

Appendix G

Construction Management Plan

DRAFT

Construction Management Plan

Tarong West Wind Farm

14-Feb-2024

DRAFT

Construction Management Plan

Tarong West Wind Farm

Client: RES Australia Pty Ltd

ABN: 55 106 637 754

Prepared by

,

14-Feb-2024

Job No.: 60704414

AECOM in Australia and New Zealand is certified to ISO9001, ISO14001 and ISO45001.

© (AECOM). All rights reserved.


AECOM has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of AECOM. AECOM undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and AECOM's experience, having regard to assumptions that AECOM can reasonably be expected to make in accordance with sound professional principles. AECOM may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety.

DRAFT

Quality Information

Document Construction Management Plan
 Ref 60704414
 Date 14-Feb-2024
 Originator Tessa Pearson, Jules Frias
 Checker/s Jared Brook
 Verifier/s Nicole Prentice

Revision History

Rev	Revision Date	Details	Approved	
			Name/Position	Signature
0	16-Feb-2024	For Development Application	Jared Brook Associate Director	

DRAFT**Table of Contents**

1.0	Introduction	1
1.1	Purpose	1
1.2	Objectives	2
1.3	Compliance with Approval Conditions	2
1.4	Project Description	2
1.4.1	Site details	2
1.4.2	Sensitive land uses and receptors	3
1.4.3	Project Details	4
1.4.4	Project Schedule	6
1.4.5	Construction activities	6
2.0	Legislation, Guidelines and Standards	8
2.1	Commonwealth and State Legislation	8
2.2	Guidelines and Standards	12
2.3	Other Approvals and Permits	12
3.0	Environmental Management	14
3.1	Environmental Policy	14
3.2	Roles and Responsibilities	14
3.2.1	The Proponent / Principal	14
3.2.2	The EPC Contractor	14
3.3	Health and Safety	16
3.3.1	Safety and Emergency Management Plan	16
3.4	Training, Awareness and Competency	16
3.5	Job Safety Environmental Assessments (JSEAs)	16
3.6	Monitoring Requirements	17
3.7	Reporting Requirements	17
3.7.1	Monthly Environmental Reports	17
3.7.2	Environmental Records and Registers	17
3.8	Auditing Requirements	18
3.8.1	Internal Auditing by EPC Contractor	18
3.8.2	Internal Auditing by the Principal	18
3.8.3	External Auditing	19
3.8.4	Complaints Procedure	19
3.9	Incident Response and Emergency Contacts	20
3.9.1	Stop Work Protocol	20
3.10	Incident Reporting	20
3.11	Communication	20
3.12	General Environmental Responsibilities	21
3.13	CMP Review	21
4.0	Summary of Key Environmental Impacts	22
5.0	Environmental Elements and Controls	24
5.1	Topography, Geology and Soils	24
5.1.1	Geotechnical Investigation	24
5.1.2	Erosion and Sediment Control	24
5.1.3	Problem Soils	24
5.2	Water	25
5.2.1	Stormwater management	25
5.2.2	Surface water quality	25
5.2.3	Groundwater	25
5.3	Flora and fauna	26
5.3.1	Vegetation and Fauna Management	26
5.3.2	Bird and Bat Management	26
5.4	Biosecurity, Weeds and Pests	27
5.5	Bushfires	27
5.6	Land Access Requirements and Protocols	28
5.7	Heritage	29

DRAFT

5.8	Hazardous Materials	29
5.8.1	Relevant standards and Codes of Practice	30
5.8.2	Hazardous Materials and Chemicals Management Plan	30
5.9	Waste Management	32
5.10	Air Quality	33
5.11	Greenhouse Gases	35
5.12	Noise, Vibration and Lighting	36
5.13	Traffic	38
5.14	Community and Stakeholder Engagement	38
6.0	References	39

List of Tables

Table 2	Properties within the Project site	2
Table 3	Road reserves within Project area (all roads local roads unless otherwise stated)	3
Table 4	Indicative Project schedule and delivery program	6
Table 5	Commonwealth and State legislation applicable to the Project	8
Table 6	Proponent Roles and Responsibilities	14
Table 7	Typical EPC Contractor Project Roles and Responsibilities	14
Table 8	Responsibilities for foreseeable communication types	20
Table 9	Key identified environmental impacts	22
Table 10	Land Access Requirements and Protocols	28
Table 11	Hazardous Materials and Chemicals Management Plan	30
Table 12	Waste Management Plan	32
Table 13	Air Quality Management Plan	33
Table 14	Greenhouse Gas Emissions Management Plan	35
Table 15	Noise, Vibration and Lighting Management Plan	36

List of Figures

Figure 1	Project layout	5
----------	----------------	---

DRAFT

1.0 Introduction

This Project Construction Management Plan (CMP) has been prepared to support development approval (DA) for the construction of the Tarong West Wind Farm (the Project) and will be updated as the Project design progresses. This Project CMP has been prepared in accordance with the requirements of:

- Performance outcome PO13 of State code 23: Wind farm development (State code 23, version 3.0); and
- The supporting State code 23: Wind farm development – Planning guidance (February 2022) (State code 23 Planning guideline).

This CMP is provided to demonstrate compliance with PO13 of State Code 23 by confirming (in conjunction with other reports) mitigation measures available to the developer to manage adverse impacts on environmental values, water quality objectives, amenity, local transport networks and road infrastructure.

1.1 Purpose

This Project CMP provides a framework for the management of activities with the potential to impact on the surrounding environment during the construction phase of the Project.

The mitigation and management measures detailed in this Project CMP, associated sub-plans and preliminary management plans, will be updated prior to construction to consider the final project design, meet subsequent requirements of Project approval conditions and relevant standard/s stated throughout each respective document. Accordingly, this Project CMP should be read in conjunction with the following Project documents:

- Conceptual Erosion and Sediment Control Plan (ESCP) (AECOM, 2023a)
- Preliminary Stormwater Management Plan (SMP) (AECOM, 2023b)
- Preliminary Vegetation Management Plan (VMP) (Ecosure, 2024a)
- Preliminary Fauna Management Plan (FMP) (Ecosure, 2024b)
- Preliminary Bird and Bat Management Plan (BBMP) (Ecosure, 2024c)
- Landscape and Visual Impact Assessment (LVIA) (Lat Studios, 2024)
- Noise Impact Assessment (NIA) (Sonus, 2023)
- Traffic Impact Assessment (TIA) (icubed consulting, 2023a), Traffic Management Plan (TMP) (icubed consulting, 2023b) and associated Transport Route Study (TRS) (icubed consulting, 2023c).

The following assessments and plans referred to within this Project CMP will be developed in accordance with subsequent Project approval conditions prior to construction:

- Approved development plans, including the approved Department of Resources (DoR) vegetation management plan (depicting approved areas of regulated vegetation to be cleared)
- Geotechnical Investigations and Slope Stability Assessment
- Safety and Emergency Management Plan (SEMP)
- Complaint Investigation and Response Plan (CIRP)
- Community and Stakeholder Engagement Plan (CSEP)
- Bushfire Management Plan (BMP)
- Pavement Impact Assessment (PIA)

DRAFT

- Two Cultural Heritage Management Plans (CHMPs)¹.

The Engineering, Procurement and Construction Contractor (EPC Contractor) will be appointed by the Proponent to construct the Project.

Implementation of this Project CMP will be the responsibility of the Proponent and its selected EPC Contractor.

This Project CMP covers construction management for the construction phase only, including commissioning activities.

1.2 Objectives

The general objectives of this Project CMP are to:

- Achieve relevant and applicable environmental standards
- Reduce the likelihood of environmental risks occurring because of Project construction
- Comply with relevant environmental legislation and Project approval conditions (local, State and Commonwealth as required)
- Comply with the Proponent's environmental responsibilities and/or policies
- Prevent and mitigate environmental harm, which may occur during construction
- Minimise adverse amenity impacts on nearby sensitive receptors
- Ensure all personnel associated with the Project are aware of their environmental duties and responsibilities under this Project CMP
- Assist with monitoring and reporting of environmental performance.

1.3 Compliance with Approval Conditions

This section will be updated once primary approvals are obtained from the Commonwealth and State Governments. This section will detail approval details and provide a table of conditions, linking to the relevant Project CMP sections.

1.4 Project Description

1.4.1 Site details

The Project site is in the South Burnett Regional Council (SBRC) local government area and is located approximately 30 kilometres (km) west of Kingaroy, 85 km east of Chinchilla and 170 km northwest of Brisbane. The Project site encompasses approximately 17,500 hectares (ha) of land (including road reserves), with approximately 1,952.96.1 ha designated as the Planning Corridor which contains a Clearing Footprint (1,062.14 ha) for the proposed wind turbines, access tracks, underground cables, overhead lines and other associated infrastructure.

The Project site comprises various freehold properties, state land, stock route reserve (Table 1) and several road reserves (Table 2).

Table 1 Properties within the Project site

Lot	Plan	Tenure	Area (ha)	Number of Turbines
4	RP890694	Freehold	922.98	4
5	BO330	Freehold	3,721.19	22
6	BO250	Freehold	2,355.45	13

¹ CHMPs are confidential documents between the parties. Information relevant to the Project construction will be incorporated into the CMP and other documentation prepared for construction, including the site induction and change finds procedure.

DRAFT

Lot	Plan	Tenure	Area (ha)	Number of Turbines
7	RP890694	Freehold	971.60	4
10	SP168643	Freehold	1,924.15	8
29	BO243	Freehold	1,711.42	18
36	BO236	Freehold	1,982.99	12
43	FTZ37338	Freehold	72.84	0
44	FTZ37207	Reserve (Stock route)	12.90	0
60	BO188	Freehold	509.43	2
62	BO188	Freehold	501.89	1
63	BO188	Freehold	507.04	1
64	BO190	Freehold	512.08	4
66	BO190	Freehold	412.34	1
67	BO490	Freehold	493.51	4
68	RP800291	Freehold	511.94	3
93	BO190	State land	14.54	0
TOTAL			17,496.23	97

Table 2 Road reserves within Project area (all roads local roads unless otherwise stated)

Road name	Adjoining lot/plan
Hodges Dip Road	4RP890694
Kingaroy Burrandowan Road (State controlled road)	4RP890694 and 7RP890694
Jumma Road	5BO330, 44FTZ37207, 60BO188, 62BO188, 63BO188, 29BO243, 10SP168643
Greystonelea Jumma Road	7RP590694, 36BO236, 5BO330 and 6BO250
Boyne River Road	62BO188, 63BO188, 42FTZ37338, 64BO190, 65BO190, 66BO190
Glenrocks Road	62BO188
Red Tank Road	10SP168643
Unnamed road	63BO188 and 65BO190

1.4.2 Sensitive land uses and receptors

Sensitive uses of the land during construction are identified as areas of high ecological value, cultural heritage value and the following land uses that are owned/accommodated by host landowners (located within the Project boundary) or non-host landowners (located outside the Project boundary):

- Caretaker's accommodation
- Dwelling house
- Dwelling unit
- Non-resident workforce accommodation
- Rural workers' accommodation

DRAFT

- Short-term accommodation
- Tourist park.

These land uses are consistent within the definition of ‘sensitive land uses’ per State code 23: Wind farm development (version 3.0) and Schedule 24 of the Planning Regulation 2017.

Heritage database searches did not identify any known heritage sites within the Project boundary. The identified Aboriginal Parties for the Project Site are the Auburn Hawkwood People Aboriginal Corporation (AHPAC) and Wakka Wakka Native Title Aboriginal Corporation (WWNTAC).

1.4.3 Project Details

The Project seeks to supply up to 436.5 megawatts (MW) of clean and renewable energy to the National Electricity Market (NEM). The Project is proposed to contain up to 97 wind turbine generators and hardstands, and ancillary infrastructure potentially including (subject to detailed design):

- Site access and on-site access tracks, including widening sections of Ironpot Road
- Two (2) site compounds
- Up to six (6) temporary laydown areas and stockpile areas
- Three (3) 33kV to 275kV substations
- One (1) PLQ switching station to connect to existing 275kV overhead powerlines
- One (1) battery energy storage system (BESS) up to 100 MW installed capacity
- Internal electrical reticulation consisting of overhead lines (OHL) and underground (UG) cabling
- On-site connection to existing 275 kV transmission line
- Two (2) permanent operations and maintenance facility including control centre, offices, workshop, warehouse, water tanks, septic systems and parking
- Two (2) batch plants
- Six (6) collector stations
- Two (2) washdown areas
- Borrow pits
- Three (3) permanent and four (4) temporary meteorological masts.

The Contractor’s CEMP will include the final Project layout and reference/link the ‘detailed design’ or ‘for construction’ plans.

The proposed Project layout is shown in Figure 1.

Legend

- * Site Access
- Turbine
- Meteorological Mast (Permanent)
- Meteorological Mast (Temporary)
- Watercourse
- State Controlled Road
- Roads
- Access Track
- Existing Powerlink 275kV Overhead Line
- Proposed Overhead Reticulation
- Proposed Underground Reticulation
- BESS Area
- Batch Plant
- Collector Station
- Laydown
- O&M Building
- PLQ Switching Station
- Site Compound
- Substation
- Washdown Area
- Site Boundary
- Cadastral Boundaries
- Planning Corridor
- Clearing Footprint

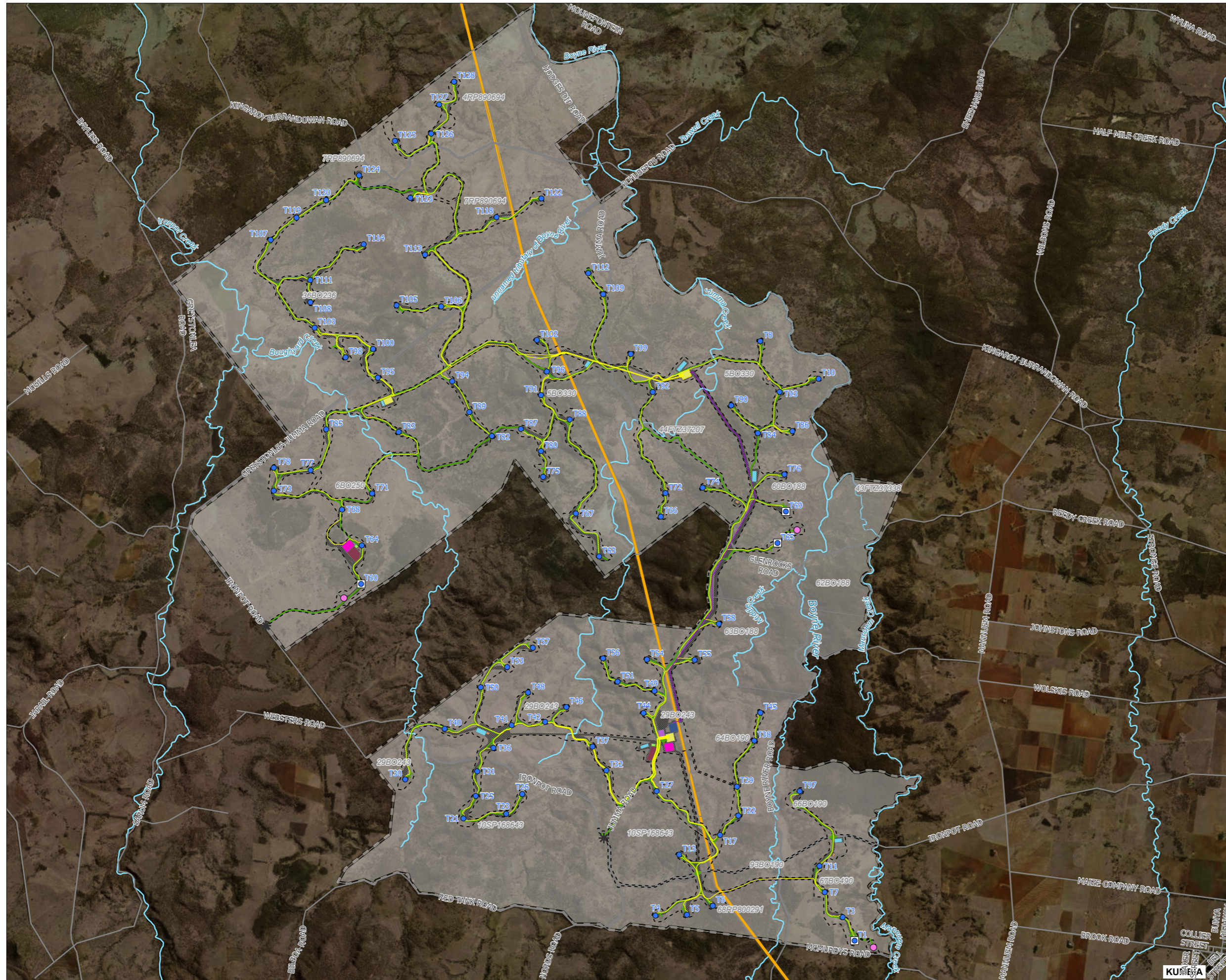


© AECOM Australia Pty Ltd (AECOM). All rights reserved.
 AECOM has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of AECOM. AECOM undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and AECOM's experience, having regard to assumptions that AECOM can reasonably be expected to make in accordance with sound professional principles.
 © State of Queensland (Department of Resources) 2022 © The State of Queensland; © Commonwealth of Australia. Based on ABS data. Bureau of Meteorology. © CSIRO Australia

TARONG WEST WIND FARM

Project layout

Figure 1



DRAFT

1.4.4 Project Schedule

The indicative Project schedule and delivery program is outlined in Table 3.

Construction is anticipated to take approximately 30 months, with commencement subject to project approvals and subsequent agreement between the EPC contractor and RES.

The construction period will remain subject to change depending on factors such as component and materials availability, construction methodologies and weather conditions.

Table 3 Indicative Project schedule and delivery program

Milestone	Timing
Construction start	Q4 2024
Construction complete	Q4 2026
Commissioning	Q3-Q4 2026
Commencement of use (Practical Completion)	Q1 2027

1.4.5 Construction activities

This section will be updated following detailed design, once construction methodologies are known and prior to construction.

Construction will include the removal of vegetation, grubbing and earthworks (topsoil removal, stockpiling, levelling and preparation of all-weather access tracks and turbine hard stands / crane pads, construction of benching for site facilities), concrete batching for laying foundations, as well as the installation of buildings (temporary and operational phase), structures, infrastructure and wind turbine components.

It is anticipated that the construction work will include excavation, trenching, bulldozing, crushing and screening, concrete batching and, subject to geotechnical conditions, rock hammering, drilling and possibly blasting. A detailed geotechnical assessment and slope assessment will be completed in detailed design, with results determining if ground conditions require rock hammering, drilling and blasting. The geotechnical and slope assessment will also assist in the calculation of quantity and source of road stone and aggregates required to construct the Project.

At its peak, up to 170 workers are anticipated to be active on the construction site.

It is anticipated that the following typical equipment will be used:

- Site mobilisation – road loaders, graders, backhoes, trucks, small crane, water cart, elevated work platforms, mulcher and generators.
- Access tracks and hardstands – road loaders, bulldozers, excavators, graders, scrapers, rollers, articulated dump trucks, belly dumper trucks, semi-trailers and water carts.
- Wind turbines – excavators, rock breaker, concrete trucks, flat-bed trucks, vacuum trucks, large crawler/all-terrain heavy lift mobile or tower cranes, small/medium mobile crawler cranes, franna cranes, generators, tele-handlers or forklifts, elevated work platforms and heavy haulage trucks
- Electrical reticulation works (cabling) – trenchers, backhoes, excavators, graders, tractors, cable laying machines, backfilling truck (e.g. stone slinger), franna crane, and small terrain cranes.
- Concrete batching – batching plant, concrete trucks, haulage vehicles for concrete materials (e.g. sand) and water.
- Rehabilitation – graders, backhoes, trucks, tractors, seed spreaders and water carts.

Other equipment and machinery may be required, depending on the nominated construction techniques and methodologies of the EPC Contractor.

Commissioning of wind turbines and supporting operational infrastructure is included within the construction phase. Impacts relating to the operation of the wind farm have been assessed and considered within design refinements during Project development.

DRAFT

The management of any complaints received from stakeholders or members of the public relating to impacts related to wind farm construction or commissioning activities is detailed in Section 3.8.4 and Section 5.14.

Proposed roles, obligations, auditing, monitoring, reporting and record keeping requirements for environmental requirements and obligations are prescribed within this Project CMP or respective management plans.

DRAFT

2.0 Legislation, Guidelines and Standards

The Project construction must be managed to meet all relevant Commonwealth and State legislation, statutory approvals, permits guidelines, standards and other legislative requirements.

Legislative requirements relevant to the activities are presented in this section. Best practice management is to be implemented at all stages of construction to comply with the requirements and guidelines.

The Proponent's appointed EPC Contractor should note the relevance of each Act for the Project. The EPC Contractor will be required to update and/or implement the items identified in Table 4. Further details regarding EPC Contractor obligations and management plans are covered in Section 5.

2.1 Commonwealth and State Legislation

Commonwealth and State legislation that may be relevant to the Project is detailed in Table 4.

Table 4 Commonwealth and State legislation applicable to the Project

Act	Purpose of the Act	Relevance to Project construction
Commonwealth		
<i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i>	The EPBC Act provides the framework for the protection and management of nationally and internationally important flora, fauna, ecological communities and heritage places, which are defined as Matters of National Environmental Significance (MNES).	<ul style="list-style-type: none"> An EPBC referral was submitted for the Project in September 2023. At the time of submitting this Project CMP, the outcome of the referral is 'Controlled Action' with the Project needing assessment via a Public Environment Report.
Queensland		
<i>Aboriginal Cultural Heritage Act 2003 (ACH Act)</i>	The ACH Act seeks to provide effective recognition, protection and conservation of Aboriginal cultural heritage. This includes the protection of artefacts and cultural sites that are of significance to Aboriginal people.	<ul style="list-style-type: none"> The Project site may contain artefacts and cultural sites that are of significance to Aboriginal people. CHMPs will be required with the following Registered Native Title Bodies Corporate: <ul style="list-style-type: none"> Auburn Hawkwood People Aboriginal Corporation (AHPAC) Wakka Wakka Native Title Aboriginal Corporation (WWNTAC). Under Section 23 of the ACH Act, a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal Cultural Heritage (the "cultural heritage duty of care").
<i>Biosecurity Act 2014 (Biosecurity Act)</i>	The Biosecurity Act provides a framework for an effective biosecurity system for Queensland that helps to minimise biosecurity risks and responds to biosecurity considerations and events. The Biosecurity Act also seeks to protect agricultural and tourism industries and the environment from pests, diseases and contaminants.	<ul style="list-style-type: none"> The Project site contains weeds and pests regulated by the Biosecurity Act. Under Section 23 of the Biosecurity Act, the General Biosecurity Obligation (GBO) requires that persons must take all reasonable and practical measures to prevent or minimise biosecurity risk. Biosecurity risk is addressed under this Project CMP.
<i>Environmental Protection Act 1994 (EP Act)</i>	The object of the EP Act is to protect Queensland's environment while allowing for development that improves the total	<ul style="list-style-type: none"> Project construction activities will be required to comply with the legislative

DRAFT

Act	Purpose of the Act	Relevance to Project construction
	<p>quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (ecologically sustainable development).</p>	<p>requirements and associated policies of the EP Act.</p> <ul style="list-style-type: none"> • Issue-specific Environmental Protection Policies (EPP’s) under the EP Act that the Project will need to comply include the: <ul style="list-style-type: none"> - Environmental Protection Regulation 2019 - Environmental Protection (Air) Policy 2019 - Environmental Protection (Noise) Policy 2019 - Environmental Protection (Water and Wetland Biodiversity) Policy 2019. • Section 319 of the EP Act includes a ‘General environmental duty’ which specifies that a person must not undertake any activity that may harm the environment without taking reasonable and practical measures to prevent or minimise the harm. • Chapter 7, part 1, division 2 of the EP Act includes ‘Duty to notify of environmental harm’ – to inform the administering authority and landholder or occupier when an incident has occurred that may have caused or threatens serious or material environmental harm. • Unless otherwise authorised by the relevant authority, works should be carried out in accordance with the default noise standards of the EP Act. • Activities involving building work that makes an audible noise and for which night-time / out of hours working is reasonably required, will require authorisation from the relevant authority. • Associated construction activities (subject to separate approval) may constitute Environmentally Relevant Activities for which development approval is required (for example, extractive and screening activities).
<p>Fisheries Act 1994 (Fisheries Act)</p>	<p>The Fisheries Act provides for the use, conservation and enhancement of the community’s fisheries resources and fish habitats in a way that seeks to apply and balance the principles of ecologically sustainable development and promote ecologically sustainable development.</p> <p>The Fisheries Act facilitates allocation and management of Fish Habitat Areas</p>	<ul style="list-style-type: none"> • The Project site contains waterways and drainage features mapped as waterways for waterway barrier works. • The Project should seek to design required crossings in accordance with the ‘Accepted development requirements for operational work that is constructing or raising waterway barrier works’ (DAF, 2018). This

DRAFT

Act	Purpose of the Act	Relevance to Project construction
	(FHA) and waterways for waterway barrier works (fish passage).	<p>includes bed level and culvert crossings.</p> <ul style="list-style-type: none"> If works design and proposed construction methodology do not meet the accepted development requirements, then State development approval will be required.
Nature Conservation Act 1992 (NC Act)	<p>The NC Act's objective is the conservation of nature while allowing for the involvement of indigenous people in the management of protected areas in which they have an interest under Aboriginal tradition or Island custom. The NC Act seeks to conserve biodiversity by creating and managing protected areas, managing and protecting native flora and fauna, and managing the spread of introduced/non-native (i.e. pest) wildlife.</p> <p>In support of the NC Act, the Nature Conservation (Animals) Regulation 2020 lists 'protected wildlife' (flora and fauna species), which are considered to be 'Extinct in the Wild', 'Endangered', 'Vulnerable', 'Near Threatened' and 'Least Concern' wildlife.</p>	<ul style="list-style-type: none"> Under Sections 88 and 89 of the NC Act, it is an offense to take (remove or destroy) protected wildlife unless exemptions apply or an approval (e.g. a clearing permit) is obtained. The Project does not encroach within any flora survey trigger map 'high risk' areas. Subject to pre-clearing surveys, the Contractor should hold all relevant and required clearing permits, Species Management Programs (SMPs) and damage mitigation permits under the NC Act, prior to undertaking clearing activities and unless exemptions apply. Unless exemption requirements can be met, a clearing permit under the NC Act may be required if an endangered, vulnerable or near threatened (EVNT) plant is found through the pre-clearing surveys within the Project's disturbance area and considered 'in the wild', and it is determined that the Project may impact on that threatened flora species. A SMP authorises activities if it will impact on breeding places of protected animals. A low or high risk SMP will likely be required, depending on the species encountered on-site. A Damage Mitigation Permit (DMP) (removal and relocation of wildlife) allows a person to take wildlife in such circumstances. Any spotter-catchers engaged to undertake works on the Project must hold a current DMP licensed under the NC Act. Measures to address impacts to vegetation are presented in the Preliminary VMP.
Planning Act 2016 (Planning Act)	<p>The Planning Act is Queensland's key piece of legislation pertaining to the strategic planning and development of the State. The Planning Act mandates the framework of planning instruments and process for development assessment.</p> <p>The purpose of the Planning Act is to establish an efficient, effective,</p>	<ul style="list-style-type: none"> The Planning Act and Planning Regulation prescribes that a wind farm development application is assessed by DSDILGP under State code 23 of the State Development Assessment Provisions (SDAP). A wind farm development application is not subject to the requirements of the local planning schemes.

DRAFT

Act	Purpose of the Act	Relevance to Project construction
	transparent, integrated, coordinated, and accountable system of land use planning (planning), development assessment and related matters that facilitates the achievement of ecological sustainability.	<ul style="list-style-type: none"> Other approvals may be required under the Planning Act subject to the construction methodology, detailed design and further liaison with the relevant authorities (for example, waterway barrier works, quarry, concrete batching plant, earthworks, etc).
Queensland Heritage Act 1992 (QH Act)	The object of the QH Act is to provide for the conservation of Queensland's cultural heritage for the benefit of the community and future generations. The QH Act provides the framework for assessing the significance of items and places of historical cultural heritage value in Queensland.	<ul style="list-style-type: none"> The Project site does not contain any historical heritage places (local or state) listed on the Queensland Heritage register. If during construction an item of heritage significance is found, Section 89 of the QH Act requires a person to notify the Department of Environment and Science (DES) of an archaeological artefact that is an important source of information about an aspect of Queensland history.
Transport Infrastructure Act 1994 (TI Act)	The TI Act provides a regime that allows for and encourages effective integrated planning and efficient management of a system of transport infrastructure. This includes the effective management, operation and continued safety of road and rail infrastructure.	<ul style="list-style-type: none"> The Project site is primarily accessed via the Bunya Highway (State controlled roads) and Mannuem Road / Ironpot Road / Jumma Road and Nords Rd / Red Tank (local roads). Under section 33 of the TI Act, written approval is required from the Department of Transport and Main Roads (TMR) to carry out road works on a State-controlled road or interfere with a State-controlled road or its operation. This may include where road works to a Council road interferes with a State-controlled road or its operations. Under section 62 of the TI Act, written approval is required from the TMR to locate a permitted access on a State-controlled road. A decision of access approval may include conditions or restrictions on the location or use of the permitted road access, type or number of vehicles to use the permitted road access location.
Vegetation Management Act 1999 (VM Act)	<p>The VM Act regulates the clearing of native vegetation and essential habitat in Queensland. The purpose of the VM Act is to conserve remnant vegetation, conserve vegetation in declared areas, prevent the loss of biodiversity, maintain ecological processes, allow for sustainable land use etc.</p> <p>The VM Act protects and regulates the clearing of native vegetation including</p>	<ul style="list-style-type: none"> The Project site contains vegetation regulated under the VM Act. Regulated vegetation clearing for the Project is limited to the areas identified in the State development application.

DRAFT

Act	Purpose of the Act	Relevance to Project construction
	'remnant' and 'high value regrowth' (HVR) vegetation (shown as Category B and C on the Regulated Vegetation Management Map) on freehold land, Indigenous land and State tenures.	
Waste Reduction and Recycling Act 2011	<p>The objects of this Act are as follows:</p> <p>(a) to promote waste avoidance and reduction, and resource recovery and efficiency actions</p> <p>(b) to reduce the consumption of natural resources and minimise the disposal of waste by encouraging waste avoidance and the recovery, re-use and recycling of waste</p> <p>(c) to minimise the overall impact of waste generation and disposal</p> <p>(d) to ensure a shared responsibility between government, business and industry and the community in waste management and resource recovery</p> <p>(e) to support and implement national frameworks, objectives and priorities for waste management and resource recovery.</p> <p>The Act contains a suite of measures to reduce waste generation and landfill disposal and encourage recycling</p>	<ul style="list-style-type: none"> • Project construction activities will generate waste and will be required to comply with the legislative requirements of the Act. • Use of resources, waste management and recycling may be considered in design planning and contract award.
Water Act 2000 (Water Act)	<p>The Water Act provides a framework for the following:</p> <p>(a) the sustainable management of Queensland's water resources and quarry material</p> <p>(b) the sustainable and secure water supply and demand management for the south-east Queensland region and other designated regions</p> <p>(c) the management of impacts on underground water caused by the exercise of underground water rights by the resource sector</p> <p>(d) the effective operation of water authorities.</p>	<ul style="list-style-type: none"> • The Project site contains several watercourses defined by the Water Act. • Approval may be required for taking or interfering with water, including underground water through an artesian or subartesian bore depending on construction methodology, unless exemption or accepted development requirements can be met. • A water sourcing strategy will be finalised in consultation with the preferred EPC Contractor and the relevant permits sought.

2.2 Guidelines and Standards

Relevant environmental standards, policies and guidelines applicable to each environmental aspect are described in the respective sub-plans and management plans, or alternatively in Section 5.0.

2.3 Other Approvals and Permits

Other approvals or permits may be required under the legislation outlined in Table 4, subject to detailed design, construction methodology and further liaison with the regulators.

The Proponent will supply copies of all statutory approvals applicable to the works to the appointed EPC Contractor and provide any updated versions thereof. The EPC Contractor will be required to

DRAFT

outline all relevant approvals and permits within the Contractor's CEMP. Additionally, the EPC Contractor will have responsibility to progress and gain any statutory approvals applicable to the works for which it has a contractual requirement to obtain.

DRAFT

3.0 Environmental Management

3.1 Environmental Policy

The EPC Contractor will be appointed by the Principal to construct the Project – in this appointment the EPC Contractor will be appointed to control the worksite in accordance with the *Work Health and Safety Regulation 2011*. It is anticipated that the EPC Contractor will utilise this Project CMP as the basis for the Contractor’s CEMP, which will be tailored to their confirmed design, construction methodologies and timeframes.

The Contractor’s CEMP will meet the proposed mitigation measures contained herein and the Project will be built under appropriate Environmental Policy that will be provided once Project Development progresses to the relevant stage.

3.2 Roles and Responsibilities

3.2.1 The Proponent / Principal

It is anticipated that the Proponent (‘Principal’) will be represented by a ‘Principal’s Representative’. This will be a team of specialists reporting to a lead Construction Manager. The Principal’s Representative responsibilities relating to the CMP are outlined in Table 5.

Table 5 Proponent Roles and Responsibilities

Role	Contact	Responsibilities
Principal’s Representative	TBA	<ul style="list-style-type: none"> Ensures the Principal’s procedures and requirements are complied with Ensures the EPC Contractor understands their obligations and responsibilities under Project CMP, associated plans and applicable legislation Ensures environmental incidents or dangerous occurrences are promptly reported, investigation and appropriate mitigation strategies are implemented by the EPC Contractor Conducts periodic desktop and site audits on the EPC Contractor to ensure compliance with management plans and that site environmental controls are implemented Reports newly identified environmental risks to the Principal

3.2.2 The EPC Contractor

The EPC Contractor is expected to be responsible to the Principal but liaise on a day-to-day basis with the Principal’s Representative.

Typical EPC Contractor roles and responsibilities for environmental management are included in Table 6. Roles and responsibilities for developing and implementing the Contractor’s CEMP and environmental reporting will be further defined by the EPC Contractor within their plan.

The EPC Contractor is to update the Contractor’s CEMP with names and contact details of personnel with key CEMP roles.

Table 6 Typical EPC Contractor Project Roles and Responsibilities

Position	Role Description/ General Responsibilities
Site Manager	<ul style="list-style-type: none"> Reviews and implements the requirements of the CEMP and supporting management plans Maintains regular / daily communications with the Principal’s Representative

DRAFT

Position	Role Description/ General Responsibilities
	<ul style="list-style-type: none"> • Communicates environmental requirements, obligations and site-specific environmental issues to all Project personnel and subcontractors • Ensure non-compliances and non-conformances are identified, recorded and reported in conjunction with the EPC Contractor HSE Manager • Coordinate action in emergency situations and allocate required resources in accordance with the Project SEMP • Ensure non-conformances are identified, recorded and reported to the Principal's Representative • Report to the Principal's Representative any activity that has resulted, or has the potential to result, in an environmental incident • Initiate action in the event of an environmental incident or emergency and allocate required resources to deal with the incident/emergency • Participate in reviews of the CEMP
HSE Manager*	<ul style="list-style-type: none"> • Reviews and inputs to the CEMP and supporting management plans • Implement all Project HSE Management Plans effectively and appropriately • Oversee the EPC Contractor site induction process and implement all EPC Contractor safety systems • Coordinate regular HSE reviews • Monitor, report on and review the effectiveness of the HSE Management Plans • Support the Project management team to actively promote an incident and injury free work culture • Provision of expert advice and coaching in the development of Project risk assessments, and Job Safety and Environmental Analysis (JSEAs) • Ensure applicable legal, approval and Project environmental obligations are complied with • Ensure Project staff have the necessary skills and training for their roles and have been instructed and understand the environmental requirements relevant to their scope of work and area • Ensure the necessary resources and processes are in place for implementation of required environmental controls • Ensure the Site Manager(s) are familiar with their responsibilities with respect to environmental obligations, Project approvals, environmental management plans and associated documents
Environmental Lead*	<ul style="list-style-type: none"> • Management of the preparation of management plans • Periodic review of site activities and their impact on the environment • Provide support in the assessment of asset risk ranking • Review and revise on a periodic basis or as required, the environmental management plans, sub-plans and environmental work method statements for Project activities, prepared by EPC Contractor and subcontractors • Develop environmental site induction and toolbox talk information to present to site personnel and the requirements of their work activities • Conduct internal environmental compliance audits • Investigate and ensure resolution and close out of any non-compliances
Site Staff and Subcontractors	<ul style="list-style-type: none"> • All Project staff (including subcontractors) have a general environmental duty of care and are responsible for their own environmental performance while on the Project. As a minimum, all personnel are required to:

DRAFT

Position	Role Description/ General Responsibilities
	<ul style="list-style-type: none"> - attend daily pre-start / toolbox meetings - carry out all activities in an environmentally responsible manner - attend environmental inductions and training relevant to their role and responsibilities - carry out all activities in accordance with the agreed environmental management plan and JSEAs - report any activity that has resulted in, or has the potential to result in, an environmental incident immediately to the HSE Manager / Site Manager - identify and report non-conformances and implement corrective and preventative action as instructed by the HSE Manager / Site Manager

** Note that these roles may be combined, with responsibilities to be assigned to the new role*

3.3 Health and Safety

3.3.1 Safety and Emergency Management Plan

The EPC Contractor will prepare a specific Safety and Emergency Management Plan (SEMP) (or equivalent) that details the requirements and management practices for health and safety associated with their scope/activities. The SEMP is to conform to the Commonwealth and State approval conditions, the Proponent standards, relevant work, health and safety (WHS) laws, and is to be prepared by the EPC Contractor in conjunction with the Contractor's CEMP.

The SEMP will include measures to respond to emergency situations

3.4 Training, Awareness and Competency

It is important to ensure that all site personnel are adequately educated, trained and inducted in environmental awareness so that they fully understand their role in implementing the Project CMP and the subsequent Contractor's CEMP. All personnel working on site (including sub-contractors) must undergo environmental management training commensurate with their responsibilities under the CMP.

Environmental training can be achieved via the following:

- A comprehensive and tailored site induction course
- Familiarisation with the requirements of the CMP
- Specific raising of awareness, via site induction, regarding the occupational health and safety risks
- Toolbox talks and pre-start meetings
- Familiarity with site environmental controls
- Training specific to certain roles to ensure compliance with statutory requirements, site environmental approvals, licences and permits, and
- Emergency/incident response processes.

The EPC Contractor will maintain a register signed by those inducted in accordance with WHS laws and Project approvals. The register will contain the name of inductees, dates inducted and the name of the facilitator.

3.5 Job Safety Environmental Assessments (JSEAs)

Prior to commencing site activities, the EPC Contractor will ensure a JSEA (or equivalent) is in place for each work activity. These documents will identify each step of the work activity, the potential hazards, the critical risks and control measures to be in place to mitigate the risks.

DRAFT

The JSEAs are to be reviewed and signed off according to the EPC Contractor requirements prior to the team commencing the task. Safety and environmental risks and controls will be identified on the JSEA.

In the event of an incident that threatens environmental harm, the EPC Contractor will implement the emergency response procedures to minimise the potential harm resulting from the incident. All site workers must be aware of the emergency contact details and emergency response procedures relevant to their roles.

3.6 Monitoring Requirements

The EPC Contractor will be responsible for conducting on-site monitoring as required to meet environmental commitments within the CMP, construction contract commitments, and the environmental legislation as current at the time of works.

For Project construction works, monitoring scopes are included within the environmental aspects' management plans outlined within section 5.0. The EPC Contractor is expected to follow the monitoring specified, and further develop monitoring plans for specific environmental aspects as noted herein.

Systematic monitoring is essential to ensure that the procedures are meeting the commitments within each management plan.

All instruments and devices used for the measurement or monitoring of any parameter under any condition of the CMP must be calibrated as per manufacturer requirements, and appropriately operated and maintained. Records must be kept by the EPC Contractor to demonstrate compliance with these requirements.

3.7 Reporting Requirements

The following information will be provided to the Principal (via the Principal's Representative) for construction works:

- Incident notifications regarding any environmental non-compliances and non-conformances
- Reporting as required by the Construction Contract or other agreements.

3.7.1 Monthly Environmental Reports

The EPC Contractor shall prepare and submit monthly environmental reports to the Proponent during the construction period.

The contents of the monthly environmental reporting shall reflect relevant approval requirements, and include necessary information to support an assessment of compliance with the environmental management plans (including the preliminary Vegetation, Fauna and Bird and Bat Management Plans, respectively) that form the basis of environmental management on the Project, including the results of environmental inspections and monitoring.

3.7.2 Environmental Records and Registers

Record Requirement	Submit to the Principal at works completion
Site inductions attendance registers	
Environmental and Cultural Heritage Incident Reports, non-conformances and complaints register and associated corrective actions taken	
Site Inspection checklists and diary entries	
Monthly Environmental Reports	
EPC Contractor environmental audit reports and subsequent corrective actions taken	
Meeting minutes with Principal, administering authorities and interested parties relating to environmental and heritage management measures	
Formal letters to the EPC Contractor from administering authorities	

DRAFT

Record Requirement	Submit to the Principal at works completion
Erosion and Sediment Control Plan (ESCP) implemented throughout construction	
Chance Find Register Heritage	
Chance Find Register Contamination	
All water quality sampling, results, discharges and wastewater removal to be documented within a final report, including a spreadsheet containing all water quality analytical data	
Waste Management Register to be provided at conclusion of site works including wastewater or contaminated soils removed from site to registered landfill, and relevant waste tracking evidence (where applicable).	
All air quality monitoring data including a register of exceedances and findings of any investigations undertaken, and changes to management implemented if required	
Greenhouse Gas Emissions inventory including all fuel and energy consumption and identified opportunities to reduce fuel and energy consumption	
All noise monitoring records contained within a summary report, detailing any exceedance to guidelines, incidents and corresponding actions	
Fauna Interaction Register	
Biosecurity compliance documentation	
Vehicle Premobilisation and Maintenance Register	
Hazardous Materials and Chemicals Register, containing types and volumes used and stored for the duration of the Project	
Spill Response Equipment Register	
Any other records to demonstrate and document compliance with Environmental Approvals held by the Principal and EPC Contractor	
Any other record identified within the EPC Contractor's CEMP	

3.8 Auditing Requirements

3.8.1 Internal Auditing by EPC Contractor

It is expected that internal auditing by the EPC Contractor of their work processes and the CMP requirements will be undertaken by suitably qualified and experienced personnel for the duration of the works.

3.8.2 Internal Auditing by the Principal

Auditing by the Principal's Representative on behalf of the Principal is expected to be carried out on site tasks undertaken by the EPC Contractor. The EPC Contractor will be required to develop a quality and assurance process that will include:

- Compliance with the Project CMP and the subsequent Contractor's CEMP, the Principal standards, and procedures
- Management and record keeping of environmental non-conformances and incidents.

Any non-compliances or non-conformances identified by the Principal audits will be discussed with the EPC Contractor management to ensure the non-compliance or non-conformance is addressed. The outcomes of internal audits may trigger the requirement to update the CMP or JSEAs.

DRAFT

3.8.3 External Auditing

External construction environmental audits may be conducted during the construction of the Project. External audits should be conducted by a qualified and independent person (i.e. a person outside the day-to-day activities of construction management and implementation).

During each audit, the auditor will meet with a nominated EPC Contractor representative (e.g. HSE or Construction Manager), inspect the works, review records and complete a de-briefing discussion with the Principal's Representative (on behalf of the Principal) and the EPC Contractor. The auditor will assess the recent and future works program, corrective actions, current environmental issues and other matters as required. An audit report will be distributed to the Principal, the EPC Contractor, and if necessary, the Principal will issue the report to a relevant authority (e.g. as required by the Commonwealth and/or State approval).

The Principal will ensure that regular audits are undertaken for the duration of construction activities. The audit frequency will be subject to contract requirements and environmental performance by the EPC Contractor.

3.8.4 Complaints Procedure

The Principal will develop a Complaint Investigation and Response Plan (CIRP) (or equivalent) for the Project.

The EPC Contractor and all subcontractors are expected to follow the CIRP and assist the Principal Development Project Manager in its execution. If an employee of the Principal, the EPC Contractor (including sub-contractors), or the Principal's Representative receives a complaint in person, they should advise the complainant of the correct avenues of complaint as outlined in the CIRP.

As described in the CIRP, in accordance with the Australian/New Zealand Standard *AS/NZS 10002:2014 – Guidelines for complaint management in organisations*, complaints will also be documented in an incident register. The following information will be recorded to document complaints received:

- The complainant's name
- The complainant's address and contact details (email and phone number)
- A description of the complaint, including the date, time and location of the event or incident, and whether the event or incident is ongoing or has been experienced previously
- Any other relevant information, including description of what the complainant heard or saw
- A description of the location of any turbine(s), vehicles or other relevant information that will assist in identification
- A reference number for the complainant's and Project records
- The name and contact details of the Project representative who received the complaint
- The date and time the location was reported to the Project by the complainant
- The process of investigation undertaken to resolve the complaint and who was responsible for, and involved in, responding to the complaint
- Any subsequent actions required to address the complaint where the complaint was able to be validated as part of the investigation
- Whether or not the complaint has been resolved to the satisfaction of the complainant
- Whether or not there are any outstanding actions necessary to respond to the incident.

The EPC Contractor is expected to assist the Principal's Community Engagement Representative with provision of information as requested to assist the Proponent in resolving complaints during the construction phase. This may include incorporating additional controls, mitigation measures and monitoring into the CMP, or other management plans. Amendments made to the CMP in response to received complaints are to be approved by the Principal and change management controls are to be

DRAFT

adopted by the EPC Contractor to ensure any variation to the environmental requirements are appropriately adopted by onsite personnel.

3.9 Incident Response and Emergency Contacts

Environmental incidents (such as spills, unauthorised vegetation clearing, etc) and emergencies (such as bushfire or flooding) may occur during construction activities. The management controls for dealing with these, will be managed in accordance with the Project SEMP. The SEMP is primarily concerned with the protection and preservation of life, the environment and property.

The nearest major emergency services are located 30 km east of the Project Site at Kingaroy, where there is a fire station, police station and hospital with emergency department. There is a local rural fire station and police station located at Kumbia.

Emergency procedures and contact telephone numbers will be presented in the site induction and displayed in a prominent position within each site working area. Copies of the SEMP will be made available at the site in accordance with WHS laws.

3.9.1 Stop Work Protocol

In the event of an incident, the following protocol will be followed:

1. Stop work
2. If safe to do so, make immediate arrangements to minimise further environmental impact or harm
3. The EPC Contractor's responsible person (as defined by the EPC Contractor's CEMP) will notify, in order:
 - a. Emergency services, if required
 - b. the Principal's Representative
 - c. Other nominated contact or stakeholders
4. If the work site remains unsafe, all personnel shall leave the work zone via established entry/exit routes and assemble at the designated emergency assembly area (to be specified during site induction)
5. Await further instruction from the EPC Contractor's responsible person.
6. The incident site shall be preserved in the event of a significant safety event in accordance with relevant WHS laws.

Records will be kept of any environmental or personnel incidents, accidents, hazardous situations, unusual events and unsafe health exposures and the corrective action taken. An Incident Investigation and Report Form will be provided in the Contractor's CEMP for reporting purposes. The incident will be investigated by determining the cause of any emergency so that necessary changes in work practices can be made to prevent the incident reoccurring.

3.10 Incident Reporting

In the case of a notifiable environmental non-compliance, the EPC Contractor must notify the regulator in accordance with statutory requirements/guidelines.

Environmental incidents not requiring external notification shall also be recorded in the incident register with relevant details, photographs and location.

3.11 Communication

Responsibilities for foreseeable communication types are summarised in Table 7.

Table 7 Responsibilities for foreseeable communication types

DRAFT

Communication	Responsibility
On-site communications	Relevant Principal and EPC Contractor role and Personnel details to be included within the Contractor's CEMP
Formal contractual communications	Relevant Principal and EPC Contractor role and Personnel details to be included within the Contractor's CEMP
Regulator communications	Relevant Principal and EPC Contractor role and Personnel details to be included within the Contractor's CEMP
Stakeholder and community communications/complaints	Relevant Principal and EPC Contractor role and Personnel details to be included within the Contractor's CEMP

3.12 General Environmental Responsibilities

All persons conducting work on the Project will have a responsibility to:

- Comply with environmental legislation relevant to their role
- Conform to the requirements of the CMP
- Undertake any training required to effectively perform their assigned environmental responsibilities and procedures
- Report environmental accidents and incidents to their employer or line manager in accordance with the EP Act and / or the SEMP
- Participate in the investigation of environmental accidents and incidents and implementation of corrective action as required.

The EPC Contractor Project Manager must, immediately upon becoming aware of it, inform the Principal's Representative of any incident or event which causes or threatens environmental harm or actual or potential serious or material environmental harm. Further, the EPC Contractor must comply with any reasonable requirement or direction given by the Principal in relation to managing or minimising that harm.

3.13 CMP Review

The CMP will remain a live document through the construction period and will be updated as required to reflect changes to environmental risks, management mitigation strategies, monitoring and reporting requirements, with the aim of minimising the likelihood of environmental harm. The EPC Contractor must provide the detail of proposed updates to the CMP to the Principal before making the change, to ensure continued compliance with approvals and/or legislative requirements.

DRAFT

4.0 Summary of Key Environmental Impacts

The summary of the key adverse impacts relevant to Project construction are detailed in Table 8.

It is noted that aspects of potential environmental impacts, including those on the residents in the near vicinity of the Project site, were incorporated into Project design prior to the commencement of construction. This includes minimising the impact on remnant vegetation and threatened species through design refinement, and completion of impact assessments including shadow flicker modelling, television and radio reception interference, and visual impact.

The list presented in Table 8 is not intended to be exhaustive. The EPC Contractor is expected to undertake a risk assessment for the Project prior to commencing construction and assess all environmental and cultural heritage risks, taking into consideration site specific knowledge available at that point, the proposed equipment, construction methodologies, existing company knowledge, experience and management strategies.

Table 8 Key identified environmental impacts

Aspect	Impact	Consequential Impact	Management Plan
Land (soils)	Construction may release sediment into local waterways resulting in impacts to water quality.	Disturbance of soils could result in contaminated or turbid stormwater runoff to downstream drainage lines, creeks or watercourses.	<ul style="list-style-type: none"> • Preliminary Stormwater Management Plan • Conceptual Erosion and Sediment Control Plan
Stormwater	Change of land use, topography, sealed areas alter stormwater runoff and onsite hydrology.	Changes to hydrological process, erosion, sedimentation and localised flooding	<ul style="list-style-type: none"> • Preliminary Stormwater Management Plan • Conceptual Erosion and Sediment Control Plan
Flora	Clearing native vegetation impacts and loss of habitat.	Reduction or loss of flora species, habitat, biodiversity and associated construction impacts (direct and indirect).	<ul style="list-style-type: none"> • Preliminary Vegetation Management Plan • Preliminary Fauna Management Plan
Fauna	Clearing native vegetation, loss of habitat and potential fauna impacts from construction related activities.	Reduction or loss of fauna species, habitat, biodiversity and associated construction impacts (direct and indirect).	<ul style="list-style-type: none"> • Preliminary Vegetation Management Plan • Preliminary Fauna Management Plan
Fauna	Commissioning of wind turbines have the potential to cause mortality of birds, including migratory birds.	Potential turbine strike and loss of individuals of birds and bats, including through commissioning phase.	<ul style="list-style-type: none"> • Preliminary Bird and Bat Management Plan
Weeds and Pests	Introduction of weed seeds and pests or increase in weed density.	Decline of native habitat value. Impacts on agricultural land values.	<ul style="list-style-type: none"> • Preliminary Vegetation Management Plan • Preliminary Fauna Management Plan
Bushfire	The use of tracked earthmoving machinery on rocky land, vehicles driving in long grass, hot works and people smoking has potential to cause fires in surrounding vegetation	Decline of native habitat values and vegetation due to fires, direct impact on fauna. Temporary reduction of amenity (air quality). Fire risk to surrounding infrastructure and people.	<ul style="list-style-type: none"> • Bushfire Management Plan • Safety and Emergency Management Plan • Preliminary Vegetation Management Plan

DRAFT

Aspect	Impact	Consequential Impact	Management Plan
	during the construction phase.	Impacts on agricultural land values.	<ul style="list-style-type: none"> • Preliminary Fauna Management Plan
Land access	Impacts to landholder activities and agricultural practice including cattle movements.	Injury or death to livestock. Disturbance to people, livestock and property. Damage to landholder infrastructure or crops.	<ul style="list-style-type: none"> • Land Access Requirements and Protocols • Land Agreements held between the Principal and the Landowners
Cultural heritage	Potential exists for disturbance of Aboriginal cultural heritage material and artefacts at and below ground level because of ground disturbance. Risk of identification of buried human remains.	Loss of Aboriginal cultural heritage values. Accidental harm to Aboriginal artefacts.	<ul style="list-style-type: none"> • Cultural Heritage Management Plans
Hazardous material	Contamination of land and water in and surrounding the site by the release of hydrocarbons or chemicals.	Pollution of soil and ground or surface water by the spillage or leakage of oil, grease, fuel or chemicals.	<ul style="list-style-type: none"> • Construction Environmental Management Plan • Work Health and Safety Management Plan held by the EPC Contractor.
Waste	Waste not correctly managed or removed from site.	Visual impact. Soil / water contamination. Attraction of pest species. Decline of native habitat. Damage to landowner infrastructure or quality of crops.	<ul style="list-style-type: none"> • Waste Management Plan
Air Quality	Dust and emissions from construction activities impact on nearby sensitive receptors or native habitat areas.	Temporary reduction of amenity values. Decline of native habitat.	<ul style="list-style-type: none"> • Air Quality Management Plan
Greenhouse Gases (GHG)	Emissions from construction vehicles, plant and equipment.	Increase of GHG emissions.	<ul style="list-style-type: none"> • Construction Environmental Management Plan
Noise, vibration and lighting	Construction works may create negative amenity impacts on surrounding residential properties, environmental harm and environmental nuisance.	Temporary loss of resident amenity.	<ul style="list-style-type: none"> • Construction Environmental Management Plan
Traffic	Project construction traffic and movement of wind turbine components use existing public roads including stock routes.	Impacts to efficiency and safety of other road users and potential impacts on cattle movements. Impacts to passing vehicles due to oversize, and impact on road surface due to heavy loads.	<ul style="list-style-type: none"> • Traffic Impact Assessment • Traffic Management Plan • Pavement Impact Assessment
Community	Construction works impact on residents, businesses and visitors.	Temporary loss of amenity values. Input into the local economy.	<ul style="list-style-type: none"> • Complaint Investigation and Response Plan

DRAFT

5.0 Environmental Elements and Controls

This section outlines mitigation and management strategies to address project impacts on various environmental aspects during construction. Impacts to some environmental aspects are addressed within a focused management plan (as will be required by the conditions of the Commonwealth and State approvals) and referred to accordingly.

It is anticipated that the EPC Contractor is responsible for managing potential harm to the environmental aspects stated herein resulting from Project construction activities. Where harm cannot be avoided, the EPC Contractor shall comply with relevant State and Commonwealth legislation with regards to the relevant aspect (refer section 2.0).

5.1 Topography, Geology and Soils

5.1.1 Geotechnical Investigation

A Geotechnical Investigation will be undertaken during the detailed design phase to provide subsurface information to allow for all aspects of design and construction. The report is expected to provide subsurface information to allow for all aspects of design and construction and provide construction considerations including but not limited to excavation characteristics, batter slopes, re-use of site materials, subgrade preparation for access tracks and hardstands, crane hardstand pavements, groundwater, slope stability, soil erosion and seismic site factor.

5.1.2 Erosion and Sediment Control

A Preliminary Erosion and Sediment Control Plan has been prepared for the Project by an RPEQ in accordance with the requirements prescribed in State code 23 and the State code 23 Planning guideline.

The Conceptual ESCP (AECOM, 2023a) identifies initial risks and the subsequent management and application of sediment and erosion control techniques for the Project. The Conceptual ESCP provides conceptual information in accordance with the International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control document. Detailed engineering design of controls and structures has not been provided.

A detailed ESCP for construction will be prepared by a suitably qualified person to meet the conditions of approval in accordance with the Best Practice Erosion and Sediment Control (BPESC) guidelines for Australia (International Erosion Control Association).

5.1.3 Problem Soils

Should Acid Sulfate Soils (ASS) be discovered onsite during construction, and ASS management plan will be prepared and with material managed according to the *Queensland Acid Sulfate Soil Technical Manual, Soil Management Guidelines*.

No potential sources of contamination are known at this stage. In the development phase for the Project individual title searches and Queensland Environmental Management Register (EMR) and Contaminated Land Register (CLR) searches were conducted. No registered sources of contamination were identified as part of this process.

If any contamination is identified during earthworks, the EPC Contractor shall:

- Notify the Principal's Representative
- Prevent spread of contamination and enact any emergency response requirements necessary to ensure environmental harm or harm to workers is avoided
- Where required, notify the relevant authority to report the contamination
- Manage the contaminated material in accordance legislative requirements and any directions that may be forthcoming from the relevant authority.

DRAFT

5.2 Water

5.2.1 Stormwater management

A Preliminary SMP (AECOM, 2023b) has been developed for the Project to assess the potential impacts of stormwater discharge on surface water quality and quantity arising from a range of activities associated with the construction, operation and decommissioning phases. The stormwater assessment has been prepared to demonstrate compliance with performance outcome PO7 and PO8 of State code 23: Wind farm development (version 3.0).

The assessment identified potential impacts associated with the construction, operation and decommissioning phases including discharge of sediments and stormwater, restriction of fish passage, chemical spills/leaks from storage areas, discharge of untreated wastewater. The report provides a range of suitable mitigation measures including a Preliminary Stormwater Management Plan, a Conceptual ESCP (AECOM, 2023a), dust suppression, and minimise disruption to waterways through detailed design. The report concluded that the risk posed to the surface water environment is considered low, provided mitigation measures are followed.

The SMP will be updated prior to the commencement of construction by an RPEQ to reflect the final Project design and in accordance with the conditions of approval. The plan is expected to:

- Demonstrate no net worsening of stormwater management because of the construction and operation of the Project
- How the Project will meet the Queensland Urban Drainage Manual (QUDM) requirements
- Identify the flow regime and measures required to address water quality and quantity.

The SMP for construction, as part of the CMP, must be submitted to the DSDILGP prior to the commencement of construction in accordance with the State approval.

The EPC Contractor must construct the Project in accordance with the mitigations and management measures described in the SMP to ensure stormwater management objectives can be achieved.

If the Project is impacted by flood events during construction, the SEMP (section 3.3.1) will contain controls and management measures relating to the protection and preservation of life, the environment and property during such emergency events.

A SMP for the operational phase will be prepared by the site operator prior to practical completion.

5.2.2 Surface water quality

Surface water quality is addressed and will be managed in accordance with the SMP and Conceptual ESCP (AECOM, 2023a).

Detailed plans will be developed prior to construction to meet the conditions of approval and will be in line with Best Practice Erosion and Sediment Control (BPESC) guidelines for Australia (International Erosion Control Association) and prepared by a RPEQ.

The EPC Contractor must construct the Project in accordance with the mitigations and management measures described in the SMP (AECOM, 2023b) and Conceptual ESCP (AECOM, 2023a) to ensure stormwater management and water quality objectives can be achieved.

5.2.3 Groundwater

The Project is not expected to impact on groundwater levels on the assumption that any take of groundwater for construction water by the EPC complies with any water permit requirements. Potential impacts to groundwater quality from spills or leaks are managed and mitigated by aspects of the:

- Contractor's CEMP
- Waste Management Plan.

DRAFT

5.3 Flora and fauna

5.3.1 Vegetation and Fauna Management

A Preliminary Vegetation Management Plan (VMP) (Ecosure, 2024a) and Preliminary Fauna Management Plan (FMP) (Ecosure, 2024b) have been prepared for the Project by a suitably qualified ecologist in accordance with State code 23 and State code 23 Planning Guideline. The VMP and FMP detail how potential impacts to vegetation and fauna will be avoided, managed or mitigated, as well as providing the framework for monitoring these potential impacts during the construction and operational phases of the Project.

It is noted that potential impacts to fauna habitat may result from a number of aspects of the project including clearing of remnant and regrowth areas of vegetation and the resulting loss or fragmentation of habitats. These impacted habitats and habitat features provide shelter or foraging resources for fauna. The maximum clearing footprint is proposed to be 1,062.14 ha. Most impacts to ecological values have been avoided through siting of infrastructure away from sensitive values. This includes the placement of WTGs and tracks away from regulated vegetation and watercourses as far as possible. As detailed design progresses, micro-siting of infrastructure will be implemented to avoid important habitat features such as hollow-bearing trees and food trees, where possible.

Where avoidance of an impact is not possible, impacts may be minimised by redesign and/or relocation of infrastructure or low impact construction methods. Impacts to ecological values can be minimised by implementing various strategies, including siting of infrastructure in existing cleared areas, micro-siting of WTGs and minimising track widths.

A VMP and FMP for construction will be prepared for the Project by a suitably qualified ecologist in accordance with conditions detailed in the Commonwealth and State approvals. The VMP and FMP will detail how potential impacts to vegetation and fauna will be managed and mitigated, as well as providing monitoring plans to minimise these potential impacts during the construction and operational phases of the Project.

The VMP and FMP is expected to include details of all measures to:

- Identify and avoid flora and fauna habitats and resources prior to clearing
- Protect and recover fauna during clearing operations, including presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures.
- Replace/relocate habitat and resources that will be unavoidably lost.

The VMP and FMP must be submitted to the DSDILGP prior to the commencement of construction in accordance with the State approval. The VMP and FMP may require approval by the DCCEEW following the Commonwealth determination for the Project.

The EPC Contractor must construct the Project in accordance with the mitigations and management measures described in the VMP and FMP as required by conditions of the State and Commonwealth approvals.

Bird and bat species identified to have potential occurrence within the Project area have been addressed in a specific BBMP.

A VMP and FMP for the operational phase will be prepared by the site operator prior to practical completion.

5.3.2 Bird and Bat Management

A Bird and Bat Management Plan (BBMP) has been prepared for the Project by a suitably qualified ecologist in accordance with State code 23 and the State code 23 Planning guideline.

Field surveys have been undertaken to confirm environments and associated habitats on site and to identify those avian and bat species present. These have assisted in informing the wind farm layout and assessment of potential impacts on fauna. The BBMP provides a framework on how to monitor the Project's impacts on bird and bat species, identify significant impacts to species of concern and

DRAFT

provides a strategy for managing and mitigating any significant impacts on these species during the construction, commissioning and operation of the Project.

Field surveys from 2018 – 2021 detected 163 identified bird species, plus an additional seven unidentified bird species (by sighting or call). Targeted surveys were undertaken for glossy black-cockatoo (*Calyptorhynchus lathami lathami*), powerful owl (*Ninox strenua*) and black-breasted button-quail (*Turnix melanogaster*). Further, field surveys, (including acoustic recording and harp trapping) detected 16 confirmed microbat species and an additional six possible microbat species.

Please refer to the BBMP (Ecosure, 2024c) for controls specific to bird and bat management.

The BBMP (Ecosure, 2024c) will be updated prior to construction by a suitably qualified ecologist in accordance with the conditions of the State and Commonwealth approvals. The BBMP will be submitted to the DSDILGP and DCCEE prior to the commencement of construction in accordance with the relevant conditions.

The EPC Contractor must construct the Project in accordance with the mitigations and management measures described in the approved BBMP.

A BBMP for the operational phase will be prepared by the site operator prior to practical completion.

5.4 Biosecurity, Weeds and Pests

A Preliminary VMP (Ecosure, 2024a) and Preliminary FMP (Ecosure, 2024b) have been prepared for the Project by a suitably qualified ecologist in accordance with State code 23 and State code 23 Planning guideline.

The VMP notes that restricted pest animals must be managed to minimise biosecurity risks. During construction and operation, rubbish and food waste must be appropriately stored and disposed off-site to minimise attracting foxes, wild dogs and pigs.

A VMP and FMP for construction will be prepared for the Project by a suitably qualified ecologist in accordance with the Project Commonwealth and State approval conditions. The VMP and FMP will provide all relevant biosecurity, weed and pest management measures as required by Project approval conditions.

Please refer to the VMP and FMP for controls specific to biosecurity, weeds and pests.

The VMP and FMP will be submitted to approval authorities prior to the commencement of construction in accordance with conditions of approval.

The EPC Contractor must construct the Project in accordance with the biosecurity mitigations and management measures described in the approved VMP and FMP.

A VMP and FMP for the operational phase will be prepared by the site operator prior to practical completion.

5.5 Bushfires

A Bushfire Management Plan (BMP) will be prepared for the Project by a suitably qualified person, in accordance with the conditions of the State approval. The BMP will document site-specific bushfire hazard assessment to inform Project Asset Protection Zones in detailed design and strategies to be implemented during construction to minimise the potential risk of bushfire hazards on life, property and the environment.

The BMP will be informed by both onsite and desktop assessment of the Project site. The BMP will be prepared for construction with consideration of the final design of the wind farm and will involve consultation with Queensland Fire and Emergency Services (QFES).

The BMP must be submitted to the DSDILGP prior to the commencement of construction in accordance with conditions of the State approval. The EPC Contractor must construct the Project in accordance with the mitigations and management measures described in the BMP.

As bushfire risks will differ for the operational phase, an operational BMP will be prepared by the site operator prior to practical completion.

DRAFT

As detailed in Section 3.3.1, the SEMP will detail controls and management measures relating to the protection and preservation of life, the environment and property during emergency events such as uncontrolled bushfire.

5.6 Land Access Requirements and Protocols

Land access requirements and protocols are presented in Table 9, which include measures necessary to minimise impacts to the existing agricultural use of the land.

Table 9 Land Access Requirements and Protocols

Land Access Requirements and Protocols	
Environmental objective	To minimise impacts on agricultural practices including cattle movements.
Performance Indicators	<ul style="list-style-type: none"> • No Project-related stock deaths or injuries on site, including within defined stock routes or reserves. • No damage to landholder infrastructure or crops outside of approved/authorised Project extents. • Ongoing proactive communication with landowners during Project works to support the avoidance of impact of Project works on landowners activities. • Compliance with landowner agreement obligations
Sources	<ul style="list-style-type: none"> • Construction activities, installation of temporary infrastructure, trenching, vehicle movements, and fencing interferes with landholder activities. • Unplanned or uncontrolled land disturbance (vehicle or plant), e.g. dust nuisance. • Vehicle stock animal collision. • Landholder gates not left as found. • Failure of biosecurity controls. • Unplanned movement of stock from stock route on to the Project site. • Use of informal or prohibited access points to the site.
Mitigation strategies	<ul style="list-style-type: none"> • Land access arrangements and requirements included in site induction and landholder updates (e.g. stock movements, paddock configurations) advised in toolbox/prestart meetings. • Access between properties within the Project must be via the agreed wind farm access points and not from 'off project footprint' locations, including any private access points on to the relevant properties. • Use only formed entrances to and from the Project site. Utilise formed access tracks within the Project site as far as practicable. Keep access tracks clear and remain aware of landholder activities. • Landholder gates must be left as found. Gate Marking protocol to be adopted to support gate activity, e.g. open / closed marking. Boundary gates between properties must be kept closed to avoid uncontrolled stock movement between properties. • Operating vehicle and mobile plant at speeds appropriate to avoid impacts to fauna. • Drive to the conditions to avoid unnecessary dust generation. Active dust control activities on major access routes within the site. • Avoid unnecessary interaction with livestock. • Adequate and reasonable agreed stock management arrangements in place between the landholder and the Principal prior to construction, to avoid injury to livestock and to exclude livestock from the construction work areas. • No pets are permitted on the Project site. • Always maintain work area in a clean and safe state. Rubbish and waste produced must be deposited to a suitable waste facility. General / organic waste must be removed regularly from the site to maintain good hygiene levels and minimise favourable conditions for pests (rodents). • Use established toilet facilities only. • Compliance with the General Biosecurity Obligation prescribed under the <i>Biosecurity Act 2014</i> and biosecurity controls established and prescribed for the Project site in the VMP and FMP to prevent biosecurity risk.

DRAFT

Land Access Requirements and Protocols	
	<ul style="list-style-type: none"> Fire risk management, including vegetation fuel load control and management of ignition risks (e.g. smoking) with the Project area, to be subject to relevant controls to minimise the potential for fire resulting from Project activities.
Monitoring	<ul style="list-style-type: none"> EPC Site Manager and/or EPC HSE Manager to monitor compliance on daily rounds / weekly inspections. Regular contact from the Project's nominated contact with the landholders regarding change to land use activities and access requirements.
Reporting	The EPC Contractor must record and report any incidents related to land access, livestock interactions, and near misses, to the Principal's Representative in line with the agreed notification process.
Corrective Actions/ Contingency Plans	Review of this CMP following any significant incident or near miss relating to impact on agricultural practice, including stock routes and cattle movements.

5.7 Heritage

Heritage database searches did not identify any known heritage or cultural heritage sites within the Project site. The Registered Native Title Bodies Corporate for the Project are:

- Auburn Hawkwood People (AHPAC)
- Wakka Wakka Native Title Aboriginal Corporation (WWNTAC).

Cultural Heritage Management Plans are currently being negotiated for the Project by a suitably experienced person. A CHMP is a State-approved agreement between a proponent and an Aboriginal party about how the Project is to be managed and avoid or minimise harm to Aboriginal cultural heritage.

The CHMPs for the Tarong West Wind Farm Project will be submitted for approval by the Department of Aboriginal and Torres Strait Island Partnerships (DATSIP).

The Proponent must ensure the Project is constructed in accordance with the mitigations and management measures described in the CHMPs and/or as defined in the EPC contract, including the development of chance finds procedures and stop works requirements.

5.8 Hazardous Materials

Construction activities have the potential to contaminate land and water in and surrounding the site by the release of chemicals. The EPC Contractor must include a list within the Contractor's CEMP of all hazardous materials and chemicals likely to be used and/or stored on the site.

Where construction works trigger an approval in relation to chemical storage, the EPC Contractor shall be responsible for obtaining and complying with relevant approval(s). If required, suitable storage facilities shall be set up in a suitable location with appropriate safety buffers, bunding and safety equipment installed. Storage must always be consistent with the requirements of the Safety Data Sheet (SDS).

The EPC Contractor is responsible for supplying appropriate spill response equipment on site and recording its maintenance and upkeep in a Spill Response Equipment Register. All relevant site staff are to be trained in the use of spill response equipment. In addition, the EPC contractor is to provide suitable fire suppression equipment, emergency showers, PPE and medical response consistent to the risk profile presented by the chemicals specifically required to be stored and used at the site.

Procedures for machinery refuelling are to be detailed in a JSEA (or equivalent) to minimise the potential for spills or leaks resulting in potential environmental harm. Any persons responsible for decanting fuel from a bulk storage unit, capturing both stationary fuel tank and mobile fuel carts, must be appropriately trained in the use of the unit, including the controls required to prevent releases to the environment. Site generators must be sited in a manner that allows for safe access to the refuelling location and prevents a circumstance where the access configuration increases the likelihood of a release during refuelling.

DRAFT

Reporting and remediation of spills is to be undertaken promptly and reported to the Principal and included in the incident register. This may include hydrocarbon spills during the commissioning of wind turbine generators.

Contaminated waste must be disposed of offsite at an appropriately licenced waste facility. The transport of the waste from the site must be in accordance with the relevant legislative obligations, including waste tracking obligations.

Surface coating treatments (if required) are to be undertaken in a manner that avoids or minimises release of chemicals to the environment and contact with the public or any Project personnel.

5.8.1 Relevant standards and Codes of Practice

Australian standards relevant to the construction process include:

- AS 1216-2006 Class labels for dangerous goods
- AS 1678 Emergency procedures guide – Transport
- AS 1940-2004 The storage and handling of flammable and combustible liquids
- AS 2508 Safe storage and handling information cards for hazardous materials
- AS 2931-1999 Selection and use of emergency procedure guide for the transport of dangerous goods
- AS3780-2008 The storage and handling of corrosive substances
- HB 76:2010 Dangerous Goods – Initial Emergency Response Guide
- Globally Harmonised System of Classification and Labelling of Chemicals

Codes of Practice that may be relevant to the further development of the Contractor's CEMP can be located at www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice

In accordance with the requirements prescribed by WorkSafe QLD, hazardous chemical products must be labelled under the Global Harmonised System unless a specific exemption applies. Regardless of labelling exemptions, the EPC Contractor must have a current SDS that reflects the Global Harmonised System information.

5.8.2 Hazardous Materials and Chemicals Management Plan

Mitigation and management strategies for hazardous materials and chemicals are presented in Table 10.

Table 10 Hazardous Materials and Chemicals Management Plan

Hazardous Materials and Chemicals Management Plan	
Environmental objective	<ul style="list-style-type: none"> • To prevent or minimise the contamination of soil and ground or surface water by the spillage or leakage of oil, grease, fuel or chemicals utilised to support the construction of the project. • To ensure the safe handling and storage of hazardous materials during Project construction. • To ensure compliance with legislative obligations relating to the safe handling and storage of hazardous materials during the construction of the project.
Performance Indicators	<ul style="list-style-type: none"> • No evidence of chemical spills or leakage to ground or water reasonably attributable to construction activities. • The correct use of onsite and offsite waste disposal facilities. Use of waste tracking for regulated waste (where required). • The use of appropriate storage, handling and use procedures as per relevant legislation or standards. • Spills of oil, other hydrocarbons and hazardous materials are to be reported and cleaned up promptly. • Adequate spill response equipment and preparedness for the spill risk that exists, including the type and volumes specific to the Project.

DRAFT

	<ul style="list-style-type: none"> • Adequate workers trained in the use of spill response equipment and the safe clean up and disposal of released chemicals.
Sources	<ul style="list-style-type: none"> • Accidental spills or leaks of hazardous chemicals or biological hazards, including fuel, chemicals, hazardous concrete component materials, or sewage. • Release of hazardous or biological hazards due to poor plant maintenance or incorrect chemical storage.
Mitigation strategies	<ul style="list-style-type: none"> • Development of a safety and emergency response plan addressing response in the event of a spill or accident involving chemicals. • Ensure that emergency spill response procedures are in place, the workforce is trained in the procedures and the spill clean-up/ containment equipment is maintained. • Handling and storage of flammable and combustible liquids in accordance with AS 1940, and the relevant Safety Data Sheets (SDS). Labelling in accordance with the Globally Harmonised System of Classification and Labelling of Chemicals. • Climate controlled chemical storage must be adopted where prescribed by SDS's and where temperature controls cannot be 'naturally' achieved at the project site within designated storage locations. • Storing and handling corrosive materials in accordance with AS 3780.8. • Capture sheeting, screens or similar are in place to contain and capture hazardous materials during construction activities such as spray painting so to not cause pollution or environmental nuisance. • Make provision for the spill catchment capacity to be at least the larger of 110% of the volume of the largest bulk container or 25% of the total capacity of all containers stored in a bunded area. All bunded areas are to have an impervious lining. • Drain bunded areas when necessary and test and dispose of accordingly, which may include using a licenced waste operator. • Undertake machinery maintenance on a sealed surface or suitable ground covering to capture spills. • Maintain a manifest of chemicals (storage location, volumes, type of chemical, receipt date). • Maintain all chemical SDS and information relating to the storage, use and handling of chemicals close enough to where the substances are being used to allow a worker who may be exposed to the substance to refer to it easily. • Tanks and hazardous material storage areas are to be appropriately bunded with a minimum 110% capacity of the stored chemical capacity. Outside open chemical bunds are to be covered and monitored to ensure the availability of capacity (avoiding rainwater intrusion). • Refuelling infrastructure is to include a sealed self-bunded containment consistent with AS1940. • Placement of refuelling infrastructure is to be consistent with the requirements described in AS1940 and must be situated at least 40 m from any waterways. • Fuel trucks must be manned by trained personnel with available spill response and spill capture equipment (e.g. drip trays). • Mobile refuelling must be undertaken at least 40 m away from any waterways. • Brief all site personnel on the correct handling and use of oil, grease, fuel and chemicals on site. • Portable metal or plastic fuel containers of normal capacities up to and including 25 litres must comply with the requirements under AS/NZS 2906:2001 Fuel containers - portable-plastic and metal. Containers covered by this Australian Standard are suitable for use with leaded, unleaded and super grades of petrol, two-stroke engine fuel, and kerosene and distillate (diesel fuels). • Empty hazardous substance containers will be suitably stored until they can be removed from the Project site. Residue risk from containers must be considered when identifying suitable storage. The EPC Contractor should make reasonable efforts to minimise the storage of empty containers at the Project site.

DRAFT

Monitoring	<ul style="list-style-type: none"> As part of the weekly site inspections monitor chemical storage areas (including refuelling locations), piping and dispensing equipment, and bunding (integrity and capacity). Periodically review procedures (as necessary) to ensure the currency of the procedures to the storage at the site. Mobile plant pre-start inspections.
Reporting	<ul style="list-style-type: none"> Any spill of oil, grease, fuel or chemicals is to be immediately reported (internally) to the EPC Contractor HSE Manager and subsequent reporting to the Principal's Representative. Root cause investigation and reporting (where required). As per monthly EPC reporting requirements, the report shall detail the results of any construction phase inspections or monitoring and identify any corrective actions taken by the EPC Contractor during the relevant period.
Corrective Actions/ Contingency Plans	<ul style="list-style-type: none"> Immediately repair bunding, tanks, piping and dispensing equipment where necessary, e.g. where evidence of, or the potential for, an uncontrolled release is identified. Treat spills as an environmental incident and report and manage accordingly. Amend procedures relating to hazardous materials and chemical management if found to be inadequate. Establish suitable emergency response procedures and provide relevant training to support spill response.

5.9 Waste Management

The EPC Contractor is to ensure that construction and other site-generated waste is appropriately managed in accordance with the relevant Queensland legislation, including the EP Act, *Waste Reduction and Recycling Act 2011* and Environmental Protection Regulation 2019. The EPC Contractor should detail the types and volumes of wastes expected to be produced on site in the Contractor's CEMP, identify the locations and methods for onsite waste containment, and identify suitable offsite waste disposal facilities for each waste stream.

Waste hierarchy of avoidance, reuse, recycling, efficient waste removal and good house-keeping procedures must be promoted by the EPC Contractor across the site.

The EPC Contractor is to undertake appropriate management, removal and disposal of waste and litter observed within the construction site. All waste removed from site is to be by a suitably qualified waste contractor and waste tracking notices (where required) are to be documented and filed on site and be available for audit. The EPC Contractor is to ensure all wastes are removed from site at the conclusion of the works, and all wastes are recorded on the Waste Register.

Mitigation and management strategies for waste are presented in Table 11.

Table 11 Waste Management Plan

Waste Management Plan	
Environmental objective	<ul style="list-style-type: none"> To ensure good housekeeping on the work site. Regulated wastes are managed appropriately and in accordance with relevant laws. No events of environmental nuisance or pollution resulting from waste management on the Project site.
Performance Indicators	<ul style="list-style-type: none"> No complaints regarding waste and housekeeping in all areas of the worksite. No complaints of waste related pollution or environmental nuisance.
Sources	<ul style="list-style-type: none"> Construction waste, e.g. concrete, wooden pallets, turbine packaging, erosion and sediment control materials. Office waste e.g. paper, printer cartridges. Food waste and packaging. Temporary ablation facilities.
Mitigation strategies	<ul style="list-style-type: none"> Ensure that construction waste is managed in accordance with best practice resource management procedures (avoid, recovery, reuse, reprocess, recycle, disposal).

DRAFT

	<ul style="list-style-type: none"> • An effective stores inventory system is to be utilised on site. • Engage licensed regulated waste transporters for the management of applicable waste streams. • Ablutions for the construction workforce are appropriately located around the site, to ensure hygiene standards are achieved and maintained. • Ensure that ablutions waste (sewage and grey water) is fully contained, regularly collected and disposed offsite by a licenced contractor. • Capture sheeting, screens or similar are in place to capture waste materials during construction activities to not cause pollution or environmental nuisance. • Waste receptacles provided to facilitate segregation of wastes. • Lidded bins for office / food waste to minimise odours and attraction of pests and native animals or birds. • Regular general waste removal off-site to ensure appropriately hygiene standards (odour, pest attraction risk) can be achieved. • Concrete washout to be carried out in bunded wash bay within the on-site batch plant. On site batch plant to include a water re-use plan (as practically achievable). • Weed wash-down waste-water pond to be lined, suitably sized (to prevent overflow) and regularly emptied by a licenced regulated waste transporter to maintain capacity and prevent the creation of cane toad breeding habitat.
Monitoring	<ul style="list-style-type: none"> • Daily site walkovers to review site housekeeping. • Regulated waste manifests / tracking certificates are kept on file. • Waste included in site checks / audits. • Tracking of waste removal events and volumes.
Reporting	<ul style="list-style-type: none"> • Waste and recycling volume summaries are included in monthly report to the Principal. • Completed Waste Management Register to be provided to the Principal by the EPC Contractor at conclusion of site works.
Corrective Actions/ Contingency Plans	<ul style="list-style-type: none"> • Mitigation measures are reviewed and updated as required.

5.10 Air Quality

If not managed appropriately, dust and emissions to air could become a nuisance to nearby residences and / or significant ecological habitats. Dust may result from vegetation clearing, bulk earthworks, vehicle movement over unsealed ground and wind erosion of stockpiles and / or unsealed ground (e.g. areas subject to reinstatement that are not yet stabilised by vegetation).

Vehicles, machinery and generator emissions used for construction works have the potential to be detrimental to local air quality.

There are sensitive receptors in the Project vicinity, primarily rural homesteads. The closest sensitive land use to the project site is >1,500m from the nearest Wind Turbine Generator for the Project – generally impact is not expected at sensitive land uses except in extreme conditions and in the absence of suitable management controls.

Mitigation and management strategies for air quality are presented in Table 12.

Table 12 Air Quality Management Plan

Air Quality Management Plan	
Environmental objective	<ul style="list-style-type: none"> • Prevent adverse impacts from air pollution on the environment during construction activities. • Establish and maintain awareness of the importance of air pollution management practices. • Minimise fugitive dust emissions.
Performance Indicators	<ul style="list-style-type: none"> • To comply with relevant regulatory and policy requirements regarding air quality. • No validated complaints from sensitive receptors relating to emissions or dust from construction activities.
Sources	<ul style="list-style-type: none"> • Dust from exposed / disturbed soil areas in windy conditions. • Mobile plant works, including grading and vegetation clearing.

DRAFT

	<ul style="list-style-type: none"> • Dust from vehicle and mobile plant movement on unsealed project roads. • Exhaust emissions from construction vehicles and plant equipment. • Dust and odours from concrete batch plant.
<p>Mitigation strategies</p>	<ul style="list-style-type: none"> • Plan construction by locating dust generating activities away from sensitive land uses where possible. • All Project personnel to receive training in air quality control practices in the site induction, including mobile plant and vehicle use. • Dust and wind will be monitored onsite and work that may generate significant levels of dust will cease if strong winds occur and the dust cannot be reasonably controlled by the EPC Contractor • Secure an appropriately licensed water source for dust suppression during the construction phase. Assess the use of soil binders, erosion blankets and other erosion controls supported by the Erosion and Sediment Control Plan for longer term exposed areas or stockpiles. • Water carts and dust screens will be used where appropriate to control dust emissions from exposed surfaces and dust generating activities at a frequency appropriate to conditions. • Where watering is used, monitor the procedure to ensure that there is no surface ponding/pooling of water to ensure the efficiency of water use and to avoid the creation of sediment laden run-off and / or a driving hazard. • Rumble grids or coarse aggregate to be installed at exit points to prevent soil being deposited onto sealed public roads (if identified in the ESCP). • Manual cleaning of vehicles and roads will be conducted as required. • Cover all loose loads for transport to and from the work site. • Restrict vehicle speeds on unsealed tracks and other footprint areas, especially where passing landowner dwellings, unfenced livestock and stationary work crews. Personnel will be informed of Project speed limits during induction. • Speed limits on public roads are to be observed. • Restrict vehicles to approved access tracks (where constructed, or where approval for use exists with the landowner) and only those vehicles required for the safe, efficient and essential construction activities will be allowed in the work area. • Construction equipment and mobile plant will be properly maintained to ensure exhaust emissions comply with relevant standards. • A vehicle inspection and maintenance program for all on site construction vehicles, including light vehicles, will be implemented and adhered to. • Efficient operation of machinery, equipment and vehicles to minimise exhaust emissions. Where practical vehicles should be shut down when long idle times occur. • Vehicle inspection and maintenance program for all on site construction vehicles, including a plant acceptance process prior to mobilisation to the Project site. • General waste will be segregated and collected regularly to control odours. • Vegetation or other materials are not to be deliberately burnt on site, unless otherwise approved e.g. in management plans. • Progressively rehabilitate and/or stabilise disturbed areas. Rehabilitate or allow natural regeneration of bare areas as soon as the area is no longer needed for construction. • Maintain stockpiles, for example stripped topsoil, in a condition which prevents windblown dust generation, especially during dry or windy conditions. This will include watering or covering of stockpiles with an appropriate erosion and sediment control solution (refer to the Conceptual Erosion and Sediment Control Plan). • Limit bare earth exposure to that essential to the efficient and effective construction of project infrastructure. Using vegetation cover, mulch covers or other suitable methods will be adopted where practicable. Mulch covers in the vicinity of infrastructure should be avoided, except where inflammable material is available. • Works reasonably expected to generate dust emissions are to be planned to allow for completion during periods of lower wind speeds and / or where the works can be supported by suitable proactive dust control measures.

DRAFT

	<ul style="list-style-type: none"> Where nuisance dust emissions cannot be effectively controlled, works are to temporarily cease until additional controls can be sourced to support the works or until a change in methodology to minimise dust emissions is identified.
Monitoring	<ul style="list-style-type: none"> Identify a responsible person to monitor weather conditions and coordinate minimising dust generating activities on windy and dry days. As part of the daily and weekly site inspections, visual inspections of dust releases and associated control measures to be noted. Visual inspections will be undertaken during activities likely to cause dust releases (i.e. earthworks) to assess the effectiveness of mitigation measures and any requirement for increased dust suppression. Any complaints from the public are to trigger investigation by the Principal in conjunction with the EPC Contractor to determine appropriate control measures.
Reporting	<ul style="list-style-type: none"> Community notification to be undertaken where appropriate where work is likely to cause dust or emissions impact on nearby sensitive receptors. If air quality monitoring equipment is set-up, inclusion of statistical data (including minimum, maximum, mean) for all air quality parameters in the EPC Contractor monthly report.
Corrective Actions/ Contingency Plans	<ul style="list-style-type: none"> If dust is generated, ensure that a water truck is used to dampen down all access tracks and public access roads with use of chemical suppressants where necessary. Identify the activity causing any validated air quality complaints and implement appropriate mitigation measures (e.g. adjusting work practices and/or maintaining or replacing equipment as required). Corrective actions may include: <ul style="list-style-type: none"> Increased level of application of existing dust suppression management controls Installation of dust monitoring at location(s) on the site boundary, using dust measurement instruments where appropriate A review and update of procedures or plans associated with dust management practice Training for on-site personnel on avoiding, minimising and controlling dust releases.

The Preliminary VMP (Ecosure, 2024a) and Preliminary FMP (Ecosure, 2024b) prepared for the Project also detail management actions to minimise dust generation and subsequent impacts on flora and fauna, noting there are no legislative requirements for air quality impacts to ecological receivers.

The VMP and FMP must be submitted to the DSDILGP prior to the commencement of construction in accordance with conditions of the State approval. The EPC Contractor must construct the Project in accordance with the mitigations and management measures described in the Preliminary VMP and the Preliminary FMP.

5.11 Greenhouse Gases

The GHG emissions estimated to be emitted from construction activities do not trigger the *National Greenhouse and Energy Reporting Act 2007* (NGER Act) reporting requirements, however energy and fuel use requires monitoring during construction activities by the EPC Contractor. Reduction strategies are to be implemented as appropriate.

Mitigation and management strategies for Greenhouse Gas Emissions are presented in Table 13.

Table 13 Greenhouse Gas Emissions Management Plan

Greenhouse Gas Emissions Management Plan	
Environmental objective	To ensure efficient energy and fuel use during construction.
Performance Indicators	<ul style="list-style-type: none"> No validated complaints received regarding levels of emissions from construction activities. Data captured to facilitate the Principal reporting requirements.

DRAFT

Greenhouse Gas Emissions Management Plan	
Sources	<ul style="list-style-type: none"> Exhaust emissions from construction vehicles, plant and equipment.
Mitigation strategies	<ul style="list-style-type: none"> Provide training to drivers and employees to ensure fuel efficient practices, such as turning off engines when not in use. Inspect and service plant equipment regularly to ensure fuel efficiency.
Monitoring	<ul style="list-style-type: none"> Undertake periodic energy and fuel audits to monitor energy and fuel use and implement reduction strategies.
Reporting	<ul style="list-style-type: none"> Inclusion of fuel and energy consumption. Identified opportunities to reduce fuel and energy consumption in the monthly environment report to the Principal.
Corrective Actions/ Contingency Plans	<ul style="list-style-type: none"> Implement training and reduction practices where identified.

5.12 Noise, Vibration and Lighting

Construction activities are anticipated to be undertaken seven days per week, up to 12 hours per day (06:30 to 18:30). Certain construction activities, such as foundation concrete pours, WTG component deliveries and turbine lifts, may occur outside these hours, or necessitate works to run longer than 12 hours for safety and quality purposes, requiring night-time working. In such instances, activity restrictions (as required) will be applied with appropriate mitigation and management measures incorporated into the Contractor's CEMP to ensure compliance with any council issued restrictions and noise restrictions prescribed within the *Environmental Protection Act 1994*.

The EPC contractor is to specifically address any required construction work on Sundays, public holidays or at night in their CEMP.

If required by conditions of approval, a NVIA will be undertaken prior to construction based on the EPC's proposed methodologies and transport routes of heavy vehicles. The NVIA would address construction noise in accordance with the EPP (Noise) and vibration in accordance with the Department of Transport and Main Roads Noise Management Code of Practice (March 2016).

The EPC Contractor must construct the Project in accordance with the mitigations and management measures described in the NVIA and listed legislation and standards.

Further noise, vibration and lighting mitigation and management strategies are presented in Table 14.

Table 14 Noise, Vibration and Lighting Management Plan

Noise, Vibration and Lighting Management Plan	
Environmental objective	<ul style="list-style-type: none"> To minimise negative amenity impacts on surrounding non-host sensitive receptors and residences not subject to a noise agreement with the Project. To minimise environmental harm and environmental nuisance due to noise from the proposed construction works. To minimise environmental harm and environmental nuisance due to vibration from the proposed construction works. To minimise environmental harm and environmental nuisance due to lighting from the proposed construction works. Minimise complaints with regards to noise, vibration and artificial lighting.
Performance Indicators	<ul style="list-style-type: none"> Unless otherwise authorised by the relevant authority, works should be carried out in accordance with the default noise standards of the EP Act, including: <ol style="list-style-type: none"> A person must not carry out building work in a way that makes an audible noise: <ul style="list-style-type: none"> on a business day or Saturday, before 6.30a.m. or after 6.30p.m.; or on any other day, at any time. Activities involving building work that makes an audible noise and for which night-time / out of hours working is reasonably required, will require authorisation from the relevant authority. As per section 440L of the EP Act, 'audible noise' means noise that can be clearly heard by an individual who is an occupier of an affected building. An individual is

DRAFT

	<p>taken to be able to clearly hear a noise if he or she can hear the noise from the part of the building occupied by the individual that is most exposed to the noise.</p> <ul style="list-style-type: none"> No validated complaints received regarding noise, vibration or lighting from sensitive receptors.
Sources	<ul style="list-style-type: none"> Operation of vegetation clearing machinery and mulchers. Concrete pours, trenching, excavations, crane lifting operations. Heavy and light vehicle operations including reversing/warning beacons. Artificial lights used for construction works, laydown areas and security.
Mitigation strategies [Noise]	<ul style="list-style-type: none"> Construction noise is to be managed in accordance with the EP Act and EPP (Noise). Noise awareness training to be incorporated in the site induction and at toolbox talks Community consultation advising of the construction plan and duration of predicted construction noise. Vehicles and machinery are to be regularly maintained and muffling devices checked to minimise noise levels. When selecting construction techniques and equipment/machinery, consider minimising noise disturbance. Consider reversing quackers rather than beepers. Intermittently used machines are to be shut down or throttled down in intervening periods. Where practicable schedule short-term high noise activities to reduce noise nuisance and intrusion. Affected residences to be notified when work is likely to cause vibration or offensive noise. Potentially affected residences to be notified of any out-of-hours construction works , ideally 24 hours in advance.
Mitigation strategies [Vibration]	<ul style="list-style-type: none"> Vibration limits to comply with Australian Standard <i>AS 2436-2010 Guide to noise and vibration control on construction, demolition and maintenance sites</i>. Construction vibration mitigations and criteria to meet those detailed in the Transport Noise Management Code of Practice, Transport and Main Roads, March 2016.
Mitigation strategies [lighting]	<ul style="list-style-type: none"> Directed lighting (downwards and / or shielded lighting) and low wattage light fixtures will be used on the Project site during construction where practicable (if night works required or for site security) to minimise glare and light spill. External lighting at the site will only be utilised for specific operational need (e.g. safe access to a turbine in low light), where it is required by law, or where it is otherwise required to ensure the security of the facility. Lighting impact on roadways and to main residential receivers will be effectively screened by both existing vegetation and topography.
Monitoring	<ul style="list-style-type: none"> It is not expected that noise or vibration monitoring equipment will be required to be installed at the Project site. Noise and or vibration monitoring may be required in response to complaints where this is considered an appropriate response. Conduct internal, informal monthly audits on site of work practices and scheduled condition monitoring of equipment, e.g. daily machinery pre-starts. Vibration monitoring may be required for any blasting required for construction or material extraction works.
Reporting	<ul style="list-style-type: none"> Results of any noise and vibration monitoring will be included in the monthly report to the Principal. If there are consistent or recurring complaints, the Principal will require a more detailed monthly report or investigation to be prepared by the EPC Contractor.

DRAFT

<p>Corrective Actions/ Contingency Plans</p>	<ul style="list-style-type: none"> • Identify the source of any noise or vibration complaint and implement appropriate mitigation measures, such as adjusting work practices and/or maintaining or replacing equipment as required. • In the event of a community member registering a complaint regarding excessive noise levels, a two-phase response regime will be implemented: <ul style="list-style-type: none"> - First justifiable complaint: Site personnel will visit complainant's property to carry out subjective evaluation of the noise and undertake a preliminary noise monitoring assessment, to determine if an exceedance of the construction noise criteria had occurred. - Second justifiable complaint: Site Response – Implement a noise monitoring program which may include an acoustic professional visiting the area where the complaint was registered for a 48-hour period to undertake a robust noise monitoring assessment to appropriately assess any impacts. The EPC Contractor may propose alternatives in the Contractor's CEMP, which may include the installation of continuous noise monitoring equipment on site.
--	---

5.13 Traffic

A Traffic Impact Assessment (TIA) and Traffic Management Plan (TMP) have been prepared for the Project by an RPEQ for the delivery of wind farm components, including wind turbine tower sections, nacelles and blades.

The TIA addresses traffic specific requirements of the relevant planning and technical standards in relation to the Project, including TMR guidelines, State code 23 and the State code 23 Planning guideline.

The EPC is to prepare a detailed TIA, TMP and Pavement Impact Assessment (PIA) for construction activities as defined by the conditions of State approval. These plans are expected to include transport movements required to import construction materials such as offsite quarry borrow material, construction water, concrete batch plant inputs, electrical reticulation materials and consumables, temporary office demountables and other construction materials, in addition to the proposed delivery of over size over mass (OSOM) wind farm infrastructure components. The EPC construction traffic management plans must also consider the proposed routes travelled by the construction workforce for the duration of Project construction.

The TIA and associated TMP and PIA must be submitted to the DSDILGP / local council prior to the commencement of construction in accordance with the timeframes prescribed in the Project approval. The EPC Contractor must construct the Project in accordance with the mitigations and management measures described in the required traffic-related plans.

5.14 Community and Stakeholder Engagement

The Project website (currently www.tarongwestwindfarm.com.au) provides the latest project news, upcoming community engagement sessions, and documents previous newsletters and information from previous community consultation events.

The Project is expected to deliver significant socio-economic local benefits within the proposed Southern Queensland Renewable Energy Zone (Southern QREZ), through local employment and contracting opportunities and benefit sharing programs with the local community. Benefits will extend through the supply chain to local businesses including construction material supply, accommodation suppliers, food outlets, vehicle and fuel services, and suppliers of uniforms, personal protective equipment, tools, equipment and other supplies.

The EPC Contractor will be required to provide the Principal with any requested information to ensure the community is kept well-informed of Project construction works before commencement of, and during, construction.

As detailed in Section 3.8.4, a CIRP will be prepared for the Project and will set out the processes for the effective, fair and consistent documenting and handling of any Project-related complaints from external stakeholders and members of the public.

DRAFT

If the CIRP is a condition of approval, it must be submitted to the DSDILGP prior to the commencement of construction. The Principal and EPC Contractor must document, handle and investigate complaints in accordance with the CIRP.

6.0 References

AECOM, 2023a. Tarong West Wind Farm: Conceptual Erosion and Sediment Control Plan (ESCP).

AECOM, 2023a. Tarong West Wind Farm: Preliminary Vegetation Management Plan (VMP) ()

AECOM, 2023b. Tarong West Wind Farm: Preliminary Stormwater Management Plan (SMP)

DAF, 2018. Accepted development requirements for operational work that is constructing or raising waterway barrier works. Queensland Government, 01 October 2018.

Ecosure, 2024a. Tarong West Wind Farm: Preliminary Fauna Management Plan (FMP)

Ecosure, 2024c. Tarong West Wind Farm: Preliminary Bird and Bat Management Plan (BBMP)

icubed consulting, 2023. Tarong West Wind Farm: Traffic Management Plan (TMP)

icubed consulting, 2023a. Tarong West Wind Farm: Traffic Impact Assessment (TIA)

icubed consulting, 2023c. Tarong West Wind Farm: Transport Route Study (TRS)

Lat Studios, 2024. Tarong West Wind Farm: Landscape and Visual Impact Assessment (LVIA)

Sonus, 2023. Tarong West Wind Farm: Noise Impact Assessment (NIA)