Vegetation and Fauna Management Plan

Wambo Wind Farm Stages 1 & 2

17 April 2023

Project No.: 0532612

The business of sustainability

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17 April 2023

Vegetation and Fauna Management Plan

Wambo Wind Farm

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Acronyms and Abbreviations

Name	Description
ALA	Atlas of Living Australia
Anabats	An acoustic monitoring device for the monitoring of ultrasonic echolocation calls of bats and other fauna.
BACI	Before-After-Control-Impact
BUS	Bird utilisation survey
DA	Development Application
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DSDILGP	Department of State Development, Infrastructure, Local Government and Planning
E	Endangered
Ecological pre-clearance surveys	Pre-clearance surveys conducted for the purpose of informing project design and micro-siting prior to mobilisation. Survey will involves the use of fauna detection survey techniques including bird surveys, bat surveys, vegetation and habitat assessments and threatened species surveys.
ERM	Environmental Management Australia Pty Ltd
Fauna Spotter Catcher pre-clearance assessment	Pre-clearance assessment undertaken immediately prior to commencement of clearing works for the purpose of identifying and locating any areas of potential wildlife habitat within the area to be cleared. Wildlife habitat to be targeted as part of these surveys includes; roosts, burrows, tree hollows and nests.
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EO Act	*Environmental Offsets Act 2014*
ERM	Environmental Resources Management Australia Pty Ltd
HSEQ Manager	Health, Safety, Environment and Quality Manager
LC	Least Concern
MNES	Matter of National Environmental Significance
MSES	Matter of State Environmental Significance
NC Act	*Nature Conservation Act 1992*
NoC	Not of Concern
OAMP	Offset Area Management Plan
OC	Of Concern
Planning Act	*Planning Act 2016*
PMST	Protected Matters Search Tool
RE	Regional Ecosystem
SEVT	Semi-evergreen Vine Thicket
SMP	Species Management Program
TEC	Threatened Ecological Communities
The Project	Wambo Wind Farm
The Project Area	Area approximately 12,760 ha in size, situated 15 km northeast of Jandowae and 60 km west of Kingaroy in the Western Downs Region Local Government Area, Queensland
The Proponent	Cubico Sustainable Investments Pty Ltd
VFMP	Vegetation and Fauna Management Plan
VM Act	*Vegetation Management Act 1999*
WO	Wildlife Online
WONS	Weeds of National Significance
WTG	Wind Turbine Generator

1. BACKGROUND

Environmental Resources Management Australia Pty Ltd (**ERM**) was commissioned by Cubico Sustainable Investments Pty Ltd (**the proponent**) to prepare a Vegetation and Fauna Management Plan for its Wambo Wind Farm (**the Project**) for stages 1 and 2, located at 131 Woolletts Road, Diamondy. The Vegetation and Fauna Management Plan (**VFMP**) has been prepared in compliance with the conditions of the Commonwealth and State approvals for the Project set out in **Table 1-1**.

Table 1-1 Conditions of Development Approval

Approval	No.	Condition
State approval 2210-31751 SPD	9(a)	Prepare a Vegetation and Fauna Management Plan (VFMP) certified by a suitably qualified ecologist. The VFMP must include details of all measures to identify and avoid fauna resources and habitats prior to clearing. The plan must include measures to protect and recover fauna during clearing operations, including presence of a qualified wildlife officer during cleaning operations, pre-clearing inspections, staging and sequence of clearing and recovery procedure. Measures to replace/relocate habitat and resources that will be unavoidable lost needs to be included.
	9(b)	Provide the VFMP required by part a) for this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au).
	9(c)	Implement the measures detailed in the VFMP
Commonwealth approval 2020-8727	3	To minimise impacts to protected matters, the approval holder must undertake the action in accordance with Queensland SARA Condition 9 (Vegetation and Fauna Management Plan).

The Project has the potential to directly and indirectly impact vegetation and fauna values with the greatest potential impact to biodiversity values associated with construction clearing and grading activities, during which vegetation and fauna habitat is removed. Where possible, vegetation and habitat disturbance associated with the proposed development has been avoided or minimised through detailed design. To determine the unavoidable ecological impact and risks for the Project, an ecological impact assessment was undertaken in 2021. The ecological impact assessment identifies the following possible residual impacts to biodiversity values:

- Vegetation clearing;
- Fauna habitat loss;
- Mortality or injury of fauna;
- Dust impacts;
- Noise and light impacts; and
- Exacerbation of disease and exotic flora and fauna.

This management plan aims to further minimise the potential residual impacts associated with the Project by providing management actions that mitigate risks identified in the ecological impact assessment.

The key component of the VFMP is avoidance through layout design, during the completed detailed design phase. Key ecological values (vegetated areas) have already been avoided through the design phase. The detailed design phase will take into consideration additional information from ecological pre-clearance surveys of the Project Area and on the ground micro siting. The ecological pre-clearance surveys have assessed localised ecological values, including threatened species breeding habitat to further avoid and minimise impacts.

Note: This VFMP does not address condition 10 of the State approval or the requirements of the *Nature Conservation Act 1992*. A separate Birds and Bats Management Plan and Species Management Program is being prepared concurrently to satisfy the requirements of condition 10.

2. PROJECT DETAILS

This Project Details provide context on the Wambo Wind Farm and the design process undertaken to inform the layout of the proposed development. A description of site infrastructure including the wind turbine generators ("Turbines" or "WTGs"), access tracks, electrical components and temporary works associated with the construction phase of the Project and an overview of the operational phase is provided.

2.1 Context

The Project consists of an area approximately 12,995 ha in size, situated 15 km northeast of Jandowae and 60 km west of Kingaroy in the Western Downs Region Local Government Area, Queensland (**the Project Area**). The Project Area incorporates the land owned by 12 individual landowners, which is made up of 44 property lots. These property lots, grouped by landowner, and their combined area are shown in **Table 2-1**.

Table 2-1 Project Area Property List and Area

Lot and Plan	Size
Lots 77 and 78 on LY323; Lot 14 on LY532	675 ha
Lot 74 on LY323; Lot 87 on LY35; Lot 24 on LY582	421 ha
Lot 52 on L34213; Lot 7 on LY359	1,564 ha
Lot 13 on LY532; Lot 71 on LY6	662 ha
Lots 1 on RL7596; Lots 3 and 53 on L34213; Lots 128, 129 and 130 on LY322; Lot 134 on LY348; Lot 126 on LY440; Lots 5, 6 and 8 on LY359; Lot 2 on RP52699	3,515 ha
Lot 2 on RP103421; Lot 80 on LY174	521 ha
Lots 95 and 100 on LY174; Lot 22 on LY308; Lot 133 on LY348; Lot 23 on LY542; Lot 4 on LY573; Lot 131 on SP169294	1,826 ha
Lot 97 on LY154; Lot 92 on LY174; Lot 98 on LY583; Lot 96 on LY174;	1,296 ha
Lot 83 LY154; Lots 81 and 82 RP203809	1,019 ha
Lots 90 and 94 on LY174; Lot 14 on LY455	803 ha
Lot 73 on LY166	257 ha
Lot 21 on LY308	262 ha
Road Reserves	174 ha
Total	**12,995 ha**

The Project Area is located in the Queensland Brigalow Belt bioregion and includes a range of landscape features typical of the region, from flat alluvial plains to undulating slopes of grassland with patches of eucalypt dominant and codominant open woodland. Two ephemeral watercourses, namely Diamondy Creek and Jingi Jingi Creek, intersect the Project Area. The majority of the Project Area (9,035.0 ha or 69.5% of the Project Area) is cleared and used for agriculture, with remnant and regrowth vegetation covering 3,960.0 ha (30.5%) of the Project Area This regrowth vegetation includes 66.1 ha of Department of Resources mapped regrowth and 345.8 ha of 'mixed eucalypt species' regrowth. The cleared areas are largely associated with alluvial plains near watercourses, while remnant vegetation is associated with upper slopes.

The Project Area occurs within the Rural Zone under the Western Downs Planning Scheme and is predominantly used for cattle grazing. Some cropping does occur and tends to be associated with growing cattle fodder. The Project Area is located immediately west of the operational 453 MW Coopers Gap Wind Farm.

Agriculture is the dominant land use in the vicinity of the Project Area, although there are some protected areas in close proximity. Diamondy State Forest is part of a large vegetated corridor located immediately north of the Project Area, whilst Jandowae State Forest occurs approximately 3.5 km south and Bunya Mountains National Park is located approximately 30 km to the southeast.

The land to be developed occupies 498.4 ha or 3.835% of the Project Area. 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 tracks established as part of the construction of the proposed development, will aid in continued agriculture activities.

The Project will be developed in two discrete stages. Stage 1 construction is scheduled to commence in Q2 2023 and will consist of 42 WTGs primarily located in the eastern part of the Project Area. Stage 1 will connect via a substation and switchyard to a new 275 kV transmission line to be built by Powerlink through the Project Area. Stage 2 will consist of up to 45 WTGs and is primarily located in the western part of the Project Area. It will utilise the same substation and connection point constructed for Stage 1.

The proposed development design has been refined on a number of occasions through an interactive process with regard to a combination of environmental, wind resource, constructability, landowner and network considerations. The design refinement process has focussed on the avoidance and minimisation of environmental impacts, particularly with regard to limiting impacts to sensitive vegetation.

3. PROJECT SCHEDULE

Stage 1 of the Project is intended to start construction in Q2 2023, with an estimated 30 month construction period to full operation. Stage 2 of the proposed development will likely commence construction approximately 6-12 months after Stage 1 and will have similar construction period to Stage 1.

The lifetime of the proposed development is based on the WTG useful life of approximately 30 years. After 30 years the wind turbines and associated infrastructure not otherwise agreed with the landowners will be removed and the area returned to its original cattle grazing use. A decommissioning and rehabilitation plan will be prepared and implemented to detail the works required for the site.

4. LEGISLATIVE CONTEXT

Approvals for the Project have been obtained under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**) and the *Planning Act 2016* (**Planning Act**), applicable reference numbers are EPBC 2020/8727 and Planning Act 2210-31751 SPD (as amended). Conditions in the respective permit's direct minimum requirements for vegetation and fauna management for the Project. In addition to the condition requirements, this VFMP is also designed to meet the requirements of the *Nature Conservation Act 1992* (**NC Act**) by establishing key ecological impact avoidance and mitigation.

4.1 Commonwealth Legislative Considerations

4.1.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act is the Australian Government's central piece of environmental legislation.
The EPBC Act provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places—defined in the EPBC Act as Matters of National Environmental Significance (**MNES**), which include:

- World heritage properties;
- National heritage properties;
- Wetlands if international importance;
- Threatened species and ecological communities;
- Migratory species;
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park;
- Nuclear Actions; and
- Water resources.

4.1.2 EPBC Act Environmental Offsets Policy 2012

The EPBC Act Environmental Offsets Policy 2012 applies where a significant residual impact on an MNES is expected to occur as a result of the proposed development. The EPBC Act Environmental Offsets Policy 2012 provides guidance on the role of offsets and when a proposed offset is considered suitable.

On 21 December 2021 the Project received approval under the EPBC Act (EPBC 2020/8727; **Appendix A**), condition 3 of EPBC 2020/8727 requires the Project minimise impacts to protected matters. For the purposes of compliance with condition 3, protected matters means a matter protected under a controlling provision in Part 3 of the EPBC Act for which this approval has effect, being:

- Koala (*Phascolarctos cinereus*) habitat; and
- Greater glider (*Petauroides sp.*) habitat.

Condition 3 of EPBC 2020/8727 states:

> *To minimise impacts to protected matters, the approval holder must undertake the action in accordance with Queensland SARA Condition 9 (Vegetation and Fauna Management Plan).*

Preparation and implementation of this Vegetation and Fauna Management Plan is designed to comply with State implemented conditions and therefore achieve compliance with the conditions of EPBC 2020/8727.

It is recognised that EPBC 2020/8727 stipulates that offsets pursuant to the EPBC Act Environmental Offsets Policy are appropriate given the approved impacts to MNES. A separate Offset Area Management Plan (**OAMP**) has been developed to address this requirement. Consequently, offsets are not considered under the VFMP.

4.2 State Legislating Considerations

4.2.1 Planning Act 2016

The Planning Act provides the overarching Queensland's statutory framework planning and development system. Subordinate legislation of the Planning Act (Planning Regulation 2017) provides the assessment framework for matter of State interest in Queensland. Matters of State interest will require referral to the State for assessment as part of the development application approvals process. In accordance with Schedule 10 of the Planning Regulation 2017, the Project was referred to the Queensland Government for assessment in August 2020.

The Department of State Development, Infrastructure, Local Government and Planning (**DSDILGP**) is responsible for delivering a co-ordinated, whole-of-government approach to the state's assessment of Development Applications (**DA**) for development that requires State referral by providing a single agency lodgement and assessment point where the state has a jurisdiction.

On 13 October 2020 DSDILGP approved a development approval for the Project, reference number 2210-31751 SPD (**Appendix B**) The conditions of 2210-31751 SPD require the proponent to prepare, provide and implement a VFMP and prescribes minimum requirements.

Condition 9.

(a) Prepare a Vegetation and Fauna Management Plan (VFMP) certified by a suitably qualified ecologist. This VFMP must include details of all measures to identify and avoid fauna resources and habitats prior to clearing, the plan must includes measures to protect and recover fauna during clearing operations, pre-cleaning inspections, staging and sequence of clearing and recovery procedures. Measures to replace/relocate habitat and resources that will be unavoidably lost needs to be included.

(b) Provide the VFMP requires by part (a) of this conditions to Queensland Treasury (windfarms@dsdmip.qld.gov.au).

(c) Implement the measure detailed in the VFMP.

Preparation and implementation of this Vegetation and Fauna Management Plan is designed to comply with conditions of 2210-31751 SPD.

4.2.2 Vegetation Management Act 1999

The clearing of native vegetation and essential habitat in Queensland is regulated by the *Vegetation Management Act 1999* (**VM Act**). The purpose of the VM Act is to regulate the clearing of vegetation in a way that conserves remnant vegetation. The purpose of the VM Act is achieved primarily by providing for the benchmarks of the Planning Act and enforcement of vegetation clearing provisions.

Mapping that regulates assessment of impacts to native vegetation under the VM Act is provided by the Department of Resources with the assessment of impacts included in the Planning Act framework and assessment process. The State DA for the Project includes provisions relating to native vegetation clearing to support the construction and operation of the Project.

4.2.3 Nature Conservation Act 1992

Impacts to Queensland biodiversity and protected areas is regulated by the NC Act. The primary purpose of the NC Act is to conserve nature while allowing for the involvement of indigenous people

in the management of protected areas. Development take into consideration wildlife and natural protected area regulated by the NC Act and associated regulations as part of the DA process.

Additionally, the NC Act required that development that will impact animal breeding places prepare a high and low Species Management Program (**SMP**) for the site. Requirements of the NC Act including he preparation of the required SMPs has been undertaken separately and applied to directly to the Queensland Department of Environment and Science.

4.2.4 Environmental Offsets Act 2014

The *Environmental offsets Act 2014* (**EO Act**) outlines the framework under which environmental offsets may be conditioned and provided in Queensland. As defined in Section 7 of the EO Act, an environmental offset is, “an activity undertaken to counterbalance a significant residual impact of a prescribed activity on a prescribed environmental matter”. Prescribed environmental matters include matters of National, State and Local environmental significance, as such, if a project results in a significant residual impact to prescribed environmental matters it may be required to offset the residual impact.

Environmental offsets are not in themselves an assessment trigger but are imposed as a condition on a proposed development or activity. The planning framework considers the EO Act framework in the assessment of impacts to prescribed environmental matters and requiring applicant to first demonstrate how impacts to prescribed environmental matters have first be avoided and mitigated to the greatest extent practicable prior to considering offsets as an option.

There have been no offsets imposed by the Queensland Government through the State Development Approval.

5. EXTENT OF VEGETATION AND FAUNA RESOURCES

5.1 Desktop Review

A number of desktop courses were reviewed to identify ecological values that may occur within the Project Area. The databases and other sources considered (including a constraints desktop report of the Project Area (GHD, 2019) the Coopers Gap Wind EIS (AECOM, 2016) and Dulacca Windfarm Flora and Fauna Technical Reports (AECOM, 2019), are listed in **Table 5-1**. A search area containing the Project Area and a minimum 10 km buffer was used for the database searches. The Project Area is an irregular shape and, as such, a bounding rectangle was used (and buffered) for database searches requiring coordinate inputs. As a result, records may be further than 10 km from the Study Area boundary at some locations. The Protected Matters Search Tool (**PMST**) and Wildlife Online (**WO**) results were cross-checked using Atlas of Living Australia (**ALA**) database locations of records in the context of the actual Study Area boundary.

This desktop review adheres to the requirement by the State Planning framework to undertake a desktop review of available information to identify species, particularly birds and bats that may be impacted by the proposed development. This desktop review, provided information on species known or likely to occur within the Project Area, based on species records, the availability of suitable habitat, breeding and roosting sites for bats, and Ramsar sites for waterbirds.

Table 5-1 Databases reviewed for Desktop Analysis

Information Source	Name	Data Description
Department of Climate Change, Energy, the Environment and Water	PMST	The search tool provides predictive results of MNES based on mapping of known and potential species distribution, habitat, ecological communities and wetlands. The outputs are based on modelling results and do not necessarily reflect known records of species or communities. The features highlighted by the search are considered further through a likelihood of occurrence assessment. Search area: -26.648388, 151.258670 (with a 20 km buffer around this middle point of the Study Area).
Department of Resources	Regional Ecosystem Version 8.0 mapping	This product maps remnant vegetation communities across Queensland and identifies communities listed as endangered, of concern or least concern status.
Department of Resources	Property Maps of Assessable Vegetation mapping (published 4 May 2017)	This product provides certified property scale maps indicating where landholders can clear regrowth in ‘Category X’ areas without further approval.
Queensland Government	MSES version 4.1 mapping	This product maps areas of MSES as defined under the Qld State Planning Policy.
Department of Resources	Queensland Globe	A Google Earth based product that allows viewing of spatial data and imagery covering Queensland.
Department of Environment and Science	Wildlife Online (WO)	A database that contains records of wildlife sightings including threatened flora and fauna species (protected under the NC Act) that have been provided to the agency by Government departments and external organisations. Search area: -26.648388, 151.258670 (with a 20 km buffer around this middle point of the Study Area).
ala.org.au	Atlas of Living Australia (ALA)	Australia national biodiversity database (supported by the National Collaborative Research Infrastructure Strategy, CSIRO). Database contains records accessed through an interactive spatial portal. Threatened species are searched to identify known records in proximity to the Study Area.
Western Downs Regional Council	Western Downs Planning Scheme 2017	The *Westerns Downs Planning Scheme 2017* provides information relating to biodiversity, and wetland and waterway corridors.

Information Source	Name	Data Description
GHD	GHD Constraints Report 2019	This recent report details the ecological constraints found in the Study Area from desktop searches. This report helped to inform research into the potential MNES, MSES and local government environmental matters which could be present in the site.
AECOM	Cooper's Gap Windfarm EIS 2016 (Chapter 12 Ecological Assessment)	This report is an ecological assessment conducted for Cooper's Gap Windfarm which sits adjacent to the east of the Study Area. It was used to gain information on ecological values surrounding the Study Area. This included information on migratory bird flight paths as well as vegetation, threatened ecological communities (**TEC**) and birds and bats. It was also used to inform the likelihood of occurrence assessment, particularly in relation to threatened species presence/records in the locality.
AECOM	Dulacca Renewable Energy Project – Fauna Technical Report and Flora Technical Report (2019)	This report is an ecological assessment conducted for Dulacca Windfarm which sits approximately 100 km to the west of the Study Area. It was used to gain information on ecological values with regards to the Study Area. This included information on migratory bird flight paths as well as vegetation, TECs and birds and bats. It was also used to inform the likelihood of occurrence assessment, particularly in relation to threatened species presence/records in the locality.
Department of Climate Change, Energy, the Environment and Water	Species Profile and Threats Database (SPRAT)	The SPRAT profiles and associated conservation advice documents were consulted for the following reasons: They provide detailed information for the Likelihood of Occurrence assessment on: ■ Species distribution; and ■ Species habitat preferred and general. The conservation advice documents are particularly important for assessing TECs found in field surveys, against the listed TEC guidelines.

5.2 Field Surveys

The extent and location of vegetation and fauna resources relevant to the Project Area have been investigated and mapped as part of the ecological survey effort undertaken to date (**Figure 5-1**). Five ecological field surveys were undertaken in November 2019, December 2020 and January 2021, February 2021 and January to February 2023 including both vegetation and fauna assessments and using the techniques summarised in **Table 5-2**.

Oversight, guidance and technical review has been undertaken by Dr David Dique, a 25 year experienced ecologist, for each field investigation. David led all field survey design and was present at three of the five field survey periods. Bird surveys were led by Principal Ecologist Paul Fox, a field ecologist with 20 years experience. Vegetation assessments, including ground truthing and mapping of Threatened Ecological Communities (**TECs**) was led by Dr Toivo Zoete, a 30 year experienced botanist and vegetation specialist.

The purpose of the spring and summer surveys was to identify and assess the ecological values in the Study Area, in order to inform the assessment of ecological impacts of the proposed development. The methodology adopted for the field studies focused on describing the vegetation communities present, flora and fauna habitats and their condition, and particularly threatened species and fauna groups vulnerable to windfarm impacts (ie. birds and bats). The techniques are summarised in **Table 5-2**.

The ecological findings that resulted from the five field investigations (together with the information obtained from desktop sources), provide a robust description of the ecological values of the Project Area, with excellent coverage and sampling within vegetation communities and potential habitats.

At each location of proposed infrastructure, following detailed design and prior to construction, detailed site specific pre-clearance surveys was conducted to inform micro-siting and further avoidance of ecological values as part of the final design of the proposed development.

Table 5-2 Ecological Surveys Undertaken within the Project Area

Dates	Target	Techniques	Survey effort
26-29 November 2019	Vegetation and habitat assessment (including targeted threatened species surveys)	■ Review of vegetation community mapping and assessment of habitat distribution. ■ Assessment of habitat features present relating to relative cover and abundance of nesting/shelter/basking sites, presence of aquatic habitats, presence of foraging resources, dominant canopy species, connectivity and disturbances. ■ Representative sampling for regional ecosystem verification ■ Targeted surveys for threatened species identified with potential to occur, as described in the likelihood of occurrence analysis.	■ 31 individual survey locations
	Bird surveys	■ Bird Utilisation Surveys using the Band Model ■ Roaming bird surveys between survey areas.	■ 16 individual surveys locations
	Bat surveys	■ Bat detection via the use of ultrasonic devices (Anabats)	■ five Anabat locations recording for four consecutive nights
7-11 December 2020	TEC Community field verification	■ Review of vegetation community mapping against the TEC thresholds and criterion ■ Verifying if areas mapped as potential TEC, actually conform to the TEC thresholds.	■ Undertaken at each potential TEC location in the Study Area
	Habitat assessments (including targeted species surveys)	■ Habitat assessments undertaken as done in the first field trip, this time with a focus on koala habitat, as well as microhabitat features for small reptiles, snails and mammals.	■ 30 individual survey locations
	Bird surveys	■ Bird Utilisation Surveys using the Band Model ■ Roaming bird surveys between survey areas.	■ 56 BUS surveys ■ 10 opportunistic bird surveys
	Bat surveys	■ Bat detection via the use of ultrasonic devices (Anabats)	■ five Anabat locations recording for four consecutive nights
	Camera traps	■ Undertaken for nocturnal species (particularly small mammals) in areas identified as potential habitat.	■ Five camera traps deployed for four nights
	Spotlighting	■ Spotlighting undertaken for nocturnal species (particularly arboreal mammals) in targeted areas (with hollow bearing trees and mature forests) as well as along road rides throughout the Study Area	■ four people surveying for three hours per night for two nights
18-22 January 2021	Bird surveys	■ Bird Utilisation Surveys (BUS) using the Band Model ■ Roaming bird surveys between survey areas.	■ 50 BUS surveys ■ seven opportunistic bird surveys
	Habitat assessments (including targeted species surveys)	■ Habitat assessments undertaken as done in the first field trip, this time with a focus on presence of microhabitat features for snails and reptiles. ■ Targeted surveys for snails and reptiles	■ 18 habitat assessments undertaken at BUS locations

Dates	Target	Techniques	Survey effort
15-19 February 2021	Habitat assessments (including targeted species surveys)	■ Habitat assessments undertaken as done in the first field trip, this time with a focus on presence microhabitat features for snails and reptiles. ■ Targeted surveys for snails and reptiles including microhabitat searches	■ 12 habitat assessments
	Bird surveys	■ Bird Utilisation Surveys using the Band Model ■ Roaming bird surveys between survey areas.	■ 47 BUS surveys ■ six opportunistic bird surveys
	Bat surveys	■ Bat detection via the use of ultrasonic devices (Anabats)	■ five Anabat locations recording for four consecutive nights
	Spotlighting	■ Spotlighting undertaken for nocturnal species (particularly arboreal mammals) in targeted areas (with hollow bearing trees and mature forests) as well as along road rides throughout the Study Area	■ four people spotlighting for three hours per night for four nights
	Camera traps	■ Undertaken for nocturnal species (particularly small mammals) in areas identified as potential habitat.	■ four camera traps deployed for four nights (16 trap nights)
	Harp trapping	■ Harp trapping for species that are indistinguishable from their calls. ■ Implemented following Anabats detecting potential listed threatened species (Nyctophilus spp.)	■ five harp traps deployed for four nights (20 trap nights)
30 January to 03 February 2023	Bird surveys	■ Bird Utilisation Surveys using the Band Model ■ Roaming bird surveys between survey areas.	■ 40 BUS surveys
	Bat surveys	■ Bat detection via the use of ultrasonic devices (Anabats)	■ four Anabat locations recording for four consecutive nights

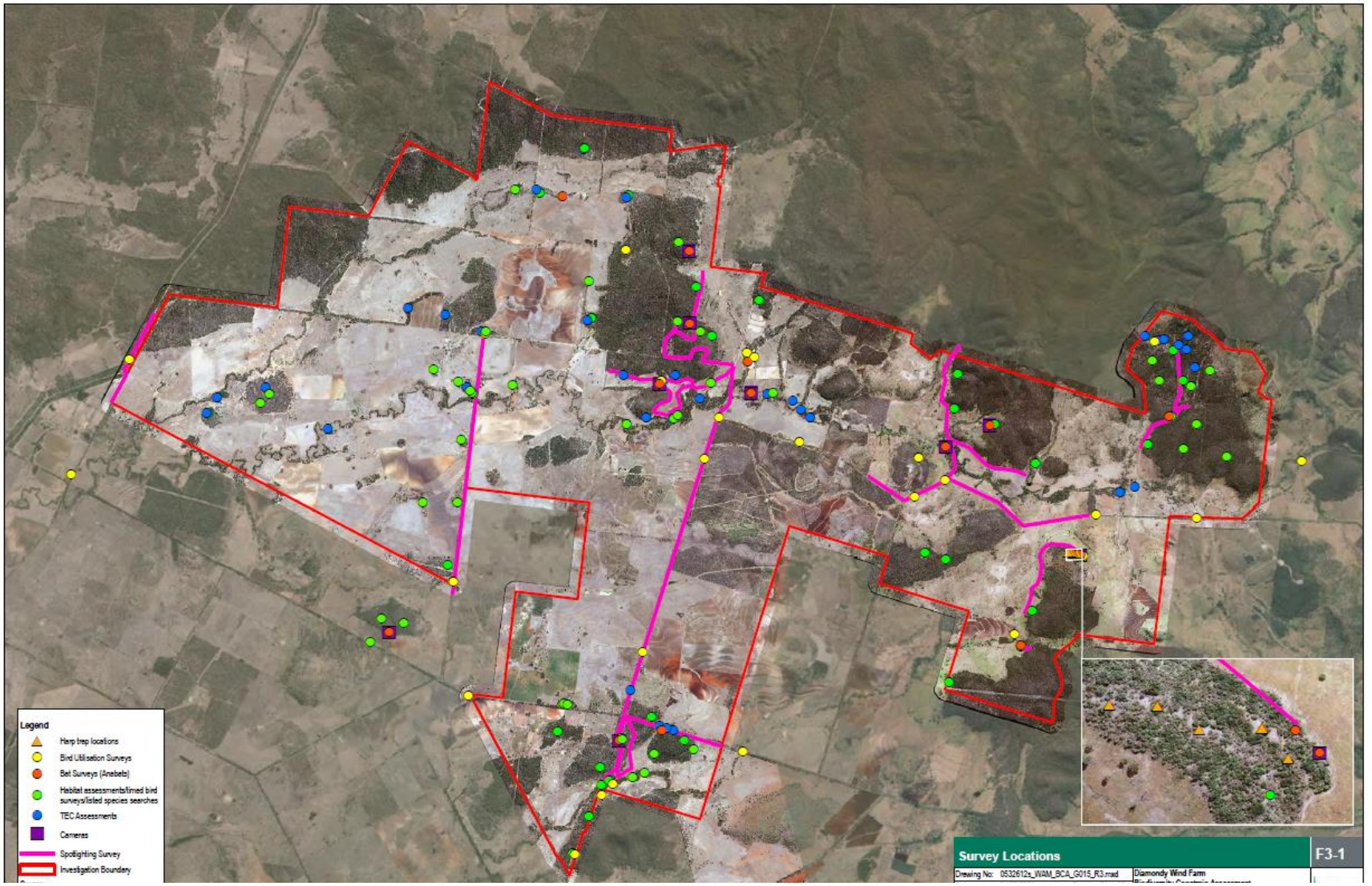


Figure 5-1 Ecological Survey Locations

5.2.1 Vegetation and Habitat Assessments

Vegetation community assessments and habitat assessments were undertaken to describe the type and condition of the vegetation communities in the Project Area. The outcomes of the assessment were used to inform the likelihood of occurrence assessment of listed threatened species and threatened ecological communities or other ecological significance.

The assessments undertaken included:

- Representative sampling of Regional Ecosystems (**RE**). This included quaternary assessments in accordance with Neldner et al. (2019);
- Assessment of water features (such as dams) and habitat values;
- Recording of topographical features; and
- Defining the barriers of both disturbed and undisturbed areas.

The parameters measured during habitat assessments included:

- Context with regard to landscape features (connectivity, proximity to water);
- Condition (weeds, evidence of disturbance, invasive species);
- Breeding and roosting habitat features (hollows, nests, caves);
- Foraging sources (flowering tree species, termite mounds);
- Microhabitat presence (woody debris, leaf litter specifically important for small mammals and reptiles);
- Wetland presence (presence of aquatic vegetation, water depth); and
- Signs of threatened species (such as scats, scratches and tracks).

Targeted surveys for threatened flora and fauna identified with potential to occur in the Project Area were undertaken at the same location as habitat assessments.

The targeted flora surveys were undertaken in accordance with the *Flora Survey Guidelines – Projected Plants, NC Act* ('Flora Survey Guidelines'). The Flora Survey Guidelines recommend meander surveys to be conducted in listed flora species habitat and during flowering periods. The Flora Survey Guidelines recommend searches to be conducted at the rate of one meander every two ha. For the field surveys, meander searches were undertaken at the same time as habitat assessments within flora trigger areas in the north of the Project Area, i.e. in spring. Not all plant species (e.g. grasses) exhibit diagnostic features (such as flower and fruit) at this time.

5.2.2 Listed Species Surveys

Targeted surveys were undertaken for listed species identified from the desktop searches as potentially occurring within the Project Area (refer to **Section 5.1**). The following information summarises the main techniques targeting listed threatened mammals, reptiles and snails within the Project Area.

Scat and scratch marks searches were undertaken for koala as per the *Survey Guidelines for Australia's Threatened Mammal* (as listed under the EPBC Act). Scat searches are not a specific survey guideline recommendation for locating greater gliders however have been listed in the *Terrestrial Vertebrate Fauna Survey Guidelines for Queensland* as a means to locate cryptic and nocturnal species. Other relevant guidelines and their recommended survey method and extent for the koala and greater glider are as follows:

- *Terrestrial Vertebrate Fauna Survey Guidelines for Queensland*:
  - Requires two 30 person minute spotlight searches of 100 x 100 m survey site; and
  - Scat and sign search can coincide with the systematic diurnal active searches, within 50 x 50 m quadrates of the survey site.

Relevant guidelines and requirements specific to the koala are as follows:

- *EPBC Act referral guidelines for the vulnerable koala*:
  - Strip transects which involve diurnal distance sampling and density searches;
  - Nocturnal spotlighting for smaller sites to determine presence and density; and
  - Scats – Spot Assessment Technique or similar which involves looking at the base of koala food trees for presence of koala scats.

Spotlighting was undertaken per guideline requirements focusing on arboreal species, particularly targeting koala and greater glider. Two teams spotlighted by foot and slow vehicle within suitable habitats and vegetation communities across six nights (total of twelve team nights spotlighting). Large and small tracts of vegetation were targeted for spotlight surveys, as well as sampling occurring within linear fragments of vegetation associated with water courses and road side vegetation, to adequately sample the vegetation communities and habitats that occur across the Project Area.

Searches for listed snails and reptiles identified in the desktop searches, were also undertaken in accordance with the following guidelines:

- *Yakka skink, Egernia rugosa. Targeted species survey guidelines (Ferguson, 2014)*;
- *Draft referral guidelines for nationally listed Brigalow Belt reptiles (DSEWPC, 2011)*; and
- *Australian land snails. A field guide to eastern Australian species (Stanisic, 2010)*.

Searches for reptiles and snails involved microhabitat identification and searches for signs of the species. This occurred throughout the Project Area in areas identified as potential habitat for the two listed snail species and five listed reptiles flagged in desktop searches. Other searches involved active searches in suitable habitat areas, including overturning of rocks and disturbance of leaf litter.

Habitat mapping was prepared for those listed species known or likely to occur to inform impact assessments.

5.2.3 Bird Surveys

Bird utilisation surveys (**BUSs**) involve 30 minute fix point surveys to provide data based on the species present, height, speed and direction of flight as stipulated by the Band Model (SNH 2012, Band 2000). Each fixed point survey site was located to provide a search radius of at least 100 m for small birds and up to 800 m for large birds with range finders used to determine distances. Searches primarily focused on birds most likely to be affected by the development, such as raptors (birds of prey) and large flocks of birds.

The survey guidelines for diurnal bird surveys and their requirements are as follows:

- *Terrestrial Vertebrate Fauna Survey Guidelines for Queensland*:
  - Diurnal bird surveys involve six x 5 -10 min area searches within 100 x 100 m survey site;
  - Two surveys conducted in the morning (<two hours after sunrise), two in mid-morning (two to four hours after sunrise) and two in less optimal times (four hours after sunrise and two hours before sunset).

The bird surveys were conducted in accordance with the time and effort required by the survey guideline requirements.

It is also noted that specific requirements for species listed in the *Survey Guidelines for Australia's Threatened Birds* (as listed under the EPBC Act) were considered in designing the field survey program. The *Survey Guidelines for Australia's Threatened Birds* recommends that flushing, listening for foraging scratching, and platelets searches for a total of 15 hours over three days, is recommended for the black-breasted button-quail. These methods were employed in suitable habitat in the northeast of the Project Area.

The 2019 field study undertook BUSs in accordance with the Band Model, at waterbodies and in open areas for birds of prey. Thus, the survey effort was performed in accordance with State legislation requirements.

A separate Bird and Bat Management Plan is to be prepared in accordance with the condition 10 of 2210-31751 SPD which has taken into account the results from field surveys and modelling and has taken a conservative approach to minimising collision risk and other potential impacts to birds.

5.2.3.1 Point surveys

Point surveys were conducted to target diurnal woodland and riparian bird species. Two ecologists traversed suitable woodland and riparian habitats and conducted 30 minute timed surveys for all birds in the area.

5.2.3.2 Waterbody Surveys

Waterbody surveys were conducted in order to target aquatic species and woodland species utilising the waterbody. Observations were made from a stationary position, and birds were identified by call detection and visual observations. The Project Area contained several artificial waterbodies, likely to act as important water sources in the landscape, particularly during dry conditions.

5.2.3.3 Birds of Prey Surveys

Birds of prey surveys were undertaken to target the listed threatened species such as the red goshawk (*Erythrotriorchis radiatus*) and generally occurring birds of prey. Birds of prey surveys were undertaken at vantage points (e.g. large hills and extensively cleared areas) at mid-morning when birds of prey become increasingly active.

5.2.4 Bat Surveys

Microbat surveys were conducted to determine the presence/absence of bats within the Project Area. One ultrasonic bat detector (Anabats) was placed at each of the five survey zones in the Project Area. These devices were used to detect ultrasonic signals from bat species in the Study Area, for four consecutive survey nights.

The bat detectors were placed across representative remnant vegetation/habitat types. This included riparian woodlands and eucalypt open forest or woodlands. The detectors were specifically placed in areas that were in close proximity to potential flight paths/water sources (farm dams). The survey locations were selected on the basis that they provided the greatest likelihood of detecting an abundance and diversity of bat species.

The detectors were secured onto trees at approximately 1.8 m above the ground. They were collected and the information recorded on the Anabats was then analysed by a specialist to determine the species recorded.

The Before-After-Control-Impact (**BACI**) design has also been implemented for bat surveys, in order to identify any impacts on bats as a result of the proposed development, with future control sites also to be determined at the conclusion of the design process.

The survey requirements and recommended survey effort and methods for bats is as follows:

- *Survey guidelines for Australia's threatened bats*:
  - Trapping methods such as harp traps are recommended. Such effort is not precisely stated, but studies have found that the use of 20 or more traps a night a good for detection (Schulz, 1999);
  - Echolocation call detection to be carried out for a recommended 30-60 minutes per night for four to five survey nights; and
  - Recommended that a variety of trapping and call detection methods are used together, where possible.

The 2019, 2020, 2021 and 2023 surveys were carried out in accordance with echolocation call detection requirements. Harp trapping was used as part of the 2021 survey effort, due to the presence of potential threatened *Nyctophillus spp*. being detected by anabats in December 2020. Harp trapping was undertaken in 2021 at the location where *Nyctophillus spp*. were detected by anabats to determine presence of *Nyctophillus spp*.

5.3 Vegetation Communities and Habitats

5.3.1 Regional Ecosystem and Regulated Vegetation

The VM Act distinguishes between vegetation that is Endangered, Of Concern, or Least Concern REs. REs are Queensland vegetation communities found within a particular bioregion that have a consistent combination of geology, landform and soil type, as determined by the Queensland Herbarium.

RE mapping shows the majority of the Study Area as RE types classed (under the VM Act) as Least Concern (**LC**) and Of Concern (**OC**). There are 13 REs mapped within the Project Area and these are summarised in **Table 5-3**.

The dominant vegetation communities identified in desktop searches and verified by field surveys were *Corymbia citriodora* (RE 11.10.1) and *Eucalyptus crebra* (RE 11.5.1) woodlands. *C. citriodora* woodlands (RE 11.10.1) are dominant in the Diamondy State Forest (north of the Project Area) and occurs as several large patches of remnant vegetation adjacent to the state forest in northern parts of the Project Area. The remnant vegetation associated with creek lines is dominated by poplar box (*E. populnea*) woodlands (RE 11.3.2). There are also some small to medium sized patches of remnant brigalow (*Acacia harpophylla*) (RE 11.9.5) which are largely found in the northern and western parts of the Project Area. South of Woolletts Rd (mid-south) and in the north-eastern part, remnant vegetation is categorised as *E. crebra* woodlands (RE 11.5.1).

In the centre of the Project Area, there is a private plantation of Chinchilla white gum (*E. argophloia*). The Chinchilla white gum is a naturally occurring rare species, known from only a small population that occurs across a few square kilometres, north of Jandowae/Nudley State Forest and south of Barakula State Forest. The plantation occurs approximately 25 km outside of the known distribution of the species. This plantation is privately owned, and is in the process of being cleared/harvested following a recent change of ownership.

Regrowth vegetation represents a small component of the Project Area and has been classified as 66.1 ha Department of Resources mapped regrowth vegetation and 345.8 ha of other mixed eucalypt species regrowth.

The Project Area has both large patches of Category B and some small areas of Category C regulated vegetation.

5.3.2 Habitats

The Project Area has been classified into seven broad habitat types. Habitats largely align with RE types and represent potential habitat for a variety of taxa. The habitats in the Project Area are mostly in moderate to low condition, with signs of degradation due to cattle grazing, erosion, and the presence of introduced flora species.

Essential habitat is defined as an area of habitat mapped by the State government where threatened fauna and/or flora are known to occur. No essential habitat or threatened flora was found within the Project Area.

5.3.3 Threatened Ecological Communities

Field surveys (refer to **Section 5.2**) determined there was evidence of potential habitat, relating to constituent REs, was found three Threatened Ecological Communities (**TECs**) within the Project Area.

These TECs are:

- Semi-evergreen vine thickets (**SEVT**) of the Brigalow Belt (North and South) and Nandewar Bioregions; ‘Endangered’, represented by constituent REs 11.8.3 and 11.9.4a. The Project Area was found to contain 58.0 ha of potential habitat for SEVT, REs 11.8.3 and 11.9.4a;
- Brigalow (*Acacia harpophylla* dominant and co-dominant); ‘Endangered’, represented by RE constituent RE 11.9.5. The Project Area was found to contain 97.6 ha of potential habitat for Brigalow, RE 11.9.5; and
- Poplar Box Grassy Woodland on Alluvial Plains, ‘Endangered’, represented by constituent RE 11.3.2. The Project Area was found to contain 315.3 ha of potential Poplar Box Grassy Woodland, RE 11.3.2.

5.3.3.1 Semi-evergreen vine thicket

The SEVT of the Brigalow Belt (North and South) and Nandewar Bioregions TEC is represented by fifteen REs in Queensland, with two constituent RE types mapped within the Study Area (RE 11.8.3 and 11.9.4a). This TEC is dominated by *Eucalyptus melanophloia* and *Casurina cristata*. A small

patch containing the characteristics of RE 11.8.3 was confirmed during field surveys to occur within the Study Area.

There was a total area of 86.8 ha SEVT TEC mapped from two patches in the Project Area; one in the north-east corner and one in the centre of the Project Area.

*5.3.3.2 Brigalow (*A. harpophylla *dominant and co-dominant)*

Brigalow (*A. harpophylla* dominant and co-dominant) TEC comprises 16 REs in Queensland, including RE 11.9.5 which is mapped in the Project Area. RE 11.9.5 patches were found during the survey effort of the Project Area. These patches of 11.9.5 were considered to be the Brigalow TEC based on meeting the size and native perennial plant cover requirements. The requirements are:

- The patch is ≥ 0.5 ha; and
- Exotic perennial plants comprise less than 50% of total vegetation cover of the patch.

There was a total area of 10.0 ha of Brigalow TEC mapped in the Study Area.

5.3.3.3 Poplar Box Grassy Woodland on Alluvial Plains

Poplar Box Grassy Woodland on Alluvial Plains TEC is represented by five REs in Queensland. Field surveys confirmed the presence within the Project Area of one of these, RE 11.3.2. This vegetation community aligned closely with Category C of the conservation advice National guidelines, which states:

- The crown cover of canopy trees in the patch is ≥ 10%; and
- <50% of perennial vegetation cover on ground layer was native, the patches must have:
  - ≥ 20 native plant spp. per patch in ground layer;
  - ≥ 10 mature trees/ha with ≥ 30cm dbh (and/or hollows); and
  - Smaller trees, saplings or seedlings suggestive of periodic recruitment.

There was a total area of 139.2 ha of habitat for Poplar Box TEC mapped in the Study Area.

The impact to protected vegetation have been avoided through Project design and micro-siting considerations (refer to **Section 6.1**). Implemented Project layout avoids the vast majority of impacts to the protected vegetation, with remaining vegetation impacts limited to the clearing of 38.85 ha, representing approximately 0.3% of the Project Area. Impacts to TECs have been completely avoided through Project design, no TECs are impacted by the Project.

Table 5-3 Regional Ecosystems within the Project Area

Regional Ecosystem	Description	Structure Category	VMA Status	Biodiversity Status	Project Area (ha)	% of Project Area
11.10.1	*Corymbia citriodora* dominates and forms a discontinuous woodland (to an open forest). Occurs on coarse-grained sedimentary rocks.	Sparse	LC	NoC	1,386.1	10.7
11.3.1	*Acacia harpophylla* and/or *Casurina cristata* form an open forest +/- scattered *Eucalypt* spp. Occurs on alluvial plains	Mid-dense	E	E	25.21	0.2
11.3.2	*Eucalyptus populnea* woodland to open woodland on alluvial plains.	Sparse	OC	OC	148.96	1.1
11.3.4	Woodland to open woodland containing *Eucalyptus tereticornis* and/or *Eucalyptus* spp. Occurs on alluvial plains	Sparse	OC	OC	8.35	0.1

Regional Ecosystem	Description	Structure Category	VMA Status	Biodiversity Status	Project Area (ha)	% of Project Area
11.5.1	Woodland to open woodland canopy dominated by *Eucalyptus crebra* and/or *E. populnea* +/- *Callitris glaucophylla*, *Angophora leiocarpa* and *Allocasuarina luehmannii*. Occurs on sandplains.	Sparse	LC	NoC	867.34	6.7
11.7.4	Mixed *Eucalypt* spp. woodland that occurs on low hills and ranges with shallow soils. Species can include *Eucalyptus crebra, E. decorticans, Corymbia trachyphloia, E. tenuipes, C. watsoniana* and *Callitris glaucophylla.*	Sparse	LC	NoC	15.21	0.1
11.7.5	Shrubland +/- emergent Eucalypt spp. Occurs on natural scalds on highly weathered coarse-grained sedimentary rocks.	Sparse	LC	NoC	169.01	1.3
11.8.3	Semi-evergreen vine thicket occurring on Cainozoic igneous rocks. Species that may occur include *Acacia harpophylla, Casuarina cristata* and *Eucalypt* spp.	Dense	OC	OC	150.93	1.2
11.9.2	Woodland to open woodland of *Eucalyptus melanophloia +/- E. orgadophila*. Occurs on fine-grained sedimentary rocks.	Sparse	LC	OC	74.01	0.6
11.9.4a	Semi-evergreen vine thicket with emergent *Eucalyptus crebra* that occurs on hillsides.	Dense	OC	E	21.74	0.2
11.9.5	Open forest that is dominated by *Acacia harpophylla* and/or *Casurina cristata*. It can also be *A. harpophylla* with semi-evergreen vine thicket understorey. Occurs on fine-grained sedimentary rocks.	Mid-dense	E	E	120.15	0.9
11.9.7	Shrubby woodland dominated by a discontinuous canopy of *Eucalyptus populnea*. Occurs on fine-grained sedimentary rocks.	Sparse	OC	OC	145.21	1.1
Regrowth vegetation					66.1	0.5
Other mixed eucalypt species regrowth					490.10	3.8
Non-remnant					9,306.57	71.6
Total					**12,995.0**	**100.0**

RE listing status:
E = Endangered
OC = Of Concern
NoC = No concern of present

5.4 Threatened Fauna

The findings of the ecological field surveys (**Section 5.2**) ground truthed the presence of a number of protected fauna species as well as identifying potential habitat for additional fauna species that are likely to occur within the Project Area. A review of desktop information in combination with the data collected during the field surveys (which verified habitat presence), five listed species under the EPBC Act and NC Act, were considered as 'Known' or 'Likely' to occur within the Project Area. These species are:

- greater glider (*Petauroides Volans*);
- koala (*Phascolarctos cinereus*);
- white-throated needletail (*Hirundapus caudacutus*);
- glossy ibis (*Plegadis falcinellus*); and
- short-beaked echidna (*Tachyglossus aculeatus*).

An additional 16 fauna species, refer to **Table 5-4**, have been determined to possibly occur within the Project Area.

Table 5-4 Potentially Listed Fauna Species within the Project Area

Species name	Common name	EPBC Act Status	NC Act Status
Anthochaera Phrygia	Regent honeyeater	CE	CE
Calidris ferruginea	Curlew sandpiper	CE, M	E
Erythrotriorchis radiatus	Red goshawk	V	V
Geophas scripta scripta	Southern squatter pigeon	V	V
Grantiella picta	Painted honeyeater	V	V
Lathamus discolour	Swift parrot	CE	E
Rostratula australis	Australian painted snipe	E	V
Chalinolobus dwyeri	Large-eared pied bat	V	V
Nyctophilus corbeni	Corben's long-eared bat	V	V
Pteropus poliocephalus	Grey-headed flying fox	V	-
Dasyurus maculatus maculatus)	Spotted-tailed quoll	E	V
Dasyurus hallucatus	Northern quoll	E	-
Anomalopus mackayi	Five-clawed worm-skink	V	E
Delma torquate	Adorned delma	V	V
Egernia rugosa	Yakka skink	V	V
Furina dunmalli	Dunmall's snake	V	-

Status listing per EPBC and NC Acts: CE = Critically Endangered; E = Endangered; V = Vulnerable; M = Migratory; LC = Least Concern; SLC = Special Least Concern.

Impacts to birds and bats are to be included and assessed as part of the Bird and Bat Management Plan. As such, impacts to birds and bats have not been considered further as part of this VFMP.

Project design and micro-siting has avoided the majority of impacts to threatened fauna habitat. Remaining impact to protected species is limited to removal of up to 30 ha of Koala habitat and up to 30 ha of Greater Glider habitat. These limits have been conditioned as part of the EPBC Act approval (EPBC 2020-8727) and will also be offset in accordance with the EPBC Act approval. Residual impact areas to Koala and Greater Glider habitat is available at **Figure 5-2**.

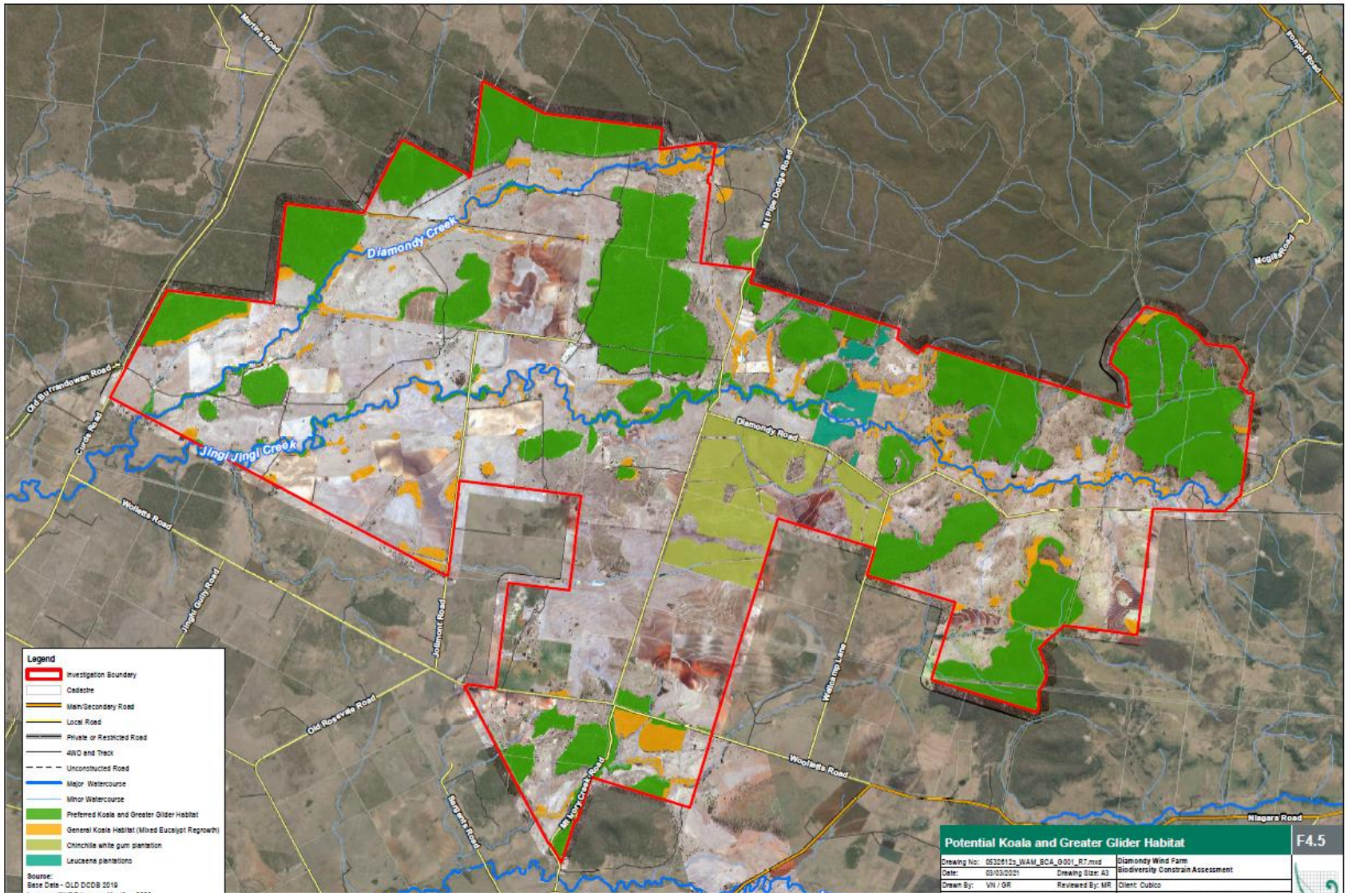


Figure 5-2 Koala and Greater Glider habitat within the Project Area

5.5 Introduced Vegetation and Fauna

5.5.1 Introduced Vegetation

Four introduced flora species listed as weeds of national significance (**WONS**) and listed under the *Queensland Biosecurity Act 2014* are known to occur within the Project Area (**Table 5-5**). This was because they were recorded during the 2019 field survey.

Weed management is to be undertaken in accordance with Section 23 of the *Biosecurity Act 2014*, General Biosecurity Obligation and individual land holder requirements at all times.

Table 5-5 Introduced Flora Known from the Project Area

Species name	Common name	WONS	Biosecurity Act
Opuntia spp.	prickly pears	✓	Restricted invasive
Lantana camara	common lantana	✓	Prohibited invasive
Parthenium hysterophorus	parthenium weed	✓	Restricted invasive
Solanum elaegnifolium	silver nightshade	✓	Restricted invasive

1. Species recorded through database searches only

5.5.2 Introduced Fauna

Three introduced fauna species were recorded in the Project Area during field surveys, including domestic dog (*Canis lupus familiaris*), hare (*Lepus capensis*) and common myna (*Acridotheres tristis*).

While not recorded, it is expected that the Project Area may provide suitable habitat for the cane toad (*Rhinella marina*), cat (*Felis catus*), pig (*Sus scrufa*), red fox (*Vulpes vulpes)*, house mouse (*Mus musculus*) and rat (*Ratus ratus*).

It is noted that in the February 2021 field investigation, mice were recorded in high abundance throughout the Study Area. Landowners had reported such abundance to be the highest they had recorded for the past 10-15 years.

6. PROJECT ACTIVITIES AND POTENTIAL IMPACTS

Potential impacts from the Project vary over project life with each project stage consisting of different activities and therefore different impacts on protected vegetation and fauna. The activities likely to result in potential ecological impacts are listed below for each project stage. As the potential impacts change for each project phase, management actions a will also be required to be stage specific.

6.1 Design Stage

While it is noted that no on-ground works are include in the design project stage, the design stage presents one of the greatest opportunities to avoid impacts to vegetation and fauna habitat within the project life cycle.

Potential impacts for the design stage include:

- Site design and turbine layout;
- Poor ecological understanding of the site leading to greater impacts to protected matters; and
- Increased fragmentation and increases in fauna barriers across the project area due to poor project design.

The Project has been designed to avoid impacts to environmental matters through implementation of a *two-stage design process* detailed further below.

6.1.1 Two-stage Design Process: Avoiding Impacts

The Project consists of widely spaced wind turbines and associated infrastructure. Given the large size of the Project Area, and the widely spaced nature of the Project, the ecological surveys were undertaken in lock step with the development design process to better focus the ecological survey effort and inform Project design.

The first design phase is based on avoidance of identified important ecological values (vegetation and potential mapped habitat for listed threatened species) as a result of the field investigation conducted in November, 2019. The ecological findings from this survey conservatively documented important ecological values across the Project Area. Based on data collected in this subsequent survey events in 2020 and 2021, it was considered that a second phase of detailed surveys at proposed disturbance areas is an important part of avoiding ecological values through site specific pre-clearance surveys at each proposed infrastructure location.

This second design phase involved on the ground micro-siting at each proposed infrastructure location (ie. access tracks, WTGs etc). The micro-siting involved more detailed pre-clearance surveys and assessments of infrastructure locations, to determine if any ecological values, such as important micro-habitat features for listed threatened species, may occur at each location. The infrastructure design has considered minimising impacts to MNES to 100m in accordance with State approval requirements. The pre-clearance surveys targeted the locations for infrastructure (eg. access tracks, WTGs etc.) and determined the actual presence/absence of listed threatened species micro-habitat features (eg. hollows, ground shelter, rocky crevices etc.) and proposed locations for infrastructure were adjusted accordingly.

This two-phase development layout design and avoidance process allowed for planned areas of disturbance to be adequately assessed in accordance with relevant legislation.

The design stage for the Project is complete with a primary environmental risk avoidance strategy for the Project having incorporated environmental survey data into project layout design in accordance with the two-stage design process. By ensuring ecological survey data was appropriately considered during the Project design stage, the Project avoids all impacts to TECs identified on site and avoids clearing of vegetation that triggers State environmental offsets. Residual impacts to protected matters that require additional management post design phase are limited to clearing of fauna habitat.

Vegetation clearing limits and locations are specified in the State planning approval, condition 21 (**Appendix B**).

> ***2210-31751 SPD - Condition 21***
>
> *Clearing a maximum 38.85 hectares of vegetation under this development approval is limited to the area identified as:*
>
> *(a) Area A as shown on attached Vegetation Management Plan VMP 2210- 31751 SPD, Sheets 1 to 6, version 1*
>
> *(b) Derived Reference Points for GPS listed on attached Vegetation Management Plan VMP 2210-31751 SPD, page 1 to 3, version 1.*

Regarding residual impacts to protected fauna habitat, impact limits are specified in the Commonwealth approval, condition 2 (**Appendix A**).

> ***EPBC 2020/8727 – Condition 2***
>
> *The approval holder must not clear:*
>
> *(a) more than 30 ha of Koala habitat within the project area;*
>
> *(b) more than 30 ha of Greater Glider habitat within the project area;*
>
> *(c) outside the project area.*

6.2 Construction Stage

The Construction Stage of the Project presents the highest risk for vegetation and fauna, key activity risks associated with project construction are included in **Table 6-1**.

Table 6-1 Construction Stage Activity Impacts

Potential Vegetation Impacts	Potential Fauna Impacts
■ Vegetation clearing for new access tracks, temporary construction compounds and laydown areas, borrow pits, water storages; concrete batching plant; turbine pads; trenches for power and instrumentation cables; electrical substation and overhead powerlines; and associated earthworks; ■ Introduction and spread of priority weeds; ■ Excavating trenches; ■ Blasting for turbine foundations (if required); ■ Construction traffic movements and plant operation (rock crushing and concrete batching plant); ■ Indirect impacts to adjacent vegetation as a result of dust, runoff and erosion, including impacts to downstream environments; and ■ Incidental spills.	■ Habitat clearance for permanent and temporary construction facilities. The consequences of these impact may include: ○ Direct loss of native fauna habitat; ○ Injury and mortality to fauna during clearing of fauna habitat; ○ Introduction and spread of priority weeds and pathogens that impact fauna; and ○ Disturbance to fallen timber, dead wood and bush rock. ■ Soil and water contamination; ■ Creation of barriers to fauna movement and habitat fragmentation (e.g. fence installation, trenching); ■ Generation of excessive dust, light or noise that disturbance; and ■ Vehicle interaction and strike.

Risks can be attributed to the direct construction activity (laydown and access track requirements) which may be temporary, turbine and access track design requirements (e.g. footings, road expansions) which are considered more permanent impacts and incidental construction related activities (e.g. of additional vehicles within the Project area). **Table 6-2** details the potential impacts to environmental values posed by the Project.

It is noted that duration of the construction phase is anticipated to be 24 to 30 months per Stage with Stage 1 and 2 to be undertaken consecutively. Construction timing and staging provides opportunity to progressively impact vegetation and fauna, allowing opportunity for fauna to relocate, as well as presenting the opportunity to staged revegetation.

Table 6-2 Potential Impacts to Ecological Values

Impact	Relevance to the Proposed Development
Clearing remnant and regrowth vegetation and the resultant loss of habitat for native fauna	There are two endangered and five of concern RE types located within the Project Area. Clearing for the proposed development will impact a total of 8.2 ha of the Of Concern RE types, and will not impact Endangered RE types. The proposed development includes an area of 13.0 ha of Least Concern remnant vegetation within the Project Footprint. There will be loss of vegetation that will result in the loss of habitat for some native and potentially threatened fauna. Such habitats would likely be used for foraging and potentially for breeding of some species. However, the area to be impacted represents a small portion of the overall amount of remnant vegetation within the Project Area. Additionally, the landscape is already highly modified and cleared for agricultural and cattle grazing purposes, and so contains limited habitat value for species present. Nevertheless, despite minimising impacts where possible, vegetation clearing will result in the permanent removal of these vegetation types and the habitat values they provide for native flora and fauna for the life of the development.
Indirect impacts to species behaviour through creating barriers to movement and dispersal	The fragmentation of habitat and the construction of the turbines may result in barriers to movement for species accessing and dispersing through the Project Area. This is such that threatened species, like the koala, may change their dispersal behaviours if infrastructure is built in an area that may impede local movement. Additionally, short-term construction activities and machinery may also create barriers to movement and result in behavioural changes of species. Nonetheless, any clearing of vegetation is proposed to occur in small localise strips or small patches. Clearing will not involve the removal of entire patches of vegetation. Therefore, species will still be able to traverse the landscape, as connections between remnant and regrowth patches will be largely avoided by the proposed development.
Indirect impacts to adjacent habitat areas as a result of noise, dust, runoff and erosion, including impacts to downstream environments	Construction traffic movements and plant operations will result in noise and dust and have the potential to negatively impact adjacent vegetation communities and habitats. Construction vehicle movements may result in accidental killing and injury of fauna. Noise disturbances have the potential to influence breeding, roosting or foraging behaviour of native fauna. Studies suggest that the consistency of noise is more important than volume, with irregular an unpredictable noise being more disruptive to wildlife (Jones et al., 2015), as may be emitted during construction and decommissioning. For the general native fauna community, individuals may relocate to adjacent areas during times of noise disturbance. Dust generated by vehicle and machinery movements has the potential to smother vegetation directly adjacent to the works and inhibit plant growth and palatability for native fauna. These effects, however, would be localised. There are measures available to limit dust generation and dispersion. Dust, noise and vibration impacts will also impact sensitive receivers in the Project Area. Nonetheless, the layout and design will minimise such impacts through avoiding turbine locations within close proximity to such sensitive receivers.
Indirect impacts to adjacent habitat areas as a result of an introduction or spread or weed and pest species	As a result of the removal of vegetation during the construction phase, there is potential for the introduction and/or spread of weeds and pests species throughout the Project Area. This introduction or spread of such weeds and pests could be a result of on foot movement, vehicular movement and the disruption and movement of vegetation. Such weed and pest species have the potential to negatively impact native flora and fauna communities through competition for resources and/or predation. The majority of the Project Area and surrounds are highly cleared and modified areas of cattle grazing property, where introduced flora are common. Four WONS were recorded throughout the Project Area: prickly pear, common lantana, parthenium weed and silver nightshade. Three introduced fauna species were recorded in the Project Area during field surveys, including domestic dog, hare and common myna. Additionally, a number of introduced flora and fauna species are considered as potentially present throughout the Project Area.

Impact	Relevance to the Proposed Development
Direct mortality or injury to native fauna during construction and operations	The peak traffic periods will be during the construction period with operational vehicle movements likely to be minimal. While many fauna groups are highly mobile (e.g. birds) and are likely to move when machinery and vehicles approach, other less mobile groups (e.g. reptile and amphibians) may be more vulnerable to this impact. Similarly, there will be excavation (construction only) which may provide a trapping hazard for some fauna groups (e.g. amphibians, small reptiles and small mammals).
Fragmentation of connectivity areas	The Project Area is a highly disturbed and modified landscape which has been cleared for pastoral and cattle grazing purposes. There are a number of existing cleared vehicle and cattle tracks. There are some remnant and regrowth patches of vegetation that occur throughout, and outside of, the Project Area. The Developmental Footprint will result in the clearing of some portions of these remnant and regrowth patches and some further small linear clearings for additional access tracks. However, fragmentation is limited based on the dispersed nature of the small amounts of clearings that will occur. Access tracks are relatively narrow, and are unlikely to represent an obstacle for many species.
Disturbance to MNES and MSES	Disturbance to MNES has been summarised in the impact assessment, in **Section 7**.

6.3 Operations Stage

The operation stage for the Project is taken to commence once construction is complete and persist for a period of 30 years or until the commencement of decommissioning, whichever is sooner.

While impacts associated with the operations stage are considered less intense when compared to the construction stage, impacts are expected to continue to require management for the duration of the operations stage to ensure impacts to vegetation and fauna are managed appropriately. Operation stage impacts are detailed in **Table 6-3**.

Table 6-3 Operations Stage Activity Impacts

Potential Vegetation Impacts	Potential Fauna Impacts
■ Routine maintenance and servicing of turbines; ■ Maintenance of access tracks; ■ Weed management (around turbines and infrastructure); and ■ Introduction and spread of priority weeds due to increase vehicular movement associated with Project operation.	■ Disturbance effects that exclude fauna from habitat; ■ Rotor noise disturbance to fauna behaviours; ■ Direct collision impacts with Project assets; and ■ Permanent habitat reduction or fragmentation of habitats may persist should appropriate connectivity not be replaced or maintained post construction activity e.g. barrier effects that limit fauna movement between essential resources, such as foraging and roosting areas.

To ensure operations stage activity impacts have been thoroughly considered, as part of the project Design stage operational impact modelling has been undertaken. Modelling was completed which addressed operational noise assessments and shadow flicker and blade glint assessments.

6.4 Decommissioning Stage

The Decommissioning Stage of the Project includes dismantling and removing of the permanent infrastructure within the Project Area. While risks posed are similar to the Construction Stage (refer to **Section 6.2**) due to the need for heavy machinery, set down area requirements, access track requirements, demolition noise and dust considerations and erosion and sedimentation associated with exposure of unvegetated soil. The decommissioning stage of the Project also involves opportunity for rehabilitation works to restore impacted habitat.

This Vegetation and Fauna Management Plan is not designed to address rehabilitation requirements or specific impact controls during the decommissioning of the Project.

A separate Decommissioning and Rehabilitation Management Plan will be prepared in accordance with State Approval 2210-31751 SPD (refer to **Appendix B**) to address environmental risks associated with the decommissioning of the Project.

7. MITIGATION AND MANAGEMENT MEASURES

Mitigation and management measures for each Project stage are required to ensure that impacts to vegetation and fauna identified in **Section 6** are avoided to the greatest extent possible.

Key mitigation and management measures, responsible entity and timing are provided in **Table 7-1**.

Table 7-1 Management and Mitigation Measures

Stage	Impact	Mitigation/Management Action	Responsibility	Timing
Design	Site design and turbine layout.	Areas of remnant and regrowth vegetation and protected flora and fauna habitat have been avoided as part of the completed Project design micro-siting.	Proponent	Completed
		Design of the turbine ensures blade sweep area >40 m above ground level to provide a collision-free foraging zone within the canopy and 20 m above the canopy.	Proponent	Completed
		Infrastructure has been located preferentially to avoid isolating, fragmenting, edge effects or dissecting tracts of native vegetation.	Proponent	Completed
		Clear marking of areas to be impacted and non-impacted, ensuring that the clearing footprint does not extend further than expected to create unnecessary fragmentation.	Contractor	Prior to construction
	Poor ecological understand of the site leading to greater impact to protected matters.	Ecological pre-clearance surveys and on-ground micro siting have ensured infrastructure design and project layout is in areas which avoid, and subsequently minimise edge effects and the isolation, fragmentation, or dissection of tracts of native vegetation.	Proponent	Completed
	Increases fragmentation and increases in fauna barriers across the project area due to poor project design.	Areas of remnant and regrowth vegetation and protected flora and fauna habitat have been avoided, where possible, as part of the completed Project design micro-siting.	Proponent	Completed
Construction	Vegetation and habitat clearing for new access tracks, temporary construction compounds and laydown areas, borrow pits, water storage; concrete batching plant; turbine pads; trenches for power and instrumentation cables; electrical substation and overhead power-lines; and associated earthworks.	Where clearing is to be undertaken within proximity to Koala and Greater Glider habitat, all clearing shall be within clearly marked boundaries and in accordance with the relevant approvals.	Contractor	At all times
		Vegetation will only be removed that has been approved to be cleared.	Contractor	At all times
		Include toolbox talks for site specific flora information to all field staff and contractors.	Contractor	Daily
		Daily inspections by suitably qualified spotter / catcher during clearing, specifically hollow trees or food tree species.	Contractor	Daily
		Provide site specific information on relevant threatened species.	Contractor	At all times
		All near misses and incidents will be fully investigated Where necessary corrective actions will be developed to improve existing processes.	Contractor	As required

		Development and implementation of an Offset Area Management Plan to compensate for the clearing of protected wildlife habitat, in compliance with condition 5 of the Commonwealth approval (EPBC 2020/8727).	Proponent	Prior to construction.
	Introduction and spread of priority weeds.	A biosecurity plan will be developed and implemented for the Project. This will include measures such as vehicle wash downs, weed certification and obligations to remain on access tracks throughout the Project Area.	Contractor	Pre-Start Works
		Activities will be planned so that movement of vehicles, plant, machinery and equipment between properties will be avoided if possible.	Contractor	At all times
		Imported material able to transport weed seed will be assessed to ensure they are free of contamination, disease and invasive weeds.	Contractor	At all times
		Access roads, easements and yards will be kept weed free where possible.	Contractor	At all times
		Only registered herbicides will be used by a licenced weed sprayer.	Contractor	At all times
		Include toolbox talks for site specific vegetation information during the project.	Contractor	Daily
		Ensure appropriate waste management (lidded bins), including food scraps, to reduce potential for feral species to become established on-site.	Contractor	At all times
		Access to a landholder's property will not occur unless authorised under a land use agreement.	Contractor	At all times
		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.	Contractor	At all times
	Excavating trenches.	Where trenching and excavations are created which may entrap fauna, suitable escape measures are put in place, and excavations are checked for fauna before backfilling.	Contractor	At all times
		All near misses and incidents will be fully investigated. Where necessary corrective actions will be developed to improve existing processes.	Contractor	As required

	Construction traffic movements and plant operation (rock crushing and concrete batching plant).	All driving will be undertaken at safe speeds that are designated for the Study Area. No driving will occur in unauthorised areas.	Contractor	At all times
		Vehicles, plant and machinery will comply with site-specific speed limits to minimise dust generation.	Contractor	At all times
	Indirect impacts to adjacent vegetation as a result of dust, runoff and erosion, including impacts to downstream environments.	Staff and contractors will be made aware through general site induction and training of the potential to generate dust emissions and the appropriate mitigation and management measures that should be implemented.	Contractor	At all times
		Construction activities must not, other than in accordance with the approved plan, interfere or block natural drainage e.g. disturbing channel contours.	Contractor	At all times
		Where required, watercourse crossing points will be adequately stabilised to prevent erosion.	Contractor	At all times
	Habitat clearance for permanent and temporary construction facilities.	Where identified, as required a qualified fauna spotter-catcher will conduct an assessment immediately prior to clearing of vegetation for the presence of fauna species. Where fauna are detected, the spotter catcher will assess and implement the most appropriate method to avoid or minimise impacts on that fauna as a result of clearing.	Contractor	At all times during clearing works
		Daily inspections by spotter / catcher during clearing, specifically hollow trees or food tree species	Contractor	Daily
		Provide site specific information on relevant threatened species.	Contractor	At all times
	Soil and water contamination.	Where required, watercourse crossing points will be adequately stabilised to prevent erosion.	Contractor	At all times
		Construction activities must not interfere or block natural drainage e.g. disturbing channel contours.	Contractor	At all times
	Generation of excessive dust, light or noise that disturbance.	Staff and contractors will be made aware through general site induction and training of the potential to generate dust emissions and mitigation and management measures that should be implemented.	Contractor	At all times
		Dust will be minimised through engineering controls on machinery and other available dust suppression methods, such as use of water sprinklers.	Contractor	At all times
		Vehicles, plant and machinery will comply with site-specific speed limits to minimise dust generation.	Contractor	At all times

	Vehicle interaction and strike	All driving will be undertaken at safe speeds that are designated for the Project Area. No driving will occur in unauthorised areas.	Contractor	At all times
		Project area site entry and exits will be clearly marked to ensure vehicle movements are contained within the approved areas.	Contractor	At all times
		Injured, sick or dead fauna will be dealt with accordingly, recorded and reported during the construction phase.	All Personnel	As required
		All near misses and incidents will be investigated to establish root cause. Where necessary corrective actions will be developed to improve existing processes.	All Personnel	As required
Operation	Routine maintenance and servicing of turbines and tracks.	Injured, sick or dead fauna will be dealt with accordingly, recorded and reported during the operation phase.	All Personnel	As required
		Maintenance work is to only be undertaken within the approved development footprint. No additional areas are to be impacted as a result of maintenance work.	Contractor	At all times
	Weed management (around turbines and infrastructure).	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.	Contractor	At all times
	Introduction and spread of priority weeds due to increase vehicular movement associated with Project operation.	A biosecurity plan will be developed and implemented for the Project. This will include measures such as vehicle wash downs, weed certification and obligations to remain on access tracks throughout the Project Area.	Contractor	At all times
		Weeds of National Significance and Restrictive Invasive species will be identified and monitoring in the Project Area. Appropriate weed monitoring will occur to ensure new weed species are identified and recorded.	Contractor	At all times
	Direct collision impacts with Project assets.	Injured, sick or dead fauna will be dealt with accordingly, recorded and reported during the operation phase.	All Personnel	As Required
	Permanent habitat reduction or fragmentation of habitats may persist should appropriate connectivity not be replaced or maintained post construction activity e.g. barrier effects that limit fauna movement between essential resources, such as foraging and roosting areas.	Injured, sick or dead fauna will be dealt with accordingly, recorded and reported during the operation phase.	All Personnel	As Required

To ensure the success of the Management and Mitigation Measures (**Table 7-1**), monitoring and reporting will undertaken to assess success of implemented management and mitigation measures. **Table 7-2**.

Table 7-2 Monitoring and Reporting Measures

Stage	Action	Responsibility	Timing
Monitoring	Daily inspections by spotter / catcher during clearing, specifically hollow trees or food tree species	Contractor	Daily
	Weekly site inspections to review implemented control measures during construction	Contractor	Weekly
	Auditing of Construction Environmental Management Plan during construction	Contractor	Quarterly
Reporting	Sightings and incidents reported in daily Pre-starts during construction	Contractor	Daily
	GPS co-ordinates of all MNES and MSES flora locations to be reported when clearing activities are planned.	Contractor	As required
	Any cleared vegetation not designated to be cleared to be reported to HSEQ Manager	Contractor	Within 24 hours
	Monthly report during construction to report on clearing activities aligned with approval requirements.	Contractor	Monthly
	Annual report on weed management measures and maintenance of vegetation activities, aligned with approval requirements	Proponent	Annually
	Fauna spotter-catcher will keep an inventory of any fauna species encountered with details of species, capture and release condition and capture and release GPS co-ordinates during construction	Spotter Catcher	Daily
	Injured native fauna to be reported to HSEQ Manager	Contractor	Within 24 hours

7.1 Training requirements

In addition to the mitigation and management measures in **Section 7**, it is a requirement of undertaking works for the Project that operators and contractors are appropriately qualified for the works they are engaged to be undertaking.

Ensuring that operators and contractors have appropriate qualifications is to be inbuilt into Wambo's contractor engagement process with the contractor responsible for ensuring that it holds relevant licencing, experience and education to be undertaking the works it has been engaged to undertake.

Engagement of a qualified fauna spotter-catcher with a Damage Mitigation Permit is consistent with the requirements of the high and low risk SMP that is required for tampering with a protected animals breeding place under the NC Act.

The fauna spotter-catcher will conduct a search immediately prior to clearing of vegetation for the presence of fauna species and important habitat values. Where fauna or important habitat values are detected, the spotter catcher will assess and implement the most appropriate method to avoid or minimise impacts prior to clearing in accordance with the relevant SMP.

Engagement of a qualified fauna spotter-catcher with a Damage Mitigation Permit is consistent with the requirements of the high and low risk SMP that is required for tampering with a protected animals breeding place under the NC Act.

Additionally, it is a requirement of the Nature Conservation (Koala) Conservation Plan 2017, that proponents undertaking cleaning of koala habitat engage a koala spotter to be present during clearing activities. A koala spotter is a person who has qualifications and experience, or demonstrated skills and knowledge, in locating koalas in koala habitats; or conducting arboreal fauna surveys.

8. ADAPTIVE APPROACH TO MANAGEMENT – ADDRESSING PROJECT CHANGE

Corrective actions in relation to vegetation and fauna management may arise during the course of the Project. Corrective action and management plan adaptation may be required due to a number of reasons, including:

- Recommendation outlines in incident investigation reports, including investigation into community concern, near miss incidents and non-compliance matters;
- Review of monitoring results indicating performance trends that are inconsistent with required outcomes of the management plan e.g increase in noted edge effects, vegetation decline, increased weeds and increased dust and sediment;
- Outcomes of audits, checks and inspections; and
- Identification of hazards or improvement opportunities.

Ensuring that the Project has capacity to adapt to any changes experienced within the Project timeline, performance targets and triggers for response have been provided in **Table 8-1**.

Table 8-1 Performance Target Triggers

Performance Target	Trigger
Ensure compliance with the relevant legislative requirements.	Compliance audits note matters of concern regarding condition compliance; or Community notification regarding nuisance or impact is reported.
Ensure compliance with relevant requirements of the State and Federal approvals.	Clearing of vegetation and fauna habitat reaches 80% or maximum disturbance limits.
No disturbance to vegetation outside the construction footprint.	Unauthorised clearing noted during informal or formal monitoring activities.
Minimise disturbance to vegetation within the Study Area.	
No increase in distribution of noxious weeds currently existing within the Study Area.	Spread of weed cover or pest abundance noted.
No new noxious weeds introduced to the Project Area.	Presences of new weeds or pests noted.
No pollution or siltation of aquatic ecosystems, wetlands, endangered ecological communities or threatened species habitat.	Sedimentation noted in receiving waterways or erosion and sediment control measures found to be in poor conditions during routine inspections.
No fauna mortality during clearing and construction.	Injured, sick or dead fauna located or reported during Project construction or operation.

8.1 Corrective Actions

Should a trigger in **Table 8-1** be met or exceeded, a decision-making process will be followed to determine if the trigger event is a result of the Project and, if relevant, what corrective action may be appropriate to address the trigger event.

Corrective actions will be undertaken in accordance with operational work conditions in **Table 8-2**.

Table 8-2 Potential Corrective Actions and Triggers

Trigger	Potential Corrective Action
Compliance audits note matters of concern regarding condition compliance.	1. Identify potential cause. 2. Investigate circumstances that resulted in identified cause. 3. Implement corrective action as deemed appropriate after identifying cause of the trigger event e.g. contractor re-education, replacement of signage. 4. Notify appropriate compliance authority as required.
Community notification regarding nuisance or impact is reported	1. Identify if the cause may be attributed to the Project. 2. Determine if the cause is likely to be without grounds. 3. Review conditions potentially related to the cause and determine if the project is compliant. 4. Determine what appropriate action/s may be implemented to address community concern.
Clearing of vegetation and fauna habitat reaches 80% or maximum disturbance limits.	1. Review vegetation and fauna clearing plans to ensure that disturbance limits have not been exceeded based on current clearing limits. 2. Should, upon review, it be anticipated that clearing will exceed maximum clearing limits then a review of the remaining clearing activities will be undertaken to ensure compliance is maintained. 3. Where further clearing is expected to exceed the maximum clearing limits the appropriate approval authority will be contacted to determine available options.
Unauthorised clearing noted during informal or formal monitoring activities.	1. Identify potential cause, which may include: (a) Clearing beyond the project footprint (over-clearing); (b) Edge effects such as shading, dust emissions and interruption of surface water flows 2. Implement remedial action as related to the identified potential cause/s e.g. review construction practices against the Construction Environmental Management Plan and implement contingencies accordingly, revegetation of the area cleared without approval. 3. Determine whether the unauthorised clearing has exceeded clearance limits and/or regulatory requirements, e.g. State/Federal planning approvals; 4. Continue monitoring of response to ensure the effectiveness of remedial actions.

Trigger	Potential Corrective Action
Spread of weed cover or pest abundance noted.	1. Identify and investigate potential cause. 2. Implement remedial actions which may include weed or pest control measures as determined by the biosecurity plan. 3. Continue monitoring of weed and pest presence and spread within the Project Area. 4. Provide report to appropriate authority as required.
Presences of new weeds or pests noted.	1. Identify and investigate potential cause. 2. Implement remedial actions which may include weed or pest control measures as determined by the biosecurity plan. 3. Continue monitoring of weed and pest presence and spread within the Project Area. 4. Provide report to appropriate authority as required.
Sedimentation noted in receiving waterways or erosion and sediment control measures found to be in poor condition during routine inspections.	1. Identify and investigate potential cause. 2. Implement remedial actions which may include additional erosion and sediment control measures as determined by the Erosion and Sediment Control Plan in accordance with Best Practice Erosion and Sediment Control guidelines for Australia (International Erosion Control Association). 3. Continue monitoring of implemented remedial action to ensure cause has been addressed or to identify what further action may be required. 4. Provide report to appropriate authority as required.
Injured, sick or dead fauna located or reported during Project construction or operation.	1. Identify if the impact to the fauna can be attributed to the Project. 2. Contact local wildlife assistance in accordance with the Species Management Program. 3. Determine and implement any corrective actions that may be appropriate to avoid reoccurrence. 4. Provide report to appropriate authority as required.

APPENDIX A COMMONWEALTH APPROVAL - EPBC 2020/8727

Australian Government
Department of Agriculture, Water and the Environment

APPROVAL

Wambo Wind Farm, 15 km north-east of Jandowae, Queensland (EPBC 2020/8727)

This decision is made under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)* (EPBC Act). Note that section 134(1A) of the EPBC Act applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

Details

Person to whom the approval is granted (approval holder)	White Wind Project No. 1 Pty Ltd
ABN of approval holder	40 630 956 384
Action	To construct and operate a wind farm approximately 15 km north-east of Jandowae in the Western Downs region of Queensland, [see EPBC Act referral 2020/8727]

Approval decision

My decisions on whether or not to approve the taking of the action for the purposes of each controlling provision for the action are as follows.

Controlling Provisions

Listed Threatened Species and Communities	
Section 18	Approve
Section 18A	Approve

Listed migratory species	
Section 20	Approve
Section 20A	Approve

Period for which the approval has effect

This approval has effect until 31 December 2060

Decision-maker

Name and position	Laura Smith Acting Assistant Secretary Environmental Assessments (QLD) and Sea-dumping Branch
Signature	
Date of decision	21 December 2021

Conditions of approval

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.

ANNEXURE A – CONDITIONS OF APPROVAL

Part A – Conditions specific to the action

1. The approval holder must not **construct** more than 110 wind turbines.
2. The approval holder must not **clear**:
   (a) more than 30 ha of **Koala habitat** within the **project area;**
   (b) more than 30 ha of **Greater Glider habitat** within the **project area**;
   (c) outside the **project area.**
3. To minimise **impacts** to **protected matters**, the approval holder must undertake the action in accordance with **Queensland SARA Condition 9** (Vegetation and Fauna Management Plan).
4. To minimise **impacts** to **protected matters**, the approval holder must undertake the action in accordance with **Queensland SARA Condition 10** (Bird and Bat Management Plan).

Offset Area Management Plan

5. To compensate for the **clearing** of up to 30 hectares of **Koala habitat** and/or **Greater Glider habitat**, the approval holder must submit an Offset Area Management Plan for approval by the **Minister**. The approval holder must not **commence the action** until the Offset Area Management Plan has been approved by the **Minister** in writing. The approval holder must implement the Offset Area Management Plan approved by the **Minister**.
6. The Offset Area Management Plan/s must:
   (a) identify a suitable environmental offset(s) for the impacts on **Koala habitat** and **Greater Glider habitat** that satisfies the requirements of the **Environmental Offsets Policy**;
   (b) include summary information on the residual impacts to **Koala habitat** and **Greater Glider habitat** that will be compensated for by the offset(s). This summary must include the area(s) of habitat for the **Koala** and **Greater Glider** and its condition and quality at all impact sites which the particular offset(s) are to address;
   (c) include detailed baseline habitat quality information on the proposed offset(s);
   (d) commit to achievable ecological outcomes for the proposed offset(s) that meet the requirements of the **Environmental Offsets Policy**;
   (e) detail how the offset(s) will be **legally secured**;
   (f) include a reference to the **EPBC Act** approval conditions to which the Offset Area Management Plan refers;
   (g) include a table of commitments made in the Offset Area Management Plan to achieve the ecological outcomes, and a reference to where the commitments are detailed in the Offset Area Management Plan;
   (h) include reporting and review mechanisms, and documentation standards to demonstrate compliance with management and environmental commitments in the Offset Area Management Plan;
   (i) include an assessment of risks to achieving environmental objectives and risk management strategies that will be applied;
   (j) include impact avoidance, mitigation and/or repair measures, and their timing;

(k) include a monitoring program, which must include:

i. measurable performance indicators to monitor attainment of the ecological outcomes;

ii. trigger values for corrective actions; and

iii. the timing and frequency of monitoring to detect trigger values and changes in the performance indicators;

(l) include proposed corrective actions, if trigger values are reached or performance indicators not attained; and

(m) include links to referenced plans and applicable conditions of approval (including State approval conditions), if any.

7. Prior to the commencement of **operation**, the approval holder must submit to the **Minister** detailed plans of the **completed layout**. If **impacts** to **protected matters** from the **completed layout** are less than 30 ha of **Koala habitat** or **Greater Glider habitat**, the approval holder may submit, for approval by the **Minister**, a version of the Offset Area Management Plan revised to compensate for the actual **impacts** to **protected matters** from the action.

Part B – Standard administrative conditions

Notification of date of commencement of the action

8. The approval holder must notify the **Department** in writing of the date of **commencement of the action** within 10 **business days** after the date of **commencement of the action.**

9. The approval holder must notify the **Department** in writing of the first date on which **commissioning** occurs within 10 **business days** after the first date on which **commissioning** occurs.

Compliance records

10. The approval holder must maintain accurate and complete **compliance records**.

11. If the **Department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **Department** within the timeframe specified in the request.

Note: **Compliance records** may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the **Department**'s website or through the general media.

Submission and publication of plans

12. The approval holder must:

(a) submit **plans** electronically to the **Department**

(b) unless otherwise agreed to in writing by the **Minister**, publish each **plan** on the **website** within 20 **business days** of the date:

i. the **plan** is approved by the **Minister**, or

ii. a revised action management plan is submitted to the **Minister** or the **Department**, or

iii. that the **plan** is submitted to Queensland Treasury as required under **Queensland SARA Condition 9** or **Queensland SARA Condition 10**, if the **plan** does not require the approval of the **Minister**,

(c) exclude or redact **sensitive ecological data** from **plans** published on the **website** or provided to a member of the public

(d) keep **plans** published on the **website** until the end date of this approval.

13. The approval holder must ensure that any **monitoring data** (including **sensitive ecological data**), surveys, maps, and other spatial and metadata required a **plan** is prepared in accordance with the **Department's** *Guidelines for biological survey and mapped data* (2018) and submitted electronically to the **Department** in accordance with the requirements of the **plan**.

Annual compliance reporting

14. The approval holder must prepare a **compliance report** for each 12 month period following the date of **commencement of the action**, or as otherwise agreed in writing by the **Minister**. The approval holder must:

    (a) publish each **compliance report** on the **website** within 60 **business days** following the relevant 12 month period

    (b) notify the **Department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within 5 **business days** of the date of publication

    (c) keep all **compliance reports** publicly available on the **website** until this approval expires

    (d) exclude or redact **sensitive ecological data** from **compliance reports** published on the **website**

    (e) where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication.

Note: **Compliance reports** may be published on the **Department**'s website.

Reporting non-compliance

15. The approval holder must notify the **Department** in writing of any: **incident**; non-compliance with the conditions; or non-compliance with the commitments made in **plans**. The notification must be given as soon as practicable, and no later than 2 **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:

    (a) any condition which is or may be in breach

    (b) a short description of the **incident** and/or non-compliance

    (c) the location (including co-ordinates), date, and time of the **incident** and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.

16. The approval holder must provide to the **Department** the details of any **incident** or non-compliance with the conditions or commitments made in **plans** as soon as practicable and no later than 10 **business days** after becoming aware of the **incident** or non-compliance, specifying:

    (a) any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future

    (b) the potential impacts of the **incident** or non-compliance

    (c) the method and timing of any remedial action that will be undertaken by the approval holder.

Independent audit

17. The approval holder must ensure that **independent audits** of compliance with the conditions are conducted as requested in writing by the **Minister**.

18. For each **independent audit**, the approval holder must:

    (a) provide the name and qualifications of the independent auditor and the draft audit criteria

to the **Department**

(b) only commence the **independent audit** once the audit criteria have been approved in writing by the **Department**

(c) submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.

19. The approval holder must publish the audit report on the **website** within 10 **business days** of receiving the **Department's** approval of the audit report and keep the audit report published on the **website** until the end date of this approval.

Revision of action management plans

20. The approval holder may, at any time, apply to the **Minister** for a variation to an action management plan approved by the **Minister**, or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the **EPBC Act**. If the **Minister** approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.

Completion of the action

21. Within 20 **business days** after the **completion of the action**, the approval holder must notify the **Department** in writing and provide **completion data**.

Part C - Definitions

In these conditions, except where contrary intention is expressed, the following definitions are used:

Business day means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the action.

Clear/cleared/clearing means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of vegetation (but not including weeds – see the *Australian weeds strategy 2017 to 2027* for further guidance).

Commencement of the action/commence the action means the first instance of any specified activity associated with the action including **clearing** and **construction**. **Commencement of the action/commence the action** does not include minor physical disturbance necessary to:

(a) undertake pre-clearance surveys or monitoring programs;

(b) protect environmental and property assets from fire, weeds and pests, including maintenance or use of existing surface access tracks.

Commissioning means all activities that are part of the referred action, including turning of turbines, that occur after the components of the first complete wind turbine are installed.

Completed layout means the layout of the project area after construction, including the actual locations and GPS coordinates of all wind turbines, transport routes, underground and overhead wiring locations and associated operational and maintenance infrastructure within the **project area**, and specifying the total area of habitat for each **protected matter impacted** by the action.

Completion of the action means the date on which all specified activities associated with the action have permanently ceased.

Completion data means an environmental report and spatial data information clearly detailing how the conditions of this approval have been met. The **Department's** preferred spatial data format is **shapefile**. This includes, but is not limited to the:

(a) area of each **listed species'** habitat **cleared**; and

(b) quality of each **listed species'** habitat in the offset area/s at the end date of this approval.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession or that are within the approval holder's power to obtain lawfully.

Compliance reports means written reports:

(a) providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and **plans**;

(b) consistent with the **Department's** *Annual Compliance Report Guidelines* (2014) (or subsequent revision);

(c) include a **shapefile** of any **impact** on any habitat for **listed species** undertaken within the relevant 12-month period; and

(d) identifying the version/s of the **plans** prepared and in existence in relation to the conditions of this approval during the relevant 12-month period.

Construct/Construction means the erection of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; preliminary site preparation work which involves breaking of the ground; the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the installation of temporary fences and signage.

Department means the Australian Government agency responsible for administering the **EPBC Act**.

Environmental Management Plan Guidelines means *Environmental Management Plan Guidelines, Commonwealth of Australia 2014* available on the department's website: http://environment.gov.au/epbc/publications/environmental-management-plan-guidelines

Environmental Offsets Policy means the *EPBC Act Environmental Offsets Policy* (2012, or a subsequent official version).

EPBC Act means the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Greater Glider means the Greater Glider (*Petauroides volans*) listed as a threatened species under the EPBC Act

Greater Glider habitat means any vegetation that provides habitat suitable for the Greater Glider as described in the Threatened Species Scientific Committee (2016). *Conservation Advice* Petauroides volans *greater glider*. Canberra: Department of the Environment. In effect under the EPBC Act from 25-May-2016.

Impact/Impacts/Impacted (verb) means to cause any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the action.

Impact (noun) means any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the action.

Incident means any event which has the potential to, or does, **impact** on one or more **protected matter(s)** other than as authorised by this approval.

Independent audit: means an audit conducted by an independent and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines* (2019).

Koala means Koala (*Phascolarctos cinereus*) (combined populations of Queensland, New South Wales and the Australian Capital Territory) listed as a threatened species under the EPBC Act.

Koala habitat means any area that provides habitat suitable for the **Koala** as described in the Department of Sustainability, Environment, Water, Population and Communities (2012). *Approved Conservation Advice for* Phascolarctos cinereus *(combined populations in Queensland, New South Wales and the Australian Capital Territory).* Canberra: Department of Sustainability, Environment, Water, Population and Communities. In effect under the EPBC Act from 02-May-2012.

Legally secured means to secure a legal agreement and/or legally binding mechanism under relevant Queensland legislation or equivalent, to provide enduring protection for the offset against development incompatible with conservation.

Minister means the Australian Government Minister administering the **EPBC Act** including any delegate thereof.

Monitoring data means the data required to be recorded under the conditions of this approval.

Operation means all activities that are part of the action that occur after the components of the final wind turbine are installed.

Plan(s) means any of the documents required to be prepared, approved by the **Minister**, implemented by the approval holder and/or published on the **website** in accordance with these conditions (includes action management plans and/or strategies).

Project area means the area where the construction and operation of the action will be undertaken, designated 'project boundary' and shown as an orange line in Appendix A.

Protected matter/s means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

Queensland SARA Condition 9 means Condition 9 of the Assessment Manager Conditions attached to the SARA Decision notice - Wambo Wind Farm, made under section 63 of the *Planning Act 2016* and granted to White Wind No.1 Pty Ltd (SARA reference: 2007-17946 SDA) or any subsequent variation to or revision of the condition, where the change is agreed to or imposed by the Queensland State Government**.**

Queensland SARA Condition 10 means Condition 10 of the Assessment Manager Conditions attached to the SARA Decision notice - Wambo Wind Farm, made under section 63 of the *Planning Act 2016* and granted to White Wind No.1 Pty Ltd (SARA reference: 2007-17946 SDA) or any subsequent variation to or revision of the condition, where the change is agreed to or imposed by the Queensland State Government**.**

The SARA decision notice is available here:
https://dsdmipprd.blob.core.windows.net/mydas/e5rOhInWXgQrW2pNrM7hqq34edoZeSlg/AM10-N_Decision-approval_with_conditions-Final.pdf

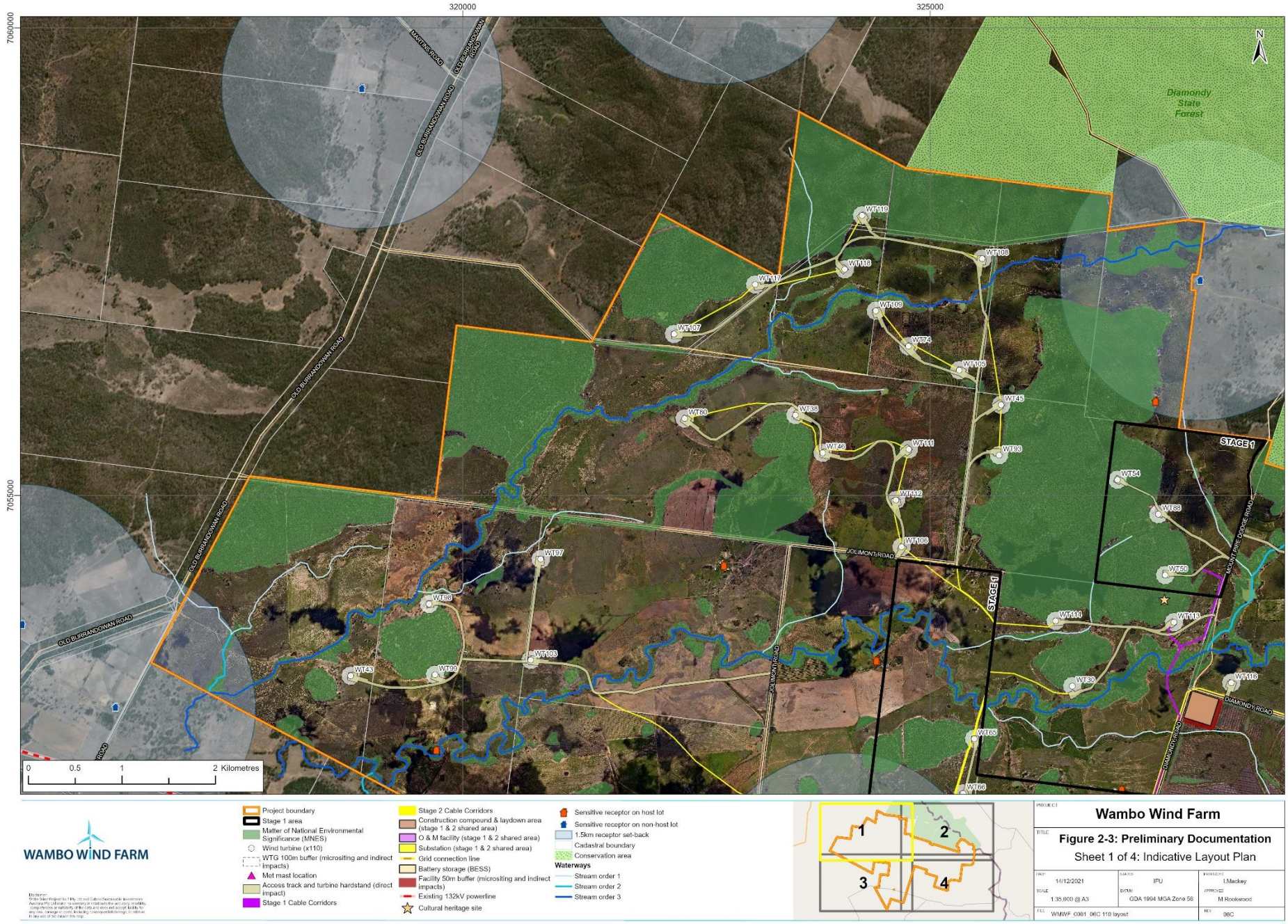
Sensitive ecological data means data as defined in the Australian Government Department of the Environment (2016) *Sensitive Ecological Data – Access and Management Policy V1.0.*

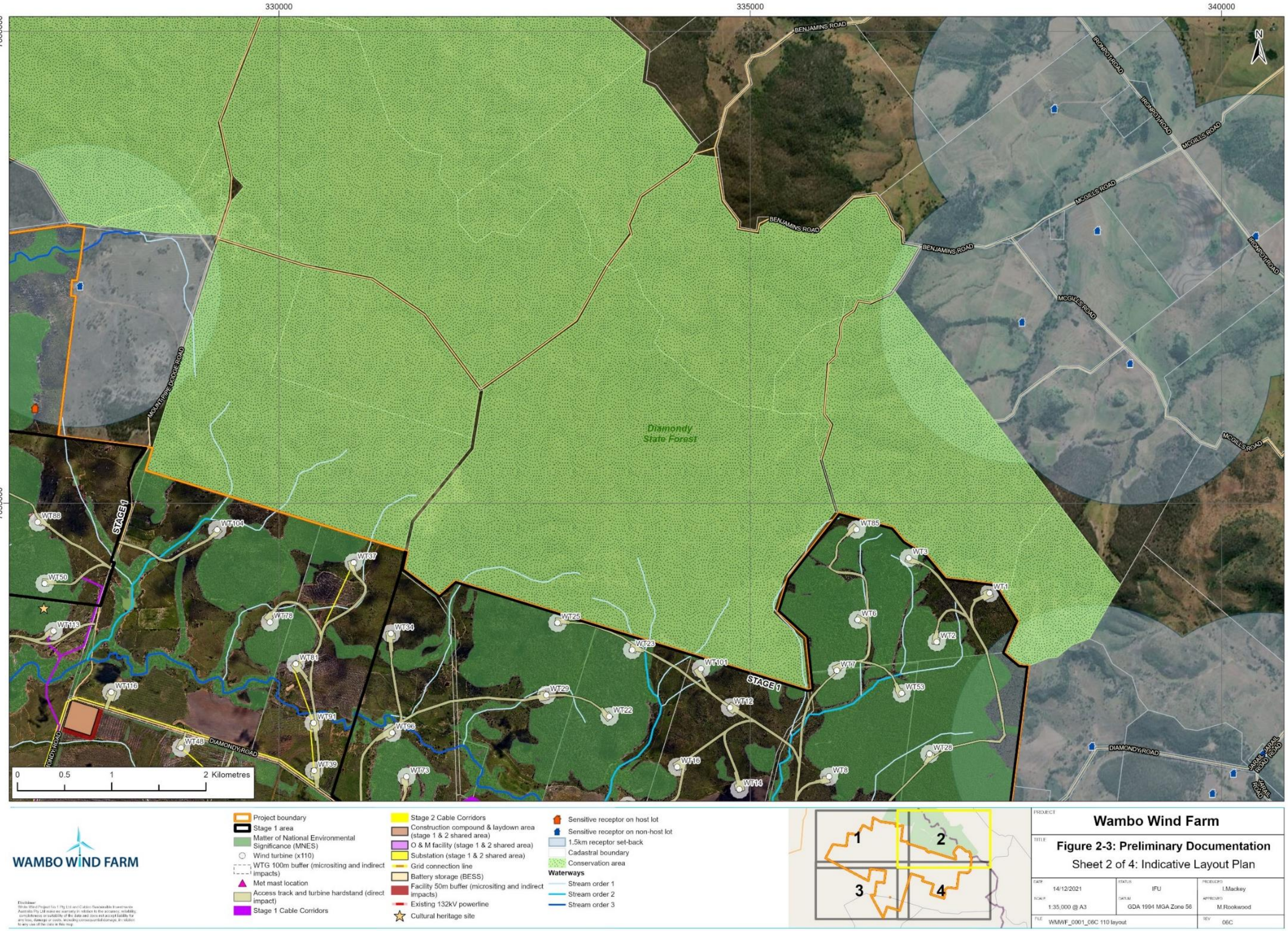
Shapefile means location and attribute information of the action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes**.**

Suitably qualified person means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

Website means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

Appendix A: Project area





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BENJAMINS ROAD
IRONPOT ROAD
MCGILLS ROAD
MOUNT PIPE DODGE ROAD
DIAMONDY ROAD
Diamondy State Forest
STAGE 1
WT88
WT104
WT37
WT50
WT113
WT78
WT81
WT116
WT91
WT48
WT39
WT34
WT25
WT23
WT101
WT29
WT22
WT96
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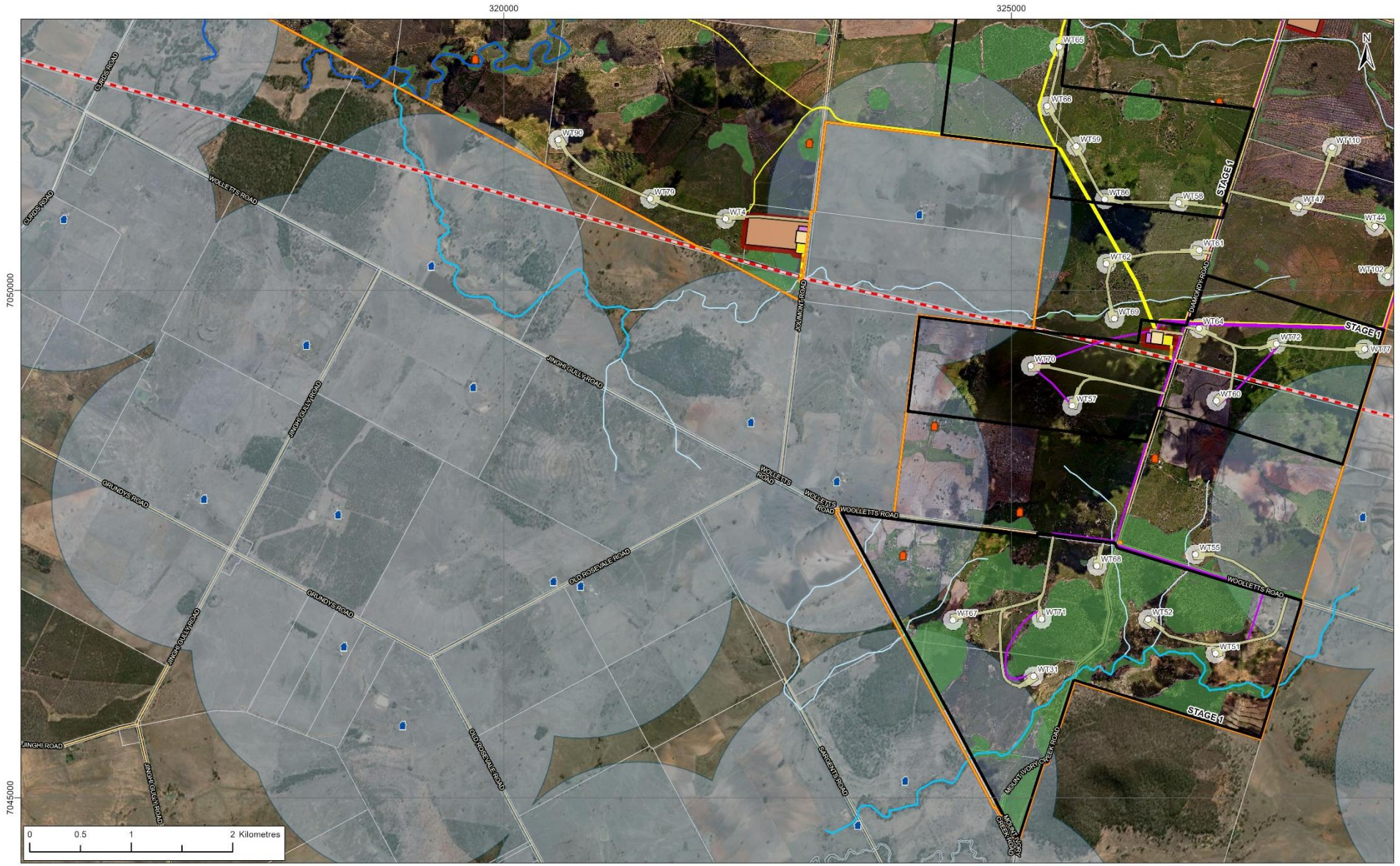
0 0.5 1 2 Kilometres
WAMBO WIND FARM
Project boundary
Stage 1 area
Matter of National Environmental Significance (MNES)
Wind turbine (x110)
WTG 100m buffer (micrositing and indirect impacts)
Met mast location
Access track and turbine hardstand (direct impact)
Stage 1 Cable Corridors
Stage 2 Cable Corridors
Construction compound & laydown area (stage 1 & 2 shared area)
O & M facility (stage 1 & 2 shared area)
Substation (stage 1 & 2 shared area)
Grid connection line
Battery storage (BESS)
Facility 50m buffer (micrositing and indirect impacts)
Existing 132kV powerline
Cultural heritage site
Sensitive receptor on host lot
Sensitive receptor on non-host lot
1.5km receptor set-back
Cadastral boundary
Conservation area
Waterways
Stream order 1
Stream order 2
Stream order 3
1
2
3
4
Wambo Wind Farm
Figure 2-3: Preliminary Documentation
Sheet 2 of 4: Indicative Layout Plan
14/12/2021
IFU
I.Mackey
1:35,000 @ A3
GDA 1994 MGA Zone 56
M.Rookwood
WMWF_0001_06C 110 layout
06C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STAGE 1
WT69
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WT102
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WT64
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WT55
WT88
WT67
WT71
WT52
WT54
WT51
WT31
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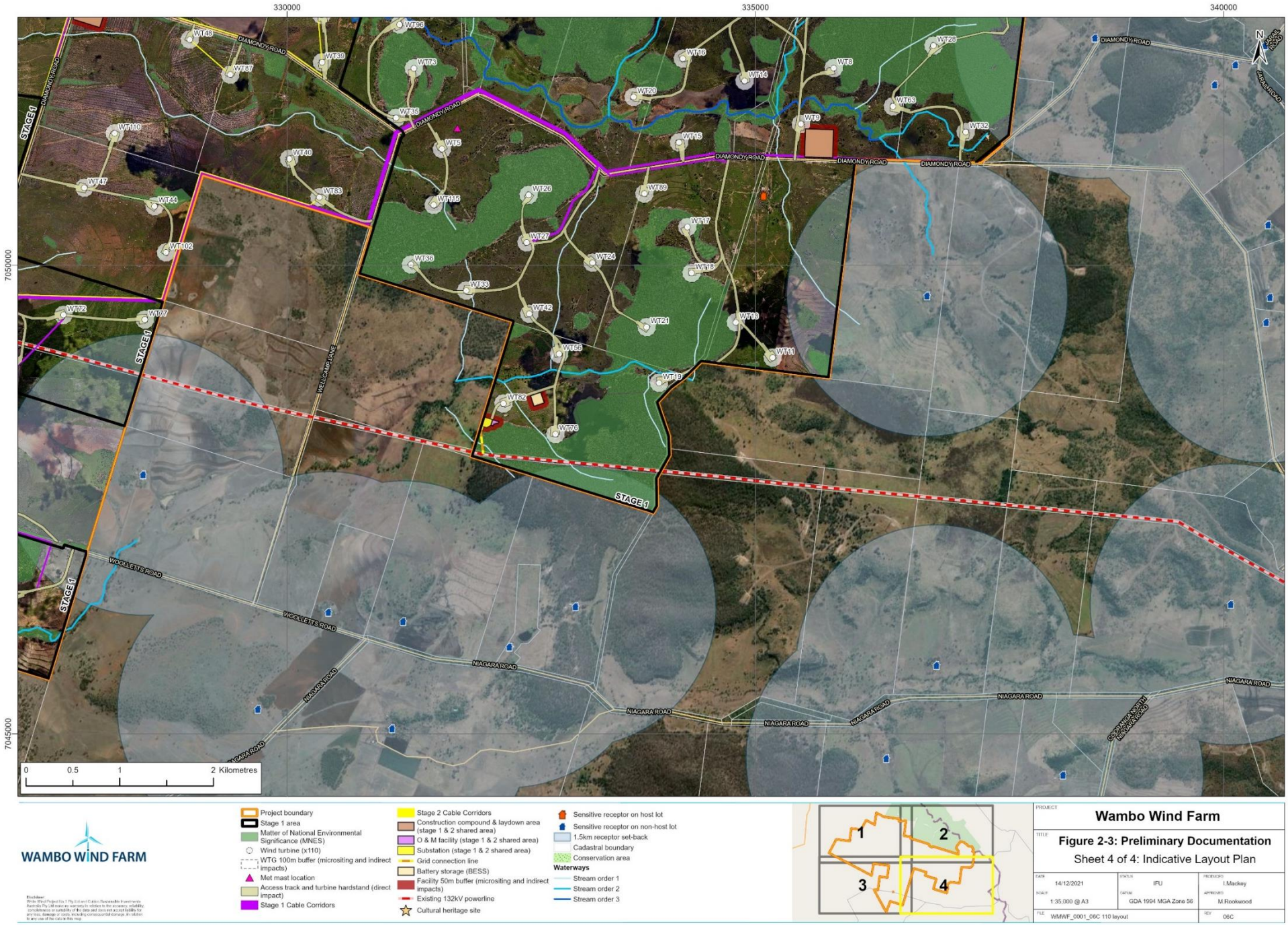
1.5km receptor set-back
Cadastral boundary
Conservation area
Waterways
Stream order 1
Stream order 2
Stream order 3
1
2
3
4
PROJECT
Wambo Wind Farm
TITLE
Figure 2-3: Preliminary Documentation
Sheet 3 of 4: Indicative Layout Plan
DATE
14/12/2021
STATUS
IFU
PRODUCED
I.Mackey
SCALE
1:35,000 @ A3
DATUM
GDA 1994 MGA Zone 56
APPROVED
M.Rookwood
FILE
WMWF_0001_06C 110 layout
REV
06C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DIAMONDY ROAD
NIAGARA ROAD
WOOLLETTS ROAD
WELLCAMP LANE
STAGE 1
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WT87
WT39
WT36
WT73
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WT110
WT40
WT47
WT44
WT102
WT83
WT115
WT26
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WT16
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2 Kilometres
WAMBO WIND FARM
Project boundary
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Wambo Wind Farm
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Figure 2-3: Preliminary Documentation
Sheet 4 of 4: Indicative Layout Plan
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I.Mackey
SCALE
1:35,000 @ A3
DATUM
GDA 1994 MGA Zone 56
APPROVED
M.Rookwood
FILE
WMWF_0001_06C 110 layout
REV
06C

APPENDIX B STATE APPROVAL – 2020-179646 SDA

Queensland Government

Changed decision notice
Our reference: 2210-31751 SPD

Decision notice—approved with conditions
(Given under section 63 of the *Planning Act 2016*)

Original reference: 2007-17946 SDA

The development application described below was properly made to the State Assessment and Referral Agency on 5 August 2020.

Applicant details

Applicant name:	White Wind No.1 Pty Ltd
Applicant contact details:	4/201 Leichhardt Street Spring Hill QLD 4000 michael.rookwood@erm.com

Location details

Street address:	131 Woolletts Road, Diamondy
Real property description:	14LY532; 77LY323; 78LY323; 126LY440; 128LY322; 129LY322; 130LY322; 134LY348; 13LY532; 1RL7596; 24LY582; 2RP52699; 3L34213; 52L34213; 53L34213; 5LY359; 6LY359; 71LY6; 73LY166; 74LY323; 7LY359; 87LY35; 8LY359; 100LY174; 131SP169294; 133LY348; 21LY308; 22LY308; 23LY542; 2RP103421; 4LY573; 80LY174; 81RP203809; 82RP203809; 83LY154; 92LY174; 95LY174; 96LY174; 97LY154; 98LY583; 14LY455; 90LY174; 94LY174
Local government area	Western Downs Regional Council

Decision

Date of decision:	13 October 2020
Decision details:	Approved subject to conditions

Approval details

Development permit	Material change of use for a wind farm (up to 110 wind turbines and ancillary buildings and infrastructure) Operational work for clearing native vegetation

Referral agencies

There were no referral agencies for this application.

DA Advisory Team (DAAT)
Level 13, 1 William Street, Brisbane
PO Box 15009 CITY EAST QLD 4002

Conditions

This approval is subject to:

- the assessment manager conditions in Attachment 1

The department has, for conditions of this approval, nominated an entity to be the enforcement authority for that condition under the *Planning Act 2016*.

Further development permits

Please be advised further development permits may be required to be obtained before the development can be carried out.

Properly made submissions

Not applicable—No part of the application required public notification.

Rights of appeal

The rights of applicants to appeal to a tribunal or the Planning and Environment Court against decisions about a development application are set out in chapter 6, part 1 of the *Planning Act 2016*. For particular applications, there may also be a right to make an application for a declaration from a tribunal (see chapter 6, part 2 of the *Planning Act 2016*).

Copies of the relevant appeal provisions are attached.

Currency period for the approval

This development approval will lapse if development is not started within the currency periods stated in section 85 of the *Planning Act 2016*.

Native title considerations

Native title was considered in the assessment.

Approved plans and specifications

Copies of the following approved plans and specifications are enclosed.

enc Attachment 1—Changed assessment manager conditions
Attachment 2 - Advice to the applicant
Attachment 3 - Reasons for the decision
Attachment 4 - Negotiated decision provisions
Attachment 5 - Appeal provisions
Attachment 6 - Approved plans and specifications

Attachment 1—Changed assessment manager conditions

No.	Conditions of development approval	Condition timing
Material change of use		
1.	Carry out the approved development generally in accordance with the following plan: i. Indicative Project Layout Plan, prepared by Wambo Wind Farm, Date: 30/07/2020, File: WMWF_0009_02A Fig4-1 Layout, Rev 02A. *NOTE: Micro-siting of temporary and permanent wind monitoring towers, roads and hardstand areas, underground and overhead powerlines, temporary laydown areas and stockpiles, battery storage, substations, site offices, workshops and temporary construction compounds is permitted within the Wambo Wind Farm Project Area as shown on the plans referred to in this condition. Micro-siting of wind turbines is permitted within 100m of the wind turbine locations shown on plans referred to in this condition, providing each turbine is micro-sited:* *i. within the Project Area shown on the plans referred to in this condition; and* *ii. at least 1,500 metres from an existing or approved sensitive land use, as at the date of this approval on a non-host lot, or alternatively, any lesser setback agreed by the non-host lot owner via a deed of release.* *NOTE: Temporary wind monitoring towers may be installed prior to the commencement of construction of the wind farm provided they are contained within the Project Area shown on the plan referred to in this condition and along access tracks and roads between turbines and substations, or overhead transmission corridor.*	At all times during construction
2.	No turbine is to be located within 1.0 times the tip height of the turbine from the edge of the Powerlink transmission line easement.	At all times
3.	(a) Provide evidence of an agreement with Airservices Australia to amend the 25 nautical mile Minimum Sector Altitude of the Kingaroy Aerodrome to: i. South Burnett Regional Council (info@southburnett.qld.gov.au) ii. Queensland Treasury (windfarms@dsdmip.qld.gov.au).	Prior to commencement of construction
4.	(a) Prepare a final Project Layout Plan (PLP) of each stage of the wind farm that identifies the project layout and the final position of all aspects of the development, including wind turbines, permanent wind monitoring towers, roads and hardstand areas, powerlines, site entrances, laydown areas, battery storage, temporary construction compounds, temporary laydown areas and stockpiles, site offices,	(a) and (b) Prior to commencement of construction of each respective stage of the wind farm

No.	Conditions of development approval	Condition timing
	workshops and substations. (b) Provide the final PLP required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au).	
5.	(a) Wind turbines must include the following marking measures: i. the wind turbine blades, the nacelle and the upper two thirds of the supporting mast of the wind turbine must be coloured either white, off white or light grey ii. the wind turbine blades must have a low reflectivity finish/treatment. (b) Install marking measures as required in part (a) of this condition. (c) Provide evidence from a suitably qualified aviation expert to Queensland Treasury (windfarms@dsdmip.qld.gov.au) that part (b) of this condition has been complied with.	(a) and (b) On completion of construction of each individual wind turbine, and to be retained at all times (c) Prior to the commencement of use
6.	(a) A Wind Monitoring Tower/Meteorology Masts Marking Plan (WMTMP/MMMP) must be prepared by a suitably qualified aviation expert. The WMTMP/MMMP must specify marking measures for each wind monitoring tower in accordance with Paragraph 39 of *Guideline D* of *National Airports Safeguarding Framework*, version number 4.1.3 and revision date 15/7/2012. (b) Implement the marking measures as required by the WMTMP/MMMP. (c) Provide evidence from a suitably qualified aviation expert to Queensland Treasury (windfarms@dsdmip.qld.gov.au) that part (b) of this condition has been complied with.	(a) Prior to construction of any wind monitoring tower (b) On completion of construction of each individual wind monitoring tower, and to be retained at all times (c) Within two weeks of the completion of construction of each individual wind monitoring tower
7.	(a) Prepare “as constructed” drawings certified by a licensed surveyor. The “as constructed” drawings must include: i. the design and location of all aspects of the development, including wind turbines, wind monitoring towers/meteorology masts, roads and hardstand areas, powerlines, laydown areas, site offices, workshops and substations ii. co-ordinates for all wind turbines and wind monitoring towers/meteorology masts iii. heights above ground level for all wind turbines and wind monitoring towers/meteorology masts	(a) Prior to the commencement of the use of each respective stage of the wind farm

No.	Conditions of development approval	Condition timing
	iv. evidence that the marking measures required by part (a) of condition 5 and parts (a) and (b) of condition 6 have been carried out. (b) Provide the "as constructed" drawings required by part (a) of this condition, to: i. Airservices Australia (Airport.Developments@AirservicesAustralia.com) ii. Western Downs Regional Council (info@wdrc.qld.gov.au) iii. South Burnett Regional Council (info@southburnett.qld.gov.au) iv. Queensland Treasury (windfarms@dsdmip.qld.gov.au).	
8.	(a) Prepare a pre-construction assessment of the television and radio reception strength at the location of any existing or approved dwellings as at the date of this approval that is within five (5) kilometres of any proposed wind turbine. The pre-construction assessment must be undertaken by an independent television and radio monitoring specialist and include testing at locations to be determined by the television and radio monitoring specialist to enable the average television and radio reception strength to be determined. (b) Provide the pre-construction assessment of television and radio reception strength required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Prepare a post-construction assessment of the television and radio reception strength at the location of any existing or approved dwellings as at the date of this in the area that is situated within five (5) kilometres of any wind turbine and in which any existing or approved dwellings are located as at the date of this approval. The post-construction assessment must be undertaken by an independent television and radio monitoring specialist and include testing at locations to be determined by the independent television and radio monitoring specialist to enable the average television and radio reception strength to be determined. (d) If the post-construction assessment establishes an unacceptable increase in interference to reception as a result of the wind farm, as determined by the independent television and radio monitoring specialist, measures to restore the affected reception to pre- construction quality must be undertaken. (e) Provide the post-construction assessment of television and radio reception strength and evidence that appropriate restoration measures have been undertaken to address television and radio reception strength where required to Queensland Treasury (windfarms@dsdmip.qld.gov.au).	(a) and (b) Prior to the commencement of the use of each respective stage of the wind farm (c) and (d) Within one month of the commencement of the use of each respective stage of the wind farm (e) Within three months of the commencement of the use of each respective stage of the wind farm

No.	Conditions of development approval	Condition timing
9.	(a) Prepare a Vegetation and Fauna Management Plan (VFMP) certified by a suitably qualified ecologist. The VFMP must include details of all measures to identify and avoid fauna resources and habitats prior to clearing. The plan must include measures to protect and recover fauna during clearing operations, including presence of a qualified wildlife officer during clearing operations, pre-clearing inspections, staging and sequence of clearing and recovery procedures. Measures to replace/relocate habitat and resources that will be unavoidably lost needs to be included. (b) Provide the VFMP required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Implement the measures detailed in the VFMP.	(a) and (b) Prior to the commencement of construction of each respective stage of the wind farm (c) During construction
10.	(a) Prepare a Bird and Bat Management Plan (BBMP) certified by a suitably qualified ecologist. The BBMP must include: i. identification of 'at risk' bird and bat groups (i.e. all threatened and common species), seasons and areas within the project site which may attract high levels of mortality ii. incorporate baseline data, including additional pre- operational surveys, Collision Risk Modelling and Population Viability Analysis iii. identification of threshold (trigger) levels for species iv. identification of mitigation measures and implementation strategies in order to reduce impacts on bird and bat groups v. monitoring requirements vi. a decision-making framework, including the trigger for operational shut-down. (b) Provide the BBMP required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Operate the development in accordance with the BBMP.	(a) and (b) Prior to the commencement of the use of each respective stage of the wind farm (c) At all times
11.	(a) Prepare a Bushfire Management Plan (BMP) certified by a suitably qualified person and in consultation with the Queensland Fire and Emergency Services addressing construction and operations, and including the following information at a minimum: (i) a fire hazard analysis (ii) mitigation strategies to achieve the development outcomes in Part E of the *State Planning Policy July 2017 – Natural Hazards, Risk and Resilience.*	(a) and (b) Prior to the commencement of construction of each respective stage of the wind farm (c) At all times

No.	Conditions of development approval	Condition timing
	(b) Provide the BMP required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Construct and operate the development in accordance with the BMP.	
12.	(a) Prepare a Safety and Emergency Management Plan (SEMP) addressing construction and operations, and include the following information at a minimum: i. a Hazard Analysis and Risk Assessment (HARA) undertaken in accordance with *AS/NZ ISO 31000:2009 Risk Management Principles and Guidelines* and with *HB203:2006 Environmental Risk Management Principles and Processes* ii. evacuation plans for the construction and operation phases of the development iii. safety management plans and emergency response procedures in consultation with the state and regional emergency service providers and provide an adequate level of training to staff who will be tasked with emergency management activities. (b) Provide the SEMP required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Construct and operate the development in accordance with the SEMP. (d) Maintain a copy of the SEMP on-site (for example, at the site office) and ensure all land owners, staff, contractors, workers and site visitors are familiar with the requirements of the SEMP.	(a) and (b) Prior to the commencement of construction of each respective stage of the wind farm (c) and (d) At all times
13.	(a) Prepare a Construction Environmental Management Plan (CEMP). The CEMP must address: i. the following prepared by a suitably qualified person: • measures necessary to minimise impacts to agricultural practice including stock routes and cattle movements • construction noise in accordance with the *Environmental Protection (Noise) Policy 2019* • measures necessary to minimise vibration to meet the construction vibration criteria in the Department of Transport and Main Roads' *Transport Noise Management Code of Practice* dated March 2016 • activities necessary to ensure the removal and disposal of waste • appropriate weed and pest management in accordance with the Department of Agriculture and	(a) and (b) Prior to the commencement of construction of each respective stage of the wind farm (c) During construction

No.	Conditions of development approval	Condition timing
	Fisheries' principles of pest management. ii. the following prepared by a Registered Professional Engineer of Queensland (RPEQ): • achieve no net worsening of stormwater management in accordance with the *Queensland Urban Drainage Manual* • geotechnical and slope stability risk assessment. iii. the following prepared by a suitably qualified person with suitable experience in Erosion and Sediment Control: • erosion and sediment control in accordance with the *Best Practice Erosion and Sediment Control (BPESC) guidelines for Australia (International Erosion Control Association).* (b) Provide the CEMP required by part (a) of this condition to: (i) Queensland Treasury (windfarms@dsdmip.qld.gov.au). (ii) Western Downs Regional Council (info@wdrc.qld.gov.au). (c) Construct the development in accordance with the CEMP.	
14.	(a) Prepare a Traffic Impact Assessment (TIA) certified by a RPEQ for the project to identify impacts on the safety, efficiency and condition of local roads. The TIA must: i. be developed generally in accordance with Department of Transport and Main Roads' Guide to Traffic Impact Assessment 2017 ii. be prepared in consultation with Western Downs Regional Council iii. recommend strategies to mitigate the impacts of the proposal on the safety, efficiency and condition of the local roads, including contributions to road works/maintenance, summarising key road-use management strategies and developing community and stakeholder consultation plans iv. include evidence that potential conflicts on third party land has been resolved with affected third party stakeholders/adjoining land owners v. demonstrate that the haul vehicle configuration proposed can physically perform/achieve manoeuvring paths (b) Provide the TIA required by part (a) of this condition to the Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Construct any necessary intersection/accesses upgrades	(a) and (b) No later than three months prior to the commencement of significant construction works of each respective stage of the wind farm (c) and (d) Prior to the commencement of use of each respective stage of the wind farm

No.	Conditions of development approval	Condition timing
	and undertake any other required works and impact mitigation strategies as detailed in the TIA in accordance with Western Downs Regional Council (as applicable) road planning and design policies, principles and manuals, as at the date of this approval, and at no cost to Western Downs Regional Council. (d) Provide RPEQ certification to Queensland Treasury (windfarms@dsdmip.qld.gov.au) and Western Downs Regional Council (info@wdrc.qld.gov.au) that the physical works identified in the TIA have been designed and constructed in accordance with part (a) and (c) of this condition. *NOTE: Significant construction works means physical construction, including significant and continuous site preparation work such as major clearing or excavation for foundations or the placement, assembly or installation of facilities or equipment at any site related to the project.*	
16.	(a) Prepare a Noise Monitoring Plan (NMP) consistent with the NIA required by condition 15 of this approval. The NMP must: i. be prepared by a suitably qualified acoustic consultant with suitable acoustic experience. ii. be prepared in accordance with Appendix 4 of *State code 23: Wind farm development – Planning guideline, July 2018* iii. include the requirement to undertake operational noise. monitoring once within three (3) months and once following nine (9) months of the commencement of the windfarm (all turbines operating). (b) Provide the NMP required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Undertake operational noise monitoring in accordance with the NMP required by part (a) of this condition.	(a) and (b) Prior to the commencement of construction of each respective stage of the wind farm (c) Once the development is operational for each respective stage of the wind farm
17.	(a) Prepare a Noise Monitoring Report (NMR) outlining the results of the operational noise monitoring in the NMP required by condition 16 of this approval. The NMR must be prepared by a suitably qualified acoustic consultant with suitable acoustic experience. (b) Submit the NMR required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au).	(a) and (b) At 3 and 12 months following the commencement of each respective stage of the wind farm

No.	Conditions of development approval	Condition timing
18.	(a) Prepare an Operational Strategy (OS) detailing any necessary operating measures / regime or wind sector management measures required to ensure noise emissions achieve the following criteria: (i) At all existing, as at the date of this approval, noise affected sensitive land uses on host lots: • An outdoor (free-field) night-time (10pm to 6am) A- weighted acoustic level of: - 45dB(A), or - the background noise (LA90) by more than 5dB(A), whichever is the greater, for wind speed from cut-in to rated power of the wind turbine and each integer wind speed in between referenced to hub height. (ii) At all existing, as at the date of this approval, noise affected sensitive land uses on non-host lots: • An outdoor (free-field) night-time (10pm to 6am) A- weighted acoustic level of: - 35dB(A), or - the background noise (LA90) by more than 5dB(A), whichever is the greater, for wind speed from cut-in to rated power of the wind turbine and each integer wind speed in between referenced to hub height. • An outdoor (free-field) day-time (6am to 10pm) A- weighted acoustic level of: - 37dB(A), or - the background noise (LA90) by more than 5dB(A), whichever is the greater, for wind speed from cut-in to rated power of the wind turbine and each integer wind speed in between referenced to hub height. • Alternatively, the acoustic level agreed between the applicant/operator and the non-host lot owner/s via a formal deed of release and not exceeding an outdoor (free-field) night-time (10pm to 6am) A-weighted acoustic level of: - 45dB(A), or - the background noise (LA90) by more than 5dB(A), whichever is the greater, for wind speed from cut-in to rated power of the wind turbine and each integer wind speed in between referenced to hub height. (b) Provide the OS required by part (a) of this condition to	(a) and (b) 12 months following the commencement of use of each respective stage of the wind farm (c) At all times

No.	Conditions of development approval	Condition timing
	Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Operate the wind farm in accordance with the Operational strategy prepared and submitted under parts (a) and (b) of this condition.	
19.	(a) Prepare a Decommissioning and Rehabilitation Management Plan (DRMP) prepared by a suitably qualified person. The DRMP must address the actions to be undertaken where any or all turbines have permanently ceased operating including: i. removal of above ground non-operational equipment ii. removal and clean-up of any contamination caused by the wind farm development as defined in the Environmental Protection Act 1994 iii. rehabilitation/revegetation of storage areas, construction areas, access tracks and other areas affected by the decommissioning of the turbines if those areas are not otherwise useful to the ongoing use of the land iv. a consultation program with relevant parties including surrounding landowners. (b) Provide the DRMP required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Decommission the wind farm in accordance with part (a) of this condition.	(a) and (b) 6 months prior to commencement of decommissioning (c) As indicated in the decommissioning and rehabilitation plan
20.	(a) Prepare a Complaint Investigation and Response Plan (CIRP). The CIRP must include: i. a toll-free telephone number and email for complaints and queries ii. how contact details will be communicated to the public iii. a process of investigation to resolve complaints iv. a requirement that all complaints will be recorded in an incident register that is to include the following details: • the complainant's name and address • a unique reference number for each complaint that is to be communicated to the complainant • any applicable turbine or monitoring mast	(a) and (b) Prior to the commencement of construction (c) within 10 business days of the receipt of each complaint (d) At 12 months following the commencement of construction and thereafter upon request from the Chief Executive administering the

No.	Conditions of development approval	Condition timing
	reference number • the complainant's concerns including date, time, prevailing conditions and description of the complaint • the process of investigation undertaken to resolve the complaint • whether or not the complaint has been resolved to the satisfaction of the complainant. (b) Provide the CIRP required by part (a) of this condition to Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Undertake complaints investigation and response in accordance with the complaint investigation and response plan required by part (a) of this condition. (d) Submit a report summarising complaints, investigation and responses to Queensland Treasury (windfarms@dsdmip.qld.gov.au). The report must include for each complaint: i. the location of the complaint on a map ii. details, investigation and remediation actions undertaken to resolve the complaint iii. any follow up communication with the complainant.	Planning Act 2016
The chief executive administering the *Planning Act 2016* nominates the Director-General of the Department of Natural Resources, Mines and Energy to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:		
21.	Clearing a maximum ~~23.64~~ **38.85** hectares of vegetation under this development approval is limited to the area identified as: (a) Area A as shown on attached ~~Technical Agency Response Plan TARP 2007-17964 SDA Sheets 1-5 Date: 27/08/2020.~~ **Vegetation Management Plan VMP 2210-31751 SPD, Sheets 1 to 6, version 1** (b) Derived Reference Points for GPS listed on attached ~~Technical Agency Response Plan TARP 2007-17964 SDA Sheet 5 of 5 dated 27/08/2020~~ **Vegetation Management Plan VMP 2210-31751 SPD, page 1 to 3, version 1.**	Prior to the commencement of construction of each respective stage

No.	Conditions of development approval	Condition timing
~~22.~~	~~Enter into an agreed delivery arrangement to deliver an environmental offset, in accordance with the *Environmental Offsets Act 2014*, to counterbalance the significant residual impacts on the matter/s of state environmental significance being:~~ • ~~clearing prescribed regional ecosystem within the defined distance of a watercourse being:~~ o ~~0.356 ha of regional ecosystem 11.8.3~~ o ~~0.044 ha of regional ecosystem 11.9.4a.~~ • ~~clearing prescribed regional ecosystems that are of concern regional ecosystems being:~~ o ~~6.75 ha of regional ecosystem 11.8.3~~ o ~~1.46 ha of regional ecosystem 11.9.4a~~ ~~*Note: the total area of clearing requiring an offset is 6.75 ha of regional ecosystem 11.8.3 and 1.46 ha of regional ecosystem 11.9.4a.*~~	~~Prior to commencing any works that impact on prescribed regional ecosystem~~
~~23.~~ **22.**	(a) Prepare an erosion and sediment control plan (ESCP). The ESCP is to be prepared by an appropriately qualified professional and address potential impacts caused by clearing on the site. (b) The ESCP must be prepared, in accordance with the *Best Practice Erosion and Sediment Control (BPESC) guidelines for Australia (International Erosion Control Association).* (c) The ESCP is to recommend measures to: i. prevent accelerated soil erosion ii. where prevention is not possible, minimise and mitigate accelerated soil erosion iii. monitor and respond accelerated soil erosion events. (d) Submit a copy of the ESCP mentioned in part (a) of this condition to: Natural Resource Assessment Department of Natural Resources, Mines and Energy Email: vegetation@dnrme.qld.gov.au (e) Implement the erosion and sediment control measures identified within the ESCP as mentioned at part (a) of this condition. *Note: Appropriately qualified professional means a person or persons who has professional qualifications, training, skills and experience relevant to erosion control, soil chemistry and/or salinity management chemistry and can give authoritative assessment, advice and analysis in relation erosion and sediment control using the relevant protocols, standards, methods or literature.*	(a) - (d) Prior to commencement of construction of each respective stage (e) At all times

No.	Conditions of development approval	Condition timing
~~24.~~ **23.**	Any person(s) engaged or employed to carry out the clearing of vegetation under this development approval must be provided with a full copy of this development approval and must be made aware of the full extent of clearing authorised by this development approval.	During construction
The chief executive administering the *Planning Act 2016* nominates the Director-General of the Department of Transport and Main Roads to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition:		
~~25.~~ **24.**	(a) Prepare a Traffic Impact Assessment (TIA) certified by an RPEQ in accordance with the Department of Transport and Main Roads' *Guide to Traffic Impact Assessment December 2018* (GTIA) which: i. identifies all potential construction and operational traffic impacts of the State-controlled road (SCR) network including ultimate haul routes, identify largest design vehicle (size and weight), conflict points with existing road infrastructure, turn paths, number of vehicles (construction and operation), traffic distribution, traffic control management, management of interaction of haul vehicle with other road users, hours of operation ii. includes measures to be undertaken to avoid, manage and mitigate the impacts identified in Item (a)(i) iii. demonstrates the haul vehicle configuration proposed can physically perform/achieve manoeuvring paths in accordance with the Department of Transport and Main Roads' *Road Planning and Design Manual 2nd Edition* (RPDM) and *Route Assessment Guidelines for Multi-Combination Vehicles in Queensland, October 2013* iv. includes a Pavement Impact Assessment (PIA) prepared in accordance with Chapter 13 of the Department of Transport and Main Roads' GTIA. The PIA must assess the SCR links impacted by the proposed development, identify the relevant marginal cost rate per SAR-km for each SCR link, and identify a mitigation strategy to ameliorate any impacts along the proposed haul route v. provides conceptual geometric design drawings of the works to demonstrate they can comply with the RPDM and be wholly contained within existing road corridors, where road works are required on the SCR vi. includes suitable evidence that potential conflicts on third party land have been resolved with affected third-party stakeholders/adjoining landowners. (b) Provide the TIA required by part (a) of this condition to the Department of Transport and Main Roads to: i. Department of Transport and Main	(a) ~~and (b)~~ no later than ~~6~~ **3** months prior to the commencement of ~~construction~~ **oversize over mass** haulage activities **(b) and** (c) ~~and (d)~~ Prior to the commencement of ~~the construction haulage activities~~ **operation of the first stage of the wind farm** **(d) Within 20 business days from completion of the works**

No.	Conditions of development approval	Condition timing
	Roads (dcs@tmr.qld.gov.au and QLDAccess_HVROPO@tmr.qld.gov.au) ii. Queensland Treasury (windfarms@dsdmip.qld.gov.au). (c) Construct any necessary intersection/accesses upgrades and undertake any other required works and impact mitigation strategies as detailed in the TIA in accordance with TMR's current RPDM, *Technical Specifications* and *Standards* (d) Provide certification to the Department of Transport and Main Roads via dcs@tmr.qld.gov.au from a Registered Professional Engineer of Queensland (RPEQ) that the required road and mitigation works identified in the TIA have been designed and constructed in accordance with part (a) and (c) of this condition. ***Note: oversize over mass haulage activities means loads exceeding 12 tonnes per axle (for platforms) and dimension over 5.5 metres wide x 35 metres long x 5 metres high***	

Attachment 2—Advice to the applicant

General advice	
1.	Terms and phrases used in this document are defined in the *Planning Act 2016* its regulation or the State Development Assessment Provisions (SDAP) v2.6. If a word remains undefined it has its ordinary meaning.
Over dimensional road loads	
2.	Under the Transport Infrastructure (Rail) Regulation 2006 permission from the Railway Manager (Queensland Rail) is required to take over dimensional road loads across Queensland Rail infrastructure (e.g. rail level crossings and rail bridges). Further information can be obtained from Queensland Rail website at: http://www.queenslandrail.com.au/forbusiness/overdimensionalloads
Works in the State-controlled road corridor	
3.	Under section 33 of the *Transport Infrastructure Act 1994*, written approval is required from the Department of Transport and Main Roads to carry out road works, including road access works (driveways) on a state-controlled road. This approval must be obtained from the relevant Department of Transport and Main Roads District Office prior to commencing any works on the state-controlled road reserve. The approval process takes time and may require the approval of engineering designs of the proposed works, certified by a Registered Professional Engineer of Queensland (RPEQ). It is highly recommended that contact be made with the Department of Transport and Main Roads' Development Compliance and Support team via email at dcs@tmr.qld.gov.au as soon as possible to ensure that gaining approval does not delay construction.
Works on a railway	
4.	Pursuant to section 25 of the Transport Infrastructure Act 1994, the railway manager's written approval is required to carry out works in or on a railway corridor or otherwise interfere with the railway or its operations. The railway manager (Queensland Rail) should be contacted in relation to any works within and along the railway corridor boundary. The applicant should contact Queensland Rail Property Team at developmentenquiries@qr.com.au or on telephone number (07) 3072 1068 in relation to this matter.
Heavy Vehicle National Law	
5.	The National Heavy Vehicle Regulator (NHVR) is responsible for administering all regulatory services under the Heavy Vehicle National (HVNL), including: • heavy vehicle access permit applications • heavy vehicle standards modifications and exemption permits • fatigue management, including a national driver work diary • compliance and enforcement of the HVNL (through existing transport inspectors and police services). For more information about the NHVR, please visit https://www.nhvr.gov.au
Ancillary Works and Encroachments within a state-controlled road	
6.	The installation of any infrastructure within the state-controlled road that is not owned by a Public Utility Provider requires separate approval from the Department of Transport and Main Roads in the form of a Road Corridor Permit issued under the *Transport Infrastructure Act 1994*. The Department of Transport and Main Roads have advised that applications for Road

	Corridor Permits are assessed on a case by case basis to ensure that the design, function and safety of the state-controlled road is not adversely impacted or compromised. For further information about Road Corridor Permits, please visit the Department of Transport and Main Roads' website www.tmr.qld.gov.au and search 'Road Corridor Permit' applications.
Cultural heritage	
7.	The *Aboriginal Cultural Heritage Act 2003* seeks to protect artefacts and cultural sites that are of significance to Aboriginal people. Under Section 23 of the Act, a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal Cultural Heritage (the "cultural heritage duty of care").
GPS coordinates	
8.	To request an electronic file of the GPS coordinates contained in Attachment 7 of this decision notice, email a request to the Department of Natural Resources, Mines and Energy (DNRME) at vegsouthregion@dnrme.qld.gov.au and include application reference (2007-17946 SDA).

Attachment 3—Reasons for the decision

(Given under section 63(5) of the *Planning Act 2016*)

The reasons for the department's decision are:

The development complies with *State code 16: Native vegetation clearing* (State code 16) and *State code 23: Wind farm development* (State code 23) of the *State Development Assessment Provisions*.

Specifically, the development:

- minimises contributions to greenhouse gas emissions
- minimises clearing to conserve vegetation, avoid land degradation and loss of biodiversity and maintains ecological processes
- avoids impacts on vegetation that are matters of state environmental significance and where it can't be avoided, the development minimises and mitigates impacts
- is appropriately located, sited, designed and operated to ensure:
    - the safety, operational integrity and efficiency of air services and aircraft operations
    - risks to human health, wellbeing and quality of life are minimised by ensuring acceptable levels of amenity and acoustic emissions at sensitive land uses
    - development avoids, or minimises and mitigates, adverse impacts on the natural environment (fauna and flora) and associated ecological processes
    - development does not unreasonably impact on the character, scenic amenity and landscape values of the locality
    - the safe and efficient operation of local transport networks and road infrastructure.

Material used in the assessment of the application:

- The development application material**, change application material** and submitted plans
- *Planning Act 2016*
- Planning Regulation 2017
- The *State Development Assessment Provisions* (version**s** 2.6 **and 3.0**), as published by the department
- The Development Assessment Rules
- SARA DA Mapping system
- Comments received

Attachment 4—Negotiated decision provisions

Attachment 5—Appeal provisions

Attachment 6—Approved plans and specifications

(given under section 43 (b) of the Planning Regulation 2017)

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