Proserpine Wind Farm

Application Number: **02245** Commencement Date: **05/02/2024** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Proserpine Wind Farm

1.1.2 Project industry type *

Energy Generation and Supply (renewable)

1.1.3 Project industry sub-type

Wind Farm

1.1.4 Estimated start date *

05/01/2027

1.1.4 Estimated end date *

29/12/2057

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

The Project (Proposed Action) is a wind farm located to the west of Peter Faust (Lake Proserpine) Dam and approximately 60 km west of Airlie Beach in the Whitsunday Regional Council. The Study Area is 52,258 hectares (ha) and the land on which the Project infrastructure will be located (the disturbance footprint) occupies 1,633.7 ha or 3.1% of the total Study Area.

The Proposed Action will consist of the following:

- Up to 166 Wind Turbine Generators (WTG);
- WTG foundations and hardstands;
- Access tracks, underground cabling and overhead transmission lines;
- Electrical infrastructure including internal electrical collector stations, substations and grid connection infrastructure;
- Concrete batching plant/s and quarry/s;
- Permanent Meteorological Masts;
- Accommodation camp;
- Battery Energy Storage System;
- Construction compound and laydown areas; and
- Central operational and maintenance facility.

The final location of the turbines will be fixed within 100 m of the proposed location following state development approval. However, the Study Area has been designed to accommodate the following maximum turbine dimensions so that potential impacts on environmental values can be properly considered. Preliminary project specifications have been provided below.

Number of Turbines: Up to 166.

Tip Height: Up to 237m.

Rotor Diameter: Up to 175m.

Turbine Hardstands: The WTG hardstand area has been designed to minimise disturbance. Each WTG hardstand, together with the blade laydown area will generally be 2.5 ha. These hardstand areas also act as bushfire setback for the ongoing operation of the proposed development. Typically, the WTG towers will be set back 30-40m from vegetation to facilitate construction.

Access and infrastructure corridors: Access corridors have been designed to utilise the existing topography of the land, minimising the impact corridor to 60m wide in most areas (including cleared areas for construction and permanent infrastructure).

Electrical Reticulation & Switchyards/Substations: Each WTG will be connected to the on-site internal electrical collector stations located within the Study Area via underground cabling infrastructure, laid in trenches approximately 1m wide, or via overhead distribution lines adjacent to access tracks. The overhead transmission lines will be installed within a 80m transmission corridor from the on-site electrical collector stations through to the main project switchyard.

Further information on the Proposed Action is provided in the Matters of National Environmental Significance (MNES) Impact Assessment Report (Att. A, Section 2.4, pp. 5-8).

The Proposed Action includes the construction, operation and decommissioning of the Proserpine Wind Farm and associated infrastructure. The key activities likely to impact ecological resources during construction, operation and decommissioning include:

Construction:

Vegetation clearing for new access tracks, temporary construction compounds and laydown areas, borrow pits, water storage, concrete batching plants, wind turbine pads, trenches for power and instrumentation cables, electrical substation and overhead powerlines, and associated earthworks. The clearing of vegetation may result in a direct impact to MNES through the removal of habitat, direct impacts on flora and fauna, and the disruption of ecological processes.

Excavating trenches requires the clearing of vegetation and disruption of soil structure, which may impact vegetation and geological stability and acoustic disturbance, potentially impacting MNES. Construction traffic movements and plant operations (rock crushing and concrete batching plants) may result in collisions with fauna, acoustic disturbance, habitat destruction and localised air pollution, potentially impacting MNES.

Operation:

WTG operation posing risk to birds and bats.

- Routine maintenance and servicing of WTGs, access tracks, electrical installations and infrastructure as require, resulting in potential impacts of vehicle incidents.

Decommissioning:

- Vehicle and plant related collisions.

Further information on potential impacts resulting from the construction, operation and decommissioning of the Proposed Action can be found in the MNES Impact Assessment Report (Att. A, Section 2.4, pp. 5-6).

Land not occupied by infrastructure following the construction and rehabilitation period will continue to be used for rural and agricultural purposes.

Further facilitated impacts are likely resulting from the Proposed Action including haulage access to the Study Area.

Exclusions

Investigation and communications works and activities, including surveys, environmental assessments, project design, geotechnical investigations and communications installations are excluded from the scope of the activities subject to this referral.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

Yes

1.2.3 Is the proposed action the first stage of a staged development (or a larger project)?

No

1.2.4 Related referral(s)

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1.2.5 Provide information about the staged development (or relevant larger project).

The Proponent is investigating potential grid connection options, the most likely of which includes a 40km overhead transmission line connecting the Proposed Action to the Strathmore Substation, near Collinsville. While not considered part of staging of the Proposed Action, the Proponent acknowledges this as a facilitated impact related to the Proposed Action which will be delivered by a different entity and a separate EPBC Act Referral will be made in the future. It is expected that the MNES values will be consistent with those identified within the Proposed Action area.

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

The MNES Impact Assessment Report (Att. A, Section 3, pp. 8) for the Proposed Action outlines the specific Commonwealth regulatory framework associated with the Proposed Action. The Proposed Action is located in the Northern Queensland Renewable Energy Zone and the Australian Energy Market Operator's

Renewable Energy Zone Q4 (Isaac) and supports key energy policy areas identified by the Queensland Government, the Commonwealth Government and the Australian Energy Market Operator.

Additionally, applicable state and local regulatory frameworks have been identified below. These include:

Commonwealth Legislation

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Proposed Action has the potential to have a significant impact on MNES and therefore requires assessment under the EPBC Act. This referral addresses this act.
- EPBC Act Environmental Offsets Policy 2012 – This policy applies where a significant residual impact on an MNES is expected to occur as a result of the Proposed Action. The policy provides guidance on the role of offsets and when a proposed offset is considered suitable.

State Legislation

- *Planning Act 2016* (Planning Act), Planning Regulation 2017. The Planning Act guides development in Queensland, and the Planning Regulation 2017provides the operational requirements. Under the Planning Act, the Project will require a Material Change of Use Permit, assessed by the Department of State Development, Infrastructure, Local Government and Planning.
    - State Development Assessment Provisions (SDAP). The Project requires assessment against SDAP codes; State Code 16: Native Vegetation clearing and State Code 23: Wind Farm Development.
- *Nature Conservation Act 1992* (NC Act). The NC Act and associated Regulations provide a framework for the creation and management of protected areas and protection of native species. It includes designation of threatened species status and provides for protected plant trigger areas.
- *Vegetation Management Act 1999* (VM Act). The VM Act is the regulatory framework for the management of vegetation using the RE classification system. It regulates the broad-scale clearing of vegetation, with the intent of conserving remnant vegetation, preventing the loss of biodiversity, maintaining ecological processes and allowing for sustainable use. There are clearing exemptions for some work activities. A relevant purpose application for infrastructure will be submitted for approval under Section 22A of the VM Act.
- *Biosecurity Act 2014* (and Regulation). The *Biodiversity Act 2014* provides for the management of biosecurity risks in Queensland. It provides measures to safeguard Queensland economy, environment, agricultural and tourism industries and way of life from pests, diseases and contaminants. Restricted matters are assigned a category (or categories) from 1 to 7, with each category placing restrictions on the dealings with the matter.
- Environmental Offsets Framework (Environmental Offsets Act 2014 and Regulation, Environmental Offsets Policy Version 1.7). An environmental offset condition may be imposed under various State assessment frameworks for an activity that will or is likely to have a significant residual impact on a prescribed environmental matter that is a matters of state environmental significance. There is a guideline to assist in determining whether or not a significant residual impact is likely.
- *Fisheries Act 1994* (Fisheries Act). The Fisheries Act provides the principal legislative framework for the regulation around fishing activities and areas that are fish habitat within a given area. This outlines how activities are to be conducted given the importance of the habitat for fish. All waters are protected against degradation by direct or indirect impacts associated with development activities.

Measures designed to protect fisheries resources include the declaration of fish habitat areas, protection of marine plants and designation of waterways for fish passage.

- *Water Act 2000* (Water Act). The Water Act provides the framework for the planning and sustainable use and management of groundwater and surface water in Queensland. It also sets up conditions and controls the activities that may impact upon water resources and quality. The Watercourse Identification Map identifies watercourses and drainage features mapped under the Water Act.

Local Legislation

- Whitsunday Regional Planning Scheme 2017. The Project is located in the Whitsunday Regional Local Government Area, the Proposed Action will need to have consideration for the outcomes sought by the Whitsunday Regional Council.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

Engagement with the community and stakeholders is a key element of any development. Stakeholder engagement has been and will continue to be undertaken with community members, local landholders (neighbouring and proximate included), relevant Government agencies and other key stakeholders. The Draft Community and Stakeholder Engagement Plan (Att D. pp.1 -27) provides further detail on engagement undertaken by the Proponent.

Engagement with the community regarding the Proposed Action commenced in 2023. Community engagement has and will continue to be undertaken using a variety of techniques, including face to face events, phone calls, letters and online platforms. Through continued, targeted engagement, the Proponent is committed to ensuring public concerns and comments are considered, and that attempts are made to avoid, minimise or mitigate potential impacts where possible.

At the time of submission, the Proponent had developed and implemented their Draft Community and Stakeholder Engagement Plan (CCSEP) (Att D. pp.1 -27) for Proserpine Wind Farm. Stakeholder engagement was first undertaken with the landowners of the impacted properties and has been ongoing since 2022.

Renewable Energy Partners (REP) and the Gia Ngaro people executed a Cultural Heritage Management Agreement in February 2024 in line with Queensland State Cultural Heritage requirements.

Initial cultural heritage surveys have begun on the Proserpine Wind Farm area and will be ongoing as project development requires.

A Negotiation Protocol has been established to allow the negotiation of an Indigenous Land Use Agreement (ILUA) with the Gia Ngaro people and ILUA meetings are scheduled to begin in May 2024.

The ILUA will formalise REP’s commitment to the Gia Ngaro people and ensure the Traditional Owners enjoy economic benefits and opportunities to participate in the project throughout development, construction, and operation.

REP has engaged with the neighbouring Traditional Owners of the Proserpine Wind Farm and will enter separate negotiations for transmissions lines and easements on Birriah People and Juru People.

Indigenous consultation and engagement will be conducted in accordance with the Guidance for proponents on best practice Indigenous engagement under the EPBC Act.

Consultation with stakeholders about the project commenced in 2023 with a small number of interested parties. At various times, such groups have included:

- Landholders

- Traditional owners
- Local government
- Relevant state government departments
- Relevant federal government departments
- Relevant state government owned corporations
- Relevant ancillary infrastructure providers

The next stage of consultation begins in 2024 with engagement of the broader community, environment and community interest groups located within the following localities: Proserpine, Mount Pluto, Dittmer, Kelsey Creek, Silver Creek, Pauls Pocket, Goorganga Creek, Brady Creek, Foxdale, Collinsville, Scottville, Springlands, and Bogie.The objectives of engagement are to:

- Build strong and trusting connections with the community, host landowners/tenants and neighbours Increase impacted and interested stakeholders and community members trust in the process and acceptance of the Project.
- Provide stakeholders and community members with opportunities to provide meaningful and considered feedback on the Project.
- Ensure stakeholders and community members are aware of the Proserpine Wind Farm Community.
- Benefit Fund and how to make an application.
- Demonstrate to the community our sensitivity on cultural heritage, environmental and landscape matters.

Consultation activities to date include:

- March 2023, Stakeholder mapping and development of a comprehensive Community and Stakeholder engagement plan.
- April 2023, Preliminary project briefing with Whitsundays Regional Council.
- April 2023, Project website and social media pages , and 1800 number launched.
- November 2023, Project newsletter #1 published and sent to newsletter subscribers and landholders.
- February 2024, Cultural Heritage Management Agreement executed with Gia and Ngaro People, North Queensland Land Council.
- March 2024, Community benefit fund launched for the Proserpine and Bowen and surrounding communities.
- March 2024, Project briefing #2 with Whitsundays Regional Council.
- March 2024, Community engagement pop up stand outside Drakes Supermarket, Proserpine.
- April 2024, Project newsletter #2 published and sent to newsletter subscribers and landholders. Updated fact sheets and project information release on website.
- April 2024, Media release issued to Whitsunday Times in March.

Consultation findings to date include

- Local businesses need a clear plan of upcoming opportunities to ensure they can participate. Actions to address concerns include, working with local government and regional economic development groups to inform local supplier pipeline. Invite local businesses to sign up to the Project newsletter to stay up to date.
- Concern regarding impacts to roads and local traffic. Actions to address concerns include, working with local government and the local community to minimise impacts of vehicles on local roads. Aim to deliver permanent improvements to existing road infrastructure and minimise unnecessary ongoing maintenance costs.
- Concerns regarding noise and visual amenity. Actions to address concerns include developing and providing visual montages of the wind turbines once location are confirmed and carrying out noise monitoring and providing these results. REP will ensure neighbors and interested stakeholders understand any expected visual and noise impacts to their properties.

- Concerns regarding impact on local flora and fauna. Actions to address concerns include considered wind farm design to avoid impacts to State and National threatened species where possible and minimise impact to habitat, including foraging and breeding areas.

A 1800 number, website, project information email address and social media channels have all been established and will remain active at least until the operational phase of the Proserpine Wind Farm Project. The Public Project details are as per below:

Email

info@proserpinewindfarm.com.au

Phone

1800 4 RENEW (1800 473 639)

Website

www.proserpinewindfarm.com.au

LinkedIn

www.linkedin.com/company/proserpine-wind-farm/

Facebook

https://www.facebook.com/profile.php?id=100091531085567

The Proponent will continue to utilise a broad range of communication and consultation activities to support genuine community engagement.

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

See our Privacy Policy to learn more about accessing or correcting personal information or making a complaint. Alternatively, email us at privacy@awe.gov.au.

☑ **Confirm that you have read and understand this Privacy Notice ***

1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	12002773248
Organisation name	ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LIMITED
Organisation address	Level 14, 207 Kent Street, Sydney, NSW, 2000

Referring party details

Name	Michael Rookwood
Job title	Principal Consultant
Phone	+61730078478
Email	michael.rookwood@erm.com
Address	GPO Box 2892 Brisbane QLD 4001

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN	663915946
Organisation name	CI Proserpine Pty Ltd as the Trustee for CI Proserpine Trust
Organisation address	Level 11, 88 Tribune St, South Brisbane 4101, Australia

Person proposing to take the action details

Name	Haidar Etemadi
Job title	Senior Planner
Phone	1800 4RENEW
Email	het@bluepp.dk
Address	Level 11, 88 Tribune St, South Brisbane 4101, Australia

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

No

1.3.2.15 Are you proposing the action as part of a Trust? *

Yes

1.3.2.16 Describe the nature of the trust arrangement in relation to the proposed action. *

The Proposed Action will be taken by CI Proserpine Pty Ltd as trustee for the CI Proserpine Trust. The Project itself is owned by the Trust, which acts through the Trustee entity appointed to represent the Trust and control its assets. As is customary for projects of this nature, the Trustee will assume the rights, obligations and liabilities for and on behalf of the Trust, including in respect of the Proposed Action.

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

CI Proserpine Pty Ltd has a satisfactory record of responsible environmental management. CI Proserpine Pty Ltd has not been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources.

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

The person proposing to take the action (CI Proserpine Pty Ltd) is a special purpose vehicle established to deliver the Project. Environmental policy and planning framework documentation is not yet available for the Proposed Action.

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

No

1.3.3.2 Is Proposed designated proponent an organisation or business? *

Yes

Proposed designated proponent organisation details

ABN/ACN	95630955869
Organisation name	RENEWABLE ENERGY PARTNERS PTY LTD
Organisation address	4000 QLD

Proposed designated proponent details

Name	Bond Watson
Job title	General Manger - Wind
Phone	+61 402 326 117
Email	bwatson@repartners.com.au
Address	L6 200 Adelaide Street Brisbane QLD 4000 Australia

1.3.4 Identity: Summary of allocation

Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN	12002773248
Organisation name	ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LIMITED
Organisation address	Level 14, 207 Kent Street, Sydney, NSW, 2000
Representative's name	Michael Rookwood

Representative's job title	Principal Consultant
Phone	+61730078478
Email	michael.rookwood@erm.com
Address	GPO Box 2892 Brisbane QLD 4001

Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	663915946
Organisation name	CI Proserpine Pty Ltd as the Trustee for CI Proserpine Trust
Organisation address	Level 11, 88 Tribune St, South Brisbane 4101, Australia
Representative's name	Haidar Etemadi
Representative's job title	Senior Planner
Phone	1800 4RENEW
Email	het@bluepp.dk
Address	Level 11, 88 Tribune St, South Brisbane 4101, Australia

Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

ABN/ACN	95630955869
Organisation name	RENEWABLE ENERGY PARTNERS PTY LTD
Organisation address	4000 QLD
Representative's name	Bond Watson
Representative's job title	General Manger - Wind
Phone	+61 402 326 117
Email	bwatson@repartners.com.au

Address	L6 200 Adelaide Street Brisbane QLD 4000 Australia

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

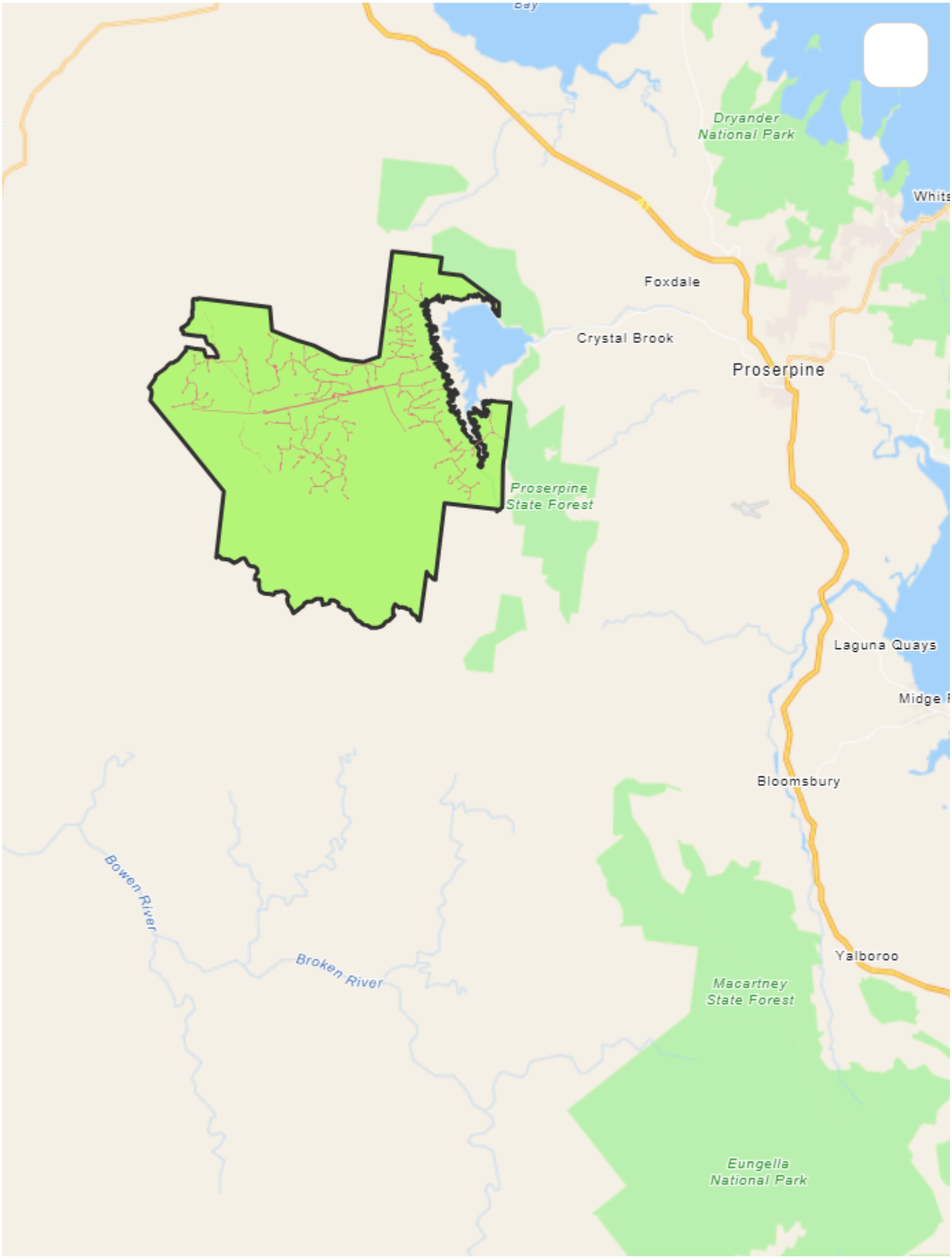
1.4 Payment details: Payment allocation

1.4.11 Who would you like to allocate as the entity responsible for payment? *

Proposed designated proponent

2. Location

2.1 Project footprint



Project area = 52431.04 Ha Disturbance footprint = 1638.4 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Pretty Bend Rd, Bogie QLD 4805 and Station Rd, Lake Proserpine QLD 4800

2.2.2 Where is the primary jurisdiction of the proposed action? *

Queensland

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

The existing land use within the Study Area and its surrounds is predominantly rural, characterised by cattle grazing. The Study Area incorporates three properties (Proserpine, Pretty Bend and Hawkstone Park) which is made up of four lands lease lots and one freehold lot (Att. A, Section 2.1, p. 3).

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

The Study Area occurs across two bioregions as defined by the Interim Biogeographic Regionalisation for Australia (IBRA) framework, the Central Queensland Coast and Brigalow Belt. Ecological and geological variance feature heavily in the Study Area with land zones of alluvial river flats, loamy and sandy plains and granite ridges, hills and lowlands, as well as a floristic makeup of riparian melaleuca woodland, open eucalypt woodland, dry rainforest and deciduous to semi-evergreen vine forest.

The Study Area contains stream order 1-5 watercourses mapped under the VM Act. Disturbance within these watercourses will be limited to linear infrastructure such as access tracks and electrical reticulation infrastructure.

The Study Area has been classified into seven broad habitat types based on data gathered over three separate field survey events. Mapped vegetation communities and habitats represent potential habitat for a variety of taxon (Att. A, Section 6.2, pp. 28-38). The mapped vegetation communities and broad habitat types are:

- *Melaleuca spp*. open forest and woodland on creeks and sandy plains;
- *Eucalyptus spp*. fringing riparian forest and woodland associated with drainage lines;
- *Eucalyptus platphylla* +/- *drepanophylla* +/- *tereticornis* woodland associated with plains and low rises;
- *Eucalyptus* and *Corymbia spp.* Open woodland to woodland associated with hills and plateaus;
- Semi-evergreen to evergreen vine thickets associated with hills and drainage lines;
- Dams, waterbodies and watercourses; and
- Cleared paddock land.

All land zones and broad habitat types that occur within the Study Area provide some extent of suitable habitat function for a known or likely to occur MNES species. Queensland State mapping has confirmed the Study Area is predominately remnant vegetation, with ground-truthing during field surveys identifying large swathes of vegetation in good condition, with microhabitat features like mature hollows, large trees and rocky outcrops that provide essential habitat services for MNES present throughout the Study Area. Structurally, the Study Area is dominated by remnant eucalypt forest, with open bloodwood and ironbark woodland to more closed poplar gum and river gum forest occurring throughout. Dry rainforest, melaleuca woodland, riparian vegetation and deciduous to semi-evergreen vine forest communities also occur in patches throughout the Study Area.

No protected areas are located within the Study Area. Three State and Territory Reserves occur within 20 km of the Study Area; Flagstone Nature Refuge, Andromache Conservation Park, and Bosel’s Nature Reserve.

3.1.2 Describe any existing or proposed uses for the project area.

Existing Uses

The Proposed Action is located in the Rural Zone under the Whitsunday Planning Scheme (2017), with the predominant land use within the Study Area and the adjacent localities being cattle grazing, though a high percentage of the Study Area is relatively undisturbed, remnant vegetation. To the east of the Proposed Action, the Peter Faust (Lake Proserpine) Dam is located in the Community Facilities Zone and the State

Forests located in the Environmental Management and Conservation Zone under the Whitsunday Planning Scheme. These areas are used for conservation and recreational purposes. Areas to the north, south and west of the Project are located in the Rural Zone under the Whitsunday Planning Scheme with the predominant land use being cattle grazing.

Proposed Use

The total disturbance footprint is anticipated to be 1,633.7 ha in area, accounting for 3.1% of the total Study Area (refer to Att. A, Section 2.2, pp. 3). The intended land use will not change substantially, except in areas directly utilised for the Proposed Action. In these areas where the land tenure is leasehold, an additional purpose of 'renewable energy' will be sought for the relevant lease.

Land not occupied by infrastructure following the construction and rehabilitation period will continue to be used for rural and agricultural purposes. It is anticipated that access tracks established as part of the construction of the Proposed Action will aid in ongoing agricultural and access activities.

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

There are no natural features and/or important or unique values specific to the Study Area.

3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The Study Area is topographically variable with land zones of alluvial river flats occurring primarily in the east and northwest, where creeks drain into Peter Faust (Lake Proserpine) Dam and out of the Don River, respectively. Loamy and sandy plains occur throughout the centre of the Study Area, with boulder-strewn granite ridges and hills dominating the landscape in the south, the northeast, along the western boundary, and through the central north-south ridge that separates the properties. Transitions between these landforms in the Study Area are generally steep and rough in terrain, with inclines exceeding 400 m in height and up to 500 m in some cases.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

Field Surveys

Field investigations were conducted over five separate events in a period from December 2022 to November 2023. These involved a range of survey methods including vegetation assessments, habitat assessments, and target flora and fauna surveys (including bird utilisation surveys (BUS)). The field investigations and methods are described in the MNES Impact Assessment Report (Att. A, Section 4.3, pp.10-17).

Five field surveys are as follows:

- Six ecologists from 5-9 December 2022 with a total of 300 person hours on ground. The survey involved targeted threatened and/or migratory species surveys (including BUS and bat surveys), vegetation and habitat assessments.
- Two ecologists from 13-18 February 2023 with a total of 100 person hours on ground. The survey involved BUS and bat surveys.
- Six ecologists from 1-6 May 2023 with a total of 300 person hours on ground. The survey involved broadening survey coverage to less-accessible areas of the Study Area, targeted threatened and/or migratory species surveys (including BUS and bat surveys), vegetation and habitat assessments.
- Two ecologists from 24-28 July 2023 with a total of 100 person hours on ground. The survey involved broadening survey coverage to less-accessible areas of the Study Area, terrestrial habitat quality assessments, quaternary vegetation assessments, targeted threatened and/or migratory species surveys (including BUS and SAT surveys).
- Six ecologists from 20-25 November 2023 with a total of 300 person hours on ground. The survey involved broadening the survey coverage to less accessible areas of the Study Area, terrestrial habitat quality assessments, quaternary vegetation assessments, and seasonal BUS.

Flora and Fauna

Most of the Study Area is mapped as Category B remnant or regrowth vegetation with Regional Ecosystem (RE) types classed (under the VM Act) as Least Concern (41,391 ha), Of Concern (7,256.2 ha) and small patches of Endangered (984.6 ha). The majority of remnant vegetation present within the Study Area is associated with open eucalypt woodlands, and these RE types account for 46,874.54 ha (or 86% of the Study Area).

Field investigations identified the potential for Broad Leaf Tea-tree (*Melaleuca viridflora*) Woodlands in High Rainfall Coastal Nort Queensland Threatened Ecological Community (TEC) to occur within the Study Area.

Additionally, the following native species were identified as known or likely to occur:

- Black ironbox (*Eucalyptus raveretiana*);
- Squatter pigeon (southern) (*Geophaps scripta scripta*);
- Fork-tailed swift (*Apus pacificus*);
- Spectacled monarch (*Symposiachrus trivirgatus*);
- Rufous fantail (*Rhipidura rufifrons*);
- Osprey (*Pandion haliaetus*)
- Koala (*Phascolarctos cinereus*);
- Northern quoll (*Dasyurus hallucatus*);
- Proserpine rock-wallaby (*Petrogale persephone*); and
- Greater glider (southern and central) (*Petauroides volans*).

Additionally, the following invasive species were identified as known or likely to occur:

- Cane toad (*Rhinella marina*);

- Cat (*Felis cattus*);
- Dingo/wild gog (*Canis lupus*);
- Camel (*Camelus*);
- European red fox (*Vulpes vulpes*);
- Mustang/wild horse (*Equus caballus*);
- Lantana (*Lantana camara*);
- Opuntia (*Opuntia spp*.);
- Flannel weed (*Sida cordifolia*);
- White eye (*Richardia brasiliensis*);
- Blue billygoat (*Ageratum houstonianum*);
- Red-head cotton bush (*Asclepias curassavica*);
- Round-leaf cassia (*Chamaecrista rotundifolia*);
- Giant rat's tail grass (*Sporobolus pyramidalis*);
- Red natal grass (*Melinis repens*);
- Mexican prickly poppy (*Argemone ochroleuca*);
- Crotolaria (*Crotoloaria spp.*);
- Sticky Stylo (*Stylosanthes viscosa*);
- Unbrella grass (*Cyperus involucratus*);
- Crab's eye (*Abrus precatorius);*
- Tropical girdlepod (*Mitracarpus hirtus);*
- Rhodes grass (*Chloris spp*.);
- Mimosa (*Mimosa pigra);*
- Devil's Fig (*Solanum hispidum*).

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

The Study Area is comprised of two main properties, Pretty Bend and Proserpine, and occurs across two bioregions as defined by the IBRA framework, the Central Queensland Coast and Brigalow Belt. Several environmental features of high ecological value occur within the Locality of the Study Area. Peter Faust Dam borders the Study Area on the eastern side of its Proserpine property, with Proserpine State Forest also running along the eastern border to the immediate south of the lake. The Don River, a high stream order ephemeral creek originating in Bowen 40 kms to the north, also flows into the Study Area before dispersing into numerous tributaries in the northwest of the Pretty Bend property.

The Study Area is topographically variable with land zones of alluvial river flats occurring primarily in the east and northwest, where creeks drain into Peter Faust Dam and out of the Don River, respectively. Loamy and sandy plains occur throughout the centre of the Study Area, with boulder-strewn granite ridges and hills dominating the landscape in the south, the northeast, along the western boundary, and through the central north-south ridge that separates the properties. Transitions between these landforms in the Study Area are generally steep and rough in terrain, with inclines exceeding 400 m in height and up to 500 m in some cases.

Remnant vegetation communities of riparian and open melaleuca woodland, diverse open eucalypt forest and woodland, dry rainforest and deciduous to semi-evergreen vine forest occur throughout the Study Area, with patches of grazed agricultural land also occurring on both properties. Cattle grazing is the primary land use of both properties in the Study Area, though a high percentage of relatively undisturbed, remnant vegetation is present throughout the Study Area.

The Study Area has been classified into seven broad habitat types, defined based on vegetation type and structure. These broad habitat types have then been delineated into respective foraging, breeding, denning and dispersal functions for listed threatened species that are known or likely to occur within the Study Area.

The landscape context and vegetation across the Study Area are further described and mapped within the MNES Impact Assessment Report (Att. A, Section 6.1 and 6.2, pp. 28-38).

3.3 Heritage

3.3.1 Describe any Commonwealth heritage places overseas or other places recognised as having heritage values that apply to the project area.

A review of Local, State and National Heritage Registers identified no sites within the Study Area. Refer to the response to question 3.3.2 for information on Indigenous and non-Indigenous heritage.

3.3.2 Describe any Indigenous heritage values that apply to the project area.

The Proponent's Native Title and Cultural Heritage Due Diligence determined the Study Area is located across an area with two persons who hold, or may hold, Native Title: Gia and Ngaro People and Juru People. The Gia and Ngaro People are presently working through their Native Title Claim and the Juru People are represented by the Kyburra Munda Yalga Aboriginal Corporation (KMYAC) RNTBC. There is one cultural heritage site located within the Study Area (Att C, pp. 7):

- GJ:A71
  - Latitude: -20.398453
  - Longitude: 148.309246
  - Date recorded: 01/12/1985
  - Attribute: Artefact Scatter
  - Cultural Heritage Party: Gia People

The Proposed Action will require an Area Agreement Indigenous Land Use Agreement (ILUA) with the Gia and Ngaro People, a Body Corporate ILUA with KYMAC, a Cultural Heritage Management Agreement (CHMA), and a Cultural Heritage Management Plan (CHMP) with both parties where activities are proposed in their respective areas. While the ILUA addresses Native Title through recognition of the traditional rights and interests of the respective Native Title parties, the CHMA will address the Aboriginal Cultural Heritage Act 2003 (QLD) through effective recognition, protection, and conservation of Aboriginal Cultural Heritage throughout the Study Area.

Given the Study Area is largely over the Gia and Ngaro People's lands and waters, the Proponent has mostly engaged and consulted with Gia and Ngaro People thus far, and will engage with the Juru People in 2024, all to enable long-term commitment and implementation of Native Title recognition and Cultural

Heritage management.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

The Study Area comprises a large section of land and as such has numerous watercourses existing within, and traversing in and out of, the Study Area. The primary watercourses within the Study Area are the Don River and a small section of the Proserpine River. Most of the numerous watercourses are tributaries that connect to these two systems. An Erosion Risk Technical Memorandum has been prepared for the Project (Att B, pp. 1-33). It should be noted that a full hydrology assessment is still to be prepared for the Project.

These watercourses are stream orders 1-5. There are also a number of minor tributaries that drain from these waterways. DNR provides mapping for ‘vegetation management watercourses and drainage features’ that are used when assessing MSES. Some small dams also occur throughout the Study Area. These are generally of moderate quality depending on size and are generally heavily used and impacted by cattle.

In accordance with the Development Assessment Mapping System (DAMS) mapping, there is one small wetland designated as MSES high ecological significance. This wetland is associated with a small section of the southern extent of Proserpine River within the Study Area. This wetland occurs where the southern drainage extent would result in low drainage areas and the formation of a small thin wetland along the watercourse.

There are multiple watercourses located to the south of the Lot 2 on SP225072 and the south-eastern section of the Lot 3585 on PH1353 which contain watercourses designated as high ecological value. The range in the north-eastern extent of Lot 3 on HR1975 also contains multiple watercourses of this category.

There are no wetlands of international importance associated with the Study Area.

The Project is located some 20 km from the coast and the Great Barrier Reef Marine Park (GBRMP). The GBRMP is a highly sensitive environmental receptor. It is noted in relation to the GRBMP, the western portion of the Project located in the Don River Catchment flows 50km downstream to the northeast before reaching the east coast and GBRMP, with the eastern portion of the Project located in the Proserpine River Catchment which flows into Lake Proserpine, having no impact on the GBRMP downstream (Att B, pp. 2).

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project is located some 20 km from the coast and the Great Barrier Reef which is considered a World Heritage Area. The World Heritage Area generally matches the spatial extent of the GBRMP. It is noted in relation to the GRBMP, the western portion of the Project located in the Don River Catchment flows 50km

downstream to the northeast before reaching the east coast and GBRMP, with the eastern portion of the Project located in the Proserpine River Catchment which flows into Lake Proserpine, having no impact on the GBRMP downstream (Att B, pp. 2).

The Erosion Risk Technical Memorandum has found that the with the implementation of best practice management controls, given the size of the catchments (the Don basin (374,512 ha) in the Burdekin Region and the Proserpine basin (250,002 ha)) relative to the disturbance footprint, the location of the Study Area in relation to downstream impacts (50 km from coast), and Project staging over a number of years (allowing for progressive disturbance and rehabilitation), the overall risk posed by the Project to GBR water quality is considered to be low (Att B, pp. 8).

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Project is located some 20 km from the coast and the Great Barrier Reef which is considered a National Heritage Place. The National Heritage Place generally matches the spatial extent of the GBRMP. It is noted in relation to the GRBMP, the western portion of the Project located in the Don River Catchment flows 50km downstream to the northeast before reaching the east coast and GBRMP, with the eastern portion of the Project located in the Proserpine River Catchment which flows into Lake Proserpine, having no impact on the GBRMP downstream (Att B, pp. 2).

The Erosion Risk Technical Memorandum has found that the with the implementation of best practice management controls, given the size of the catchments (the Don basin (374,512 ha) in the Burdekin Region and the Proserpine basin (250,002 ha)) relative to the disturbance footprint, the location of the Study Area in relation to downstream impacts (50 km from coast), and Project staging over a number of years (allowing for progressive disturbance and rehabilitation), the overall risk posed by the Project to GBR water quality is considered to be low (Att B, pp. 6).

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.3.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

There are no Ramsar Wetlands within the Study Area or within the vicinity of the Study Area.

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
Yes	No	Dasyurus hallucatus	Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu]
No	No	Denisonia maculata	Ornamental Snake
No	No	Dichanthium setosum	bluegrass

Direct impact	Indirect impact	Species	Common name
No	No	Egernia rugosa	Yakka Skink
No	No	Erythrotriorchis radiatus	Red Goshawk
Yes	No	Eucalyptus raveretiana	Black Ironbox
No	No	Falco hypoleucos	Grey Falcon
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
Yes	No	Geophaps scripta scripta	Squatter Pigeon (southern)
Yes	No	Hirundapus caudacutus	White-throated Needletail
No	No	Macroderma gigas	Ghost Bat
No	No	Neochmia ruficauda ruficauda	Star Finch (eastern), Star Finch (southern)
No	No	Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew
No	No	Omphalea celata	
No	No	Petauroides minor	Greater Glider (northern), Greater Glider (north-eastern Queensland)
Yes	No	Petauroides volans	Greater Glider (southern and central)
Yes	No	Petrogale persephone	Proserpine Rock-wallaby
No	No	Phaius australis	Lesser Swamp-orchid
Yes	No	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
No	No	Phlegmariurus tetrastichoides	Square Tassel Fern
No	No	Poephila cincta cincta	Southern Black-throated Finch
No	No	Polianthion minutiflorum	
No	No	Pteropus poliocephalus	Grey-headed Flying-fox
No	No	Rostratula australis	Australian Painted Snipe
No	No	Samadera bidwillii	Quassia
No	No	Solanum graniticum	Granite Nightshade
No	No	Taudactylus eungellensis	Eungella Day Frog
No	No	Tringa nebularia	Common Greenshank, Greenshank

Direct impact	Indirect impact	Species	Common name
No	No	Tyto novaehollandiae kimberli	Masked Owl (northern)

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Broad leaf tea-tree (Melaleuca viridiflora) woodlands in high rainfall coastal north Queensland
No	No	Poplar Box Grassy Woodland on Alluvial Plains

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

In general, potential impacts from the construction phase relate to habitat loss and disturbance. Operational impacts are largely limited to possible bird and bat collisions with operational WTGs. Decommissioning impacts are similar to those that may occur during the construction phase but likely to be of much lower magnitude as there is no additional vegetation clearing during the decommissioning phase. Direct disturbance to MNES will be habitat loss and degradation, which arises from disturbance to native vegetation (predominantly by land clearing).

Based on field survey observations and desktop review seven threatened species have been concluded as known or likely to occur within the Study Area. Direct impacts to these species are discussed in the following sections, further information is discussed in the MNES Impact Assessment Report (Att. A, Section 7.2, pp. 105-106). Indirect impacts as a result of the proposed development are discussed in the MNES Impact Assessment Report (Att. A, Section 7.1, pp. 101-104).

Black Ironbox (*Eucalyptus raveretiana*)

The proposed development has the potential to have a direct impact on 6.7 ha of potential habitat for the species. Potential habitat for the species has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-3, pp. 47).

Squatter Pigeon (southern) (*Geophaps scripta scripta*)

The proposed development has the potential to have a direct impact on 1,630.8 ha of potential habitat for the species. Potential habitat for the species has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-5, pp. 56).

White-Throated Needletail (*Hirundapus caudacutus*)

The Study Area can be considered as containing potential foraging habitat throughout all broad habitat types available, as no impediment is present for this species that would prevent it foraging over one broad habitat type and not another. The species is almost exclusively aerial while in Australia, impact from the

proposed development is likely to be associated with turbine collision. Given the above, no habitat has been mapped for the species. Additional information on this species is provided in the MNES Impact Assessment Report (Att. A, Section 6.3.3.1, pp. 57).

Koala (*Phascolarctos cinereus*)

The proposed development has the potential to have a direct impact on 1,338.8 ha of potential breeding and foraging habitat and 124.3 ha of potential dispersal habitat for the species. Potential habitat for the species has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-6, pp. 61).

Northern Quoll (*Dasyurus hallucatus*)

The proposed development has the potential to have a direct impact on 3.1 ha of potential denning habitat and 90.1 ha of potential dispersal and foraging habitat for the species. Potential habitat for the species has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-7, pp. 65).

Proserpine Rock-Wallaby (*Petrogale Persephone*)

The proposed development has the potential to have a direct impact on 7.1 ha of potential denning habitat and 68.7 ha of potential foraging habitat for the species. Potential habitat for the species has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-8, pp. 69).

Greater Glider (southern and central) (*Petauroides Volans*)

The proposed development has the potential to have a direct impact on 1,275 ha of potential denning and foraging habitat and 131.0 ha of potential dispersal and foraging habitat for the species. Potential habitat for the species has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-9, pp. 73).

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

Yes

4.1.4.5 Describe why you consider this to be a Significant Impact. *

A full MNES Significant Impact Assessment is provided as Appendix D of the MNES Impact Assessment (Att. A, Appendix D, pp. 220-258). This assessment has demonstrated potential impacts to black ironbox, northern quoll and Proserpine rock-wallaby are unlikely to be significant. Potential impacts to white-throated needletail have the potential to be significant and potential impacts to squatter pigeon (southern), koala and greater glider are likely to have a significant impact.

Black Ironbox (*Eucalyptus raveretiana*)

It was concluded that the proposed development is unlikely to cause a significant impact to black ironbox. Impacts to black ironbox are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.1, pp. 221-224).

The Proposed Action will result in clearing of 6.7 ha of black ironbox habitat (0.7% of total species habitat within the Study Area).

This species occurs across 23 known sites from Nebo to Ayr, and Apis Creek to Rockhampton, with the majority of these sites on roadsides, freehold land and leasehold land (Halford, 1997).

Given the extensive observations of black ironbox throughout the Study Area (more than 50 individuals recorded over five distinct locations in the Don River and its tributaries), it is possible black ironbox habitat within the Study Area constitutes an important population.

However, through active design to avoid and minimise placement of infrastructure in mapped areas, clearing from the Proposed Action is projected to mostly avoid black ironbox habitat. Proposed impacts occur in limited linear areas of habitat. Micro-siting and pre-clearance surveys within areas of proposed infrastructure will further reduce clearing of habitat for this species.

Operating under this assumption, it is unlikely an impact of 6.7 ha (0.7%) to black ironbox habitat will lead to a significant impact to the species.

Squatter Pigeon (southern) (*Geophaps scripta scripta*)

It was concluded that the Proposed Action is likely to cause a significant impact to squatter pigeon. Impacts to the squatter pigeon are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.2, pp. 224-227).

A total of 1,630.8 ha of southern squatter pigeon habitat (3.4% of total habitat available) is expected to be cleared within the Study Area.

There is abundant southern squatter pigeon breeding and foraging habitat mapped to occur within the Study Area (52,258.3 ha) and it has been concluded that this habitat may represent habitat critical to the survival of the species due to the numerous observations of this species during the field surveys (66 individuals over 12 months).

Therefore, the clearing of 1,630.8 ha of southern squatter pigeon habitat (3.4% of total habitat within the Study Area) is likely to lead to an adverse impact to habitat critical to the survival of the species and lead to a significant impact to the species.

Koala (*Phascolarctos cinereus*)

It was concluded that the Proposed Action is likely to cause a significant impact to koala. Impacts to the koala are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.3, pp. 227-231).

Koala habitat within the development footprint has been concluded to be habitat critical to the survival of the species as it provides foraging, breeding, and dispersal functions.

Furthermore, the majority of koala habitat within the development footprint is likely to support high ecological value breeding and foraging function.

Despite the implementation of mitigation measures including pre-clearance surveys and micro-siting of planned infrastructure, retention of dispersal and movement function through low impact to dispersal habitat and linear WTG design, there is potential the Proposed Action will adversely affect habitat critical to the survival of the species and/or reduce the area of occupancy of the species due to the volume of high-value breeding and foraging habitat impacted.

Therefore, an impact to 1,338.8 ha of koala breeding and foraging habitat (4.1% of this habitat within the Study Area) and 124.3 ha of koala dispersal habitat (0.8%) is considered likely to have a significant impact to the species.

Northern Quoll (*Dasyurus hallucatus*)

It was concluded that the Proposed Action is unlikely to cause a significant impact to the northern quoll. Impacts to the northern quoll are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.4, pp. 232-235).

Northern quoll habitat available within the Study Area has been concluded to not include habitat critical to the survival of the species.

Majority of denning habitat has been avoided through active design to avoid and minimise placement of infrastructure in mapped areas. Therefore <1% of denning habitat will be impacted. Additionally, only a small proportion (212 ha or 1.9%) of foraging habitat will be disturbed as a result of the proposed

development, and post construction, it is expected that foraging can still occur in rehabilitated areas that had been previously disturbed.

It was therefore concluded that such a small impact is unlikely to cause a significant impact to the species.

Proserpine Rock-wallaby (*Petrogale Persephone*)

It was concluded that the Proposed Action is unlikely to cause a significant impact to the Proserpine Rock-wallaby. Impacts to the Proserpine rock-wallaby are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.5. pp 235-238). The Proserpine rock-wallaby was potentially detected within the Study Area during the May 2023 survey event on a camera trap within the west of the Study Area and during the December 2022 survey event on a camera trap within the east of the Study Area, however cannot be confirmed due to uncertainty with species identification. The images captured of rock-wallaby species by the camera trap were checked by expert Dr. Mark Eldridge and thought more likely to represent individuals of *Petrogale inornata* (Unadorned rock-wallaby), though noted that 100% positive identification could not be provided from these images.

Proserpine rock-wallaby habitat available within the Study Area has been concluded to not include habitat critical to the survival of the species.

Majority of denning habitat has been avoided through active design to avoid and minimise placement of infrastructure in mapped areas. Therefore <1% of denning habitat will be impacted. Additionally, only a small proportion (168 ha or 2.6%) of foraging habitat will be disturbed as a result of the proposed development, and post construction, it is expected that foraging can still occur in rehabilitated areas that had been previously disturbed.

It was therefore concluded that such a small impact is unlikely to cause a significant impact to the species.

Greater Glider (*Petauroides Volans*)

It was concluded that the Proposed Action is likely to cause a significant impact to the greater glider. Impacts to the greater glider are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.6, pp. 238-242).

It is considered likely that several populations of greater glider occur within the Study Area. The species has been recorded in five distinct locations across the Study Area, a total of 24 individuals.

Greater gliders are highly susceptible to native forest clearance and disturbance (Tyndale-Biscoe & Smith, 1969) and can become locally extinct in small and fragmented habitat patches as the species relies heavily on the presence of suitable microhabitat (hollow-bearing trees) which can take more than a century to develop. (DCCEEW, 2022)

As such, the impact of habitat clearing for this species can have much larger effects on ecological function and suitability for this species than we could otherwise predict based purely on the volume of clearing alone.

Despite mitigation measures being applied during design, a disturbance to 917 ha of high-value denning and foraging habitat is likely to result in the long-term decrease in the size of one or more of the aforementioned population, decrease the areas of occupancy of the species, and/or decrease the area of habitat critical to the survival of the species.

White-throated Needletail (*Hirundapus caudacutus*)

It was concluded that the Proposed Action has the potential to cause a significant impact to the whitethroated needletail. Impacts to the white-throated needletail are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.7, pp. 242-244).

White-throated needletail is almost exclusively aerial while in Australia, and therefore the entire Study Area (52,258 ha) is considered aerial foraging habitat (DAWE, 2015). The construction of 166 WTG is predicted to impact foraging habitat (airspace above the Study Area) by creating a turbine collision risk. Turbine collision associated with the Proposed Action is expected to be a greater risk for the species than clearing of terrestrial habitat.

More than 400 individuals of white-throated needletail were recorded over several days within the Study Area during the November 2023 field investigations. Collision risk modelling has determined, at a 95% avoidance rate, collision risk for this species as 0.0141 turbine strikes per year.

The minimum threshold for an ecologically significant impact to a population for white-throated needletail is 10 individuals (DAWE, 2015). The modelled impact to this species over the proposed development lifetime, an approximately 35-year period, is 0.5 strikes, and therefore the ecological significant impact is not expected to be reached.

However, there is potential that the encumbrance of aerial foraging habitat for this species by WTG within the Study Area will affect foraging habitat for approximately 400 individuals and therefore has a potential to have a significant impact on the species.

4.1.4.7 Do you think your proposed action is a controlled action? *

Yes

4.1.4.8 Please elaborate why you think your proposed action is a controlled action. *

Based on the Significant Impact Assessments undertaken in accordance with the significant impact guidelines (DoE, 2013) (Att. A, Appendix D, pp. 220-258), the Proposed Action is likely to have significant impact to three EPBC Act listed threatened species, including:

- Squatter Pigeon (southern) (*Geophaps scripta scripta*) - The Proposed Action has the potential to impact on 1388.0 ha of potential breeding habitat for the species.
- Koala (*Phascolarctos cinereus*) - The Proposed Action has the potential to impact on 1,338.8 ha of potential breeding or foraging habitat and 124.3 ha of potential shelter and dispersal habitat for the species.
- Greater Glider (*Petauroides Volans*) - The Proposed Action has the potential to impact on 1,275.6 ha of potential denning and foraging habitat and 131.0 ha of potential dispersal and foraging habitat.

Additionally, the Proposed Action has the potential to have significant impact to one EPBC Act listed threatened species:

- White-throated Needletail (*Hirundapus caudacutus*) - The Proposed Action has the potential to impact on terrestrial habitat for the species.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Potential impacts of the proposed activities will be managed in a manner consistent with the management approaches for wind farm activities, and, where relevant, additional measures will be implemented.

The first element of impact mitigation was determining turbine design and layout based on avoidance of vegetation and potential habitat mapped during field investigations. This included minimising the impact to regulated vegetation and threatened species habitat.

Field investigations identified several MNES confirmed as known, likely, or potentially occurring, on site. Habitats for these threatened species were mapped and design constraints identified to avoid and minimise infrastructure in each of these areas. For example, the design aimed to avoid placement of access tracks in mapped Black iron box habitat where possible. In areas where avoidance was not possible, targeted surveys were conducted to verify the location of Black iron box individuals before access tracks were mapped. This allowed wind farm design to avoid established individuals.

Similarly, for the (potential) Proserpine rock-wallaby and Northern quoll, placement of infrastructure in mapped potential breeding and shelter habitat were avoided. Where this was not possible, infrastructure in these areas was minimised. Potential koala, greater glider, and squatter pigeon habitat was more extensive across the site, therefore infrastructure was located in areas with lower quality habitat, such as previously disturbed areas where possible.

The next stage of the design process will involve targeted surveys to confirm habitat boundaries for areas with planned infrastructure. Results of these surveys will inform further design works to avoid and minimize impacts. For example, any infrastructure within 450m of a mapped potential Proserpine rock-wallaby breeding and shelter area will be surveyed to confirm the habitat boundary and occupation status. If the area is confirmed as occupied, infrastructure will be redesigned to minimise impacts. Similarly, further detailed design will be carried out to minimise edge effects and to ensure appropriate corridors are retained for glider and koala dispersal.

The second part of the impact mitigation effort will involve on the ground micro-siting at each location proposed for infrastructure.

At each location of proposed infrastructure, following detailed design and prior to construction, detailed site-specific pre-clearance surveys will be completed to ensure further avoidance of ecological values. These surveys will inform micro-siting of infrastructure as required as part of the final design for the proposed development.

The following additional overarching principles will be applied during the next stages of the project to further avoid, minimise, and mitigate impacts.

Loss of existing native vegetation

- Areas of remnant and regrowth vegetation to be avoided at the design and micro-siting stages, where practicable.
- Areas of threatened flora and fauna habitat will be avoided at design and micro-siting stages, where practicable.
- A Vegetation Management Plan will be developed and implemented to ensure that clearing is undertaken in accordance with legislative standards and requirements.
- Progressive restoration of access corridors will occur once construction has been completed. For example, access tracks will reduce impact from 40 m down to a nominal 20 m.

Weed and pest control

- A Biosecurity Plan will be developed and implemented for the proposed development. This will include measures such as vehicle clean downs, weed hygiene declaration and obligations for vehicles to remain on access tracks throughout the Study Area.
- Weed management and control methods will depend upon location, weed species identified, the degree of the infestation, relevant landholder agreement or conduct and compensation agreements provisions, and local, state and national regulatory requirements.
- Imported material able to transport and facilitate the spread of weed and seeds will require a weed hygiene declaration and be assessed to ensure they are free of contamination, disease and invasive weeds.
- Weeds of National Significance (WONS) and Invasive species will be identified and monitored in the Study Area. Appropriate weed monitoring will occur to ensure new weed species are identified,

recorded and managed appropriately.

Mortality or injury to native fauna

A Bird and Bat Management Plan will be produced in order to implement impact mitigation measures for the proposed development.

- A Fauna Management Plan will be developed to implement impact mitigation measures for the proposed development.
- During vegetation clearing activities fauna management will be implemented that may include preclearing surveys, fauna spotter-catcher supervision and methods to reduce impacts as set out in a fauna management plan.
- No driving will occur in unauthorised areas, and in other areas will be carried out at safe speeds adopted to the road conditions.
- Injured, sick or dead fauna will be recorded and reported during construction. This can be carried out by a fauna spotter- catcher.
- Impacts from turbine collision to bats and birds will be monitored.
- Areas of bird habitat including known nests will be avoided in the design and then further avoided when micro siting occurs, where practicable.
- WTGs have been sited away from key bird and bat habitats (waterways and drainage lines) where practicable. Micro siting will also aim to avoid large remnant trees where possible and any large nests identified on site.

Impacts from turbine collision to bats and birds

- A Bird and Bat Management Plan will be produced in order to implement impact mitigation measures for the proposed development.
- Areas of bird habitat including known nests will be avoided in the design and then further avoided when micro siting occurs, where practicable.

Barotrauma

- As mentioned for impacts from turbine collision, a BBMP will be designed to assist in mitigating impacts to bats, including additional surveys prior to determining final design.
- Impact mitigation is primarily ensuring the turbine layout largely avoids microbat habitat, which includes woodlands and open forests. To reduce impacts to canopy flyover foragers.
- Additionally, reducing lights on operating turbines will help to reduce insect presence, thus limiting potential feeding opportunities for bats close to the turbines.

Disturbance to MNES

- Two-stage impact avoidance process will continue to be implemented which avoids stands ecological values at the layout/design phase, and pre-construction phase.
- Infrastructure will be located to first avoid and then minimise the impacts of edge effects or dissecting tracts of native vegetation so that species dispersal is not significantly impeded.
- Vegetation will only be removed that has been approved to be cleared.
- Micro-siting will occur at all potential turbine locations and areas deemed to contain threatened species habitat will be avoided as much as possible.
- Specific Management Plans will be developed to manage and mitigate impacts to listed threatened species ‘known’ or ‘likely’ to occur within the Study Area. Such plans will include a Fauna
- Management Plan (FMP), Vegetation Management Plan (VMP) and Bird and Bat Management Plan (BBMP).
- Where disturbance to threatened species habitat must occur, individuals and surrounding microhabitat features (e.g. hollows, nests, logs etc.) will be translocated to suitable areas (if possible).

The management and mitigation measures specific to identified potential impacts to MNES identified are provided in the MNES Impact Assessment Report (Att. A, Section 8, pp. 114-121).

It should be noted that some of the management measures and proposed management plans are intended to more broadly manage impacts to species that are not threatened and have therefore been considered in above text.

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

A Significant Impact Assessment was undertaken for relevant MNES against the SIG (DoE, 2013). It was concluded that there is likely to be a significant impact to:

- Southern squatter pigeon (*Geophaps scripta scripta*);
- Greater glider (southern and central) (*Petauroides Volans*); and
- Koala (*Phascolarctos cinereus*).

Additionally, it was concluded that there is potential for there to be a significant impact to:

- White-throated needletail (*Hirundapus caudactus*).

Where significant impacts to MNES cannot be avoided, the Proponent is committed to offsetting these impacts. An Offset Management Strategy (OMS) will be prepared, that specifically outlines the requirements to deliver and manage the offsets, in accordance with the conditions of approvals for the proposed development. The proposed development will also offset the “actual” area of habitat impacted that will be further defined at the detailed design phase. This incentivises the minimisation of impacts to habitats so as to reduce the offset requirement. The disturbance area for species with likely or potential significant impacts, are described below:

- Southern squatter pigeon (*Geophaps scripta scripta*)- 1,630.8 ha;
- Greater glider (southern and central) (*Petauroides Volans*)- 917 ha (breeding and denning) and 268 ha (shelter and foraging);
- Koala (*Phascolarctos cinereus*)- 33,043.8 ha (foraging and breeding) and 16,175.2 ha (shelter and dispersal); and
- White-throated needletail (*Hirundapus caudactus*)- 52,258.3 ha.

Offset requirements for these species will be calculated in accordance with the EPBC Act Environmental Offsets Policy.

There is a preference for offsets to be located within the Study Area, avoiding areas of Project infrastructure. Once an offset area has been selected, and adequate surveys undertaken to confirm species habitat and habitat quality, an Offsets Area Management Plan (OAMP) will be prepared for the implementation and ongoing management of the selected offset area/s.

Offset requirements are further described in the MNES Impact Assessment Report (Att. A, Section 9.1, pp.131-132).

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
No	No	Actitis hypoleucos	Common Sandpiper
Yes	No	Apus pacificus	Fork-tailed Swift
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Crocodylus porosus	Salt-water Crocodile, Estuarine Crocodile
No	No	Cuculus optatus	Oriental Cuckoo, Horsfield's Cuckoo
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
Yes	No	Hirundapus caudacutus	White-throated Needletail
No	No	Monarcha melanopsis	Black-faced Monarch
No	No	Motacilla flava	Yellow Wagtail
Yes	No	Myiagra cyanoleuca	Satin Flycatcher
No	No	Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew
Yes	No	Pandion haliaetus	Osprey
Yes	No	Plegadis falcinellus	Glossy Ibis
Yes	No	Rhipidura rufifrons	Rufous Fantail
Yes	No	Symposiachrus trivirgatus	Spectacled Monarch
No	No	Tringa nebularia	Common Greenshank, Greenshank

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

In general, potential impacts from the construction phase relate to habitat loss and disturbance. Operational impacts are largely limited to possible bird and bat collisions with operational WTGs. Decommissioning impacts are similar to those that may occur during the construction phase but likely to be of much lower

magnitude as there is no additional vegetation clearing during the decommissioning phase. Direct disturbance to MNES will be habitat loss and degradation, which arises from disturbance to native vegetation (predominantly by land clearing).

Based on field survey observations and desktop review, nine threatened species have been concluded as known or likely to occur within the Study Area. Direct impacts to these species are discussed in the following sections, further information is discussed in the MNES Impact Assessment Report (Att. A, Section 7.2, pp. 105-106). Indirect impacts as a result of the proposed development are discussed in the MNES Impact Assessment Report (Att. A, Section 7.1, pp. 101-104).

White-throated Needletail (*Hirundapus caudacutus*)

Refer to above section.

Fork-tailed Swift (*Apus pacificus*)

The entire Study Area can be considered potential foraging habitat for the species and as such no habitat has been mapped for the species.

Of specific consideration is the species vulnerability to wind farm developments specifically, due to their near-strictly aerial nature and potential likelihood of flying at the rotor swept height. Additional information on the species is provided in the MNES Impact Assessment Report (Att. A, Section 6.3.4, pp 84-85).

Satin Flycatcher (*Myiagra cyanoleuca*)

The Proposed Action has the potential to have a direct impact on 1463.1 ha of satin flycatcher foraging and dispersal habitat for the species. Potential habitat for the species has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-13, pp. 91).

Spectacled Monarch (*Symposiachrus trivirgatus*)

The Proposed Action has the potential to have a direct impact on 68.5 ha of spectacled monarch foraging and dispersal habitat for the species. Potential habitat for the species has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-13, pp. 91).

Rufous Fantail (*Rhipidura rufifrons*)

The Proposed Action has the potential to have a direct impact on 65.5 ha of potential habitat for the species. Potential habitat has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-13, pp. 91).

Glossy Ibis (*Plegadis falcinellus*)

The Proposed Action has the potential to have a direct impact on 0.8 ha of potential habitat for the species.

Potential habitat has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-13, pp. 91).

Eastern Osprey (*Pandion haliaetus*)

The Proposed Action has the potential to have a direct impact on 8.4 ha of potential habitat for the species.

Potential habitat has been mapped in the MNES Impact Assessment Report (Att. A, Figure 6-13, pp. 91).

Gull-billed Tern (*Gelochelidon nilotica*)

Based on habitat preferences the wetlands and waterbodies within the Study Area are not large enough to support the species. The Study Area has been considered likely dispersal habitat for the species, with no foraging or roosting habitat available.

Caspian Tern (*Hydroprogne caspia*)

Based on habitat preferences the wetlands and waterbodies within the Study Area are not large enough to support the species. The Study Area has been considered likely dispersal habitat for the species, with no foraging or roosting habitat available.

4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

Yes

4.1.5.5 Describe why you consider this to be a Significant Impact. *

A full MNES Significant Impact Assessment is provided in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, pp. 220-258). This assessment has demonstrated potential impacts to fork-tailed swift, satin flycatcher, spectacled monarch, rufous fantail, glossy ibis, eastern osprey, gull-billed tern and caspian tern are unlikely to lead to a significant impact. Impacts to the white-throated needletail have the potential to result in a significant impact.

White-throated Needletail (*Hirundapus caudacutus*)

See above section.

Fork-tailed Swift (*Apus pacificus*)

It was concluded that the proposed development is unlikely to result in a significant impact to the species.

Impacts to the fork-tailed swift are described in the Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.8, pp. 245-247).

The minimum threshold for an ecologically significant population of fork-tailed swifts is 100 individuals (DAWE, 2015). A total of nine fork-tailed swifts were observed over four occasions in different locations throughout the Study Area. Therefore, the threshold for a significant population is not met.

Fork-tailed swift is almost exclusively aerial while migrating through Australia (Higgins, 1999). The proposed development will not result in clearing of important habitat for this species as it is only known to utilise airspace within Australia.

Airspace is proposed to be utilised by 166 turbines across the Study Area. Based on collision risk modelling completed for this assessment concluded 0.00022 turbine collisions per year based on a conservative 95% avoidance rate. This equates to 0.077 collisions across a proposed 35 year project life and does not constitute a significant impact (100 individuals).

Satin Flycatcher (*Myiagra cyanoleuca*)

It was concluded that the proposed development is unlikely to result in a significant impact to the species.

Impacts to the satin flycatcher are described in the Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.9, pp. 247-248).

Satin flycatcher was observed in a group of five birds in riparian woodland adjacent to a watercourse during the 2023 field survey program. Clearing of 440 ha of important habitat for satin flycatcher is considered significant. The 1,463.1 ha of habitat proposed to be removed by the proposed development would constitute important habitat, defined under the “Referral Guideline for 14 birds listed as migratory species under the EPBC Act”.

However, the Study Area is not within known breeding habitat for this species and there is a high level of disturbance (e.g., weeds and introduced predators) to the existing habitat within the Study Area meaning that the species is likely to only utilised this habitat for movement and dispersal. Therefore, it has been

concluded that the satin flycatcher is unlikely to be significantly impacted by the proposed development.

Spectacled Monarch (*Symposiachrus trivirgatus*)

It was concluded that the proposed development is unlikely to result in a significant impact to the species.

Impacts to the spectacled monarch are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.10, pp. 248-250).

There is a total of 1998.6 ha of spectacled monarch habitat withing the Study Area, with approximately 68.5 ha (3.3% of available habitat within the Study Area) projected to be disturbed by construction works associated with the Proposed Action.

The threshold for significant impact to important habitat for spectacled monarch is 210 ha per the draft referral guidelines (DAWE, 2015), therefore there will not be a significant impact to important habitat for spectacled monarch.

One individual was observed during May 2023 field survey program, however this does not meet the threshold of an ecologically significant proportion of the population (650 individuals, per the draft referral guidelines) (DAWE, 2015). Therefore, this project is highly unlikely to destroy or isolate an area of important habitat for listed migratory bird species within the Study Area.

Rufous Fantail (*Rhipidura rufifrons*)

It was concluded that the Proposed Action is unlikely to result in a significant impact to the species. Impacts to the rufous fantail are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.11, pp. 251-252).

Habitat for rufous fantail in the Study Area totals 1998.6 ha. Approximately 65.5 ha of important habitat is proposed to be impacted through removal by the Proposed Action. The threshold for significant impact to important habitat is 750 ha, therefore there will not be a significant impact the rufous fantail.

Glossy Ibis (*Plegadis falcinellus*)

It was concluded that the Proposed Action is unlikely to result in a significant impact to the species. Impacts to the glossy ibis are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.12, pp. 252-253).

The Study Area contains approximately 200 ha of glossy ibis habitat. Direct impacts of approximately 0.7 ha to this habitat (or 0.35% of all available habitat within the Study Area) are likely to result from the Proposed Action.

Though an ecologically significant threshold for this species is not described, it can be concluded that the Study Area does not support an important population of glossy ibis due to the lack of available habitat and the size of its estimated global population (1,200,000 – 3,200,000 individuals) (SPRAT).

Given the small area of projected impact to glossy ibis habitat, as well as the unlikeliness of a significant population of the species occurring within the Study Area, it is not likely the Proposed Action will cause a significant impact to the species.

Eastern Osprey (*Pandion haliaetus*)

It was concluded that the Proposed Action is unlikely to result in a significant impact to the species. Impacts to the eastern osprey are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.13, pp. 254-255).

The Proposed Action works will largely avoid areas of important habitat for osprey. Habitat has been mapped for eastern osprey primarily along high ecological value waterways and riparian areas.

Important habitat for eastern osprey in the Study Area totals 780 ha. The Proposed Action is projected to impact 8.4 ha of osprey habitat (1.1% of eastern osprey habitat available in the Study Area). The threshold for significant impact to important osprey habitat is “84 km of coastline”. The minimum threshold for an ecologically significant population is 24 individuals, per the draft referral guidelines (DAWE, 2015).

Given the thresholds for ecologically significant osprey habitat impacts and population are not met within the Study Area, it is unlikely there will be a significant impact to important habitat for osprey.

Gull-billed Tern (*Gelochelidon nilotica*)

It was concluded that the Proposed Action is unlikely to result in a significant impact to the species. Impacts to the gull-billed tern are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.14, pp. 255-256).

This species was observed on the western edge of Peter Faust Dam, approximately 1 km outside of the Study Area. Whilst this is adjacent to the Study Area, no habitat equivalent to Peter Faust Dam, nor habitat associated with this species (described in Att, A, Section 6.3.4, pp. 97) is found within the Study Area. This project is therefore unlikely to cause a significant impact to the species.

Caspian Tern (*Hydroprogne caspia*)

It was concluded that the Proposed Action is unlikely to result in a significant impact to the species. Impacts to the Caspian tern are described in Appendix D of the MNES Impact Assessment Report (Att. A, Appendix D, Section 1.1.15, pp. 257-258).

This species was observed on the western edge of Peter Faust Dam, approximately 1 km outside of the Study Area. Whilst this is adjacent to the Study Area, no habitat equivalent to Peter Faust Dam, nor habitat associated with this species (described in Att, A, Section 6.3.4, pp. 89-90) is found within the Study Area. This project is therefore unlikely to cause a significant impact to the species.

4.1.5.7 Do you think your proposed action is a controlled action? *

Yes

4.1.5.8 Please elaborate why you think your proposed action is a controlled action. *

Based on the Significant Impact Assessments undertaken in accordance with the significant impact guidelines (DoE, 2013) (Att. A, Appendix D, pp. 220-258), the Proposed Action has the potential to have significant impact to one EPBC Act listed migratory species:

- White-throated Needletail (*Hirundapus caudacutus*).

There is potential that the encumbrance of aerial foraging habitat for this species by WTG within the Study Area will affect foraging habitat for at least 400 individuals and therefore has a potential to have a significant impact on the species.

4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Potential impacts of the proposed activities will be managed in a manner consistent with the management approaches for wind farm activities, and, where relevant, additional measures will be implemented.

The following species have areas of habitat mapped on the Study Area: Rufous fantail, Spectacled monarch, Eastern osprey, and Glossy ibis. These areas include riparian areas along the Don River and tributaries as well as pockets of habitat near waterbodies e.g. dams. Therefore, these areas have been avoided where possible, and where avoidance was not possible, for example an access track crossing the river, these crossings minimised to minimise disturbance to this habitat.

The following species have likely foraging habitat mapped across the Study Area: White throated needle-tail, Fork tailed swift, and Satin flycatcher. Dispersal habitat is mapped across the whole of the Study Area for the Caspian tern and Gull-billed tern. Avoidance was not possible, therefore minimisation techniques will be developed and applied during construction and operation of the wind farm, which are summarised below.

At each location of proposed infrastructure, following detailed design and prior to construction, detailed site specific pre-clearance surveys will be conducted inform micro-siting and further avoidance of ecological values as part of the final design of the Proposed Action. Impact and disturbance mitigation will follow a two-stage process.

The first element of impact mitigation will be determining turbine design and layout based on avoidance of vegetation and potential habitat mapped, as a result of the field investigation conducted. This will include minimising the impact to regulated vegetation and threatened species habitat. Noting that this process has already been undertaken as part of the design phase completed to date, and where possible further disturbance will be reduced as part of the future detailed design phase.

The second part of the impact mitigation effort will involve on the ground micro-siting at each location proposed for infrastructure. Such micro-siting will involve on the ground assessments of the potential infrastructure locations to determine if any ecological values, such as threatened species habitat that occur in that area will influence re-siting of infrastructure.

Loss of existing native vegetation

- Areas of remnant and regrowth vegetation to be avoided at the design and micro siting stages, where practicable.
- Areas of threatened flora and fauna habitat will be avoided at design and micro siting stages, where practicable.
- A Vegetation Management Plan will be developed implemented to ensure that clearing is undertaken in accordance with legislative standards and requirements.
- Progressive restoration of access corridors will occur once construction has been completed. For example, access tracks will reduce impact from 40 m down to a nominal 20 m.

Weed and pest control

- A Biosecurity Plan will be developed and implemented for the Proposed Action. This will include measures such as vehicle clean downs, weed hygiene declaration and obligations to stick to access tracks throughout the Study Area.
- Weed management and control methods will depend upon the location, weed species identified, the degree of the infestation, relevant landholder agreement or conduct and compensation agreements provisions, and local, state and national regulatory requirements.
- Imported material able to transport and facilitate the spread of weed and seeds will require a weed hygiene declaration and be assessed to ensure they are free of contamination, disease and invasive weeds.
- Weeds of National Significance (WONS) and Invasive species will be identified and monitored in the Study Area. Appropriate weed monitoring will occur to ensure new weed species are identified, recorded and managed appropriately.

Mortality or injury to native fauna

- A Bird and Bat management Plan will be produced in order to implement impact mitigation measures for the Proposed Action .
- A Fauna management Plan will be produced in order to implement impact mitigation measures for the Proposed Action .
- During vegetation clearing activities fauna management will be implemented that includes preclearing surveys, fauna spotter-catcher supervision and methods to reduce impacts as set out in a fauna management plan.
- No driving will occur in unauthorised areas, and in other areas will be carried out at safe speeds adopted to the road conditions.
- Injured, sick or dead fauna will be recorded and reported during construction. This can be carried out by a fauna spotter- catcher.
- Impacts from turbine collision to bats and birds will be monitored.
- Areas of bird habitat including known nests will be avoided in the design and then further avoided when micro siting occurs, where practicable.
- Development of a Bird and Bat Management Plan that considers the impacts that will occur to birds and mitigation measures to address these.
- WTGs have been sited away from key bird and bat habitats (waterways and drainage lines) where practicable. Micro siting will also aim to avoid large remnant trees where possible and any large nests identified on site.

Impacts from turbine collision to bats and birds

- A Bird and Bat Management Plan will be produced in order to implement impact mitigation measures for the Proposed Action .
- Areas of bird habitat including known nests will be avoided in the design and then further avoided when micro siting occurs, where practicable.

Barotrauma

- As mentioned for impacts from turbine collision, a BBMP will be designed to assist in mitigating impacts to bats, including additional surveys prior to determining final design.
- Impact mitigation is primarily ensuring the turbine layout largely avoids microbat habitat, which includes woodlands and open forests. To reduce impacts to canopy flyover foragers.
- Additionally, reducing lights on operating turbines will help to reduce insect presence, thus limiting potential feeding opportunities for bats close to the turbines.

Disturbance to MNES

- Two-stage impact avoidance process will continue to be implemented which avoids stands ecological values at the layout/design phase, and pre-construction phase.
- Infrastructure will be located to first avoid and then minimise the impacts of edge effects or dissecting tracts of native vegetation so that species dispersal is not significantly impeded.
- Vegetation will only be removed that has been approved to be cleared.
- Micro-siting will occur at all potential turbine locations and areas deemed to contain threatened species habitat will be avoided as much as possible.
- Specific Management Plans will be developed to manage and mitigate impacts to listed threatened species ‘known’ or ‘likely’ to occur within the Study Area. Such plans will include a Fauna
- Management Plan (FMP), Vegetation Management Plan (VMP) and Bird and Bat Management Plan (BBMP).
- Where disturbance to threatened species habitat must occur, individuals and surrounding microhabitat features (e.g. hollows, nests, logs etc.) will be translocated to suitable areas (if possible).

The management and mitigation measures specific to identified potential impacts to MNES identified are provided in the MNES Impact Assessment Report (Att. A, Section 8, pp. 114-121).

4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

A Significant Impact Assessment was undertaken for relevant MNES against the SIG (DoE, 2013). It was concluded that there is potential for a significant impact to:

- White-throated needletail (*Hirundapus caudactus*).

Where significant impacts to MNES cannot be avoided, the Proponent is committed to offsetting these impacts. An Offset Management Strategy (OMS) will be prepared, that specifically outlines the requirements to deliver and manage the offsets, in accordance with the conditions of approvals for the Proposed Action. The Proposed Action will also offset the “actual” area of habitat impacted that will be further defined at the detailed design phase. This incentivises the minimisation of impacts to habitats so as to reduce the offset requirement. The disturbance area for species with likely or potential significant impacts, are described below:

- White-throated needletail (*Hirundapus caudactus*) - 52,258.3 ha.

Offset requirements for these species will be calculated in accordance with the EPBC Act Environmental Offsets Policy.

There is a preference for offsets to be located within the Study Area, avoiding areas of Project infrastructure. Once an offset area has been selected, and adequate surveys undertaken to confirm species habitat and habitat quality, an Offsets Area Management Plan (OAMP) will be prepared for the implementation and ongoing management of the selected offset area/s.

Offset requirements are further described in the MNES Impact Assessment Report (Att. A, Section 9.1, pp.131-132).

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

No nuclear actions are proposed as part of the Proposed Action.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Proposed Action does not involve a Commonwealth marine area.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Proposed Action is located more than 20 km inland from the coast. Given the distance from the coast, the Proposed Action is unlikely to have any direct impacts to the GBRMP. A full hydrology assessment is still being prepared for the Project. This will focus on determining potential changes to surface water flows

as a result of the Project,

The Project is located some 20 km from the coast and the Great Barrier Reef which is considered a National Heritage Place. The National Heritage Place generally matches the spatial extent of the GBRMP. It is noted in relation to the GRBMP, the western portion of the Project located in the Don River Catchment flows 50km downstream to the northeast before reaching the east coast and GBRMP, with the eastern portion of the Project located in the Proserpine River Catchment which flows into Lake Proserpine, having no impact on the GBRMP downstream (Att B, pp. 2).

The Project area covers approximately 52,258 ha and the disturbance footprint is approximately 1,634 ha. With regard to indirect impacts, the greatest risk posed to the GBRMP as a result of the Proposed Action is the potential increase in sediment loading in surface water as a result of erosion.

The Erosion Risk Technical Memorandum has found that the overall risk posed by the Project to GBR water quality is considered to be low (Att B, pp. 6). This low risk rating was the outcome of a desktop RUSLE assessment that took into account several factors including soil type, topography, and location of waterways. This low potential impact is further reinforced when factoring in the implementation of best practice management controls, the size of the catchments (the Don basin (374,512 ha) in the Burdekin Region and the Proserpine basin (250,002 ha)) relative to the disturbance footprint, the location of the Study Area in relation to downstream impacts (50 km from coast), and Project staging over a number of years (allowing for progressive disturbance and rehabilitation).

A full hydrology assessment will be prepared for the Proposed Action. This will focus on determining potential changes to surface water flows as a result of the Proposed Action.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Proposed Action does not involve coal mining or coal seam gas.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Proposed Action does not include Commonwealth Land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The Proposed Action does not involve Commonwealth heritage places.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)

- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

1. Alternative Project location - The site identification process involves a combination of wind resource modelling, assessment of grid capacity, landholder engagement and environmental assessments in order to identify a potentially viable project. Following these assessments, no viable alternative location was identified in proximity to this Proposed Action.
2. Alternative Project layout options - The final layout has been designed to ensure minimal impact to potential habitat while presenting a viable wind farm project.
3. Do Nothing approach - The Study Area is currently used for farming and grazing. Although the 'donothing' scenario would allow for continued use of the site for agricultural production, it will also lead to a missed opportunity to generate additional renewable energy and to reduce Australia's dependency on fossil fuels for energy generations and the consequential emissions of Greenhouse gases. Furthermore, the land use will not change as a result of the Proposed Action, with the land remaining compatible for agricultural and grazing purposes.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	17/09/2024	No	High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

	Type	Name	Date	Sensitivity	Confidence

#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att D - CSEP Draft - 2024.pdf Draft Community and Stakeholder Engagement Plan	17/09/2024	Yes	High

2.2.5 Tenure of the action area relevant to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

3.1.2 Existing or proposed uses for the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att C - DATSIP Search -2024.pdf Cultural Heritage Database and Register Search Reports	17/09/2024	No	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att B - Erosion Tech Memo-2024.pdf Erosion Technical Memorandum	16/09/2024		High

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.4.5 (Threatened Species and Ecological Communities) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.4.8 (Threatened Species and Ecological Communities) Why you think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.4.11 (Threatened Species and Ecological Communities) Proposed offsets relevant to avoidance or mitigation measures

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.5.5 (Migratory Species) Why you consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.5.8 (Migratory Species) Why you think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.5.10 (Migratory Species) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.5.11 (Migratory Species) Proposed offsets relevant to avoidance or mitigation measures

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att A - MNES Report-2024.pdf Matters of National Environmental Significance Impact Assessment Report	16/09/2024	No	High

4.1.8.3 (Great Barrier Reef) Why your action is unlikely to have a direct and/or indirect impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att B - Erosion Tech Memo-2024.pdf Erosion Technical Memorandum	17/09/2024	No	High

5.2 Declarations

Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	12002773248
Organisation name	ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LIMITED
Organisation address	Level 14, 207 Kent Street, Sydney, NSW, 2000
Representative's name	Michael Rookwood
Representative's job title	Principal Consultant
Phone	+61730078478
Email	michael.rookwood@erm.com
Address	GPO Box 2892 Brisbane QLD 4001

☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ By checking this box, I, **Michael Rookwood of ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LIMITED**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

✔ Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	663915946
Organisation name	CI Proserpine Pty Ltd as the Trustee for CI Proserpine Trust
Organisation address	Level 11, 88 Tribune St, South Brisbane 4101, Australia
Representative's name	Haidar Etemadi
Representative's job title	Senior Planner

Phone	1800 4RENEW
Email	het@bluepp.dk
Address	Level 11, 88 Tribune St, South Brisbane 4101, Australia

☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ I, **Haidar Etemadi of CI Proserpine Pty Ltd as the Trustee for CI Proserpine Trust**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

☑ I, **Haidar Etemadi of CI Proserpine Pty Ltd as the Trustee for CI Proserpine Trust**, the Person proposing the action, consent to the designation of **Bond Watson of RENEWABLE ENERGY PARTNERS PTY LTD** as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

✓ Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

ABN/ACN	95630955869
Organisation name	RENEWABLE ENERGY PARTNERS PTY LTD
Organisation address	4000 QLD
Representative's name	Bond Watson
Representative's job title	General Manger - Wind
Phone	+61 402 326 117
Email	bwatson@repartners.com.au

Address	L6 200 Adelaide Street Brisbane QLD 4000 Australia

☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ I, **Bond Watson of RENEWABLE ENERGY PARTNERS PTY LTD**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *