HSE

PLAN

Construction Environmental Management Plan – MW880

Project No		42592 – East Coast Grid Expansion Stage 1 MW880			
Document No		21100-PL-LH-0001			
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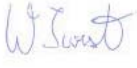
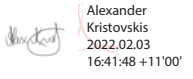
Final	03/02/22	Issued for Use			 Alexander Kristovskis 2022.02.03 16:41:48 +11'00'
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1. Introduction

1.1 Context of document

This APA Construction Environmental Management Plan (CEMP) has been prepared for use during the construction of the gas compression station as part of the East Coast Grid Expansion – Stage 1, MW880, located on Lot 1 DP580284, approximately 35km south-west of Condobolin, New South Wales (NSW).

Approval for the project was received from the Department of Planning, Industry and Environment (DPIE) on 05 October 2021. As a condition of approval, APA is required to prepare a CEMP for the project to the satisfaction of the Secretary prior to the commencement of construction and ensure it is implemented throughout the construction phase.

Approval conditions relevant to the development and implementation of this CEMP are outlined in Table 1 below with a reference to where each condition is covered within this document or in an additional management plan.

This CEMP has been developed to reflect APA systems, and inform construction contractors of the construction-phase environmental risks, management measures, standards and monitoring requirements stipulated for the construction works.

The Contractor is to either implement the APA CEMP or develop a contractor CEMP, for approval by APA, which complies with the APA CEMP.

This CEMP must not be implemented or amended in any way that contravenes any conditions of any development approval, permit or licence or other approval required for the project.

This CEMP should be read and followed in conjunction with the following documents:

- The relevant scope of work as detailed below:
    - Serviced construction camp scope of work (SOW) (21100-SOW-CN-0003);
    - CSMPEI construction SOW (21100-SOW-CN-0006);
    - Bulk earthworks SOW (21100-SOW-C-0002);
    - Driven steel piles SOW (21100-SOW-C-0004)
- The Site Area plan (21100-MAP-LH-0005).

Table 1: Approval conditions relevant to this CEMP

Condition number	Requirement	Where addressed
A5	The Proponent must	
a)	Rehabilitate the sites progressively, as soon as reasonably practicable following disturbance	Section 7.13
b)	Minimise the disturbance area at any time	Section 3 Appendix 1
c)	Employ interim rehabilitation strategies to minimise dust generation, soil erosion and weed incursion on parts of the sites that cannot yet be permanently rehabilitated	Section 7.13

A1	With the approval of the Planning Secretary, the Proponent may	
a)	Prepare and submit any strategy, plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program)	Approval of request for staging received on 19/11/2021
B5	The Proponent must	
a)	Minimise traffic and pedestrian safety issues and disruption to local users of the transport route/s during construction	Section 7.8 Appendix 5 (sub-plan to CEMP)
b)	Maintain all roads and utility-related infrastructure in a safe and serviceable condition	Section 7.8 Appendix 5 (sub-plan to CEMP)
B6	The Proponent must undertake road maintenance and grading works on various sections of Crown Camp Road identified in the Modification Report, to the satisfaction of Lachlan Shire Council.	Agreement reached with Lachlan Shire Council. Evidence submitted on 08/11/2021 Approval of evidence received 15/11/2021
B7	Unless otherwise agreed by the Secretary, the Proponent may only undertake construction activities between: a) 7am and 6pm Monday to Friday; b) 8am to 1pm Saturdays; and c) At no time on Sundays and NSW public holidays The following activities may be undertaken outside these hours without the approval of the Secretary: a) The delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; b) Emergency work to avoid the loss of life, property and/or material harm to the environment; c) Where a negotiation agreement has been reached with affected receivers; or d) Works as approved through the out-of-hours works protocol as approved through CEMP required by condition C1	Section 7.6.1
B8	The Proponent must	
a)	Minimise the noise generated by any construction, upgrading or decommissioning activities in accordance with the best practice requirements outlined in the *Interim Construction Noise Guideline* (DECC, 2009), or its latest version.	Section 7.6
b)	Ensure any blow down events occur during the day	Section 7.6
c)	Notify affected landholders at least 24 hours prior to any blow down events	Section 7.6

d)	Minimise traffic noise impacts on receivers along the transport routes for all sites	Section 7.6
B9	The Proponent must minimise the dust and greenhouse gas emissions generated by the development including wind-blown and traffic generated dust	Section 7.5
B10	The Proponent must	
a)	Minimise the visual and off-site lighting impacts of the development	Section 7.7
b)	Ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of Australian Standard AS4282 (INT) 2019 – Control of Obtrusive Effects of Outdoor Lighting	Section 7.7
c)	Consult with affected landowners after construction regarding potential vegetation screening options	Section 7.7
B14	The Proponent must	
a)	Ensure the construction, commissioning and operation of the development does not cause any water pollution, as defined under Section 120 of the POEO Act, including the management of surface water runoff and spray irrigation of treated effluent	Appendix 2 (sub-plan to CEMP)
b)	Minimise any soil erosion associated with the construction of the development in accordance with the relevant requirements in the *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004) manual, or its latest version	Appendix 2 (sub-plan to CEMP)
c)	Ensure that construction is undertaken to minimise impacts on watercourses by applying management measures generally in accordance with the guidance series for *Controlled Activities on Waterfront Land* (DPIE Water 2012 or latest versions)	Appendix 2 (sub-plan to CEMP)
B15	The Proponent must prepare a Soil and Water Management Plan for the development to the satisfaction of the Planning Secretary. This plan must	
a)	Be prepared by a suitably qualified and experienced person/s approved by the Planning Secretary	Approval of experts received on 09/11/2021
b)	Be prepared in consultation with Council and DPIE Water	Attachment B in Appendix 2 (sub-plan to CEMP)
c)	Be submitted to the Planning Secretary for approval prior to carrying out construction under this approval	Noted
d)	Includes	
i)	Details of the sources and security of water supplies for the construction and life of the development (including authorised entitlements and licences)	Appendix 2 (sub-plan to CEMP)
ii)	Details of water use and management on the site	Appendix 2 (sub-plan to CEMP)
iii)	An Erosion and Sediment Control Plan, consistent with the requirements of the guideline *Managing Urban Stormwater: Soils and Construction (Landcom 2004)* and the *Guidelines for Controlled Activities on Waterfront Land (NRAR)*	Appendix 3 (sub-plan to the CEMP)

iv)	Details the wastewater treatment and spray irrigation system, including measures to mitigate downstream and offsite impacts	Appendix 2 (sub-plan to CEMP)
B16	The Proponent must ensure the development is constructed to minimise the potential for contaminant mobilisation	Section 7.3 Section 7.9
B17	The Proponent must	
a)	Minimise the waste generated by the construction and operation of the development	Section 7.11
b)	Manage onsite wastewater to the satisfaction of the relevant Council	Section 7.12
c)	Store and handle waste in accordance with its classification	Section 7.11
d)	Remove all waste from the site as soon as practicable, and ensure it is sent to an appropriately licensed waste facility for disposal	Section 7.11
B18	The Proponent must ensure the development does not cause any direct or indirect impacts on heritage items located outside the approved disturbance area	Section 3 Appendix 4 (sub-plan to the CEMP
B19	The Proponent must prepare an Aboriginal Cultural Heritage Management Plan to the satisfaction of the Planning Secretary. This plan must	Appendix 4 (sub-plan to the CEMP
a)	Be prepared by a suitably qualified and experienced person/s	Appendix 4 (sub-plan to the CEMP
b)	Be prepared in consultation with Heritage NSW and Registered Aboriginal Parties	Appendix 4 (sub-plan to the CEMP
c)	Be submitted to the Planning Secretary for approval prior to carrying out construction under this approval	Noted
d)	Describe the measures to be implemented to	
i)	Protect, monitor and/or manage identified Aboriginal objects and Aboriginal places (including proposed archaeological investigations and salvage of objects within the approved disturbance area) in accordance with the commitments made in the document/s listed in condition A2(c)	Appendix 4 (sub-plan to the CEMP
ii)	Manage the discovery of suspected human remains and any new Aboriginal objects or Aboriginal places, over the life of the development	Appendix 4 (sub-plan to the CEMP
iii)	Facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the sites	Appendix 4 (sub-plan to the CEMP
B20	The Proponent must implement the Aboriginal Cultural Heritage Management Plan approved by the Planning Secretary	APA commits to the implementation of the ACHMP throughout the construction of the project
B21	Construction impacts must be restricted to areas for which biodiversity impacts were assessed in the BDAR and must not encroach into other areas of retained native vegetation and habitat	Section 3 Section 7.1
C1	Prior to commencing construction, the Proponent must prepare a Construction Environmental Management Plan	

	(CEMP) for the development to the satisfaction of the Planning Secretary. This plan must	
a)	Be prepared in consultation with the relevant Council, Heritage NSW and BCS	Evidence of consultation with Lachlan Shire Council and BCS provided Heritage NSW consulted during development of ACHMP
b)	Identify the statutory approvals that apply to the construction and commissioning of the development	Section 4
c)	Describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development	Section 1.5 Section 7 (Control Measures tables for each discipline) Section 9
d)	Describe the procedures that would be implemented to	
i)	Keep the local community and relevant agencies informed about the construction, commissioning and operations of the development	Section 9.8
ii)	Receive, handle, respond to, and record complaints	Section 9.4
iii)	Resolve any disputes that may arise	Section 9.4
iv)	Respond to any non-compliance	Section 8.1
v)	Respond to emergencies	Section 7.10
e)	Include	
i)	The following sub-plans	
	Noise, including out-of-hours works protocol	Section 7.6
	Air quality and greenhouse gas	Section 7.5
	Biodiversity	Section 7.1
	Traffic management, including detail of measures to minimise impacts on regional towns	Section 7.8 Appendix 5 (sub-plan to the CEMP
	Waste	Section 7.11
ii)	A clear plan depicting monitoring to be carried out in relation to the development	Section 7 Section 9.5
C2	The CEMP sub-plans must state how	
a)	The mitigation measures identified in the Modification Report will be implemented	Section 7
b)	The relevant terms of this Schedule will be complied with	Whole of document
C3	The Proponent must implement the approved CEMP	APA commits to implementing the approved CEMP throughout the

		construction of the project
A1	The Planning Secretary must be notified in writing via the Major Projects website immediately after the Proponent becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 1	Section 8.1 Section 9.3
A2	The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Proponent becomes aware of a non-compliance	Section 8.1
A3	A non-compliance notification must identify the development and the application number for it, set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance	Section 8.1
A4	A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance	Noted

1.2 Objectives of the CEMP

The objectives of this CEMP are to:

- Describe the overall approach to environmental management which will be applied by APA and all contractors during project construction;
- Set the minimum environmental management performance requirements for activities;
- Describe the relationship between APA's Environmental Management Systems, this CEMP and other respective procedures; and
- Identify and assign responsibilities for environmental management and activities.

1.3 APA Health, safety and environment policy

1.3.1 Policy

APA Group Policies are the principal Health, Safety and Environment documents. These Policies are authorised by the Managing Director and are intended to ensure that systems are in place to protect the safety and health of all persons working on, or associated with, all APA operations. It also ensures the minimisation of the impact APA has on the environment to which we interact.

The Health, Safety and Environment Policy is also endorsed by the APA Health, Safety and Environment Representatives and supported by subordinate APA procedures. It is also supported by a list of specific policies and safety non-negotiables which are documents of equal importance.

It is a requirement that all employees, including contractors and subcontractors, comply with the requirements of the APA HSE Policy, as a minimum.

1.3.2 Strategy

APA aspires to provide a zero-harm work environment. We are committed to the effective implementation of our HSE Policy and to the continual improvement of our HSE Performance.

The APA HSE Management System is called 'Safeguard' and provides a framework by which the processes relating to the company's Health, Safety and Environment activities are defined, implemented and controlled. Additionally local business unit processes and procedures / requirements, provide instruction to workers on performing activities safely.

The high-level risk HSE risk management framework (known as RCA) is shown below.

Risks

- **Identify hazards** that may cause harm
- **Assess the risks** by determining likelihood and consequence of these hazards causing harm

Controls

- **Implement and maintain control measures** which prevent and / or reduce consequences of harm

Assure

- **Monitor and review** the effectiveness of the control measures.

1.4 Terms and abbreviations

The Generic APA Terms and Abbreviations are listed in the Terms and Abbreviations Glossary.

The Specific Terms and Abbreviations used in this document are listed below:

Table 2 Terms

Item	Definition
The Site / Site Area	Area in which disturbance is approved to occur - Site Area Map (21100-MAP-LH-0005)
The Contractor	The construction contractor appointed to carry out the Works.
The Works	Refers to the project scope as detailed in the Scope of Works:
The Specification	Refers to the APA specifications to be utilised for the East Coast Grid Expansion Stage 1 MW880 Construction (as outlined in the relevant Construction Scope of Works)
The Scope of Work	Refers to the East Coast Grid Expansion Stage 1 MW880 Construction Scope of Works • Serviced construction camp scope of work (SOW) (21100-SOW-CN-0003); • CSMPEI construction SOW (21100-SOW-CN-0006); • Bulk earthworks SOW (21100-SOW-C-0002); • Driven steel piles SOW (21100-SOW-C-0004)

Table 3 Abbreviations

Item	Definition
ACHMP	Aboriginal Cultural Heritage Management Plan
APA	APA Group – the proponent
APA CEMP	This document
CEMP	Construction Environmental Management Plan
CPESC	Certified Professional in Erosion and Sediment Control
DPIE	Department of Planning, Industry and Environment
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
ESCP	Erosion and Sediment Control Plan
HSE	Health, Safety and Environment
LEP	Local Environmental Plan
LGA	Local Government Area
LSC	Lachlan Shire Council
MSEP	Moomba to Sydney Ethane Pipeline
MWP	Moomba to Wilton Pipeline
NSW	New South Wales
SWMP	Soil and Water Management Plan
TMP	Traffic Management Plan

1.5 Environmental roles and responsibilities

The roles and responsibilities in relation to the implementation of this CEMP are set out below.

All personnel (i.e. APA and/or contractors) must:

- Comply with the requirements of applicable environmental legislation;
- Undertake all activities in an environmentally responsible manner;
- Comply with specific requirements of the planning approval and supporting documentation;
- Conduct activities in accordance with this CEMP; and
- Participate in environmental and cultural heritage training relevant to roles and responsibilities.

Table 4: Environmental roles and responsibilities for APA site representatives

Role	Responsibilities
Project Manager	• Ensure project is adequately resourced • Ensure all documentation is approved and in place in accordance with the contractual requirements.
Greenfields Project Manager	• Ensure the necessary resources and processes are in place for implementation of this CEMP • Ensure non-conformances are identified, recorded and reported • Work with environmental representatives in planning and implementing environmental requirements • Ensure legal compliance
Supervisors: - Facilities - Earthworks	• Ensure the CEMP requirements are implemented and maintained • Ensure non-conformances are identified, recorded and reported • Drive implementation of corrective actions • Work with environmental group in planning and implementing environmental requirements
Project HSE Support	• Monitor the implementation and effectiveness of the Contractor's performance • Monitor the CEMP implementation and arrange amendments if required • Conduct environmental auditing and monitoring • Complete environmental statutory reporting requirements

Table 5: Environmental roles and responsibilities for contractor site representatives

Role	Responsibilities
Construction Manager	• Preparation and implementation of site induction • Ensure all project staff have a clear understanding of the environmental requirements relevant to their area of works • Ensure all Area Managers are familiar with the approved CEMP for construction and associated documents and their responsibilities within them • Participate and provide guidance in the regular review of the CEMP and associated documents • Take action in the event of an emergency and allocate the required resources to minimise environmental impact • Report any activity that has resulted, or has the potential to result, in an environmental incident to the APA HSE support and Project Manager.
Site Supervisor	• Communicate with all personnel and subcontractors regarding compliance with the approved CEMP and site specific environmental issues • Coordinate implementation and maintenance of pollution control measures • Identify resources required for implementation of the CEMP • Coordinate action in emergency situations and allocate required resources in accordance with the incidents, complaints and communication action plan • Ensure that instructions are issues and adequate information provided to field based employees which relate to environmental risks on site
Site Operator	• Carry out the activities in accordance with the CEMP • Carry out the necessary monitoring and reporting requirements • Identify and report non-conformances • Implement corrective actions • Work with environmental group in planning and implementing environmental requirements.
HSE Support	• Monitor the implementation and effectiveness of the CEMP • Conduct environmental auditing, monitoring and training • Provide advice on environmental matters and corrective actions as requested • Ensure all environmental and safety reporting requirements are recorded and provided to APA

	• Review statutory compliance and ensure all approvals in place.

2. Project description

2.1 Overview

The East Coast Grid Expansion in NSW will be facilitated by the construction of five compressor stations, through a staged approach, along the length of the Moomba to Wilton Pipeline (MWP).

This CEMP addresses the construction of the compressor station for Stage 1 at MW880 (also known as Milne).

Once constructed, each compressor station will include:

- An enclosed gas turbine driven compressor unit;
- Microturbine;
- Compressor inlet / scrubber;
- Compressor discharge Air Cooled Heat Exchanger;
- A control equipment building;
- Two fuel gas skids;
- Air compressors and receivers;
- Associated piping, electrical equipment, instrumentation, and controls;
- A station vent; and
- Small accommodation and maintenance buildings for operations.

All facilities will be installed on driven piles or supported on structural steel skids over gravel sheeting, with the exception of the accommodation buildings which will likely be constructed on concrete slab.

MW880 is located in central NSW, approximately 35km south-west of Condobolin, in the Lachlan Shire Local Government Area (LGA) on Lot 1 DP580284. The compressor station will be constructed on land owned by APA.

MW880 hosts existing infrastructure related to the construction and operation of the MWP and the Moomba to Sydney Ethane Pipeline (MSEP), including the following:

- Infrastructure to remain after construction:
    - Pig catcher and launcher for the MWP;
    - Pig catcher and launcher for the MSEP;
    - Small amenities building;
    - 3m high wire fencing (will be replaced with similar fencing around whole compressor station site); and
    - Communications tower, approximately 100m high of steel lattice construction, operated by Telstra.

- Infrastructure to be removed during construction:
    - Historical water retention structure

Crown Camp Road is an unsealed local road located adjacent to the northern site boundary.

2.2 Construction activities

Construction activities will be restricted to the approved Site Area. Following construction, temporary infrastructure will be removed while the permanent facilities will be fenced off.

Construction materials and supplies (including food and services for the temporary accommodation camp) will be sourced from relevant suppliers, likely from Condobolin, and transported to site.

The majority of construction activities will take place between 07:00am and 6:00pm, seven days a week. During the commissioning phase, activities will also take place between 07:00am and 6:00pm, seven days per week, however for the final two weeks, commissioning activities will be 24-hours per day.

Construction of the compressor stations will include the following activities:

- Mobilisation of construction equipment;
- Establishment of access (where required);
- Establishment of temporary construction camp accommodation and associated facilities;
- Site bulk earthworks including build up to achieve required facility ground levels;
- Installation of steel piles;
- Installation of all equipment items, skids and buildings;
- Installation of associated steel structures, prefabricated piping, electrical equipment, instrumentation and controls;
- Supply and install communication and controls infrastructure;
- Demobilisation of construction equipment
- Rehabilitation of temporary disturbance areas; and
- Pre-commissioning and commissioning of the compressor station.

2.2.1 Workforce

The construction of the compressor stations will require an average workforce of 40 with a peak of 80 personnel over the 12-month period (which includes commissioning). Accommodation of the construction workforce will be in the form of a temporary camp on site for the duration of works.

2.3 Project timeframes

The indicative project construction timeframes are provided below:

- Early works and camp establishment: early-March 2022 to late-May 2022;

- Construction and pre-commissioning: late-May 2022 to late-November 2022; and
- Camp removal, commissioning and handover: late-November 2022 to late-March 2023.

3. Site Area and access

All works are limited to within the Site Area (21100-MAP-LH-0005) as detailed within the Contract (*doc control number*) and in Appendix 1.

Access to the Site Area is only by way of the site entry off Crown Camp Road near the north-western corner of the site (see Appendix 1).

The area north of the existing scraper station is excluded from the Site Area and no activities, including parking of plant or equipment, are to occur in this Exclusion Zone. The paddock tree to the south of the Temporary Camp location is also excluded from the Site Area.

No site based project activity is to occur outside of the Site Area (21100-MAP-LH-0005) without prior approval of APA.

4. Legislative and regulatory context

APA is committed to compliance with legislative requirements and industry standards through all of its activities. A list of key legislation relevant to project approvals and a summary of the status of required regulatory approvals is detailed in the following sections.

4.1 Commonwealth

Table 6: Relevant Commonwealth legislation

Approval	Act	Status
EPBC Act Referral	Australian Government *Environment Protection and Biodiversity Conservation Act*	EPBC Ref: 2021/9032 Referral Decision – Not a Controlled Action (06 October 2021)

4.2 State policies, guidelines and regulations

Table 7: Relevant NSW legislation

Approval	Act	Status
NSW Planning Approval	*Environmental Planning and Assessment Act 1979*	Modification 1 (Stage 1 and 2) – approval received 05 October 2021
Pipeline Licence	*Pipelines Act 1967* (NSW)	Variation to Pipeline Licence No. 16 – variation approved 14 December 2021
Aboriginal Cultural Heritage Management Plan	*National Parks and Wildlife Act 1974*	Aboriginal Cultural Heritage Management Plan approval received 14 January 2022

Soil and Water Management Plan	*Protection of the Environment Operations Act 1997*	Soil and Water Management Plan approval required prior to commencement of construction
Soil and Water Management Plan	*Managing Urban Stormwater – Soils and Construction Volume 1, third edition (Landcom 2004)*	Soil and Water Management Plan approval required prior to commencement of construction
Soil and Water Management Plan	*Best Practice Erosion and Sediment Control Appendix P Land-based pipeline construction (IECA 2015)*	Soil and Water Management Plan approval required prior to commencement of construction

4.3 Local

Table 8: Relevant local approvals

Approval	Act	Status
Section 68 Approval	*Local Government Act 1993*	Section 68 approval for camp wastewater disposal – required prior to disposal of wastewater
Section 138 Approval	*Roads Act 1993*	Section 138 Works and Structures in a public road required for works at site entrance – required prior to commencement of construction.

5. Description of the environment

MW880 is located in central NSW in the Lachlan River catchment, approximately 35km south-west of Condobolin, in Lachlan Shire LGA. The site, owned by APA, is zoned as RU1, primary production under the Lachlan Local Environmental Plan (LEP). The southern part of the site is used by a local farmer for dryland cropping.

The vegetation on site is disturbed White Cypress Pine – Poplar Box woodland, in largely derived native grassland condition. The species present on site are a mixture of natives and exotics, including one high threat exotic species. The site has previously been used for farming and to host existing MWP and MSEP infrastructure. A communications tower operated by Telstra is located in the north-eastern corner of the lot boundary.

The nearest mapped watercourse to the site is an unnamed 3rd order watercourse to the south of the site. This unnamed watercourse and the site itself drains generally to the north-east towards Humbug Creek. Drainage between the site and Humbug Creek has been heavily modified to suit the surrounding agricultural development. Humbug Creek flows north-northwest into Banar Lake, which flows into Wallaroi Creek, Wallamundry Creek and ultimately the Lachlan River further to the north during major flood events. Local drainage features tend to be intermittent / ephemeral to semi-permanent, dependent on the degree of land modification (i.e. agriculture).

MW880 is situated within a highly modified agricultural landscape. The surrounding area consists of cleared agricultural land with scattered native vegetation. Vegetation within the site is consistent with the locality, with the majority of the site consisting of cropped land and cleared native grassland. A narrow strip of woodland is located along the edge of the road, extending west to east.

MW880 is predominately located in the NSW South Western Slopes bioregion. Geologies within this bioregion are dominated by chert, mudstone, siltstone and sandstone. Soils within plains landforms within this unit typically comprise shallow, well-drained stony red brown texture-contrast soils and brown clays.

MW880 is characterised by alluvial plains surrounded by elevated, incised ridges and rises. Sandstone, siltstone and mudstone are the dominant geology of these landforms.

Wind at MW880 is predominately from the south-west and has an average wind speed of 3.8m/s, and is calm 10% of the time. Rainfall is typically moderate to low, with an average annual rainfall of 437mm/year.

There are seven residences (sensitive receptor locations) within 5km of the Site Area.

Key environmental constraints on the site are summarised in Table 9.

Table 9: Key environmental constraints

Environmental Constraint	Description
Derived natural grassland	Area north of the existing Scraper Station is predominately made up of derived natural grassland and will be avoided during the construction phase. See exclusion zone on Site Area map (Appendix 1).
Semi-arid woodland (strip of mature trees)	Northern boundary of the lot includes a narrow strip of semi-arid woodland along Crown Camp Road. This will be avoided during construction.
Paddock tree (Cypress Pine)	Mature tree south of the temporary construction camp will be left standing and not impacted by construction. See exclusion zone of Site Area map (Appendix 1).
Sensitive receptor	Residential property located approximately 2.5km south-east of the Site Area
Soils on site	Soils susceptible to wind and water erosion when disturbed will be managed appropriately in line with the Soil and Water Management Plan and the Erosion and Sediment Control Plan.

6. Environmental impact assessment

An environmental impact assessment (by way of the Modification Report) was completed to identify the potential environmental impacts associated with the project and the proposed mitigation measures to manage these potential impacts.

The environmental impact assessment was completed by an environmental consultant (EMM) and included the following:

- Identification of key phases of the project;
- Identification of key tasks / activities associated with each phase of the project;
- Identification of potential risks from the project that may impact on the environment; and
- Identification of control measures to manage risks.

The assessment considered the potential likelihood and consequences that environmental impacts would occur with the proposed management measures in place.

The control measures to ensure the environmental impacts associated with all activities are minimised are set out in the CEMP.

7. Management plans

Environmental objectives, performance targets and risk management measures have been developed for the identified potential environmental impacts associated with the construction of the project.

The environmental issues assessed are as follows:

- Biodiversity,
- Biosecurity;
- Soil and water;
- Aboriginal cultural heritage;
- Air quality and greenhouse gas;
- Noise;
- Visual amenity;
- Traffic;
- Fuels, oils and chemicals;
- Bushfire risk and emergency response;
- Waste management;
- Sewage treatment / disposal; and
- Restoration and rehabilitation.

In addition to the above specific environmental issues, general project management measures requiring compliance are as follows:

Table 10: General management measures

Control Measures	Responsibility
The approved Site Area, including vegetation clearing extent and environmental or heritage features within the Site Area, will be clearly demarcated and identified during the construction stage with survey pegs and at some locations with flagging, bunting, barrier mesh or similar. Exclusion Zones will be clearly marked and communicated as such.	☐APA ☒Contractor
All temporary infrastructure will be decommissioned and removed at the completion of construction.	☐APA ☒Contractor
All project personnel will complete an induction that will include environmental and heritage management requirements.	☐APA ☒Contractor
Nearby landholders will be provided a dedicated point of contact for the duration of the project.	☒APA ☐Contractor

7.1 Biodiversity

Table 11: Biodiversity management sub-plan

Area	Details
Values	Plant community type (PCT) – White Cypress Pine – Poplar Box woodland on footslopes and peneplains mainly in the Cobar Peneplain Bioregion (two conditions – derived native grassland and moderate). Hollow-bearing trees within PCT 72 (moderate condition) Recorded species Grey-crowned Babbler (*Pomatostomus temporalis*; ecosystem credit species). Superb Parrot (*Polytelis swainsonii*) Species likely to occur Grey Falcon (*Falco hypoleucos*) Corben's Long-eared Bat (*Nyctophilus corbeni*)
Activities that may impact on values	• Removal of native vegetation and threatened species habitat. • Increased vehicle movement and increased human activity. • General construction. • Wastewater produced from the construction camp and associated facilities.
Potential impacts	• 0.75ha of PCT 72 (derived native grassland condition) native vegetation to be cleared • Introduction and/or spread of weeds/pathogens • Increase in animals • Fauna mortality from vehicle strikes • Increased levels of noise, vibrations, lighting and dust • Increased erosion • Fragmentation, resulting in reduction in connectivity.
Performance objectives / targets	Minimise and mitigate impacts on biodiversity values identified during field surveys.
Standards	• Australian Standards AS 4970-2009 Protection of trees on development sites • APA HSE EP 13.01.01 Environmental Approvals • APA HSE EP 13.02.02 Native Vegetation Management
Monitoring requirements	Clearing of native vegetation will be monitored by a suitably qualified ecologist to ensure impacts to mature trees are avoided.
Contingency and corrective actions	Follow contingency plan as outlined in Section 8.
Records	Records of personnel who have completed the environmental and heritage induction. Records of any fauna mortalities from vehicle strikes. Records of any non-compliance.

Control Measures	Responsibility
Clearly identify and demarcate clearing extents and no-go zones.	☐APA ☒Contractor
Retain native vegetation and fauna habitat, wherever possible, and only clear the extent required to construct and maintain the modification	☐APA ☒Contractor
Retained native vegetation to be fenced off.	☐APA ☒Contractor
Where feasible, tree protection zones (TPZs) in accordance with the Australian Standard AS4970-2009 Protection of trees on development sites (Standards Australia Committee 2009), will be set up around all trees to be retained within and immediately adjacent to the impact area	☐APA ☒Contractor
Personnel to complete environmental and heritage management induction.	☒APA ☐Contractor
Stabilisation of exposed soils and completion of dust suppression.	☐APA ☒Contractor
Demarcate tree protection zones.	☐APA ☒Contractor
No mature trees (with a DBH of >5cm) are to be removed.	☐APA ☒Contractor
Undertake pre-clearance surveys prior to vegetation clearing.	☐APA ☒Contractor
Vehicles, plant and equipment to be cleaned down and certified weed free (see Section 7.2).	☐APA ☒Contractor
Cleared native vegetation will be retained and reused for on-site rehabilitation where it doesn't present a fire risk.	☐APA ☒Contractor

7.1.1 Pre-clearance procedure

Prior to vegetation clearing, the construction manager will ensure:

- All subcontractors and employees involved in the clearing are trained via toolbox talks (or similar) on the environmental risks and aspects to be considered prior to clearing. The following tasks will be undertaking prior to clearing:
    - Demarcation of no-go areas, including areas of environmental sensitivity;
    - The extent of disturbance shall be clearly illustrated on construction plans, demarcated and delineated on the ground ahead of disturbance;
    - Where required, weed eradication will be carried out and areas of weed-infected topsoil have been identified in accordance with the *Biosecurity Act 2015*. Stockpiles of Weeds of National Significance (WONS), including any affected topsoil, will be disposed of at an appropriately licenced waste management facility; and
    - Ensure erosion and sediment controls are in place as required.

7.1.2 Demarcation

To ensure impacts are contained within the Site Area, and no encroachment into surrounding vegetation results from the project, the following will be undertaken:

- Limits of clearing will be fenced off with clearly visible temporary fencing / flagging (or similar), establishing a clearly marked boundary, including any "no-go zones". This may include appropriate signage such as "No-Go Zone" or "Environmental Protection Area";
- Mature trees (DBH>5cm) will be flagged and avoided, this includes the paddock tree marked as a 'no-go zone' to the south of the temporary construction camp location;
- The location of "no-go zones" will be identified and included in site inductions and toolbox talks; and
- All material stockpiles, vehicle parking and machinery storage to be located within the areas proposed for clearing, and not in areas of native vegetation that are to be retained.

7.2 Biosecurity

Table 12: Weed management sub-plan

Area	Details
Values	Plant community type (PCT) – White Cypress Pine – Poplar Box woodland on footslopes and peneplains mainly in the Cobar Peneplain Bioregion (two conditions – derived native grassland and moderate). Hollow-bearing trees within PCT 72 (moderate condition) Recorded species Grey-crowned Babbler (*Pomatostomus temporalis*; ecosystem credit species). Superb Parrot (*Polytelis swainsonii*) Species likely to occur Grey Falcon (*Falco hypoleucos*) Corben's Long-eared Bat (*Nyctophilus corbeni*)
Activities that may impact on values	Increased vehicle movement and increased human activity may cause the introduction or spread of weeds, pathogens and feral animals on site.
Potential impacts	• Introduction and/or spread of weeds and pathogens. • Mortality of native fauna from *Phytophthora cinnamomi* • Increased attraction of feral animals including Red Fox (*Vulpes vulpes*) and Wild Dog (*Canis familiaris*). • Mortality of native fauna from feral animals.
Performance objectives / targets	• Ensure that existing weeds do not spread within the site or off-site. • No introduction of new weeds. • No introduction of pathogens. • Ensure no increase in feral animal abundance.
Standards	• APA HSE EP 13.01.01 Environmental Approvals • APA HSE EP 13.02.02 Native Vegetation Management

Monitoring requirements	A weed and pathogen monitoring program will be implemented (see Section 7.2.2). Weekly inspections of the site will be undertaken, where suitably qualified persons will inspect the Site Area to identify and remove any weeds. Weeds will be removed and appropriately disposed of at a licenced waste facility.
Contingency and corrective actions	Follow contingency plan as outlined in Section 8.
Records	• Any WONS recorded on site. • Records from weekly weed monitoring including presence of new weeds and weeds that have been removed. • Records of personnel who have completed the environmental and heritage inductions. • Records of vehicle weed certification.

Control Measures	Responsibility
Conduct weed control in key areas such as laydown areas or vehicle parking bays.	☐APA ☒Contractor
Vehicle, plant and equipment to be cleaned down and certified weed free (in accordance with Section 184 of the *Biosecurity Act 2015*) prior to initial entry to the Site Area.	☒APA ☒Contractor
Vehicles, plant and equipment to strictly adhere to approved roads and tracks.	☒APA ☒Contractor
Biosecurity certifications to be kept with the vehicles.	☒APA ☒Contractor
Waste materials will be reused or recycled or disposed of at licenced facilities.	☒APA ☒Contractor
Refuse containers will be lidded and no waste to be left outside.	☐APA ☒Contractor

7.2.1 Vehicle and plant wash down

All vehicles, plant and equipment will be cleaned down and certified weed free in accordance with Section 184 of the *Biosecurity Act 2015* prior to initial entry to the Site Area. Once certified weed free, all vehicles, plant and equipment will strictly adhere to the approved roads, tracks, easements and work areas to minimise contact with off-site vegetation. Any breaches of protocol and travelling outside of approved areas will require the vehicle, plant and/or equipment to be re-certified in accordance with Section 184 of the *Biosecurity Act 2015*.

Biosecurity certifications will be kept with the vehicle, plant and equipment at all times.

7.2.2 Weed and pathogen monitoring

During construction, a suitable qualified person will conduct weekly inspections of the site. These weekly inspections will include:

- Control and removal of any weed species, including WONS;
- Removal of any affected topsoil, which will be disposed of at an appropriately licenced waste management facility as required by the *Biosecurity Act 2015*; and

- Recording of any new weed species or infestations that occur on site.

7.2.3 Disposal of biosecurity material

Weeds identified during weed and pathogen monitoring will be double bagged, and appropriately stored, collected and transported by licenced contractors for disposal at appropriately licenced facilities in Condobolin or elsewhere.

7.2.4 Feral animal control

During construction and with an increase in human activity, there is potential for an increase in feral animal activity which may increase pressure on native fauna and reduce quality of vegetation.

To minimise the risk of increased predator activity, the Contractor will implement the following during construction:

- Waste materials generated during construction will be reused or recycled where practicable, or collected and transported by licenced contractors for disposal at appropriately licenced facilities;
- Refuse containers will be located at each worksite to enable collection of waste, with regular removal from worksites to designated areas; and
- Refuse containers will be lidded to mitigate fauna access. No waste will be left outside in open areas accessible to feral animals

7.3 Soil and water

Table 13: Soil and water management sub-plan

Area	Details
Values	Suitability and stability of land. Stability of land to preserve existing water quality, landscapes and ecosystems.
Activities that may impact on values	Land clearing. Soil disturbing activities.
Potential impacts	Topsoil loss and soil erosion. Sediment release outside of the site area. Contamination of stormwater flows.
Performance objectives / targets	Prevent occurrence of soil erosion during and following construction: • No soil erosion within construction work areas • No sediment loss from construction areas • Erosion controls installed and maintained in accordance with Erosion and Sediment Control Plan • Minimise change to soil profile from disturbance activities: • No evidence of subsoil on surface within excavated areas following rehabilitation • No visual evidence of soil compaction following rehabilitation. Avoidance of impacts to receiving waters on and off-site.

Standards	• Best Practice Erosion and Sediment Control (IECA 2008) • Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) • Managing Urban Stormwater, Soils and Construction Volume 2A Installation of Services
Monitoring requirements	Visual inspection of work areas for evidence of erosion and sediment loss from work areas and integrity of erosion and sediment control measures. Inspections to be carried out weekly and following significant rainfall event.
Contingency and corrective actions	Should erosion and sedimentation be evident, stop work immediately, report incident and remedy in accordance with ESCP. Follow contingency plan as outlined in Section 8.
Records	Weekly inspection report

Control Measures	Responsibility
Implement Erosion and Sediment Control Plan as per Appendix 3	☒APA ☐Contractor
Any required cut and fill will employ slope design rules and stabilisation measures guided by material erosion and agronomic characterisation of the site soils.	☒APA ☐Contractor
Major land disturbance works will be schedule to avoid periods of high wind, where practicable. Soil and erosion control measures will be adjusted to ensure appropriate management of erosion and sediment during adverse weather.	☐APA ☒Contractor
Site drainage will be designed to maximise sheet flow where possible. Construction of diversion drains, channels and table drains will be minimised to the maximum possible extent where practicable.	☒APA ☐Contractor
Priority will be given to the prevention or minimisation of soil erosion rather than allowing erosion to occur and relying on sediment control measures to trap and contain sediment and turbid runoff.	☒APA ☒Contractor
Soils will be ameliorated by the incorporation of gypsum into the soil at rates determined by site specific soil testing. Hardstands will be gravel sheeted or concreted, and stabilised or strengthened where required.	☐APA ☒Contractor
All reasonable and practicable measures needed to protect downstream waters and adjacent properties from the adverse effects of sediment and turbid water discharge will be implemented.	☐APA ☒Contractor
Site areas containing potential contaminants (such as fuel, oil, grease and chemicals) will be covered and/or bunded in accordance with Australian Standard AS1940: The storage and handling of flammable and combustible liquids to prevent contamination of stormwater runoff, with offsite disposal of captured water / contaminants.	☒APA ☒Contractor
Temporary and permanent onsite wastewater management systems will: • Be appropriate for each site based on consideration of the site layout, site conditions and relevant environmental constraints; and • Be designed, constructed, operated, maintained and decommissioned in accordance with best practise and relevant guidelines (including WaterNSW 2019), applicable standards (including AS/NZS 1547:2012 On-site domestic wastewater management) and local Council requirements.	☒APA ☐Contractor

All required water licensing and approvals will be obtained to support water supply arrangements for each site during construction and operation.	☒APA ☐Contractor
Stormwater runoff from buildings will be captured in rainwater tanks for use on site, to minimise demand for imported water.	☒APA ☐Contractor

A Soil and Water Management Plan (SWMP) is contained as Appendix 2 of this CEMP.

7.3.1 Erosion and sediment control

A site specific Erosion and Sediment Control Plan, certified by a Certified Professional in Erosion and Sediment Control (CPESC), has been prepared and is included as Appendix 3 to this CEMP.

7.4 Aboriginal Cultural Heritage

Table 14: Aboriginal cultural heritage management sub-plan

Area	Details
Values	Items / areas of known and unknown Aboriginal Cultural Heritage significance
Activities that may impact on values	Site establishment and camp mobilisation General construction works
Potential impacts	Very low likelihood of potential impacts to Aboriginal cultural heritage or intergenerational equity.
Performance objectives / targets	Respect and protection of items of Aboriginal cultural heritage
Standards	• Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW • Aboriginal Cultural Heritage Consultation Requirements for Proponents • Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW. • Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.
Monitoring requirements	Monitoring requirements as set out in the approved Aboriginal Cultural Heritage Management Plan at Appendix 4.
Contingency and corrective actions	An unexpected finds protocol and unexpected human remains protocol is detailed as a part of the Aboriginal Cultural Heritage Management Plan at Appendix 4.
Records	Records of cultural heritage inductions to be kept by the Contractor.

Aboriginal cultural heritage is to be managed in accordance with the Aboriginal Cultural Heritage Management Plan as presented in Appendix 4.

7.4.1 Aboriginal Cultural Heritage Management Plan

An Aboriginal Cultural Heritage Management Plan (ACHMP) has been prepared for the site and is contained as Appendix 4.

The ACHMP has been developed to provide guidance on:

- Processes to maintain ongoing consultation with the project's registered Aboriginal parties (RAPs) and Heritage NSW – APA will manage all consultation;
- Site-specific inductions highlighting Aboriginal cultural heritage values;
- Management procedures for Aboriginal cultural heritage values within, and adjacent to, the project area during pre-construction and construction phases;
- Protocols and procedures for unexpected finds, such as human remains;
- Protocols for undertaking activities in areas that have not been previously assessed, if required; and
- Other administrative requirements.

The Contractor is required to adhere to this ACHMP during the construction phase of the project.

7.5 Air quality and greenhouse gas

Table 15: Air and GHG emissions management sub-plan

Area	Details
Values	Biological integrity of natural ecosystems and ecological processes Sensitive receptors
Activities that may impact on values	Site establishment and camp mobilisation General construction works General project transport activities and deliveries Piling
Potential impacts	Negative impacts to sensitive receptors (increase in dust emissions) Emissions from the combustion of fuel (diesel) by onsite plant and equipment
Performance objectives / targets	• Prevent the generation of dust in preference to applying dust suppression measure. • Minimise potential for unplanned emissions to the atmosphere including dust. • Ensure there is no health risk or loss of amenity due to emission of dust to the environment. • Compliance with relevant legislation and standard
Standards	APGA Code of Environmental Practice APA HSE EP 13.03.01 Gas, Dust & Light Emissions Management APA HSE EP 13.08.01 Energy and Emissions Reporting
Monitoring requirements	Daily visual check for dust Maintenance checks on plant and equipment Conduct monitoring if required or if a complaint has been received
Contingency and corrective actions	Should wind conditions become unfavourable, dust generating activities will be ceased until conditions are favourable, as directed by the APA Construction Manager. Follow contingency plan as outlined in Section 8
Records	Maintenance records Daily pre-start equipment check records

	Site inspection reports General housekeeping inspection reports Compliance records

Control Measures	Responsibility
Stabilisation of exposed soils will be undertaken as soon as practicable, and dust suppression undertaken as required using water sprays, water extension agents, soil stabilising polymers or other media on: • Unpaved work areas subject to traffic and wind; • Exposed soil; • Main haulage routes, as required; • Sand, spoil and aggregate stockpiles; and • During the loading and unloading of dust generating activities. When water is used for dust suppression, it will not be applied in a way that causes ponding or runoff.	☐APA ☒Contractor
Construction vehicles with potential for loss of loads (such as dust or litter) will not be overloaded and will be covered when using public roads.	☐APA ☒Contractor
Plant and equipment will be maintained in good condition to minimise ignition risk, fuel consumption, spills and air emissions that may cause nuisance.	☐APA ☒Contractor
Plant, equipment and vehicle engines will be switched off when not in use.	☐APA ☒Contractor
Material handling will be efficiently scheduled and planned to minimise fuel consumption	☐APA ☐Contractor
10% blended ethanol fuel will be used for petrol-powered light vehicles, where practicable	☐APA ☒Contractor
Services and materials (aggregates, etc.) will be sourced locally, where practicable	☐APA ☒Contractor
Low carbon alternatives will be procured where practicable (use of lower carbon cement alternatives).	☐APA ☒Contractor

7.6 Noise

Table 16: Noise management sub-plan

Area	Details
Values	Existing biodiversity and land quality Biological integrity of natural ecosystems and ecological processes Sensitive receptors
Activities that may impact on values	Site establishment and camp mobilisation General construction works Piling
Potential impacts	Negative impacts to sensitive receptors resulting from excessive noise
Performance objectives / targets	• Minimise noise impact on surrounding residents by ensuring unacceptable noise is not emitted beyond the site area.

	• Ensure there is no health risk or loss of amenity due to noise emissions • Maintain a good relationship with the nearby community. • Compliance with relevant legislation and standard.
Standards	• NSW Department of Environment and Climate Change 2009 • Interim Construction Noise Guideline (ICNG) 2009 • NSW Environmental Protection Authority Noise Policy for Industry 2017
Monitoring requirements	If complaints are received regarding construction noise, implement control measures and conduct monitoring at the affected residence to determine whether criteria are exceeded.
Contingency and corrective actions	Follow contingency plan as outlined in Section 8
Records	Maintenance records Daily pre-start equipment check records Site inspection reports General housekeeping inspection reports Compliance records

Control Measures	Responsibility
Noise generated by any construction, upgrading or decommissioning activities will be minimised in accordance with the best practice requirements outlined in the *Interim Construction Noise Guideline* (DECC, 2009), or its latest version.	☐APA ☒Contractor
Blowdown events are to only occur during the day, unless for an emergency situation	☒APA ☐Contractor
APA will notify affected landholders at least 24 hours prior to any scheduled blowdown events	☒APA ☐Contractor
Contractor to minimise traffic noise impacts on receivers along the transport routes for the sites by remaining on the dedicated transport routes and staying with speed limits at all times.	☐APA ☒Contractor
Impact piling at MW880 will not be conducted outside of Interim Construction Noise Guideline standard construction hours (Sunday, public holidays and Saturday between 1pm and 6pm) unless agreed with potentially impacted landholder(s).	☐APA ☒Contractor
Turbine intakes and exhausts will be fitted with silencers consistent with those assessed in Table 4.1 of the noise impact assessment of Modification 1.	☒APA ☐Contractor

7.6.1 Out-of-hours works protocol

The conditions of approval for the project state that construction activities may only be undertaken during standard construction hours unless approved through this out-of-hours protocol.

Table 17: Conditions of approval relevant to out of hours work

Condition of approval	Condition requirements
B6	Unless otherwise agreed by the Secretary, the Proponent may only undertake construction activities between: (a) 7 am to 6 pm Monday to Friday; (b) 8 am to 1 pm Saturdays; and (c) At no time on Sundays and NSW public holidays The following activities may be undertaken outside these hours without the approval of the Secretary: (a) The delivery of materials as requested by the NSW Police Force or other authorities for safety reasons; (b) Emergency work to avoid the loss of life, property and/or material harm to the environment; (c) Where a negotiated agreement has been reached with affected receivers; or (d) Works as approved through the out-of-hours works protocol (see Section 7.6.1 of this CEMP) as approved through the CEMP required by Condition C1.

7.6.1.1 *Proposed out-of-hours activities*

During construction, APA is proposing a rolling 3 week on / 1 week off workforce roster, meaning there is always a crew on site undertaking works.

Construction of the project will require construction activities to be undertaken outside of standard construction hours, primarily being earthworks and general construction during the hours of 1pm to 6pm on Saturdays and 7am to 6pm on Sundays. In addition, there may be catering delivered to the temporary construction camp out-of-hours. APA is not proposing any construction works between the hours of 6 pm to 7 am.

Justification for undertaking works outside of the standard construction hours is provided below.

7.6.1.2 *Justification for out-of-hours work*

Construction noise criteria for the project were determined in accordance with the Interim Construction Noise Guideline (ICNG). This guideline promotes a clear understanding of ways to identify and minimise noise from construction and to identify 'feasible' and 'reasonable' work practices.

The guideline recommends standard construction hours where noise from construction activities is audible at residential premises:

- Monday to Friday 7 am to 6 pm;
- Saturday 8 am to 1 pm; and
- No construction work is to take place on Sundays or public holidays.

ICNG guidelines state that a strong justification would typically be required to undertake works outside of the standard hours.

Noise management levels (NMLs) were established for residential properties for standard and outside of standard hours.

Predicted noise levels from expected construction works indicate the following:

- Noise predictions from site preparation and general construction works indicate levels which will satisfy the noise affected management level for the daytime out-of-hours periods on Saturdays, Sundays and public holidays; and
- Noise predictions associated with piling works, indicate levels which would marginally exceed the daytime out-of-hours NML.

Impact piling will be the activity that generates the greatest amount of noise, which will cause the daytime out-of-hours NML at one sensitive receptor to exceed by 2dB (which is defined as negligible in the Noise Policy for Industry). All other noise generating activities will be compliant with out-of-hours NMLs.

Should piling works be proposed out of hours, the Contractor will undertake noise assessments of the works to verify noise levels at sensitive receptors. Once noise levels are verified, agreement with all owners and occupiers of sensitive receptors where noise levels will exceed NML will be gained prior to undertaking piling works out-of-hours.

While construction activities outside of standard hours could be limited, this would result in the construction timeframe being significantly extended, which would have further implications for the environmental impact of the project.

The construction and commissioning timeframe of 12 months is based on construction activities being undertaken for 11 hours per day, seven days a week. If construction activities are limited to standard hours, then 1.5 of every 7 days will be unproductive. This reduction in hours would extend the nominal construction timeframe by approximately three months, which would have consequential impacts on air quality, soil and water.

With the project proposing to work outside of standard hours, the impacts on sensitive receptors are limited in both number and duration.

Therefore, limiting general construction to standard hours is not proposed and APA is seeking approval to undertake construction as detailed above.

*7.6.1.3 **Application of mitigation measures***

The following management measures will minimise noise impacts associated with the construction phase of the project:

- A complaints management system will be put in place that documents:
    - Name of persons receiving complaint;
    - Name of person making the complaint;
    - Date and time of complaint;
    - Nature of the complaint;
    - Actions taken to rectify;
    - Actions to minimise risk of reoccurrence; and
    - Name of person(s) responsible for undertaking the required actions.

- Nearby landholders will be provided a dedicated point of contact for the duration of the project.
- Impact piling at the project site (MW880) will not be conducted outside of ICNG standard construction hours unless actual noise monitoring has occurred and agreed with potentially impacted landholders.
- Relevant affected landholders will be notified of any blowdown events scheduled to take place and informed of the potential noise impacts, including timing and duration.

7.7 Visual amenity

Table 18: Visual amenity management sub-plan

Area	Details
Values	Existing biodiversity and land quality Biological integrity of natural ecosystems and ecological processes Sensitive receptors
Activities that may impact on values	Site establishment and camp mobilisation General construction works General project transport activities and deliveries Piling
Potential impacts	Impact to amenity due to a change to existing viewshed
Performance objectives / targets	Minimise light spill from the site Compliance with relevant legislation and standard
Standards	Australian Standard AS4282 (INT) 2019 – Control of Obtrusive Effects of Outdoor Lighting APA HSE EP 13.03.01 Gas, Dust & Light Emissions Management
Monitoring requirements	Daily visual check for dust
Contingency and corrective actions	Follow contingency plan as outlined in Section 8
Records	Site inspection reports General housekeeping inspection reports Compliance records

Control Measures	Responsibility
The design of the compressor station and associated infrastructure will include colour tones and material finishes that are sympathetic to existing buildings, background vegetation or landscape	☒APA ☐Contractor
Model review and design has been undertaken to minimise the visual and off-site lighting impacts of the development	☒APA ☒Contractor
Contractor to ensure that all external lighting associated with the development complies with relevant Australian Standards including the latest version of Australian Standard AS4282 (INT) 2019 – Control of Obtrusive Effects of Outdoor Lighting	☐APA ☒Contractor
Camp provider to position lighting to focus on temporary accommodation camp and not surrounding area during construction	☐APA ☒Contractor

APA will consult with affected landowners after construction regarding potential vegetation screening options	☒APA ☐Contractor

7.8 Traffic

Table 19: Traffic management sub-plan

Area	Details
Values	Operate within safe work environment with minimal disturbance to the public.
Activities that may impact on values	Road use of project vehicles Reduced speed zones adjacent to work areas.
Potential impacts	Restricted access and/or delays for local road users Community complaint and reputational impacts.
Performance objectives / targets	• Implement the approved Traffic Management Plan • Maintain Council roads to the standard agreed with Lachlan Shire Council • No public complaints
Standards	Austroads Guide to Road Design Part 4A: Unsignalised & Signalised Intersection Traffic Control at Work Sites (RMS, 2018)
Monitoring requirements	Maintenance records and reports
Contingency and corrective actions	In the event of public complaint, further enquiry will be conducted to confirm the issue and options for management In the event of damage to roads, rectify to standard specification and notify DPIE and/or Lachlan Shire Council In the event of traffic incident, stop work and notify authorities Follow contingency plan as outlined in Section 8.
Records	Complaints and incidents log

Control Measures	Responsibility
Construction vehicles with potential for loss of load (such as dirt or litter) will not be overloaded and will be covered when using public roads.	☐APA ☒Contractor
10% blended ethanol fuel will be used for petrol-powered light vehicles, where practicable.	☒APA ☒Contractor
Ensure compliance with measures outlined in the site-specific Traffic Management Plan (TMP) – see Appendix 5 of this CEMP.	☐APA ☒Contractor
Traffic and pedestrian safety issues to be managed in accordance with the approved TMP	☐APA ☒Contractor
Contractor to maintain all roads and utility-related infrastructure in a safe and serviceable condition	☐APA ☒Contractor
Transport routes will be clearly marked or communicated, and speed limits enforced.	☐APA ☒Contractor
After arrival at the project site all vehicles, plant and equipment will remain within the construction footprint and on approved roads and tracks	☐APA ☒Contractor

Any oversized or over weight loads will be transported in accordance with the requirements of the relevant road authority.	☐APA ☒Contractor
Potentially affected local businesses in regional centres will be notified prior to transport of oversize loads where necessary	☐APA ☒Contractor
Transportation of oversized loads through regional centres will be scheduled for night time where possible to minimise potential impacts on street parking	☐APA ☒Contractor
If travelling on the main street through West Wyalong, oversize vehicle are to use the truck bypass route in preference to the main street route.	☐APA ☒Contractor

7.8.1 Traffic Management Plan

A Traffic Management Plan (TMP) for the construction phase of the project has been developed and is included as Appendix 5 of this CEMP.

The TMP includes:

- A review of relevant construction plans and documents;
- The relevant statutory and policy controls that apply to the site and land use;
- Details of:
    - The location of proposed work site access points;
    - Construction vehicle types and haulage routes;
    - Construction workers parking;
    - Proposed construction program and hours of construction;
    - Estimated number of construction vehicle movements (light and heavy);
    - Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during construction;
- A driver's Code of Conduct; and
- An assessment of the suitability of potential Oversize / Overmass (OSOM) vehicle access routes to / from the site for the largest and/or heaviest types of vehicles required to access the site, for deliveries of construction materials and equipment.

7.9 Fuels, oils and chemicals

Table 20: Fuels, oils and chemicals management sub-plan

Area	Details
Values	Existing biodiversity and land quality Existing integrity of soils Biological integrity of natural ecosystems and ecological processes
Activities that may impact on values	Storage and use of fuels and chemicals during construction
Potential impacts	Spills of fuels, oils or chemicals are a hazard that can lead to contamination of soil, water and/or the receiving environment.

Performance objectives / targets	Prevent the release of fuels, oils or chemicals to the environment
Standards	• Australian Standard AS 1940:2017 – The storage and handling of flammable and combustible liquids • APA HSE PRO 005 Chemical management • APA HSE EP 13.04.01 Chemical spill management • APA HSE EP 13.06.01 Soil and land management
Monitoring requirements	SDS register implemented and regularly checked / updated when new chemicals are added to the project. Monitoring bunded area for overtopping following heavy rain. Be aware of likely rain events. Visual assessment of stains associated with spills and leaks. Spill kits checked weekly.
Contingency and corrective actions	Spill emergency of stains associated with spills and leaks Follow contingency plan as outlined in Section 8.
Records	Chemical area inspections, audits and incident reports on a weekly basis. Spills / leaks to be reported as soon as practicable.

Control Measures	Responsibility
Dangerous goods, as defined by the Australian Dangerous Goods Code, and flammable and combustible liquids will be stored and handled in accordance with all relevant Australian Standards	☐APA ☒Contractor
Liquids stored on site that have the potential to cause environmental harm must be stored in or serviced by an effective containment system and managed to prevent the release of liquids to waters or land (other than as authorised by the EA).	☐APA ☒Contractor
Site areas containing potential contaminants (such as fuel, oil, grease and chemicals) will be covered and/or bunded in accordance with Australian Standard AS1940: The storage and handling of flammable and combustible liquids to prevent contamination of stormwater runoff, with offsite disposal of captured water/contaminants.	☐APA ☒Contractor
Routine visual monitoring and recording of chemical and fuel storage facilities must be undertaken	☐APA ☒Contractor
To reduce the risk of spills occuring, the volume of liquid material (fuel, oil, lubricant) required on-site for construction activities is to be limited to only that which is required. All liquid material will be stored within containment facilities (e.g. bunded areas, leak proof trays).	☐APA ☒Contractor
Where flammable or combustible chemicals are required to be stored on-site, appropriate fire-fighting equipment will be available. Incompatible chemicals will not be stored together.	☐APA ☒Contractor
Any refuelling trucks that are required to travel onsite will carry a spill kit capable of containing any spills.	☐APA ☒Contractor
Contractors shall provide appropriate spill response and recovery equipment suitable to the substances being utilised for the scope of work.	☐APA ☒Contractor
Persons handling chemicals shall be provided with, use and be trained in appropriate personal protective equipment, chemical handling and spill response and recovery procedures.	☐APA ☒Contractor

Spill kits to be re-stocked following use	☐APA ☒Contractor
Material contaminated as a result of a spill (e.g. soil or solid absorbent) must be removed (i.e. excavated or swept up) and placed in an appropriate container to prevent further contamination. An accredited chemical waste contractor will be engaged to dispose of the material and to provide copies of Waste Transport Certificates and Certificates of Disposal for each consignment. Records will be kept of all certificates.	☐APA ☒Contractor

7.10 Bushfire risk and emergency

Table 21: Bushfire risk and emergency management sub-plan

Area	Details
Values	Receiving environment Construction workforce
Activities that may impact on values	• General construction activities • Use of plant and equipment • Natural events
Potential impacts	Potential to cause harm to the environment, community and/or workforce resulting from an emergency situation
Performance objectives / targets	Prevent, minimise and manage any emergency responses during construction activities to ensure no impact to the environment and human health
Standards	• APA Emergency Response Plan • APA Bushfire Management Plan • APA Health, Safety and Environment Plan (*insert doc number*) • APA HSE GP 11.01 Emergency Management
Monitoring requirements	Monitoring in accordance with the APA Emergence Response Plan
Contingency and corrective actions	Follow contingency plan as outlined in Section 8.
Records	Maintenance records Daily pre-start equipment check records Site inspection reports General housekeeping inspection reports Compliance records

Control Measures	Responsibility
The project Emergency Response Plan must be implemented during construction	☐APA ☒Contractor
Project construction is to comply with APA's existing Bushfire Management Plan	☐APA ☒Contractor
Open fires, including open barbeques, billy fires, and brush burning, will not be permitted on site.	☐APA ☒Contractor
All hot work operations will have access to a validated portable fire extinguisher	☐APA ☒Contractor

The project will implement the APA HSE Management System	☒APA ☒Contractor

7.10.1 Emergency response procedure

All personnel will be inducted to the site emergency response plan either prior to arrival on site or upon arrival on site by the Construction Manager or nominated delegate. During this induction process, emergency muster area locations will be indicated and records will be maintained.

An evacuation exercise will be scheduled to be carried out within the first two weeks after mobilisation to site. All stakeholders will be invited to participate in the exercise. A debrief session will be held after the exercise has been conducted to discuss deficiencies and improvements required. This will be carried out by the main contractor site Construction Manager or site HSE representative.

The Construction Contractor will contact the local emergency services prior to the commencement of construction works to confirm the site and camp locations, on site incident management ability, peak personnel number and key project contacts. Verification of this information sharing is to be made to APA construction supervisors.

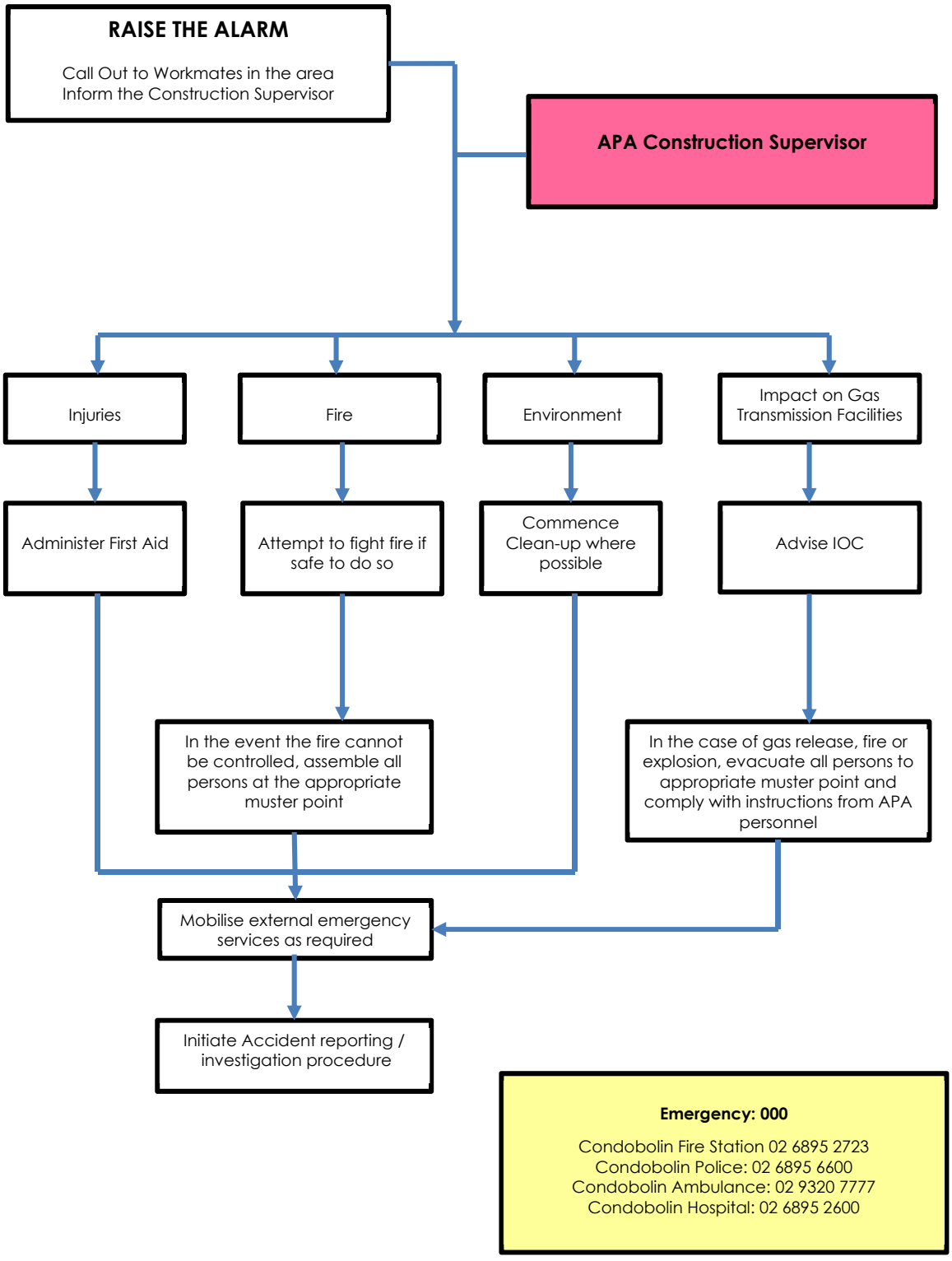
7.10.1.1 ***Personnel and contact details***

Emergency contact details are provided below:

APA Contacts	Number
IOC	1800 017 000 1300 087 621
Construction Supervisor – Neil Wicks	0428 302 291
HSE Advisor – Ryan Brooks	0412 869 501
Senior Project Manager – Alex Kristovskis	0458 449 600
Project Manager – Hassan Cheema	0459 445 633
Project Engineer – James McSweeney	0466 390 620
APA Brisbane Office	07 3323 6100

7.10.1.2 ***Action in an Emergency***

The Project Emergency Response Plan will be available on site and will be implemented throughout construction. The below procedure will be followed in case of an emergency:


RAISE THE ALARM
Call Out to Workmates in the area
Inform the Construction Supervisor
APA Construction Supervisor
Injuries
Fire
Environment
Impact on Gas Transmission Facilities
Administer First Aid
Attempt to fight fire if safe to do so
Commence Clean-up where possible
Advise IOC
In the event the fire cannot be controlled, assemble all persons at the appropriate muster point
In the case of gas release, fire or explosion, evacuate all persons to appropriate muster point and comply with instructions from APA personnel
Mobilise external emergency services as required
Initiate Accident reporting / investigation procedure
Emergency: 000
Condobolin Fire Station 02 6895 2723
Condobolin Police: 02 6895 6600
Condobolin Ambulance: 02 9320 7777
Condobolin Hospital: 02 6895 2600

7.11 Waste management

Table 22: Waste management sub-plan

Area	Details
Values	Existing biodiversity and land quality Existing integrity of soils Biological integrity of natural ecosystems and ecological processes
Activities that may impact on values	Main waste streams: sewerage, general solid waste, waste oils and grease. Minor waste streams: recyclable material from construction, putrescible wastes.
Potential impacts	• Potential for pest infestations due to putrescible wastes, including food and cardboard. • Land contamination from management of waste liquids including oils, lubricants, spilled substances and clean-up materials. • Land contamination and increased nutrient loads within the environment from effluent disposal.
Performance objectives / targets	All waste collected and disposed of appropriately. Site conforms to the Waste Management Hierarchy principles. No land and water contamination as a result of waste management.
Standards	AS1940:2004: The storage and handling of flammable and combustible materials APGA Code of Environmental Practice. APA HSE EP 13.04.01 Chemical Spill Management. APA HSE EP 13.01.01 Environmental Approvals. APA HSE EP13.02.02 Native Vegetation Management. APA HSE EP13.06.01 Soil and Land Management. APA HSE EP13.05.03 Wastewater Management. APA HSE EP13.05.02 General Waste Management. APA HSE EP13.04.02 Contaminated Land Management. APA HSE EP13.02.03 Pest, disease and Weed Management.
Monitoring requirements	Visual inspections will be conducted weekly to assess the integrity and effectiveness of waste management practices. Waste storage facilities will be inspected on a weekly basis to assess compliance with this CEMP.
Contingency and corrective actions	Follow contingency plan as outlined in Section 8.
Records	• Records will be maintained of the quantities of waste generated, the quantities transported and disposed of, and the methods of disposal (e.g. landfill or recycling) for all construction activities. Records will include waste manifests, waste tracking numbers (for listed wastes) and associated receipts. • Incidences and remedial actions records. • Waste tracking documents.

	• Records of completed inductions, daily pre-start checks, routine plant and equipment maintenance and monitoring records.

Control Measures	Responsibility
All personnel will be instructed in project waste management practices as a component of the environmental induction process	☐APA ☒Contractor
Waste materials generated during construction and operations will be reused or recycled where practicable, or appropriately stored, collected and transported as soon as practicable by licenced contractors for disposal at appropriately licenced facilities.	☐APA ☒Contractor
Waste disposal strategies for each waste stream shall be developed and documented prior to the commencement of each works scope including the identification of suitable disposal locations in consultation with local waste sub-contractors and/or local government where applicable.	☐APA ☒Contractor
Suitable waste containers shall be provided for each waste stream in designated areas and clearly labelled.	☐APA ☒Contractor
Waste containers will be lidded to mitigate fauna access. No waste will be left outside in open areas accessible to feral animals.	☐APA ☒Contractor
Site areas containing potential contaminants (such as fuel, oil, grease and chemicals) will be covered and/or bunded in accordance with Australian Standard AS1940: The storage and handling of flammable and combustible liquids to prevent contamination of stormwater runoff, with offsite disposal of captured water/contaminants.	☐APA ☒Contractor

7.12Sewage treatment / disposal

Table 23: Sewage treatment and disposal sub-plan

Area	Details
Values	Existing biodiversity and land quality Existing integrity of soils and waterways (ground or surface waters) Biological integrity of natural ecosystems and ecological processes
Activities that may impact on values	Disturbance for establishment of treated effluent disposal area Ineffective sewage treatment Sewage or chemical spill, or incorrect application / transport off site of treated effluent (via ground or surface water) Ineffective management of treated effluent irrigation area
Potential impacts	• Damage to surrounding vegetation • Soil contamination • Contamination of waterways
Performance objectives / targets	• Sewage treatment and disposal to be managed to avoid any direct or indirect impacts to land or water • To provide contingency plans to minimise the potential for adverse impacts to land or water as a result of an emergency situation. • No excessive flows into the sewage collection system that may result in an uncontrolled release or inadequately treated effluent.

	• No uncontrolled releases of sewage or treated effluent. • No treated effluent runoff from the irrigation area. • No significant impact on the surrounding natural environment.
Standards	• Local Government Act 1993 Section 68 Approval • Protection of the Environment Operations Act 1997 • ANZECC & ARMCANZ (2000) Water Quality Guidelines • Australian Guidelines for Water Recycling • Australian Standard 1547 On-site domestic wastewater management • Australian Standard 1546.3 On-site domestic wastewater treatment units – Secondary treatment systems
Monitoring requirements	• Continuous online monitoring and automatic control of equipment and instruments, including alerts and alarms where necessary for intervention, and shut down for critical failures of systems or performance • Daily visual inspection of the irrigation area. Visually identified issues or concerns will be immediately reported to the Camp Manager for action / rectification. • Daily to weekly visual inspection of the condition of all sewage collection, treatment and disposal infrastructure over the site. Visual deterioration or damage will be immediately reported to the Camp Manager for action / rectification. • Weekly inspection of the irrigation area, noting any signs of erosion or degradation of the vegetation. • Quarterly detailed inspection, calibration, adjustment, servicing and maintenance from suitably qualified, competent, approved and authorised external service provider / contractor. Reports to be provided to the Camp Manager, APA and Lachlan Shire Council as required by the Section 68 approval. • Sampling and testing of treated effluent to confirm treated effluent quality - upon commissioning to demonstrate compliance and then quarterly.
Contingency and corrective actions	If ponding or runoff of treated effluent is occuring from part of the irrigation area, irrigation to that part of the area will cease immediately and diverted to a new area. The Camp Manager or delegate will investigate and document events of non- compliance with the above performance indicators. Where unsuitable (out of specification) treated effluent quality is detected, treated effluent will not be irrigated until the reason for the issue is rectified. Non-conformances will be documented, investigated and corrective actions implemented. Follow up review will occur to ensure the effectiveness of corrective actions.
Records	The following records will be maintained:

	• Any environmental incidents or accidents that have occurred. • Records of complaints in relation to the operation of the plant. • Recorded data from online monitoring of equipment and instruments including alerts and alarms (if applicable). • Records of visual inspections of the irrigation area. • Records of visual inspections of the condition of sewage collection, treatment and disposal infrastructure over the site. • Records of detailed inspections of the irrigation area. • Records of detailed inspections, and any calibration / adjustment / servicing (if required) of all sewage collection, treatment and disposal infrastructure. • Reports from quarterly detailed inspections, calibration, adjustment, servicing and maintenance from suitably qualified, competent, approved and authorised external service provider / contractor. • The results of treated effluent quality monitoring.

Control Measures	Responsibility
System Design	
All sewage capture, storage, treatment and disposal infrastructure shall be suitably designed, constructed and operated in accordance with the Section 68 approval.	☐APA ☒Contractor
Treated effluent disposal area shall be established and operated in accordance with the Section 68 Approval.	☐APA ☒Contractor
The treatment plant shall include wet weather capacity of at least to 2 days.	☐APA ☒Contractor
The treatment plant shall include an alarm system to alert operators and service personnel in the event of system fault including pump failure or tank high level.	☐APA ☒Contractor
Vegetation disturbance shall be minimised for the establishment of the irrigation area – to assist in maintaining soil stability.	☐APA ☒Contractor
The irrigation area shall be fenced and signage installed to prevent inadvertent or unauthorised access.	☐APA ☒Contractor
Pipelines and fittings associated with the sewage treatment and disposal system shall be clearly identified.	☒APA ☒Contractor
System Operations	
Plant and equipment used for on-site sewage treatment and disposal shall be installed, maintained and operated by suitably trained, competent and experienced personnel.	☐APA ☒Contractor
Written procedures shall be established for the operation and monitoring of the treatment system and disposal area	☐APA ☒Contractor
Discharged treated effluent shall meet the quality standards stated in the approval.	☐APA ☒Contractor
Treated effluent shall be directed to wet weather storage where conditions are unsuitable for irrigation.	☐APA ☒Contractor

All staff shall be made aware of materials that are not permitted to enter the treatment system. This may include excessive quantities of cleaning products including detergents and disinfectants; fats, oils and greases, motor or equipment oils or lubricants, pesticides or herbicides.	☐APA ☒Contractor
Septic waste / waste activated sludge / biosolids / screenings shall be removed off-site as required and disposed of at appropriately licensed premises.	☐APA ☒Contractor
There is to be no ponding or runoff from the irrigation area.	☐APA ☒Contractor
Vegetation control (trimming) shall be undertaken within the irrigation area to optimise water and nutrient uptake, maintain visibility and access to the piping and irrigation network.	☐APA ☒Contractor
Sewage Treatment and Disposal Emergency Management	
The following response procedure will be implemented if a spill (sewage or chemical spill; incorrect application / transport off site of treated effluent) occurs: • The operator will assess the size and origin of the spill. • Action will be take safely stop any further release. This may include isolation of pumps or valves. • Action will be taken to contain the spill and prevent release to the environment. This may include use of sandbags, or earth bunding to contain the release. • The Camp Manager will be notified of the spill and of any additional resources required to contain the spill. • An assessment will be made of the size of the spill and requirements for notification to DPIE. • Where possible, the contained spill will be pumped back into the plant.	☐APA ☒Contractor

7.13 Restoration and rehabilitation

Table 24: Rehabilitation sub-plan

Area	Details
Values	Existing biodiversity and land quality Existing integrity of soils Biological integrity of natural ecosystems and ecological processes
Activities that may impact on values	Clean up and waste disposal Weed spraying
Potential impacts	• Damage to surrounding vegetation • Soil contamination from inappropriate waste disposal during demobilisation • Spread of weeds • Creation of long-term visual impact • Residual wastes • Insufficient rehabilitation

	• Removal of excess soil • Removal of waste • Inappropriate use / application of weed spray.
Performance objectives / targets	Disturbed areas are stable from erosion Weeds are not present
Standards	APGA Code of Environmental Practice NSW *Biosecurity Act 2015*
Monitoring requirements	• Regular inspections will be undertaken during construction and operations to monitor the restored areas stability and rehabilitation success. • Erosion and sediment control measures (as per the SWMP) will be installed as necessary. Erosion controls will be maintained until the area is stabilised to minimise erosion risk from the disturbed area. Post-construction erosion control management will be maintained as part of the operations phase. • Rehabilitation areas shall be inspected to confirm that works are appropriate, prior to handover to APA. • Rehabilitated areas shall be surveyed and mapped and appropriate records (including rehabilitation methodology) provided to APA for future monitoring purposes.
Contingency and corrective actions	Additional weed treatment where weeds persist Management of erosion and or subsidence to stabilise landform where land is actively degrading. Contractor to remedy as soon as practicable. Follow Contingency Plan as outlined in Section 7.
Records	Records to be kept of induction participations, regular inspections of site, erosion and sedimentation, reinstatement and an audit 12 months after final rehabilitation. Records of acceptance by third parties of restoration works.

Control Measures	Responsibility
Rehabilitation of disturbed areas will commence progressively as soon as practicable during and after construction, and will be carried out in accordance with the SWMP and Landcom (2004).	☐APA ☒Contractor
Minimise the disturbance area at any time.	☐APA ☒Contractor
Employ interim rehabilitation strategies to minimise dust generation, soil erosion and weed incursion on parts of the sites that cannot yet be permanently rehabilitated.	☐APA ☒Contractor
Compaction relief shall be undertaken on all areas compacted during construction, with particular attention to areas subject to regular watering and high traffic volume.	☐APA ☒Contractor
The site shall be re-profiled to original contours or to new, stable contours where not reasonably practical to re-profile to original contour.	☐APA ☒Contractor
Topsoil from stockpiles is to be respread following compaction relief.	☐APA ☒Contractor
Any wheel ruts will be graded and erosion control measures will be installed or re-established	☐APA ☒Contractor

All temporary above ground infrastructure not required for operations shall be removed.	☐APA ☒Contractor

8. Contingency plans

8.1 Contractor responsibility

The Contractor shall develop contingency plan(s) for potential environmental incidents associated with the Contractors Scope of Work and incorporate measures within the CEMP and/or specific contingency plans.

As a minimum the contingency plan(s) shall address:

- Identification of potential incidents;
- Clear definition/protocols of how/when procedures are to be initiated;
- Identification and provision of required materials and equipment to be maintained on site to appropriately respond to the incident;
- Identification of additional materials/equipment/services located off site, to assist in response to an incident – including what, where, contact details for access;
- Immediate action to be taken upon incident occuring – to prevent / minimise harm;
- Reporting protocols and responsibilities – internally and to APA. As a minimum"
    - The APA Project Manager shall be notified immediately or as soon as possible upon identification of an incident
- Practices and procedures to be employed to restore the environment and/or mitigate any environmental harm caused;
- Procedures to investigate causes and impacts including impact monitoring, as required; and
- Training of staff in procedures and use of response materials / equipment.

Corrective actions for minor incidents (not requiring external reporting) shall be addressed within the relevant section of this CEMP.

All regulatory compliance reporting will be in accordance with the NSW DPIE Compliance Reporting Guideline and include the below information as a minimum:

- Introduction;
- Previous report actions (if relevant);
- Compliance status summary;
- Incidents;
- Complaints; and
- Relevant appendices, which may include:
    - Compliance table
    - Action status table
    - Compliance report declaration form

- Figures and photos.

Reports will be submitted by APA through the Major Projects Portal.

8.2 APA responsibility

8.2.1 Incident notification, reporting and response

The Planning Secretary (DPIE) must be notified in writing via the Major Projects website immediately after APA becomes aware of an incident, as defined in Section 9.3.

The notification must identify the development (including the development application number and the name of the development) and set out the location and nature of the incident.

8.2.2 Non-compliance notification

The Planning Secretary (DPIE) must be notified in writing via the Major Projects website within seven days after APA becomes aware of any non-compliance.

A non-compliance notification must identify the development and application number, set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

9. Management systems

9.1 Induction and training

All personnel (APA employees and Contractor's) are required to complete inductions as outlined in the East Coast Grid Expansion Construction H&S Plan (*insert doc number*) in accordance with contractual requirements. This induction will include specific elements to address:

- Environmental responsibilities and duties;
- Noise and dust management;
- Flora and fauna management measures;
- Aboriginal Cultural Heritage duty of care;
- Waste management;
- Weed management;
- Landholder relations; and
- Rehabilitation.

In addition to the inductions and specialised environmental training as required for environmental compliance; regular toolbox meetings will be held which include a discussion on environmental aspects, recent incidents and observations and possible improvements in procedures. As a minimum, toolboxes should occur at the beginning of each new job phase. These meetings reinforce the training and promote greater awareness of specific issues. The site based environmental advisors will regularly

interact with all personnel across work areas sharing knowledge and providing feedback on environmental management requirements.

9.1.1 APA responsibility

APA is responsible for ensuring all its employees are suitably qualified for the roles they fill within the project. APA will make available to the Contractor any site specific induction requirements from APA and the Contractor for incorporation into the site induction package. APA will ensure that its personnel comply with the Contractors site induction requirements.

9.1.2 Contractor responsibility

The Contractor is responsible for the preparation and presentation of the site induction package. The induction package must be presented to APA for acceptance prior to implementation.

The Contractor shall ensure that all personnel have the appropriate training and/or experience to undertake their role within the project. Certain roles require formal qualifications and/or level of experience (e.g. fauna handlers, persons preparing erosion and sediment control plans, inspection of vehicle cleanliness, etc.). The Contractor will ensure that suitably qualified/trained personnel are provided for such roles.

9.2 Job hazard analysis

All JHA's (or similar) developed for the project must identify, include and address all environmental risks likely associated with the task.

9.3 Incident management

Incidents will be reported in accordance with the APA Incident Reporting Procedure (APA HSE GP 07.01) via the Safeguard Plus platform.

9.3.1 APA responsibility

APA will carry out and required regulatory reporting, in accordance with HSE GP 07.01, and with the appropriate government agency. APA will review findings of all incident reports and verify Contractor has implemented viable corrective actions.

Requirements for external reporting of environmental incidents in NSW is outlined in Section 8.1.

9.3.2 Contractor responsibility

The Contractor shall implement the APA Incident Reporting Procedure or an equivalent system for reporting of incidents.

All incidents which cause, or hazards which have the potential to cause environmental harm, including near misses are to be reported, regardless of size of impacts.

An incident at APA is an unplanned event that causes harm to people or the environment. As a result of an incident, people could be injured or made ill, while the environment could be damaged.

An environmental incident at APA is when environmental harm has occurred. Environmental harm can occur because of a breach of one, or a combination of, three environmental parameters:

- Environmental law and/or regulation (including licence and/or approval conditions);
- Environmental harm to a technical environmental area (e.g. physical biological harm, loss of public amenity); and
- Failure of an environmental risk management method.

A near miss is an unplanned event that doesn't actually cause harm to people or the environment, but had circumstances been different the event could have resulted in harm.

The Contractor will implement reporting procedures to record any environmental non-conformances or incidents. The procedures are to be agreed with APA prior to commencement of works and in accordance with the contract requirements.

The Contractor Construction Manager will be responsible for reporting to the APA Construction Manager. The Contractor HSE Support will notify the site APA HSE Support.

The Contractor Construction Manager will provide verbal notification of any incident to the Project Manager as soon as practicable, but within 48 hours of identification of the incident. Initial notification will be formally provided within 12 hours of identification of the incident using the incident report form. The incident report form is to be provided to the APA Project Manager and a copy provided to APA Construction Manager and the site APA HSE Support.

The Contractor shall investigate and follow up all incidents and, where relevant, nominate and implement corrective actions.

9.4 Complaints management

9.4.1 APA responsibility

Any reporting required to the regulators will be carried out by APA. APA is required to respond to complaints received from the administering authority within 14 days of completion of the investigation or receipt of the monitoring results.

The APA Project Manager or Construction Manager will review with the Contractor Construction Manager each complaint upon receipt and agree how the complaint will be addressed.

9.4.2 Contractor responsibility

The Contractor HSE Support will maintain a complaints management system of all complaints received.

All complaints received, that do not involve potential or actual environmental incident, must be advised to the APA Construction Manager and HSE Support within 24 hours.

Any complaints received from external stakeholders will be investigated.

The results of the investigation will be communicated back to the complainant within a reasonable timeframe (initial feedback needs to be given to the complaint within 2 days of receiving the complaint) with a record of the complaints and any actions taken recorded in the complaints database.

The Contractor will be responsible for providing APA with any required assistance in relation to a complaint received from the administering authority.

Any results of the investigation (including an analysis and interpretation of any monitoring results) and abatement measures implemented will be provided to the APA Construction Manager within 10 days of completion of the investigation or receipt of the monitoring results to enable APA to report to the administering authority within the required regulatory timeframes.

The complaints management system will document:

- Name of person receiving complaint;
- Name of person making the complaint;
- Date and time of complaint;
- Nature of the complaint;
- Actions taken to rectify;
- Actions to minimise risk of reoccurrence; and
- Name of person(s) responsible for undertaking the required actions.

A record of complaints and incidents causing environmental harm, and actions taken in response to the complaint or incident will be maintained and retained for five years.

If any monitoring conducted to investigate a complaint indicates that emissions exceed specified criteria, then the following will be undertaken:

- Investigate methods of addressing the exceedances;
- Report on proposed control methods to DPIE and the complainant; and
- If requested, conduct follow up monitoring to confirm compliance.

The Contractor Construction Manager shall review each complaint with the APA Project Manager and/or Construction Manager upon receipt and agree how the complaint will be addressed. Corrective actions and other recommendations including, where applicable, modifications to practices and procedures will be made and closed out under the direction of the APA Project Manager and Construction Manager.

Where the complainant is not satisfied with the outcome of the investigation, the Contractor Construction Manager is responsible for escalating the matter to APA where it will be further escalated internally. Where the matter is still unable to be resolved, an independent mediator can be engaged where necessary.

9.5 Monitoring

As a minimum, the Contractor is required to undertake at least weekly monitoring of all construction activities. The monitoring pro-forma is to be site specific and address all monitoring requirements. In addition to this, specific on site monitoring is to occur in accordance with project approval requirements.

9.6 Inspections and audits

During construction there will be continuous review of the construction area. Individuals and work crews will be required to demonstrate that the pertinent requirements of the CEMP are being adhered to.

9.6.1 APA responsibility

APA will be responsible for all reporting to the regulators, particularly incident reporting.

APA's HSE support will maintain copies of all reports, reviews, and audits and will be responsible for making them available to the appropriate APA Managers.

Audit results will be used to review management practices, and if necessary, the CEMP will be updated to accommodate changes.

9.6.2 Contractor responsibility

The Contractor will be required to prepare checklists for the elements of the EMP. The Contractor Supervisors will record daily and weekly activities on the prepared checklists and submit to APA in accordance with the conditions of contract; at least weekly.

9.6.3 CEMP audits

APA will conduct audits against the APA CEMP at the frequencies set out in Table 25 with a maximum period between audits of three months. The Contractor will make all appropriate information available.

The Contractor is responsible for undertaking compliance audits of the Contractor CEMP and will make available to APA the results of any internal audits conducted by the Contractor in relation to the Project.

Table 25: Audit schedule

Number	Audit	Timing
1	CEMP compliance	Within 1 month of site establishment
2	CEMP compliance and approval conditions relevant to the time of the audit	3 months after audit 1

9.6.4 Post construction

Post-construction monitoring against rehabilitation criteria will be conducted by the APA Infrastructure Delivery group on a six monthly basis for 12 months to evaluate the

effectiveness of revegetation, erosion and soil stability management, and weed control (timing of audits will be dependent on weather conditions). Issues identified during audits will be recorded and corrective actions(s) implemented in accordance with the contract defects process.

9.7 Records

Records shall be retained and disposed of in accordance with APA's Information and Records Management Policy and regulatory requirements.

As a minimum, the following records will be captured and maintained and provided to APA as detailed in Table 26.

Table 26: Reporting requirements

Item	Weekly	Monthly	End of project
Vegetation	N/A	Accurate survey of areas disturbed	Provide to APA in digital format disturbance footprint (accurate to within +/-1m).
Waste	Site inspection	Regulated waste tracking records	All final reports and registers
Weeds	Vehicle / equipment washdown records – summary table, where required. Record of any weed surveys undertaken and treatments carried out.	Vehicle / equipment washdown records – summary table, where required. Record of any weed surveys undertaken and treatments carried out. Register of vehicle / equipment certification.	Vehicle / equipment washdown records – summary table together with verification (copies of certificates).
Fauna	Fauna injured / relocated register	Fauna injured / relocated register	Fauna injured / relocated final register
Greenhouse gas	N/A	Fuel consumption by fuel type Amount of gas purged to the environment.	All final reports and registers
Environmental incidents	Incidents – total number. Results of investigations to date. To be reported immediately following incident.	Monthly report	Final incident register
Complaints	Details of any complaints.	Detail and status of any complaints.	Complaints register.
Neighbouring landholders	Communications with neighbouring landholders	Monthly report	Copy of all, if any, agreements reached during construction.
Cultural Heritage	All inductions, consultation and monitoring activities	Updates to register	All final reports and registers

9.8 Project communication

APA will continue to update the project website during the construction, commissioning and operation of the project to inform all interested parties on key activities, project milestones and general project information.

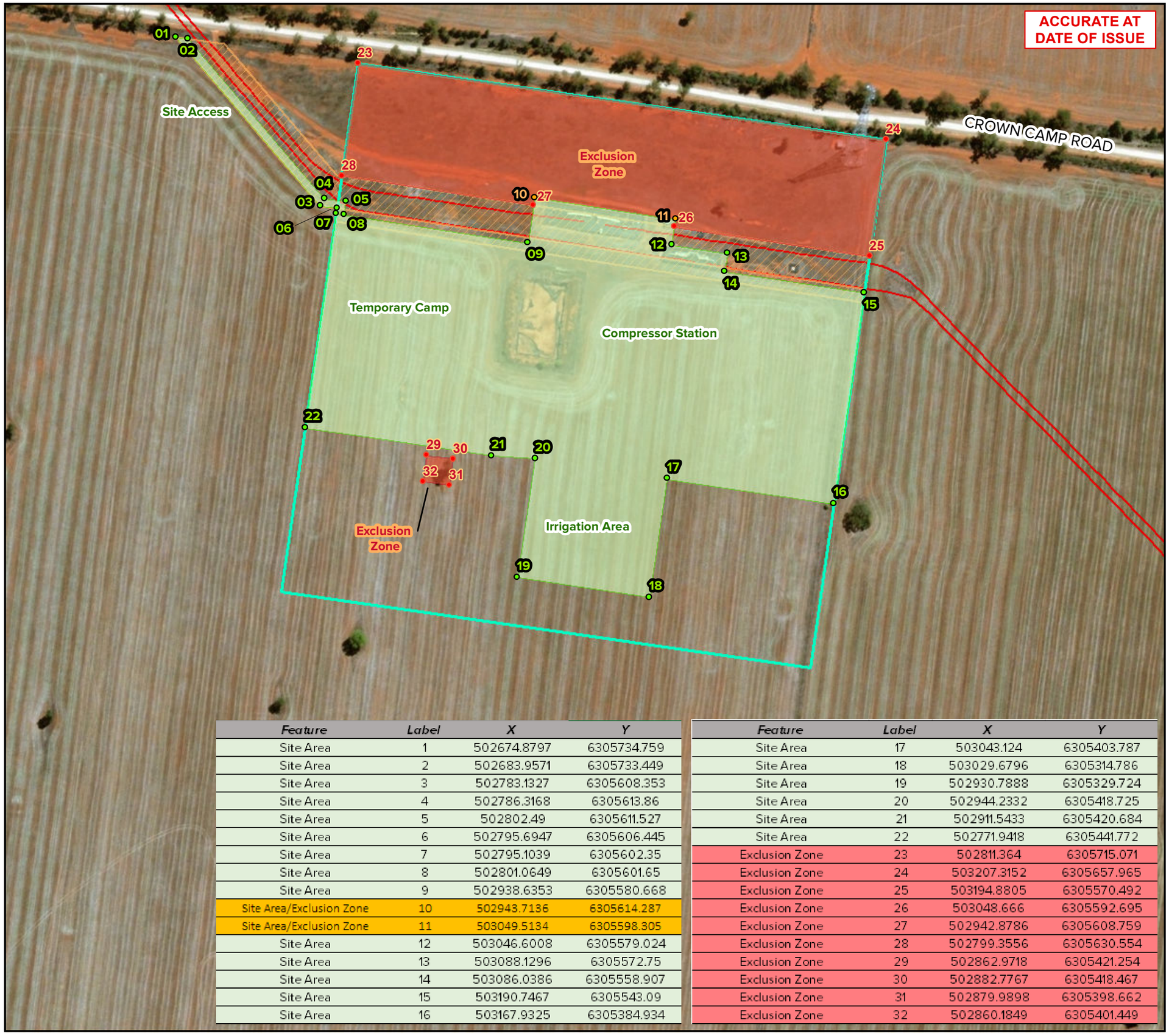
APA has also developed an internal Stakeholder Engagement Plan which is a live document used to track and record engagement throughout the project and will be updated on an as needed basis.

APA updates local and broader stakeholders regarding projects via media releases, which are typically covered in national and regional news outlets. For example, the announcement of the East Coast Grid Expansion project was covered by the Australian Financial Review as well as local and industry publications. APA anticipates that it will continue to engage local and broader stakeholder's via media to provide project updates.

APA will also provide its contact details on a sign at the project construction site. Construction contractors will be provided the dedicated project 1800 phone number, email mail box and webpage details so that they can refer any community enquiries received onto the project team.

For further information on the East Coast Grid Expansion project, members of the public may call 1800 856 001 (8am to 5pm AEST, Monday to Friday) or email EastCoastGridExpansion@apa.com.au

APPENDIX 1 - MW880 Site Area



Feature	Label	X	Y
Site Area	1	502674.8797	6305734.759
Site Area	2	502683.9571	6305733.449
Site Area	3	502783.1327	6305608.353
Site Area	4	502786.3168	6305613.86
Site Area	5	502802.49	6305611.527
Site Area	6	502795.6947	6305606.445
Site Area	7	502795.1039	6305602.35
Site Area	8	502801.0649	6305601.65
Site Area	9	502938.6353	6305580.668
Site Area/Exclusion Zone	10	502943.7136	6305614.287
Site Area/Exclusion Zone	11	503049.5134	6305598.305
Site Area	12	503046.6008	6305579.024
Site Area	13	503088.1296	6305572.75
Site Area	14	503086.0386	6305558.907
Site Area	15	503190.7467	6305543.09
Site Area	16	503167.9325	6305384.934

Feature	Label	X	Y
Site Area	17	503043.124	6305403.787
Site Area	18	503029.6796	6305314.786
Site Area	19	502930.7888	6305329.724
Site Area	20	502944.2332	6305418.725
Site Area	21	502911.5433	6305420.684
Site Area	22	502771.9418	6305441.772
Exclusion Zone	23	502811.364	6305715.071
Exclusion Zone	24	503207.3152	6305657.965
Exclusion Zone	25	503194.8805	6305570.492
Exclusion Zone	26	503048.666	6305592.695
Exclusion Zone	27	502942.8786	6305608.759
Exclusion Zone	28	502799.3556	6305630.554
Exclusion Zone	29	502862.9718	6305421.254
Exclusion Zone	30	502882.7767	6305418.467
Exclusion Zone	31	502879.9898	6305398.662
Exclusion Zone	32	502860.1849	6305401.449

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PROJECT: EAST COAST EXPANSION

TITLE: MWP Proposed Compressor Site Location - Milne

SUBTITLE: Site Area

DATE: 23/12/2021

DATA SOURCE:

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

LEGEND:

Coordinate Corner

- Site Area
- Site Area/Exclusion Zone
- Exclusion Zone
- APA Gas Asset
- Site Area
- Exclusion Zone
- Existing Easement
- Surveyed Lot Boundary

DOCUMENT NUMBER: 21100-MAP-LH-0005_4.0

Revision	Description	Drawn	Checked/QC	Approved	Date
4.0	Issued for Use	PR	BC	BC	23/12/21
3.1	DRAFT	PR	BC		23/12/21
3.0	Issued for Use	PR	BC	BC	24/11/21
2.0	Issued for Use	PR	BC	BC	17/11/21
1.1	DRAFT	PR	BC		17/11/21
1.0	Issued for Use	PR	BC	BC	18/10/21
0.2 0.3	DRAFT	PR			14/10/21
0.1	DRAFT	PR	BC		29/09/21

SCALE: 1:2,800 @ A3

Coordinate System: GDA 2020 Zone 55
GIS Ref: 560-MAP-L-7996

0 50 100
Metres

LOCATION DIAGRAM

APPENDIX 2 - Soil and Water Management Plan

APPENDIX 3 - MW880 Erosion and Sediment Control Plan

APPENDIX 4 - ABORIGINAL CULTURAL HERITAGE MANAGEMENT PLAN

APPENDIX 5 - TRAFFIC MANAGEMENT PLAN