are required to attend Project and/or site inductions where the requirements and obligations of the CEMP are communicated. A record of all sub-contractors inducted will be maintained as part of the Project induction and training register.

A standard monitoring form will be developed that will be used to assess:

- The sub-contractor's general work practices.
- The effectiveness of the sub-contractor's environmental protection measures.
- The sub-contractor's compliance with the requirements of this CEMP.
- The maintenance of environmental measures.

4.4 CEMP availability

This CEMP will be made available for public inspection on request. Confidential information, which may include the location of threatened species, Aboriginal objects or places and personnel contact details, will be removed from all documents provided or made available to the public.

An electronic copy of the CEMP is provided on the Project website (http://www.rms.nsw.gov.au/roadprojects/projects/pac_hwy/port_macquarie_cooffs_harbour/oxley_hwy_to_kempsey/project_documents/index.html).

5 Competence, training and awareness

To ensure that this CEMP is implemented effectively, each level of management is responsible for ensuring that all personnel reporting to them are aware of the requirements of this CEMP. The ESR will coordinate the environmental training in conjunction with other training and development activities (e.g. safety).

5.1 Environmental induction

All personnel (including sub-contractors) are required to attend a compulsory site induction that includes an environmental component prior to commencement on-site. This is done to ensure all personnel involved in the Project are aware of the requirements of the CEMP and to ensure the implementation of environmental management measures.

Short-term visitors to site for purposes such as deliveries will be required to be accompanied by inducted personnel at all times.

The ESR will conduct the environmental component of the site inductions.

The environmental component will include, but not limited to, an overview of:

- Relevant details of the CEMP including purpose and objectives.
- Key environmental issues.
- Conditions of environmental licences, permits and approvals.
- Specific environmental management requirements and responsibilities.
- Mitigation measures for the control of environmental issues.
- Incident response and reporting requirements.
- Information relating to the location of environmental constraints.

A record of all environment inductions will be maintained and kept on-site. The ESR may authorise amendments to the induction at any time. Possible reasons for changes to the induction may be Project modifications, legislative changes or amendments to this CEMP or related documentation.

The Environmental Representative will review and approve the induction program and monitor implementation.

5.2 Toolbox talks, training and awareness

Toolbox talks will be one method of raising awareness and educating personnel on issues related to all aspects of construction including environmental issues. The toolbox talks are used to ensure environmental awareness continues throughout construction.

Toolbox talks will include details of EWMSs for relevant personnel. Toolbox talks will also be tailored to specific environmental issues relevant to upcoming works.

Relevant environmental issues may include (but are not limited to):

- Erosion and sedimentation control.
- Hours of work.
- Emergency and spill response.
- Aboriginal and non-Aboriginal heritage.

- Threatened species, endangered ecological communities, clearing controls and vegetation protection.
- Weed management.
- Dust control.

Toolbox attendance is mandatory and attendees of toolbox talks are required to sign an attendance form and the records maintained.

Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact. Topics covered may include those detailed above, or others deemed necessary in the lead up to or during construction.

Another way to inform construction personnel will be through the development and distribution of awareness notes. These will typically take the form of a poster, booklet, or similar and will be distributed to engineers, supervisors and others with a responsibility for managing specific work locations or activities. This documentation will be used to inform the broader workforce through either daily pre-starts meeting (see section 5.3) or provision in worker crib sheds/break facilities.

The Environmental Representative will review and approve the training program and monitor implementation.

5.3 Daily pre-start meetings

The pre-start meeting is a tool for informing the workforce of the day's activities, safe work practices, environmental protection practices, work area restrictions, activities that may affect the works, coordination issues with other trades, hazards and other information that may be relevant to the day's work.

The Supervisor with support as appropriate from the ESR, FAA WHS Representative, FAA Site Engineer, or FAA Q&E Manager will conduct a daily pre-start meeting with the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. Daily pre-start meetings are generally succinct in nature and take approximately 10-15 minutes.

The environmental component of pre-starts will be determined by the Site Engineer, Q&E Manager, Supervisor and ESR and will include any environmental issues that could potentially be impacted by, or impact on, the day's activities. All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained.

Pre-start topics, dates delivered and a register of attendees will be recorded.

6 Communication

6.1 Internal communication

Clear lines of communication throughout all levels and functions (e.g. management, staff and sub-contracted service providers), is key to minimising environmental impacts and achieving continual improvements in environmental performance.

The environmental team will meet regularly to discuss any issues with environmental management on-site, any amendments to plans that might be required or any new/changes to construction activities.

Regular meetings may also be scheduled with the Environmental Representative and relevant Roads and Maritime environmental staff. The purpose of these meetings would be to communicate ongoing environmental performance and to identify any issues to be addressed.

In addition, environment team members will participate in toolbox talks on at least a weekly basis. This forum will provide an opportunity for the environment team members to communicate on environmental performance, to advise on any upcoming sensitive environmental matters for future work areas and to receive feedback from on-site personnel.

Further internal communications regarding environmental issues and aspects will be through awareness training as described in Section 5.2.

6.2 External and government authority consultation

The FAA Q&E Manager will be the main point of contact regarding specific environmental issues. The FAA Q&E Manager has the responsibility to report on the ongoing environmental performance of the Project to Roads and Maritime, Environmental Representative and EPA. The FAA Q&E Manager will report regularly to Roads and Maritime on progress and any key environmental matters and to the EPA through monthly EPL reports.

6.3 Stakeholder and community communication

6.3.1 Community communications strategy

A Community Communications Strategy (Construction Community Liaison Management Plan) has been developed to provide an approach to stakeholder and community communications in accordance with the requirements of CoA B28. The strategy identifies opportunities for providing information and consulting with the community and stakeholders during the construction phase of the Project. The plan defines:

- The engagement groups.
- The key messages of the Project.
- The range of tools that will be used to interact with community and stakeholders.

Communication tools defined in the strategy include:

- Targeted community open days.
- Advertisements.
- Displays.
- Door-knock.
- Letterbox drops.
- Signage.

- Website.
- Focus meetings.
- 1800 number and email address.

The Community Communications Strategy (Construction Community Liaison Management Plan) has been submitted to DP&I on 4/4/14 for approval prior to the commencement of construction.

6.3.2 Construction Complaints Management System

A Construction Complaints Management System, consistent with AS 4269: Complaints Handling, will be developed for the Project, in accordance with the requirements of CoA B27.

All community inquiries and complaints related to the construction activities will be referred to the 24-hour community information line (1800 1545 724). A postal address and email address [Sancrox@au-ferrovial.com] has been provided for receipt of complaints and enquiries. The telephone number, the postal address and the email address was published in newspapers circulating in the local area prior to the commencement of construction and is provided on the Project website.

Information on all complaints received, including the means by which they were addressed and whether resolution was reached and whether mediation was required or used will be included in a complaints register. The information contained within the register will be made available to the Director-General on request.

Attempts will be made to resolve all complaints in accordance with the community engagement strategy. An initial response to complaints will be provided within 24 hours of a complaint being received. A further detailed response, including steps taken to resolve the issue(s) that lead to the complaint, will be provided within 10 days. All complaints should be closed off in the stakeholder database. At all times the stakeholder will be kept informed of when they will receive a response.

The FAA Q&E Manager will apply an adaptive approach to ensure that corrective actions are applied in consultation with the appropriate construction staff to allow modifications and improvements in the management of any environmental issues resulting in community complaints.

7 Incidents and emergencies

In the event of an environmental incident, Roads and Maritime Environmental Incident Classification and Reporting Procedure will be implemented. The full procedure is provided in Appendix A7.

The procedure provides references to:

- Types of incidents.
- Criteria for classifying of environmental incidents.
- Processes for systematically responding to and managing emergency situations.
- Processes and legal requirements (eg. Acts, Regulations, EPL), for reporting and notification of an environmental incident.

The procedure covers the management of events such as, but not limited to:

- Spills of fuels, oils, chemicals and other hazardous materials.
- Unauthorised discharge from sediment basins or other containment devices.
- Unauthorised clearing or clearing beyond the extent of the Project boundary or premises.
- Death or injury of fauna as a result of clearing.
- Inadequate installation and subsequent failure of temporary erosion and sediment controls.
- Unauthorised damage or interference to threatened species, endangered ecological communities or critical habitat.
- Unauthorised harm or desecration to Aboriginal objects and Aboriginal places.
- Unauthorised damage or destruction to any State or locally significant relic or Heritage item.
- Unauthorised damage to marine vegetation and mangroves.
- Unauthorised dredging or reclamation works within a watercourse.
- Potential contamination of waterways or land.
- Accidental starting of a fire or a fire breaking out of containment.
- Any potential breach of legislation, including a potential breach of a condition of: an environment protection licence; CoA approval; or any agencies permit conditions.
- Works undertaken without appropriate approval or assessment under the EP&A Act.
- Works undertaken that are not in accordance with a Project assessment.
- Unauthorised dumping of waste.

In accordance with the requirements of CoA B24, the Compliance Tracking Program will document:

- Mechanisms for reporting and recording incidents and actions taken in response to those incidents.
- Provisions for reporting environmental incidents to the Director General during construction and operation.

- Procedures for rectifying any non-compliance identified during review of incident management.

Typically, environmental incidents will be notified verbally immediately and in writing within one hour of any incident occurring to the Roads and Maritime Representative and the Environmental Representative. Incident reports will be provided to Roads and Maritime Representative and the Environmental Representative within 24 hours of the incident occurring, including lessons learnt from each environmental incident and proposed measures to prevent the occurrence of a similar incident. All efforts will be undertaken immediately to avoid and reduce impacts of incidents and suitable controls put in place. Incidents will be close out as quickly as possible, taking all required action to resolve each environmental incident.

Where Roads and Maritime issue a Corrective Action Request to Ferrovial Agroman Australia in relation to an environmental incident, the corrective/preventative action to prevent reoccurrence or address environmental impact must be completed within the specified time frame and the completed Corrective Action Request returned to Roads Maritime within 7 days.

The EPA will be notified of any environmental incidents or pollution incidents on or around the site via the EPA Environment Line (telephone 131 555) in accordance with Part 5.7 of the POEO Act. The circumstances where this will take place include:

- a) If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial.
- b) If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000.

Where the incident involves an Aboriginal site, relevant Registered Aboriginal Parties will be notified and their input sought in closing out the incident.

Roads and Maritime Environment Branch and Project team will maintain all records relating to environmental incidents.

The Director General will be notified of incidents in writing in circumstances where:

- The actual or potential harm to the health or safety of human beings or ecosystems is not trivial.
- The actual or potential loss of property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000
- A breach of the Conditions of Approval or a breach of legislation has occurred.

An initial notification to the Director-General will be made verbally the same day. The written notification will be made within 10 working days. Where incidents are considered to be minor, i.e. do not meet the criteria above, they will be reported to the Director-General in accordance with the compliance tracking reporting frequencies prescribed in Section 2.2 of the Compliance Tracking Program.

8 Inspections, monitoring and auditing

8.1 Environmental inspections

8.1.1 Weekly and post rainfall site inspections

The FAA Q&E Manager and/or ESR will undertake weekly and post rainfall inspections of the work sites to evaluate the effectiveness of environmental controls. The ESR will record inspection findings on an inspection checklist form.

If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded on the checklist form. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority.

All deficiencies must be promptly issued to the applicable parties, actioned, verified and closed out within an appropriate time frame based on the risk score associated with each deficiency. Actions listed will be identified and an appropriate timeframe to close out will take into consideration risks (eg location, weather).

8.1.2 Environmental Representative, Roads and Maritime and ERG inspections

The Environmental Representative, Roads and Maritime staff and members of the ERG will undertake regular inspections of works sites, and in particular critical activities throughout construction of the Project. Inspections by the Environmental Representative and Roads and Maritime project staff would typically occur on a weekly or fortnightly basis depending on the complexity and anticipated risks associated with the stage of construction. ERG inspections will typically be less frequent, more likely on a monthly or three-monthly basis depending on the construction staging of the Project.

A member of the FAA environment team will participate in all Environmental Representative, Roads and Maritime and ERG inspections, and records maintained. Deficiencies and required actions will be analysed and prioritised at the completion of the inspection and timeframes for implementation of corrective actions agreed.

8.1.3 Pre-work inspections

Prior to the commencement of works on each shift, an inspection will be carried out and will include a check of relevant environmental controls and resources required to ensure effective operation and maintenance. Works are not to commence unless inspections are found to be satisfactory.

The FAA Site Engineer, FAA Supervisor or ESR will undertake the inspections.

8.2 Environmental monitoring

Monitoring will be undertaken to validate the impacts predicted for the Project, to measure the effectiveness of environmental controls and implementation of this CEMP, and to address approval requirements.

Weather monitoring- the ESR shall utilise the BOM located at Port Macquarie Airport (approximately 4.5km NE of the Project). In addition, rainfall gauges shall be located at the Site Compound and in the vicinity of the Bridge Works (Highway Overpass). Gauges shall be monitored daily by the ESR with records submitted and available as per the EPL and contract requirements- see table 8-1 below.

The monitoring requirements for required aspects are included in the relevant environmental management sub-plans and summarised in Table 8-1 and Table 8-2 below.

Table 8-1 Summary of environmental monitoring required by Project Approval

CoA	Description	Relevant Sub-Plan	Reporting Requirements
B10 and IB31(b)	Ecological monitoring for construction related impacts	Construction Flora and Fauna Management Sub-Plan (Appendix B2)	Annual reporting of results to the Director-General, EPA and DPI (Fishing and Aquaculture).
B16, B17, and B31 (d)	Water Quality Monitoring Program	Construction Soil and Water Management Sub-Plan (Appendix B4)	Reporting of results to DP&I, EPA, DPI (Fishing and Aquaculture) and NOW.
B20 (i)	Monitoring procedures for the built elements and landscaping (including weed control)	Urban Design and Landscaping Plan	Refer to UDLP
B29 (c) and B29 (d)	Monitoring of implementation and outcomes of EMPs and monitoring programs by Environmental Representative	NA	Report to Roads and Maritime
B30 (e) (i)	Monitoring of dust emissions	Construction Air Quality Management Sub- Plan (Appendix B6)	Refer to Sub-Plan
B30 (e) (iii)	Construction and operation of ancillary facilities	Construction Soil and Water Management Sub-Plan (Appendix B4) Construction Air Quality Management Sub- Plan (Appendix B6)	Refer to Sub-Plans
B30(e) (v)	Monitoring of construction waste	Construction Waste and Energy Management Sub-Plan (Appendix B7)	Refer to Sub-Plan
B30 (e) (vi)	Monitoring the impacts of spoil and fill	Construction Soil and Water Management Sub-Plan (Appendix B4)	Refer to Sub-Plan
B30(e) (vii)	Monitoring of construction hazard and risks	Roads and Maritime Services Environmental Incident Classification and Reporting (Appendix A7)	Refer to Appendix A7
B31 (a)(vi)	Monitoring of the Construction Traffic Management Plan	Construction Traffic Management Sub-Plan (Appendix B1)	Refer to Sub-Plan
B31 (b) (ix)	Monitoring of Construction Flora and Fauna Management Plan	Construction Flora and Fauna Management Sub-Plan (Appendix B2)	Refer to Sub-Plan
B31(c) (vii)	Construction noise and vibration monitoring	Construction Noise and Vibration Management Sub-Plan (Appendix B3)	Refer to Sub-Plan
C16	Monitoring/reporting measures to protect Aboriginal cultural heritage sites	Construction Heritage Management Sub-Plan (Appendix B5)	Refer Sub-Plan

Table 8-2 Summary of environmental monitoring required by EPBC Act Approval

Condition	Description	Relevant Sub-Plan	Reporting Requirements
4 and 8	Ecological monitoring for construction related impacts	Construction Flora and Fauna Management Sub-Plan (Appendix B2)	Annual reporting of results to the Minister (Department of the Environment).

A Monitoring procedure will address how these activities will be undertaken. The monitoring procedure will include:

- Purpose and scope.
- Minimum acceptable frequency and standards listed in applicable approvals, licences and regulations.
- Relevant EPA approved methods, Australian Standards or, in the absence of an Australian Standard, industry acceptable procedures.
- Targets and parameters.
- Processes for response to any exceedances of targets/standards.
- Processes for recording and reporting results.

The Environmental Representative and Roads and Maritime Representative will be advised of any non-conformances from monitoring and details reported in the monthly report.

Where a non-conformance is detected or monitoring results are outside of the expected range and are directly attributable to FAA’s activities (i.e. are influenced by factors under the direct control of the FAA e.g. noise from construction equipment), the process described in Section 8.6 will be implemented. Steps in the process will typically include:

- An analysis of the results by the ESR in more detail with a view of determining possible causes for the non-conformance.
- A site inspection by the ESR.
- Advising relevant personnel of the problem.
- Identifying and agreeing on actions to resolve or mitigate the non-conformance.
- Implementing actions to rectify or mitigate the non-conformance.

A Non-conformance Environmental and/or Incident Report may be issued by the FAA Q&E Manager in response to the non-conformance problem if it is found to be construction related.

The timing for any improvement will be agreed between the relevant Site Engineer and FAA Q&E Manager based on the level of risk (e.g. a significant risk will require immediate action).

All environmental monitoring equipment shall be maintained and calibrated according to the manufacturer’s specifications and appropriate records kept (Refer to FAA’s Quality Procedure for Calibration Control).

8.3 Auditing and reporting

Table 8-3 presents auditing requirements that are applicable to the Project.

8.3.1 Contractor audits

Internal auditing will be undertaken generally on a six monthly basis throughout the Project. The purpose of auditing is to verify compliance with:

- This CEMP and Sub-Plans.
- Approval requirements (CoA, SoC).
- Any relevant legal and other requirements (e.g. licenses, permits, regulations, Roads and Maritime contract documentation).

An audit checklist will be developed and amended as necessary to reflect changes to this CEMP, subsequent approvals and changes to Acts, regulations or guidelines.

8.3.2 Independent external audits

External auditing will be undertaken by an independent environment auditor in accordance with ISO 19011:2003 – Guidelines for Quality and/ or Environmental Management Systems Auditing.

Table 8-3 Audit requirements

No.	Audit	Requirement	Timing	Responsibility	Recipient
1	Internal audit	Verify compliance with approval and legal requirements, Roads and Maritime specifications and construction documentation.	The first audit within three months of the commencement of construction and then at six Monthly intervals thereafter. The final submitted within five working days of contract completion date.	FAA Q&E Manager or-ESR	Project Manager, Roads and Maritime Representative
2	External independent audit	Verify compliance with approval and legal requirements, Roads and Maritime specifications, construction documentation and any other commitments.	Six monthly	FAA Q&E Manager	Project Manager, Roads and Maritime Representative
3	External independent audit	Verify compliance with the Department of the Environmental EPBC Act conditions of approval	Upon request	Environmental Manager	Minister for the Environment

8.4 Compliance tracking program

An Compliance Tracking Program has been developed for the Project. The requirements of the Compliance Tracking Program, as prescribed in CoA B24, include:

- a) FAA shall notify Roads and Maritime Services of the commencement of the action and Roads and Maritime will notify the Department in writing within 30 days of the commencement, as required by the Department of the Environment Condition of Approval 9.
- b) Provisions for periodic review of Project compliance with the requirements of this approval, Statement of Commitments and documents listed under condition A1.
- c) Provisions for periodic reporting of compliance status against the requirements of this approval, Statement of Commitments and documents listed under condition A1 to the Director General including at least one month prior to the commencement of construction and operation of the Project and at other intervals during the construction and operation, as identified in the Program.
- d) A program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing.
- e) Mechanisms for reporting and recording incidents and actions taken in response to those incidents.
- f) Provisions for reporting environmental incidents to the Director General during construction and operation.
- g) Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management.

The Compliance Tracking Program describes how the requirements of CoA B24 will be met and sets out a program and frequency for compliance reporting and independent auditing. The compliance reporting required under the Compliance Tracking Program will record how the CoA and SoC have been addressed. A summary of the required compliance reporting, as required by CoA B24, is provided in Table 8-4.

As required by the Department of the Environment Condition of Approval 9, within 30 days FAA shall notify Roads and Maritime Services of the commencement of the construction works, Roads and Maritime shall be responsible for advising the Department in writing of the commencement.

Table 8-4 Compliance reporting

No.	Report	Requirement	Timing	Responsibility	Recipient
1	Compliance Tracking Program CoA B24 (a)	Describes how the requirements of CoA B24 will be met and sets out a program and frequency for compliance reporting and independent auditing.	Prior to construction	Roads and Maritime	DP&I
2	Compliance Reporting CoA B24 (c)	Report on compliance and performance against approval requirements. The compliance reporting required under the Compliance Tracking Program will record how the CoA and SoC have been addressed.	Prior to construction, six months following commencement of construction and then at yearly intervals thereafter. Prior to commencement of operation.	Roads and Maritime	DP&I and ER

8.5 Other reporting

Prior to, during and following construction, various reports will be prepared to fulfil internal Roads and Maritime and FAA reporting needs and requirements under various Project approvals. Table 8-5 sets out the reporting requirement applicable to the Project, timing of the reporting, who is responsible for managing preparation of the reports and the intended recipient(s).

Additional reporting may be necessary as the works progress. In such a circumstance, Table 8-5 will be amended to reflect these changes.

Table 8-5 Reporting requirements

No.	Report	Requirement	Timing	Responsibility	Recipient
1	Compliance Reporting – Department of the Environment EPBC Act condition of approval 8	Report on compliance with each condition of approval, including implementation of the Biodiversity Offset Management Plan, Flora and Fauna Management Plans and Ecological Monitoring Plan.	Within three months of every 12 month anniversary of the commencement of the action	FAA Q&E Manager	Department of the Environment
2	Monthly environmental report	For incorporation in Project Monthly Reports including environmental statistics (i.e. incidents, regulatory action, complaints on environmental issues), regulatory and authority considerations, monitoring program performance and key environmental issues.	Monthly	FAA Q&E Manager	Roads and Maritime
3	EPL monthly report	Details of all non-compliances with conditions of EPL, measures taken to prevent recurrence, and	Within 10 working days of the end of each calendar	FAA Q&E Manager	EPA

No.	Report	Requirement	Timing	Responsibility	Recipient
		details of discharges from sediment basins where water quality results exceed EPL conditions.	month.		
4	EPL annual returns	Report on compliance with EPL.	Within 60 days of the anniversary of the EPL.	FAA Q&E Manager	EPA
5	ER inspection report	Report of site environmental performance following routine inspections.	Monthly	Environmental Representative	Roads and Maritime
6	Environmental risk assessment	Conducted for each construction stage, project changes and significant issues.	Prior to construction during development of CEMP and as required thereafter.	FAA Q&E Manager and/or ESR, Site Engineer	Roads and Maritime
7	Monitoring results	Report on monitoring data recorded and potential exceedances against criteria.	As required	FAA Q&E Manager and/or ESR	Roads and Maritime
8	Roads and Maritime and/or EPA environmental inspection reports	Response to matters raised in Roads and Maritime and/or EPA site inspections.	As required. Typically every two weeks for Roads and Maritime inspection reports and monthly for EPA inspection reports.	FAA Q&E Manager and/or ESR,	Roads and Maritime/ EPA

8.6 Non-conformity, corrective and preventative actions

Any member of the Project team may raise a non-conformance or improvement opportunity.

The FAA Quality Plan (SCX-Q-P-001) describes the process for managing non-conforming work practices and initiating corrective/preventative actions or system improvements.

The Environmental Representative and Roads and Maritime Representative or public authority may also raise a non-conformance or improvement opportunity using the same process.

A non-conformance is the failure or refusal to comply with the requirements of this CEMP and supporting documentation.

For each non-conformance identified, a corrective/preventative action (or actions) must be implemented. In addition, any environmental management improvement opportunities can be initiated because of incidents or emergencies, monitoring and measurement, audit findings or other reviews. Improvement opportunities may also result in the implementation of corrective/preventative actions.

Corrective/preventative actions and improvement opportunities will be entered into the FAA's quality system database and include detail of the issue, action required and timing and responsibilities. The record will be updated with date of close out and any necessary notes. The database will be reviewed regularly to ensure actions are closed out as required.

Non-conforming activities may be stopped, by the FAA Q&E Manager, ESR or FAA Site Engineer following consultation with the FAA Project Manager. The works will not commence until a corrective/preventative action has been closed out. The Environmental Representative may also stop works in these circumstances. In such circumstances, a non-conformance report must be prepared in accordance with the Quality Plan.

Procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management are also documented in the Compliance Tracking Program.

9 Review and improvement

Management reviews are undertaken as part of the continual improvement process. The management review can consist of group reviews, or executive reviews.

A group review is initiated by the ESR and includes relevant Project team members and stakeholders. The environment team also meet as least quarterly, or at other pre-determined periods, to review environmental management issues for the Project. The environment team meeting can be run in conjunction with a wider group meeting if the FAA Q&E Manager deems it appropriate.

The environment group meetings include:

- A review of the aspects and impacts register, legal register and environmental induction.
- Consideration of monitoring, inspection and audit results.
- Consideration of incidents and any lessons learnt.
- Consideration of any new regulatory issues.
- A review of the effectiveness of erosion and sediment controls.
- Consideration of ERG issues.
- Consideration of changes in operational needs such as resourcing.
- Feedback from management reviews.

An executive review will involve the management team. This review will be held every 12 months and will include a review of:

- Effectiveness of environmental management documentation implementation.
- Management effectiveness.
- Potential improvements to the environmental management documentation.
- Adequacy of resources.
- Findings of audits.
- Environmental objectives and targets.
- Environmental performance.
- Compliance with legal and other requirements.
- Critical non-conformance or repeated non-conformances.
- Organisation changes.
- Effectiveness of training and inductions.

The outcomes of the group and executive reviews could include amendments to this CEMP and related documentation, revision to the Project's environmental management system, risk assessment review, re-evaluation of the Project objectives and targets as well as feeding into other Project documents.

A CEMP review would also be conducted following Category 1 incidents, where these incidents are relevant to, and require an updated to the CEMP".

Any changes to the CEMP, sub plans or other documentation prescribed by the CoA will be advised to Roads and Maritime, The Environmental Representative and DP&I (where relevant) for approval. This is described further in Section 1.6”.

10 Documentation

10.1 Environmental records

The ESR is responsible for maintaining all environmental management documents as current at the point of use. Types of records include:

- All monitoring, inspection and compliance reports/records.
- Correspondence with public authorities.
- Induction and training records.
- Reports on environmental incidents, other environmental non-conformances, complaints and follow-up action.
- Community engagement information.
- Minutes of CEMP and construction environmental management system review meetings and evidence of any action taken.

All environmental management documents are subject to ongoing review and continual improvement. This includes times of change to scheduled activities or to legislative or licensing requirements.

Only the FAA Q&E Manager has the authority to change any of the environmental management documentation.

10.2 Document control

FAA or Roads and Maritime where relevant, will coordinate the preparation, review and distribution, as appropriate, of the environmental documents listed above. During the Project, the environmental documents will be stored at the main site compound.

FAA will implement a document control procedure to control the flow of documents within and between Roads and Maritime, stakeholders and subcontractors.

The procedure will also ensure that documentation is:

- Developed, reviewed and approved prior to issue.
- Issued for use.
- Controlled and stored for the legally required timeframe.
- Removed from use when superseded or obsolete.
- Archived.

A register and distribution list will identify the current revision of particular documents or data.

Appendix A1

Legal and other requirements

Table 1 Legal register

Table 2 Roads and Maritime G36 requirements

Table I Legal register

Act	Activity / aspect	Requirement	Reference	Part 3A applicability
General				
<i>Environmental Planning and Assessment Act, 1979</i>	All	Comply with the terms Minister for Planning's approval for the project. Obtain the Minister's approval for any project modifications that are not consistent with the planning approval.	S75W	Yes
Water				
<i>Water Management Act 2000</i>	Water access and use.	Do not take water from a water source (a lake, river or estuary or place where water occurs naturally on or below the surface of the ground, and includes coastal waters) without an access licence.	S56 S60A	No
With the exception of controlled activity approvals, the <i>Water Management Act 2000</i> (WM Act) only applies in relation to those water sources covered by operational water sharing plans – these areas cover most of the State's major regulated river systems.		Do not use of water on land (unless supplied by a water utility, irrigation corporation etc or in accordance with basic landholder rights) without a water use approval.	S89 S91A	

* Note that pursuant to Schedule 6A of the *Environmental Planning and Assessment Act 1979*, the project is a transitional Part 3A project. The provisions of Part 3A therefore continue to apply.

Act	Activity / aspect	Requirement	Reference	Part 3A ⁷ applicability
<i>Water Management Act 2000</i>	Water management works	Do not construct/use a water supply work, drainage work or flood work without the appropriate approval.	S90 S91B S91C S91D	No
<i>Water Management Act 2000</i>	Waterfront land.	Do not deposit material, excavate, or remove material within a watercourse bank, shore or bed, or on land 40 metres inland, or interfere with the likely flow of water to such a body, without a controlled activity approval.	S91	No Public authorities are exempt from the need to obtain a controlled activity approval. Water Management (General) Regulation 2011 (cl.38)
<i>Water Act 1912</i> Note that this Act is being progressively repealed by the <i>Water Management Act 2000</i> (WM Act). With the exception of controlled activity approvals, the WM Act only applies in relation to those water sources covered by operational water sharing plans – these areas cover most of the State's major regulated river systems.	Surface water	Obtain a licence or permit for construction or use of 'work' for purposes including the taking and using of water	S21B	Yes
	Groundwater	Obtain a licence where interference with groundwater is likely to occur.	S112 S121A	S112 does not apply to the Crown. Roads and Maritime is therefore not required to obtain a licence under this provision.
	Floodplains	Obtain an approval for controlled works. These include works which occur on a designated floodplain, which can prevent land from being flooded or which can affect water flow to or from a river or lake.	S180	An exemption in relation to roads potentially applies – see clause 4 of the Water (Part 8-General) Regulation 1995.
<i>Protection of the Environment Operations Act 1997</i>	Water pollution	Do not cause water pollution (other than to a sewer), except in accordance with the conditions of any EPA licence.	S120 S122	Yes

Act	Activity / aspect	Requirement	Reference	Part 3A ¹ applicability
Noise				
<i>Protection of the Environment Operations Act 1997</i>	Plant maintenance and operation	Do not operate plant if it emits noise caused by poor maintenance or operation.	S139	Yes
<i>Protection of the Environment Operations Act 1997</i>	Materials management	Do not cause noise by failing to properly and efficiently deal with materials.	S140	Yes
Protection of the Environment Operations (Noise Control) Regulation 2008	Marine vessels – offensive noise and noise control equipment	As owner or captain, do not allow a vessel to be used on navigable waters so as to emit offensive noise. Do not use a vessel on navigable waters if its noise control equipment is defective.	cl. 30-31 cl. 32	No- No marine activities included in the scope of this Project(Sancrox)
Contaminated material				
<i>Protection of the Environment Operations Act 1997</i>	Land pollution	Do not cause or permit land pollution other than under authority of a licence or regulation. (However it is not a land pollution offence to place virgin excavated natural material or lawful pesticides and fertilisers on land, or by placing matter on land that has been notified to the EPA as an unlicensed landfill and which is operated in accordance with the regulations.)	S142A – S142E	Yes
<i>Contaminated Land Management Act 1997</i>	Reporting contamination	Notify the EPA if contaminants exceed thresholds contained in guidelines or the regulations where contamination has entered or will foreseeably enter neighbouring land, the atmosphere, groundwater or surface water. Contaminants in soil are equal to or exceed guideline levels with respect to the current or approved use of the land. Contamination meets other criteria that may be	S60	Yes

Act	Activity / aspect	Requirement	Reference	Part 3A ¹ applicability
		prescribed by the regulations.		
Biodiversity				
<i>Noxious Weeds Act 1993</i>	Weed control	As a public authority occupier of land, control noxious weeds on the land as required under the control category or categories specified in relation to the weeds concerned. Notify relevant control authority within 3 days of becoming aware that a notifiable weed (W1 weed) is on land. (or ought reasonably to have known). Must not scatter or cause to scatter notifiable weed material.	S13 S16 S30	Yes
<i>National Parks and Wildlife Act 1974</i>	Native fauna	Do not harm any animal that is of a threatened species population or ecological community, or its habitat except in accordance with a planning approval.	Part 8A	Yes
		Do not harm critical habitat except as in accordance with a planning approval	S98	NO (Not identified in the Project area)
		Do not harm native fauna (other than listed unprotected fauna) except in accordance with a planning approval or licence. (Not identified in the Project area).	S120, S127, 132C	NO (Not identified in the Project area)
<i>Native Vegetation Act 2003</i>	Flora and native vegetation conservation	Only clear native vegetation in accordance with a planning approval or property vegetation plan.	S12	Yes
<i>National Parks and Wildlife Act 1974</i>	Flora and native vegetation conservation	Do not pick protected native plants without a licence.	S117 S131	Yes
<i>Fisheries Management Act 1994</i>	Dredging or reclamation	Provide the Minister for Primary Industries 28 days notice of planned dredging or reclamation work.	S199	NO (Not identified in the Project area)

Act	Activity / aspect	Requirement	Reference	Part 3A ⁷ applicability
<i>Fisheries Management Act 1994</i>	Mangroves, seagrasses and marine vegetation	Do not harm any mangroves, seagrasses or other marine vegetation on public water land protected by the regulations without a permit.	S205	No
<i>Fisheries Management Act 1994</i>	Fish passage	Do not block fish passage without a permit.	S219	No
<i>Environment Protection Biodiversity Conservation Act, 1999 (Commonwealth)</i>	Flora and fauna conservation	Do not kill, injure or take a member of a listed threatened species without a permit.	Part 13	Yes
		Comply with the terms of any EPBC Act approval for the project.		NA
Waste				
<i>Protection of the Environment Operations Act 1997</i>	Littering	Do not litter in a public place or an open private place. Do not litter from a vehicle. Only deposit advertising material in receptacles provided for mail or newspapers or under the door of the premises. Do not deposit advertising material on or in vehicles.	Part 5.6A	Yes
<i>Protection of the Environment Operations Act 1997</i>	Waste and transportation	Do not undertake a scheduled waste activity unless in accordance with an environmental protection licence. A licence must be obtained when construction and demolition wastes are applied to land under certain circumstances. This includes the reincorporation of crushed road base material back into roads and the placing of excess fill material onto properties. A licence is not required if the material: Is VENM. Does not exceed 200 tonnes in the Sydney, Newcastle and Wollongong areas, or 20,000 tonnes	Part 3.2 Schedule 1	Yes

Act	Activity / aspect	Requirement	Reference	Part 3A ¹ applicability
		<p>outside these areas.</p> <p>Is covered by a “general exemption”. Current exempted materials are ENM, recycled aggregates and raw mulch. These exemptions are conditional and require some chemical testing of materials before they are placed onto land.</p> <p>A licence must be obtained if more than 2,500 tonnes (or cubic metres) is stored on a stockpile site at any one time, or more than 30,000 tonnes of waste is received per year from off site.</p>		
		Only transport waste to a facility that can lawfully accept the waste.	S143	Yes
		Do not dispose of waste in a manner that harms or is likely to harm the environment.	S115	Yes
Protection of the Environment Operations (Waste) Regulation 2005	Waste and transportation	Comply with general requirements for the transport of waste. For example, any vehicle used by the person to transport waste must be kept in a clean condition and be maintained so as to prevent spillage of waste. For some wastes only licensed transporters can be used.	Regulation cl.49	Yes
		Comply with record keeping requirements in relation to the transport of certain types of waste.	Regulation Part 3	Yes
Heritage				
<i>Heritage Act 1977</i>	Heritage	Do not undertake an activity that will affect a place, building, work, relic, moveable object or precinct which is subject to an Interim Heritage Order or is listed on the State Heritage Register without approval from the Heritage Council.	S56-57	No
		Do not disturb or excavate land with knowledge or reasonable cause to suspect that the disturbance or	S139	No

Act	Activity / aspect	Requirement	Reference	Part 3A ⁷ applicability
		excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed; or Do not disturb or excavate land on where a relic has been discovered or exposed unless an excavation permit in place.		
		Notify the heritage Council on discovery of a relic	S146	Yes
<i>National Parks and Wildlife Act 1974</i>	Aboriginal places and objects	Do not harm or desecrate an Aboriginal object or Aboriginal place without consent.	S86 S90	No
		Notify the NPWS within reasonable time of becoming aware of the location or discovery of certain Aboriginal objects.	S89A	Yes
<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Commonwealth)</i>	Protection of areas and objects	Report any discovery of Aboriginal remains to the Federal Minister for the Environment and Heritage.	S20	Yes
		Comply with the provisions of any declaration in relation to a significant Aboriginal area or object.	S22	Yes
General				
<i>Protection of the Environment Operations Act 1997</i>	Harming the environment	Do not risk harming the environment by wilfully or negligently: disposing of waste unlawfully. causing any substance to leak, spill or otherwise escape (whether or not from a container); or emitting an ozone depleting substance	S115 S116 S117	Yes
<i>Protection of the Environment Operations Act 1997</i>	Control equipment	Properly and efficiently maintain and operate any installed pollution control equipment (including monitoring devices).	S167	Yes
<i>Protection of the Environment Operations Act 1997</i>	Notification of	Notify the EPA immediately of pollution incidents where material harm to the environment is caused	S148	Yes

Act	Activity / aspect	Requirement	Reference	Part 3A ¹ applicability
<i>Act 1997</i>	pollution incidents	or threatened.		
<i>Protection of the Environment Operations Act 1997</i>	Site licensing	Do not carry out or allow an activity listed in Schedule 1, or carry out work to enable such an activity, unless the premises are licensed by the EPA. This applies to: Extractive activities This clause applies to the following activities: "land-based extractive activity" , meaning the extraction, processing or storage of extractive materials, either for sale or re-use, by means of excavation, blasting, tunnelling, quarrying or other such land-based methods	S47 S48	Yes
<i>Environmentally Hazardous Chemicals Act, 1985</i>	Hazards and risks	Obtain a licence to undertake prescribed activities involving environmentally hazardous chemicals or declared chemical wastes.	S28	Yes
<i>Dangerous Goods (Road and Rail Transport) Act 2008</i>	Hazards and risks	Ensure that dangerous goods are transported in a safe manner.	S9	Yes
<i>Pesticides Act 1999</i>	Hazards and risks	Use pesticides in an environmentally sensitive manner. Do not use an unregistered pesticide without a permit. Read the label or permit for the pesticide. Use registered pesticides in accordance with instructions on the label. Do not use any restricted pesticide unless authorised by a certificate of competency or a pesticide control order under the Act. Compliance with pesticide codes of practice is	S12 S13 S14 S15 S17	Yes

Act	Activity / aspect	Requirement	Reference	Part 3A ¹ applicability
		required.		
<i>National Greenhouse and Energy Reporting Act, 2007 and Regulations 2008</i>	Greenhouse gas emissions	Accounting and reporting of greenhouse gases produced and energy consumed during construction. Applicability dependent on thresholds.	-	Yes
<i>Privacy and Personal Information Protection Act 1998 (NSW)</i>	Community Liaison	Legislation relevant to Community Liaison	-	Yes

Table 2 Roads and Maritime G36 requirements

G36 reference	Requirement	Relevant section of CEMP or supporting documentation
Section 3	Implement a Contractors Environmental Management System (EMS)	This document
3.1	An environmental policy must be included.	Appendix A3
3.2 c)	Prepare and implement a CEMP in accordance with Clause 4 and ISO 14001 Clause 4.3.3.	This document
3.3 a)	Nominate the Environmental Manager directly responsible for ensuring that the requirements of the CEMS are implemented and maintained.	Section 4.2.7- Position Responsibilities FAA Q&E Manager
3.3 b)	Indicate how suitable resources will be assigned to ensure that the CEMP is fully implemented.	Section 4.2 Resources, Roles, Responsibility and Authority
3.5	Include a matrix or index in the CEMP showing where the environmental protection requirements of G36 have been addressed. Advise Roads and Maritime Representative of any change to the CEMS or CEMP.	Appendix A1- Table 2 (This table) Section 1.5 Distribution
3.7	Monitor and evaluate environmental performance.	Chapter 8
3.10	Schedule and undertake CEMS audits and CEMP compliance audits.	Section 8.3
4.1.1	A CEMP must be prepared and include environmental protection practices, resources and sequence of activities required to comply with relevant environmental legislation, conditions of any applicable licence, approval and permit, ISO 14001 Clause 4.	This document (CEMP)
4.1.1	The CEMP must be either incorporated as part of the project quality plan or be consistent with the Project Quality plan.	The CEMP has been prepared in Accordance with QA Specification G36 and in part of the Project Quality Plan
4.2	The CEMP must indicate the names, responsibilities and authority of your site management personnel who have primary responsibility for implementing the CEMP, monitoring its effectiveness, rectifying and reporting any environmental deficiencies, controlling further construction activities until deficiencies are rectified and keeping your environmental records.	Section 4.2 Resources, Roles, Responsibilities and Authority
4.2	The CEMP must identify the Environmental Manager as the authorised contact person for	Section 4.2 Resources, Roles, Responsibilities and

G36 reference	Requirement	Relevant section of CEMP or supporting documentation
	communications with the Roads and Maritime Representative and the Environment Protection Authority (EPA) on environmental matters.	Authority. FAA Q&E Manager
4.2	A project soil conservationist must be appointed for the duration of the project. The soil conservationist will review all erosion, sediment and water pollution plans, controls and measures prior to installation.	Section 4.1.4 Progressive erosion and sediment control plans Appendix B4 Construction Soil and Water Quality Management Plan
4.4.1	<p>The CEMP must include details of:</p> <ul style="list-style-type: none"> • Key emergency response personnel showing responsibilities and contact details including all-hours telephone numbers. • Emergency services (e.g. ambulance, fire brigade, spill clean-up services). • Communications strategy (internal and external). <p>Containment measures to be taken in the event of emergency situations that may arise during the Contractor's Work and procedures for restoration.</p>	Chapter 7. Incidents and Emergencies Contacts, (page ii) Section 4.2 Contacts (Section 4.2) Chapter 6 Communication
4.4.2	All Environmental Incidents must be managed and reported in accordance with the Roads and Maritime Environmental Incident Classification and Management Procedure.	Appendix A7 Roads and Maritime Environmental Incident Classification Reporting
4.4.2	<p>EPA will be notified via the EPA Environment Line (telephone 131 555) of any environmental incidents or pollution incidents on or around the Site in accordance with Part 5.7 of the Protection of the <i>Environment Operations Act 1997</i> (NSW) (POEO Act), in the following circumstances:</p> <ul style="list-style-type: none"> • If the actual or potential harm to the health or safety of human beings or ecosystems is not trivial. <p>If actual or potential loss or property damage (including clean-up costs) associated with an environmental incident exceeds \$10,000.</p>	Appendix A7 Roads and Maritime Environmental Incident Classification Reporting Chapter 7 Incidents and Emergencies
4.4.2	Prepare an Incident Emergency Spill Plan as part of the CEMP.	Construction Emergency Spill Response Sub Plan
4.5	Ensure that all staff and subcontractors working on the Site are provided with environmental training to achieve a level of competence and awareness appropriate to their assigned activities before they commence their assigned activities.	Chapter 5 Competency, Training and Awareness

G36 reference	Requirement	Relevant section of CEMP or supporting documentation
4.7	Identify at least two persons (and their contact telephone numbers) who will be available to be contacted by EPA on a 24 hour basis and who have authority to take immediate action to shut down any activity, or to effect any pollution control measure, as directed by an authorised officer of EPA.	Contacts (page ii): Project Manager and Site Engineer
4.8.1	Notify local residents about new or changed construction activities which will affect access to their properties or otherwise significantly disrupt residents' use of their premises.	Section 6.3 Stakeholders and Community Communication
4.8.3	Inform residents of the proposed work outside normal working hours.	Section 6.3 Stakeholders and Community Communication Construction Liaison Management Plan
4.9	<p>You must only undertake construction activities associated with the project during 7 am – 6 pm on Monday to Friday and 8 am – 1 pm on Saturday.</p> <p>Works outside of the construction hours identified in conditions C3 may be undertaken in the following circumstances:</p> <ul style="list-style-type: none"> a) works that generate noise that is <ul style="list-style-type: none"> i. no more than 5 dB(A) above rating background level at any residence; or ii. no more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) at other sensitive land uses; or for b) the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or d) construction works undertaken through sparsely populated areas (being those areas in which sensitive receptors are located greater than 200 metres away from the project boundary). In this case construction is permissible during the following hours: 6.00am to 6.00pm Monday to Friday and 7.00am to 4.00pm Saturdays and at no time on Sundays or public holidays. These works hours may be reviewed and/ or revoked by the Director General in consultation with the EPA in the case of excessive or unresolved noise complaints; or <p>Any approval by the Principal to allow extension of working hours or working days (except for Saturday work between 8.00am to 1.00 pm), is subject to the following:</p> <ul style="list-style-type: none"> a) considered on a case-by-case or activity-specific basis; 	Appendix B3 Construction Noise and Vibration Management Sub Plan

G36 reference	Requirement	Relevant section of CEMP or supporting documentation
	<ul style="list-style-type: none"> b) accompanied by details of the nature and need for activities to be conducted during the varied construction hours; c) accompanied by written evidence to EPA and DP&I that activities undertaken during the varied construction hours are justified, appropriate consultation with potentially affected receivers and notification of port Macquarie – Hastings Council has been undertaken and all practicable and reasonable mitigation measures have been put in place; d) accompanied by EPA agreement with the proposed variation in construction times; e) managed to avoid and minimise complaints; f) undertaken in accordance with practice Note VII of the Roads and Maritime Environmental Noise Management Manual. 	
4.10	Report on complaint about any environmental issue, including pollution, arising from the Works.	Section 6.3 Stakeholders and Community Communication Appendix A7. Roads and Maritime Environmental Incident Classification Reporting
4.11	Maintain environmental records to demonstrate compliance with the CEMP.	Section 10.1. Environmental Records
4.13	Undertake inspections and surveillance, and report on performance on high risk events and activities, works in environmentally sensitive areas, the adequacy of operational controls, and measurements for aspects where compliance limits have been specified.	Chapter 8. Inspections, monitoring and auditing
4.14.1	Develop and implement a risk-based auditing program.	Section 8.3
4.15	Implement a waste and recycling material data collection program.	Appendix B7 Construction Waste and Energy Management sub Plan
5	Identify the location of environmentally sensitive areas and adjacent sensitive receivers.	Appendix A6 Sensitive area Plans
6.2	Identify obligations under environmental legislation relevant to the Work.	Appendix A1 (Table 1)
6.3	Obtain all necessary approvals, licences and permits required for the work and carry out work in accordance with the requirements.	Section 3.3 Approvals, permits and licensing Appendix A1 (Table 1)
6.4	Identify construction activities and access requirements to the construction site and the other areas	Appendix A4 Ancillary Facilities Assessment

G36 reference	Requirement	Relevant section of CEMP or supporting documentation
	affected by the Work.	
6.5	Prepare and implement a soil and water management Plan addressing: <ul style="list-style-type: none"> • Erosion and sedimentation control. • Water extraction. • Dewatering. • Works in waterways. • Impacts on groundwater from construction. 	Appendix B4 Construction Soil and Water Management sub Plan
6.6	Prepare and implement an air quality management Plan.	Appendix B6 Construction Air Quality Management Plan
6.7	Prepare and implement a Noise and Vibration Management Plan.	Appendix B3 Construction Noise and Vibration Management sun Plan
6.9	Manage clearing, mulch, flora and fauna.	Appendix B2 Construction Flora and Fauna Management sub Plan
6.12	Plan and execute the Work so as to minimise the possibility of pollution of the Site and adjoining areas from chemicals, dangerous goods and other potential contaminants.	Appendix A2. Environmental Aspects and Impacts
6.13, 6.14	Prepare and implement a Heritage Management Plan to manage Aboriginal and non-Aboriginal heritage.	Appendix B5 Construction Heritage Management Sub Plan
6.15	Manage contaminated land.	Appendix B4 Construction Soil and Water Management Sub Plan (Appendix F)
6.16	Prepare and implement a Waste Management Plan.	Appendix B7 Construction Waste and Energy Management sub Plan
6.18	Reinstate all disturbed areas both on and off the Site.	Section 2.3 Constructions activities and sequence Appendix B4 Construction Soil and Water Management Sub Plan

Appendix A2

Environmental aspects and impacts

The identification of significant construction activities and associated impacts that could eventuate during construction of the Project is central to the selection of appropriate environmental safeguards.

The risk management process involved an assessment of all specific project activities/aspects in or near environmentally sensitive areas and resulted in the development of a list of environmental risks (effects and impacts) and a corresponding risk mitigation strategy and risk ranking. Each environmental risk was categorised, based on the following:

- The environmental aspect.
- Relative scale of the potential impact.
- Type of potential impact.
- Likelihood of occurrence.

The identification of risks included a review of the proposed works, the CoA, SoC, and review of the environmental risks identified by the EA and subsequent Submissions Report.

Table 1 Aspects and impacts register

Issue	Construction activity / aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures (to be considered and where applicable further developed in associated management documents)	Risk level following mitigation	Management Documents / Training Required
Air quality	General earthworks. Vegetation clearing. Open excavation works. Spoil handling. Stockpiling	Complaints from residential and industrial neighbours, including loss of amenity, dust in living areas, swimming pools.	B (moderate)	<p>Induct personnel on air quality issues and safeguards.</p> <p>Use water carts on unsealed surfaces and stockpiles.</p> <p>Utilise safe dust suppressants to reduce dust generation.</p> <p>Use street sweepers to reduce dust in areas of dust build up.</p> <p>Modify or cease operations during high winds.</p> <p>All trucks on public roads to cover loads.</p> <p>Vehicles, equipment, machinery used and all facilities – designed, operated and maintained to control the emission of smoke, dust, odours and fumes.</p> <p>Plan construction work to minimise extent of clearing at one time.</p> <p>All disturbed areas stabilised, revegetated and/or landscaped as soon as practicable.</p> <p>Minimise tracked mud/dust on public roads.</p> <p>No burning or incineration of any material at any time.</p> <p>Dust monitoring.</p> <p>Avoid “hot-work” during total fire bans and obtain any necessary permits/exemptions from the Rural Fire Service.</p> <p>WorkCover licensing requirements will be complied with for the storage of hazardous substances and dangerous goods.</p> <p>Appropriately stocked spill kits will be readily available at all chemical storage locations and during chemical use.</p> <p>Material Safety Data Sheets (MSDSs) will be obtained, complied with and retained on site for all required chemicals.</p> <p>Pesticide use will be in accordance with the Pesticides Act, 1999.</p>	C (Low)	<p>CAQMP</p> <p>EWMS</p> <p>CSWMP</p> <p>Complaints procedure</p> <p>Induction</p>
	Vehicular movements on unsealed roads. Material haulage Quarrying. Vehicle emissions. Handling of chemicals, waste and hazardous goods. Release of greenhouse gases	Potential adverse health effects.	C (Low)		C (Low)	
		Degradation of water quality and other aspects of the natural environment.	C (Low)		C (Low)	
		Health risks to neighbours and members of the public from release of gases and/or smoke.	C (Low)		C (Low)	
Biodiversity	Clearing of native vegetation. Stockpile / haul road construction near vegetation. Works near and in creeks /	Loss of habitat for threatened species.	A (High)	<p>Induct personnel on biodiversity issues and mitigation measures.</p> <p>Prior to construction – identify and fence all flora and fauna habitat areas required to be protected as identified in the Environmental Assessment and/or detailed design</p>	B (moderate)	<p>CFFMP</p> <p>EWMS</p> <p>Vegetation Clearing procedure</p>
		Potential longer-term impacts associated with increased habitat fragmentation.	A (High)		B (moderate)	

Issue	Construction activity / aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures (to be considered and where applicable further developed in associated management documents)	Risk level following mitigation	Management Documents / Training Required
	temporary crossings. General earthworks near vegetation. Vehicular movements. Open excavation works.	Direct impact to flora or fauna during construction. Introduction of weeds, pests and disease.	B (moderate)	documentation. Minimise clearing of all vegetation and undertake progressive revegetation. Locate and construct fauna crossings as identified in the Environmental Assessment and/or detailed design documentation. Implement ongoing weed monitoring and management programs. Disturbed areas will be monitored for effective soil stabilisation and restoration / rehabilitation. Implement a stages clearing process and undertake fauna rescue during clearing as required. Engage arborist to provide advice on habitat tree health and provide ongoing advice. Design and construct all temporary waterway crossings to maintain fish passage. Undertake threatened species management as required under the Environmental Assessment and/or detailed design documentation / Approval. Implement washing procedures to prevent the spread of pests and disease. Undertake monitoring as required in the Approval. Implement Frog hygiene protocols as per Hygiene Protocol for the Control of Disease in Frogs (DECC NSW, 2008) when moving between wet-area work sites representing giant barred frog habitat (including Maria River and associated tributaries, Cooperabung, Barrys, Smiths and Pipers creeks).	C (Low)	Fauna handling procedure Induction
Aboriginal heritage	Early works including non-substantial construction activities eg services relocations. Initial clearing and/or grubbing of vegetation. Initial removal of topsoil. Construction of site compounds and spoil / mulch and / or equipment stockpile areas. Temporary access roads during construction.	Impact to identified heritage items prior to completion of any required salvage program.	A (High)	Prior to construction – identify and assess Aboriginal heritage items on proposed sites and predict potential impacts.	B (moderate)	CHMP EWMS Impact to identified heritage procedure Induction Skeletal remains procedure
		Impact (machinery, procedure vibration, stockpiles) during the construction period to identified sites	A (High)	Induct personnel on heritage issues and mitigation measures. Protect identified heritage items with protective fencing or flagging and signage from being disturbed during construction.	B (moderate)	
		Impact to undiscovered or undocumented heritage sites	B (moderate)	Undertake salvage works in accordance with the HMP prior to impacting site.	C (Low)	
		Change in visual integrity of cultural area	A (High)	If design changes or construction activities impact on areas outside of those identified in the EA, OEH and relevant Aboriginal groups will be consulted and approval obtained pre any required salvage.	B (moderate)	
		Finding / disturbing burials or human remains	C (Low)	Implement unexpected find procedures as required.	C (Low)	

Issue	Construction activity / aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures (to be considered and where applicable further developed in associated management documents)	Risk level following mitigation	Management Documents / Training Required
Non-Aboriginal heritage	Early works including non-substantial construction activities eg services relocations.	Impact to identified heritage items.	B (moderate)	<p>Prior to construction – identify and assess non- Aboriginal heritage items on proposed sites and predict potential impacts.</p> <p>Induct personnel on heritage issues and safeguards.</p> <p>Protect identified heritage items with protective fencing or flagging from being disturbed during construction.</p> <p>Undertake archival recording as specified in the HMP.</p> <p>Regular inspection of heritage protection fencing.</p> <p>Implement unexpected find procedures as required.</p> <p>Landholder consultation.</p>	C (Low)	<p>HMP</p> <p>EWMS</p> <p>CNVMP</p> <p>Chance find procedures</p> <p>Induction</p>
	Initial clearing and/or grubbing of vegetation.	Vibration damage during the construction period to identified sites.	B (moderate)		C (Low)	
	Initial removal of topsoil.	Impact to undiscovered or undocumented heritage sites.	B (moderate)		C (Low)	
	Construction of site compounds and spoil / mulch and / or equipment stockpile areas.	Change in visual integrity of heritage sites.	B (moderate)		C (Low)	
	Temporary access roads during construction.					
Noise and vibration	Site establishment.	Noise impacts on sensitive receivers during construction.	A (High)	<p>Liaise (agreements where applicable) with local communities and affected residents.</p> <p>Adherence to working hours in CNVMP unless otherwise approved.</p> <p>Implement operational noise mitigation measures as early as possible.</p> <p>Respite periods for particularly noisy/ short duration activities (in accordance with regulatory guidelines and/or CNVMP).</p> <p>Noise and vibration impacts considered in selection of construction methods.</p> <p>Construction equipment selected, operated and maintained to minimise noise impacts and where necessary fitted with silencers and “smart” reversing alarms.</p> <p>Reduced use of horns to signal trucks loaded where residences close by.</p> <p>Minimise impacts from saw cutting/ use effective shielding.</p> <p>Regular noise monitoring to monitor predicted verses actual noise levels.</p> <p>Implementing management measures where regenerated noise is found to be excessive and agreements are not in place.</p> <p>Managing construction vehicle routes and speed of vehicles.</p> <p>Modelling vibration impacts and monitoring where impacts are predicted.</p> <p>Establish and maintain complaints management system.</p> <p>Building condition reports on potentially impacted buildings as required by Project approval.</p> <p>Discuss noise and vibration monitoring results at each ERG.</p>	A (High)	<p>CNVMP</p> <p>EWMS</p> <p>Negotiated agreements</p> <p>Complaints procedure</p> <p>Induction</p>
	Earthworks.	Vibration impacts on nearby receptors, including heritage.	B (moderate)		C (Low)	
	Bridge works.					
	Piling.					
	Paving.					
	Saw cutting.					
	Crushing and screening.					
	Rock hammering and drilling.					

Issue	Construction activity / aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures (to be considered and where applicable further developed in associated management documents)	Risk level following mitigation	Management Documents / Training Required
Soil and water quality	Clearing and grubbing. Earthworks.	Erosion and movement of soils.	A (High)	Appropriately designed erosion control structures (eg sedimentation basins, ERSED-straw bales, silt fences and sand bags) will be installed, maintained and cleaned regularly.	B (moderate)	CSWMP EWMS SWMP Basin management procedure Induction Targeted ERSED training Design for temporary waterway crossings Unexpected Discovery of Contaminated Land Procedure
	Storage of fuels, chemicals and other dangerous goods.	Captured dirty water discharge from basins.	A (High)			
	Maintenance of plant and equipment, including servicing and refuelling.	Dirty water not captured and leaves site.	A (High)	Locate spoil stockpiles, plant and equipment away from drainage lines, watercourses or stormwater drains in accordance with established criteria.	B (moderate)	
	Sediment basin management.	Contamination of sediment basins and /or waterways from spills.	B (moderate)	Install clean water diversions to ensure clean and dirty water are not mixed on site.	C (Low)	
	Drainage works.	Disturbance to creeks from access road construction.	A (High)	Storage, compound access and parking areas sealed, as early during works as practicable.	B (moderate)	
	Concrete works.	Haul road washout from flood event.	A (High)	Chemical storage meets WorkCover and EPA bunding/storage requirements.	A (High)	
	Temp access road construction / removal from waterway areas.	Disturbance on unidentified contaminated land eg historical agricultural practice such as tick dips.	B (moderate)	Wheel mud reduction/ cleaning measures at exit of all sites where required.	C (Low)	
	Bridge construction.			Well designed temporary waterway crossings minimising risk of fines in waterways and designed to address larger flow volumes. Buffer zones of vegetation will be maintained adjacent to waterways for as long as practical. Rehabilitation and landscaping works of disturbed areas undertaken as soon as the works are completed and/or progressively where possible. Appropriately designed, implemented and maintained silt control systems to mitigate risk of water pollution during upgrade of the creek bridges. Implement concrete washout process within bunded areas. Provide and maintain spill kits. Consult / confirm with EPA and Primary Industries for temporary creek crossings construction / removal methods. Establish clean water catch drains/ diversion early in Project before topsoil stripping. Design drainage to maximise dirty water to sediment basins. Engage soil conservationist to advise on ERSED issues. Establish dedicated ERSED crews for the Project. Install signage at discharge points to assist workers to understand implications of dirty water release in sensitive areas. Meet new Roads and Maritime Dewatering guidelines. Implement appropriate procedures to identify, contain, handle and management contaminated material. Stabilise bridge abutment approach batters as soon as practicable following construction.		

Issue	Construction activity / aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures (to be considered and where applicable further developed in associated management documents)	Risk level following mitigation	Management Documents / Training Required
Water management	Extraction of groundwater. Water use for dust suppression, washing of plant and equipment, landscaping, compaction etc. Water use for drinking water, hand washing, toilets etc. Excavation water table. Quarrying. General earthworks and construction.	Groundwater interception and ingress into excavations.	B (moderate)	Construct "Turkeys Nest" type basins for storing captured stormwater. Prioritise the use of captured stormwater over other sources. Re-use / recycle water where possible. Minimise excavations proposed to intercept groundwater. Drainage	B (moderate)	CSWMP EWMS Basin management procedure Induction
		Reduction of aquifer storage.	C (Low)		C (Low)	
		Changes to the natural groundwater flow in the area surrounding the Project due to compaction of the road surface.	B (moderate)		C (Low)	
		Changes in the recharge and runoff patterns as a result of construction.	B (moderate)		C (Low)	
		Contamination of groundwater due to construction activities.	B (moderate)		C (Low)	
Mulch and tannin	Vegetation clearing and storage of mulch	Tannin impacts on waterways.	A (High)	Implement the Roads and Maritime mulch and tannin protocol.	C (Low)	
Spoil and Fill	Cuts. Fill areas. Borrow pits. Quarries. Haulage of spoil and fill. Stockpiling. Spoil areas.	Demand on local resources – local quarries / suppliers.	B (moderate)	Design for balanced earthworks. Refer to mitigation measures stated in the Air Quality (Dust) row above and Traffic and Transport Management row below. Off site spoil movements to be monitored and tracked on the site waste disposal register as per the EPA guidelines, including characterisation of the spoil to determine correct disposal locations and volumes. Spoil to be beneficially reused, on or off site, where applicable and meeting environmental requirements. Includes reuse of excavated material, either as fill, or as earth mounds for noise control, or beautification, shielding or revegetation mounds on site. All loads accessing public roads to be covered to prevent any loss of material, which may cause driver safety issues. Only locate stockpiles in accordance with criteria in CWSMP. Implement appropriate procedures to identify, contain, handle and management contaminated material. Classify and dispose of any contaminated land in accordance with EPA guidelines.	C (Low)	CSWMP EWMS CAQMP CEMP Unexpected Discovery of Contaminated Land Procedure
		ERSED issues from cuts / batters / stockpiles.	A (High)		B (moderate)	
		Sensitive area damage from stockpiling.	A (High)		B (moderate)	
		Disturbance on unidentified contaminated land eg historical agricultural practice such as tick dips.	B (moderate)		C (Low)	
		Exposing acid sulphate soils or potential acid sulfate soils.	A (High)		B (moderate)	
Waste Management	Generation of waste during construction activities including	Excessive waste being directed to landfill.	B (moderate)	Apply waste hierarchy principles – avoid-reduce-reuse-recycle.	C (Low)	CWEMP

Issue	Construction activity / aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures (to be considered and where applicable further developed in associated management documents)	Risk level following mitigation	Management Documents / Training Required
	building materials, excess unsuitable spoil material, vegetation material.	Incorrect disposal of contaminated waste. Not meeting POEO VENM, ENM and mulch requirements. Littering.	A (High)	Waste materials contained in waste bins or other suitable containers, and collected for recycling, reuse or disposal by the licensed waste contractor. Separate, contain, manage and dispose contaminated waste to prevent migration and further contamination whilst maintaining compliance with EPA requirements. Label and store all liquid waste containers in a bunded area prior to removal off-site. Undertake inspections of the worksite and waste storage areas to ensure litter / debris is regularly cleaned up and contained on site. Designate smoking areas. Establish recycling system early on in Project. Establish good segregation areas for concrete and waste concrete is not to be transported off site for land disposal. Section 143 Notices Under the PoEO Act and provision of a letter to landholder highlighting the need for a "s.143 Notice", the Contractor's role and the respective roles of the Roads and Maritime and the landholder in ensuring that the waste is appropriately managed. Consider types of waste, how each waste type will be used as a beneficial use and address in the approvals that no other type of waste will be used.	B (moderate)	EWMS Waste reporting register
Energy	Extraction / processing / transportation of materials. Fuel and energy use. Vegetation removal.	Excess energy consumption and greenhouse gas generation during construction	A (High)	Use local material and personnel where possible to reduce transport emissions. Restrict vegetation clearance to the minimum required. Conduct energy audits during the project to identify and address energy waste.	B (moderate)	EWMS CFFMP / Vegetation Clearing Procedure Equipment maintenance procedures. Induction
Traffic and transport	Haulage of material. Import of material / plant / equipment. Travel to / from site.	Accidents - Safety of commuters, pedestrians, cyclists, contractors and subcontractors. Delays	A (High)	Develop and update Traffic Management Plans for all stages of work. Identify and assess roads likely to be affected by Project construction and develop methods to minimise traffic increases. Undertake before and after dilapidation surveys on local roads Traffic controllers and / or signage for both egress and ingress off the work sites. All vehicles carrying materials to be adequately covered to prevent any loss of material, which may cause driver safety issues.	B (moderate)	TMP EWMS Induction
Visual Impact,	Cuttings and cut finishes. Bridge design Revegetation /	General public aesthetic impacts	B (moderate)	Landscape and rehabilitation plan including extensive seeding planting in required areas will be developed and	C (Low)	UDLMP

Issue	Construction activity / aspect	Potential impact	Risk level prior to mitigation	Indicative Mitigation Measures (to be considered and where applicable further developed in associated management documents)	Risk level following mitigation	Management Documents / Training Required
Landscaping and Rehabilitation	landscaping. Removal of visually prominent native vegetation. Evening / night works. Rehabilitation of disturbed land.	Heritage related visual.	A (High)	implemented. Landscape treatments will incorporate the surrounding landscape types and vegetation patterns and address view scapes. Embankments and cuttings will be stabilised by the use of appropriate landscape treatments. The use of night-lighting will be minimised where possible during the construction phase and directed away from residential areas. Site compounds and areas surrounding them will be kept tidy and be regularly cleaned and maintained. Undertake landscaping and revegetation works in accordance with the approved Urban Design and Landscape Management Plan. Monitoring and weed control.	B (moderate)	EWMS
General Environmental Management	Environmental management / supervision. Incident response.	Non-compliance with CEMP, SoC, MCoA, legislative requirement.	A (High)	Ensure all environmental personnel are trained in the CEMP and all associated documents.	B (moderate)	CEMP Procedures Roads and Maritime Incident Management Guidelines/ procedures EWMS Compliance Tracking Program Internal / external audits
		Failure to follow requirements of strategies / procedures.	A (High)	FAA Q&E Manager / ESR diligence in including requirements from CEMP and procedures into EWMS and training.	B (moderate)	
		Failure to report environmental issues.	A (High)	Regular review of environmental management documents. Regular review of compliance with environmental management documents, SoC, CoA etc.	B (moderate)	
		Inconsistent advice to construction personnel.	B (moderate)	Regular environment team meetings.	C (Low)	
		Inadequate response to environmental incident/ emergency.	A (High)	FAA Q&E Manager and ESR to be involved in design and construction meetings. Training in environmental emergency response. Ensure NCR process is followed.	B (moderate)	
Socioeconomic	All stages of construction	Temporary restricted access to properties due to construction works.	B (moderate)	<ul style="list-style-type: none"> Maintain access or provide alternative access to individual landholdings at all times. Ensure that there is constant access to business through the utilisation of service roads. 	C (Low)	TMP

Appendix A3

Environmental policy

ENVIRONMENT POLICY

Responsible management of the natural and human environment is an obligation we own and take seriously across all our operations.

Striving always to minimise our environmental impact, we will be responsible and efficient with our use of natural resources, minimise waste and optimise re-use and recycling of materials. We will contribute positively to conservation and improvement of the environment.

We work to and will maintain an environmental management system that meets the requirements of AS/NZS ISO 14001:2004 and is certified to this Standard by an accredited 3rd party.

Our guiding principles are:

- **We will minimise our environmental footprint.** Through good design, careful planning and effective construction controls, we will minimise the impact we have on the environment.
- **We will comply with our obligations.** We will understand our legal, development consent, community and customer obligations before committing to a project and allow for the resources we need to assure compliance.
- **Risk management will underpin our environmental program.** By taking time to understand and assess the environmental aspects and impacts of our operations, we will seek design and construction solutions that offer the best practical environmental outcomes.
- **We will promote awareness and knowledge.** Through training, instruction and shared learning we will ensure our employees and business partners have the capability and motivation to achieve our environmental management objectives.
- **Our management systems will be world class.** Through a systematic, organised approach we will measure, report and review our performance to seek continual improvement in our systems, processes, resources and outcomes.
- **We value innovation.** By promoting and rewarding innovation we will develop new, cost-effective designs and best practice construction solutions that enhance environmental outcomes and offer value to our customers.
- **Environmental performance is a team effort.** We expect all employees to be personally involved in minimising our environmental impact including by conserving resources and minimising waste.
- **Effective consultation and communication improves outcomes.** We will find the best solutions and minimise concern and disruption by communicating, consulting, and working collaboratively with our customers, regulators and other stakeholders.


Enrique Blanco Gomez, Managing Director
Ferrovial Agroman Australia

18 September 2013

Appendix A4
Ancillary facilities assessment

Appendix A4

Ancillary facilities assessment criteria

Revision history

Revision	Date	Description	Approval
0	19/4/13	Draft Document from Roads and Maritime	
1.0	20/01/14	Initial Post-Tender Version – For Roads and Maritime. Formal Review	
1.1	24/02/2014	Resubmission after Roads and Maritime, Formal Review and receipt of Department of Environment approval.	
1.2	3/03/2014	Resubmission following Roads and Maritime formal review (3/03/2014)	
1.3	11/03/2014	Resubmission following Roads and Maritime formal review (10/03/2014)	
1.4	19/03/2014	Resubmission following Roads and Maritime formal review (16/03/2014)	



Figures 1 and 2: Sancrox Site compound location and photo

Appendix A5

Document register

Table 1 Environmental document register

Environmental management document	Purpose	Document no.	Document title	Approval requirement
Environmental Policy	Policy	<i>FAA EnvP</i>	Environmental Policy	<i>Managing Director</i>
Construction environmental management plan	Policy Legal and other requirements Risk assessment Objectives and targets Roles and responsibilities Communication and training Monitoring, auditing and reporting Corrective action Management review Management actions	<i>SCX-ENV-P-001</i>	Construction Environmental Management Plan	DP&I,
Environmental management sub plans	Objectives and targets	<i>SCX-ENV-P-002</i>	Construction traffic management sub plan	DP&I
	Roles and responsibilities	<i>SCX-ENV-P-003</i>	Construction flora and fauna management sub plan	DP&I, Department of the Environment
	Legal and other requirements			
	Training	<i>SCX-ENV-P-004</i>	Construction noise and vibration management sub plan	DP&I
	Monitoring, auditing and reporting			
	Management actions			
		<i>SCX-ENV-P-005</i>	Construction soil and water quality management sub plan	DP&I
	<i>SCX-ENV-P-006</i>	Construction heritage management sub plan	DP&I	
	<i>SCX-ENV-P-007</i>	Construction air quality management sub plan	Roads and Maritime	

Environmental management document	Purpose	Document no.	Document title	Approval requirement
		SCX-ENV-P-008	Construction waste and energy management sub plan	Roads and Maritime
		SCX-ENV-P-009	Construction liaison management plan	DP&I
		SCX-ENV-P-010	Construction Acid Sulphate Soil Management sub plan	DP&I
		SCX-ENV-P-011	Construction Emergency Spill Response sub plan	Roads and Maritime
Urban design and landscape management	Objectives Materials Methodology	SCX-UDLP-001	Urban design and landscape management	DP&I
Compliance tracking program	Compliance status Auditing Recording and reporting	SCX-CTP-001	Compliance tracking program	DP&I
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-001	<i>Asbestos Find & Handling Procedure</i>	Project Manager
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-002	<i>Contaminated Land Procedure</i>	Project Manager
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-003	<i>Flora&Fauna Rescue Procedure</i>	Project Manager
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-004	<i>Natural Incidents Procedure</i>	Project Manager
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-005	<i>Procedure for assessing the effectiveness of water and soil</i>	Project Manager

Environmental management document	Purpose	Document no.	Document title	Approval requirement
			<i>control</i>	
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-006	<i>Procedure for collection, treatment and disposal of waste water</i>	Project Manager
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-007	<i>Procedure for dewatering</i>	Project Manager
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-008	<i>Procedure for monitoring BOM forecast</i>	Project Manager
Environmental procedures	Operational controls and instructions	SCX-ENV-PR-009	<i>Procedure for unexpected heritage finds</i>	Project Manager
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-001	<i>Clearing and grubbing work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-002	<i>Working near sensitive area work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-003	<i>Sediment basin construction work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-004	<i>Importing of fill material work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-005	<i>Topsoil stripping and stockpiling work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-006	<i>Public Road Access and Managing Mud Tracking</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-007	<i>Out of hours work method matrix</i>	Roads and Maritime
Environmental work	Management measures	SCX-ENV-EW-008	<i>Demolition work method matrix</i>	Roads and Maritime

Environmental management document	Purpose	Document no.	Document title	Approval requirement
method statements	Operational controls			
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-009	<i>Temporary water diversion work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-010	<i>Concrete waste management work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-011	<i>Using concrete curing compounds work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-012	<i>Dewatering work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-013	<i>Installation of Scour protection work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-014	<i>Installing permanent culverts work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-015	<i>Milling and asphaltting work method matrix</i>	Roads and Maritime
Environmental work method statements	Management measures Operational controls	SCX-ENV-EW-016	<i>Refuelling work method matrix</i>	Roads and Maritime
Environmental forms and checklists	Monitoring and auditing Recording and reporting	SCX-E-F-	<i>[Detail to be added]</i>	

Appendix A6

Sensitive area plans

Appendix A7

Roads and Maritime environmental incident classification
and reporting

Appendix B1

Construction traffic management sub-plan

Appendix B2

Construction flora and fauna management sub-plan

Appendix B3

Construction noise and vibration management sub-plan

Appendix B4

Construction soil and water quality management sub-plan

Appendix B5

Construction heritage management sub-plan

Appendix B6

Construction air quality management sub-plan

Appendix B7

Construction waste and energy management sub-plan