Saddletop Wind Farm

Scoping Report

Squadron Energy

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Document Tracking

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Abbreviations

Abbreviation	Description
ABN	Australian Business Number
ABS	Australian Bureau of Statistics
ACHA	Aboriginal Cultural Heritage Assessment
ACMA	Australian Communication and Media Authority
AEMO	Australian Energy Market Operator
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
BAM	Biodiversity Assessment Methodology
BAM-C	Biodiversity Assessment Methodology Calculator
BBAMP	Bird and Bat Adaptive Management Plan
BBUS	Bird and Bat Utilisation Surveys
BC Act	*Biodiversity Conservation Act 2016*
BDAR	Biodiversity Development Assessment Report
Benefit Sharing Guideline	*Benefit Sharing Guideline – Guidance for State Significant Renewable Energy Development* (DPHI, 2024e)
BESS	Battery Energy Storage System
Biodiversity and Conservation SEPP	*State Environmental Planning Policy (Biodiversity and Conservation) 2021*
Biosecurity Act	*Biosecurity Act 2015*
BOS	Biodiversity Offset Scheme
BSAL	Biophysical Strategic Agricultural Land
CASA	Civil Aviation Safety Authority
CIC	Critical Industry Cluster
Commonwealth DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water
CPHR	Conservation Programs, Heritage and Regulation
DNG	Derived Native Grassland
DPE	Department of Planning and Environment (now Department of Planning, Housing, and Infrastructure)
DPHI	Department of Planning, Housing, and Infrastructure
DPIE	Department of Planning, Industry and Environment (now Department of Planning, Housing, and Infrastructure)
EII Act	*Electricity Infrastructure Investment Act 2020*
EIS	Environmental Impact Statement
ELA	Eco Logical Australia
EMF	Electromagnetic Field
EP&A Act	*Environmental Planning & Assessment Act 1979*
EPA	Environment Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EPI	Environmental Planning Instrument
EPL	Environmental Protection Licence
ESD	Ecologically Sustainable Development
FM Act	*Fisheries Management Act 1994*
FTE	Full-time Equivalent

Abbreviation	Description
GHG	Greenhouse Gases
GIS	Geographic Information System
GW	Gigawatt
Heritage Act	*Heritage Act 1977*
IBRA	Interim Biographic Regionalisation for Australia
ICNIRP	International Commission on Non-ionizing Radiation Protection
ILUA	Indigenous Land Use Agreement
IPC	Independent Planning Commission
ISP	Integrated System Plan
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
LLS	Local Land Services
LLS Act	*Local Land Services Act 2013*
LSC	Land and Soil Capability
LSPS	Local Strategic Planning Statement
LVIA Technical Supplement	*Wind Energy Guideline – Technical Supplement for landscape Character and Visual Impact Assessment (DPHI, 2024b)*
Mining Act	*Mining Act 1992*
MNES	Matters of National Environmental Significance
MW	Megawatts
MWh	Megawatt hour
NATA	National Association of Testing Authorities
NEM	National Electricity Market
NM	Nautical Mile
NOA	Naturally Occurring Asbestos
NPW Act	*National Parks and Wildlife Act 1974*
NSW	New South Wales
NSW DCCEEW	NSW Department of Climate Change, Energy, Environment and Water
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water (formerly DPE)
OEH	Office of Environment and Heritage
O&M	Operation and Maintenance
OSOM	Over-size over-mass
PCT	Plant Community Types
Planning Systems SEPP	*State Environmental Planning Policy (Planning Systems) 2021*
POEO Act	*Protection of the Environment Operations Act 1997*
Primary Production SEPP	*State Environmental Planning Policy (Primary Production) 2021*
Private Agreement Guideline	*Private Agreement Guideline - Guidance for State Significant Renewable Energy Development* (DPHI, 2024d)
Project	Saddletop Wind Farm
Proponent	Saddletop Wind Farm Pty Ltd
RAPs	Registered Aboriginal Parties
RDP	Rapid Data Point
RE Act	*Renewable Energy Act 2000*

Abbreviation	Description
Resilience and Hazards SEPP	*State Environmental Planning Policy (Resilience and Hazards) 2021*
REZ	Renewable Energy Zones
RF Act	*Rural Fires Act 1997*
RFS	NSW Rural Fire Service
Roads Act	*Roads Act 1993*
SEARs	Secretary's Environmental Assessment Requirements
SEED	Sharing and Enabling Environmental Data
SEP	Stakeholder Engagement Plan
SEPP	State Environmental Planning Policy
SIA	Social Impact Assessment
SoHI	Statement of Heritage Impact
Squadron Energy	Squadron Renewable Energy Developments Pty Ltd
SSD	State Significant Development
SVTM	State Vegetation Type Map
TBDC	Threatened Biodiversity Data Collection
TEC	Threatened Ecological Community
TMP	Traffic Management Plan
Transport and Infrastructure SEPP	*State Environmental Planning Policy (Transport and Infrastructure) 2021*
VI	Vegetation Integrity
WARR Act	*Waste Avoidance and Resource Recovery Act 2001*
Wind Energy Guideline	*Wind Energy Guideline* (DPHI, 2024a)
WM Act	*Water Management Act 2000*
WTG	Wind Turbine Generators

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1. Introduction

1.1. Project Overview

The Saddletop Wind Farm (the 'Project') involves the construction, operation and decommissioning of up to 123 Wind Turbine Generators (WTGs), Battery Energy Storage System (BESS), and associated ancillary infrastructure and temporary facilities with a total capacity of up to 738 megawatts (MW). The Project is located approximately 30 km north-east of Tumut and 45 km east of Gundagai around the Adjungbilly area, within the Riverina Local Land Services region of New South Wales (NSW) and within the Cootamundra-Gundagai Regional Council, Yass Valley Council and Snowy Valleys Council Local Government Areas (LGAs) (Figure 1-1). The Project is on predominantly privately owned, freehold land, as well as Crown Land and Council land. The Schedule of Lands is provided in Appendix A.

The main components of the Project include:

- Wind Turbine Generators: Up to 123 WTGs.
- Transmission Works: Including new electricity lines to connect the Project to the internal electrical reticulation network, and the National Electricity Market (NEM) and the construction and operation of a new Electrical Plant Compound.
- Electrical Plant Compounds: Including the construction and operation of an Electrical Plant Compound (includes Battery Energy Storage System (BESS) and/or substation). The BESS is proposed to store and deploy energy with a proposed capacity of 150MW / 600 MWh. One BESS only is proposed with multiple options identified currently for siting investigations.
- Ancillary Infrastructure: Including (but not limited to) internal access roads/tracks, utilities and communications infrastructure, operation & maintenance (O&M compounds), hardstands, meteorological masts and external road upgrades (subject to blade sizing and transport routes).
- Temporary Facilities: Including construction compounds, laydown and storage areas, construction working areas, rock crushing and concrete batch plants, temporary roads, and temporary meteorological masts used during construction, operation and decommissioning of the Project.
    - Worker Accommodation: Pending further investigation temporary accommodation is likely to be required for the construction workforce. Accommodation within Gundagai, Tumut and the surrounds is limited. Accommodation requirements will be further assessed in the Environmental Impact Statement (EIS). Proposal for temporary accommodation will be the subject of consultation with the local community and key stakeholders.

A preliminary Project layout is provided in Figure 1-2 and the Project's regulatory approval pathway will be:

- State Significant Development (SSD) process under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) based on the Project's value as defined in the *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP)
- NSW Assessment Bilateral Agreement for Project Matters of National Environmental Significance (MNES) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

This Scoping Report has been prepared by Eco Logical Australia Pty Ltd (ELA) on behalf of Saddletop Wind Farm Pty Ltd (the 'Proponent'). The purpose of this Scoping Report is to request the NSW Planning Secretary's Environmental Assessment Requirements (SEARs) for the preparation of the EIS for the Project (refer to Section 1.4 for details).

1.2. Project Objectives

The objectives of the Project are to:

- Contribute to improving the security, stability and resilience of the NEM through renewable energy generation and energy storage capacity.
- Assist in delivering network benefits and renewable energy services in line with the NSW Electricity Infrastructure Roadmap (2020) (although the Project is not in a Renewable Energy Zone (REZ)).
- Support the transition to renewable energy through additional, firmed capacity of approximately 738 MW.
- Support Australia's commitments to reduce greenhouse gases and contribute to NSW achieving NetZero emissions by 2050 as set out in the NSW Climate Change Policy Framework
- Contribute to achieving the Energy Security Target established by the NSW Electricity Strategy (2019) and enacted in the *Electricity Infrastructure Investment Act 2020* (EII Act).
- Avoid and/or minimise environmental and community impacts wherever practicable, through careful design and implementation of best practice environmental management and mitigation.
- Contribute to positive community and economic outcomes in the Adjungbilly and Burrinjuck communities and wider South East region of NSW.

1.3. Related Development

1.3.1. Electrical Transmission Infrastructure

Two Transgrid southern NSW network transmission lines pass through the Project Site, including the Yass to Lower Tumut 330kV line 3 and Yass to Upper Tumut 330kV line 2. The Project is proposing to potentially connect to one of these options. Alternatively, the Project may connect to Transgrid's recently approved 500kV HumeLink transmission line. Engagement with Transgrid will continue throughout the planning process.

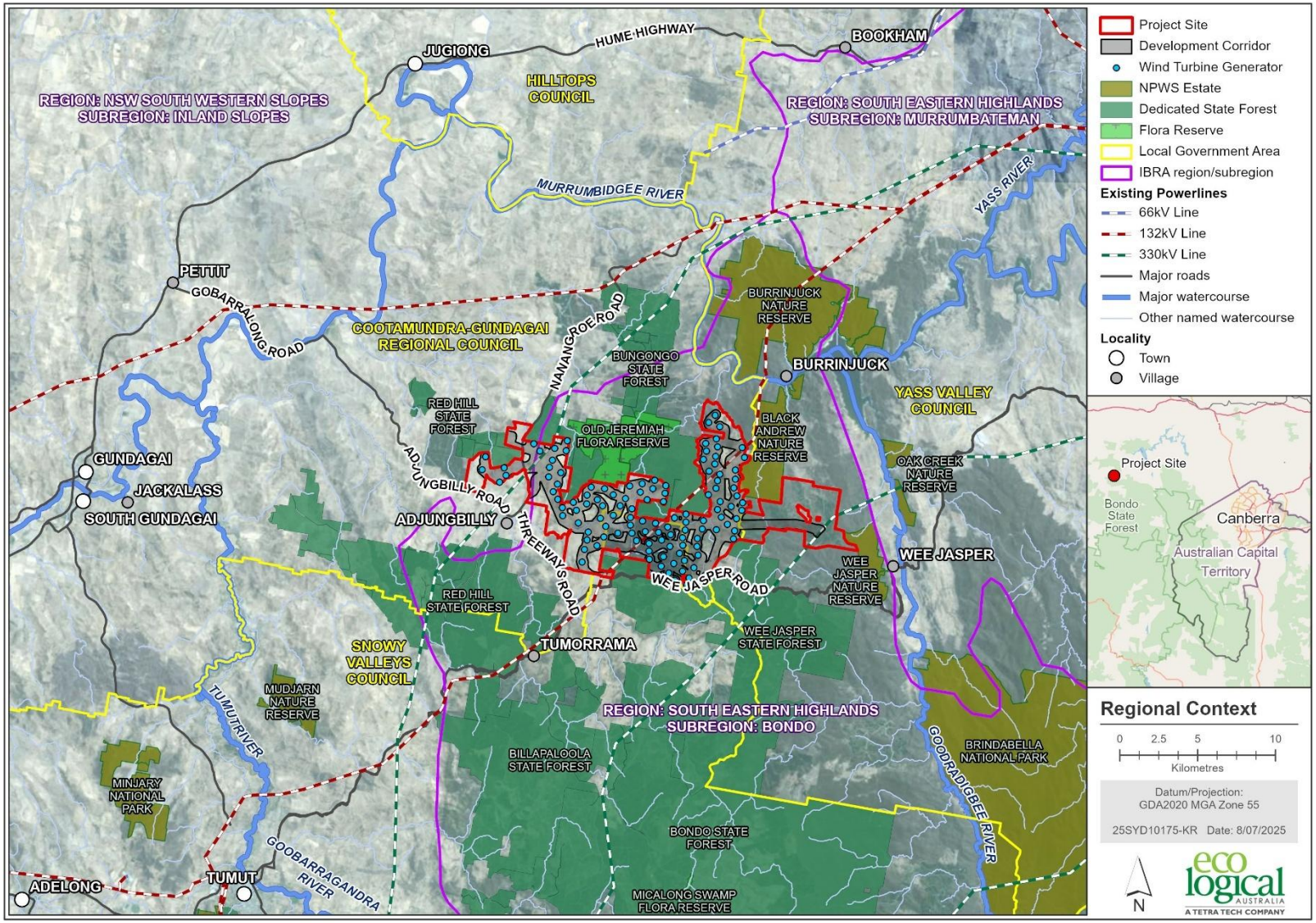

Figure 1-1: Regional context of the Project

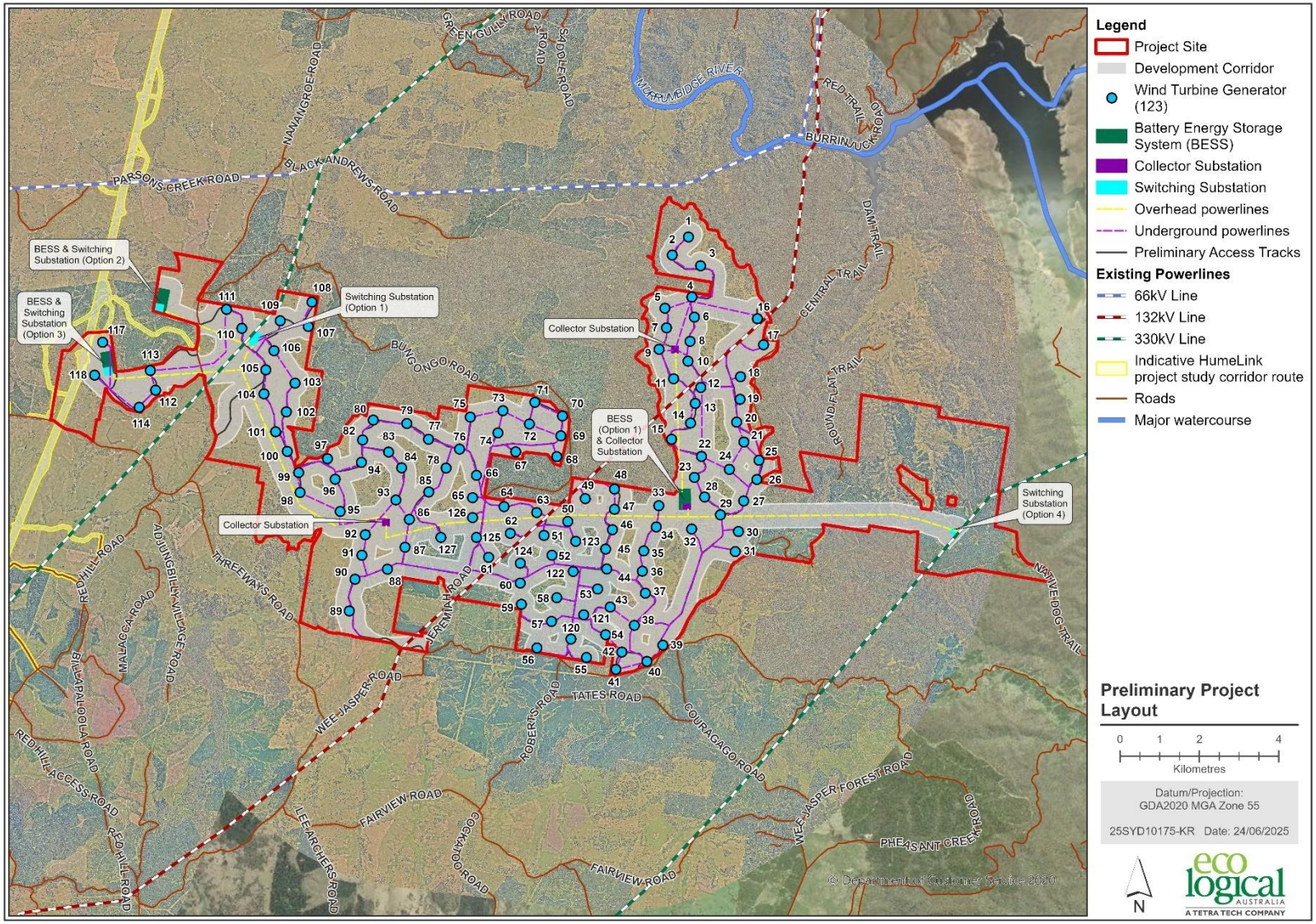

Figure 1-2: Preliminary Project layout

1.4. Proponent

The Proponent for the Project is Saddletop Wind Farm Pty Ltd, a wholly owned subsidiary of Squadron Energy, one of Australia's leading renewable energy companies that develops, operates, and owns renewable energy assets across Australia. Currently, Squadron Energy has 1.1 GW of renewable energy in operation and 900 MW under construction.

The details of the Proponent are provided in Table 1-1.

Table 1-1: Proponent details

Proponent Details	
Proponent Name	Saddletop Wind Farm Pty Ltd
Postal Address	PO Box 1708, Newcastle NSW 2300
ABN	46 657 394 897
Project Contact	Nadine Caff, Project Manager Saddletopwind@squadronenergy.com

1.5. Document Purpose

This Scoping Report has been prepared in accordance with the following guidelines and frameworks:

- *State Significant Development Guidelines – Preparing a Scoping Report* (DPIE, 2022)
- *Social Impact Assessment Guideline for State Significant Projects* (DPHI, 2025)
- *Undertaking Engagement Guidelines for State Significant Projects* (DPHI, 2024e)
- Standard Industry SEARs
- Renewable Energy Planning Framework:
    - *Renewable Energy Planning Framework: Wind Energy Guideline* (DPHI, 2024a)
    - *Wind Energy Guideline – Technical Supplement for Landscape Character and Visual Impact Assessment* (DPHI, 2024b) (Visual Technical Supplement)
    - *Wind Energy Guideline – Technical Supplement for Noise Assessment* (DPHI, 2024c) (Noise Technical Supplement)
    - *Benefit Sharing Guideline* (DPHI, 2024d)

The requirements of the above guidelines and frameworks are provided in Table 1-2 relevant to preparation of this Scoping Report and a SEARs decision.

An assessment against the NSW *Wind Energy Guideline* (DPHI, 2024a) has identified the scoping requirements to apply for SEARs are comparable with the approach used in the preparation of this Scoping Report, including:

- The requirements of scoping in Section 2.3.1 and Section 4.2 of the NSW *Wind Energy Guideline* (DPHI, 2024a) are to identify the key environmental assessment issues, describe the engagement with the local community and complete preliminary visual and noise assessments in accordance with the SSD Guideline.
- The requirements of scoping in Section 1.3 and 4.1 of the Visual Technical Supplement (DPHI, 2024b) are consistent with the output of the Preliminary Visual Assessment undertaken by Moir Studio (2025; Appendix C) and summarised in Section 6.2.

- The requirements of scoping in Section 2.1 of the Noise Technical Supplement (DPHI, 2024c) are consistent with the output of the Preliminary Noise Assessment undertaken by Marshall Day Acoustics (2025, Appendix D) and summarised in Section 6.3.

Table 1-2: Summary of Guideline requirements relevant to Scoping

Guideline	Item	Section in this Report
State Significant Development Guidelines – Preparing a Scoping Report (DPIE, 2022)	Describe the Project in simple terms.	Section 2.4
	Include an analysis of feasible alternatives considered having regard to the objectives of the development and identify the alternatives that will be investigated further in the EIS.	Section 3.2
	Give an early indication of community views on the Project and identify what engagement will be carried out during the preparation of the EIS.	Section 5
	Identify the key matters requiring further assessment in the EIS and the proposed approach to assessing each of these matters having regard to any relevant Government legislation, plans, policies, or guidelines.	Section 6
Social Impact Assessment Guidelines for State Significant Projects (DPHI, 2025)	Gain an initial understanding of the Project's social locality.	Section 6.11
	Gain an initial understanding of the characteristics of the communities within the Project's social locality.	Section 6.11
	Conduct an initial evaluation of the likely social impacts for different groups in the social locality and the level to which these impacts need to be assessed.	Section 6.11
	Consider potential refinements or approaches in response to likely social impacts.	Section 6.11
	Consider the remainder of the SIA tasks, including engagement.	Section 6.11
Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024e)	The Proponent must: • Identify an early engagement that has been carried out that is relevant to the Project (i.e., engagement undertaken as part of a prior planning process). • Identify the key stakeholders for further engagement (i.e., individuals, special interest groups, councils, and government agencies with an interest in or likely to be affected by the Project). • Plan how they intend to engage with the community, council, and government agencies, so that the engagement is proportionate to the scale and nature of the Project and the likely level of community interest in the Project. • The community can: - Take up any early engagement opportunities to understand the Project. - Provide feedback to the proponent about aspects of the Project which they support, do not support, or wish to be adjusted. - Provide clear reasons for any concerns to enable the proponent to consider possible alternative approaches to address the issues. - Alert the proponent to any matters they feel have not been considered.	Section 5
Wind Energy Guideline (DPHI, 2024a)	Provide clear and consistent guidance to the community, industry and regulators about how to measure and assess key environmental impacts of SSD wind energy development in NSW.	Section 6
	Facilitate better outcomes by requiring early identification of impacts to drive better siting and design.	Section 3.2, Section 6
	Facilitate meaningful, respectful and effective community and stakeholder engagement across the development assessment process, from pre-lodgement to post-approval.	Section 5

Guideline	Item	Section in this Report
	Encourage benefit-sharing between wind energy operators and the communities in which they operate, where appropriate.	Section 5, Section 6.11
Wind Energy Guideline – Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2024b)	The scoping report must include a visual impact analysis that identifies public viewpoints and private receivers that require assessment in the EIS.	Section 6.2
	Identify a visual study area.	Section 6.2.2
	Conduct viewshed mapping to identify areas from which the Project could be visible.	Section 6.2.2
	Identify public viewpoints and private receivers that would have line of sight to the project and sit within the study area.	Section 6.2.2
	The results of the scoping analysis should be presented on a map and included in the Scoping Report. The map should identify the: • Proposed turbine locations. • Study area. • Results of the viewshed mapping analysis. • Relevant setback area calculated in accordance with Figure 2. • Location of public viewpoints and private receivers (including whether they are subject to any associated landowner or other negotiated agreement and are therefore associated with the development).	Figure 6-3
Wind Energy Guideline – Technical Supplement for Noise Assessment (DPHI, 2024c)	Conduct an indicative noise impact assessment of expected noise levels at all receivers.	Section 6.3.2

1.6. Terminology Used

This Scoping Report uses the following terminology:

- **Project:** This is in reference to the proposed development, including the proposed WTGs and all associated ancillary infrastructure and temporary facilities, as described in Section 2.4 and related areas.
- **Project Site:** This includes the area in which the Development Corridor is currently sited and defines the extent of the property boundaries and the bounds of the proposed EPBC Act referral.
- **Preliminary Project Layout:** The preliminary layout assessed for the purposes of this Scoping Report, which includes the proposed WTG locations, internal roads, electrical infrastructure and Electrical Plant Compounds.
- **Development Corridor:** The area generally bound by a buffer of 300 m radius around the preliminary Project layout as shown in Figure 1-2 (approximately 600 m wide corridor in total).
- **Study Area:** As defined by the investigation of each environmental aspect and impact assessment.
- **Associated Receiver:** A residence on privately owned land in respect of which the owner has reached an agreement with the applicant in relation to the development.
- **Non-associated Receiver:** A residence on privately-owned land in respect of which the owner has not reached an agreement with the applicant in relation to the development.

2. Strategic Context

2.1. Project Viability

Squadron Energy has integrated social, environmental, and economic considerations in developing the Project with the principles of Ecologically Sustainable Development (ESD). This approach minimises the potential impacts while maintaining or enhancing positive outcomes for the wider community.

There are several key areas that have been considered in the selection of the Project Site, including:

- Suitable Wind Resource: Wind resource has been monitored at the Project Site since 2021. The monitoring data has been modelled with long term reference data and shows wind speeds that are high and consistent, demonstrating the viability of the Project in the selected location
- Environmental Impacts: The Project has adopted the hierarchy of avoid, minimise, mitigate, and offset to manage potential environmental impacts which will be addressed in detail as part of the EIS. The preliminary Project layout has been designed to avoid known constraints and incorporates environmental design criteria such as preferential siting of the Development Corridor on cleared land, maintaining vegetation buffers and avoiding ridgelines
- Access to Electricity Network: The Project is proposing to potentially connect to one of three possible connections options, which are, the newly constructed 500kV HumeLink transmission line, Yass to Lower Tumut 330kV line 3 or Yass to Upper Tumut 330kV line 2, all of which are within the Project Site (Figure 1-2).
- Local Communities: The low population density of the surrounding area will assist in designing the Project to avoid and/or minimise noise and visual impacts from the Project. Potential impacts to sensitive receivers will be studied further in the EIS and consultation with landowners will continue throughout the Project development
- Land Suitability: During the operational phase it is proposed that the balance of land would continue to be used for agricultural purposes such as sheep and cattle grazing or cultivation, with grasses sown for ground cover and grazing fodder in disturbed areas, resulting in only a minor net change to the existing land use
- Site Access: There is good existing road access to the Project Site including highways, wide sealed minor roads, and numerous unsealed, graded minor roads which intersect the Project Site. Any potential road upgrades will be designed and assessed further in the EIS and in consultation with the relevant road authorities
- Proximity to Resources: During the construction phase it will be necessary to source water and other materials for the construction of roads and WTG foundations. In the local area, there are several active quarries and water sources that have the potential to service the resource requirements associated with the construction of the Project, subject to procurement processes
- Economic Impact: The population centres of Yass, Gundagai, Tumut and Canberra are well established to cater for an increase in workforce, having prior experience in servicing the transport, renewable energy infrastructure, manufacturing, and tourism industries.

2.2. Strategic Need for the Project

Table 2-1 provides a summary of the relevant national, state, regional and local planning and policy context to the Project.

Table 2-1: Project alignment with strategic plans and policies

Strategy, Plan or Policy		Description	Project Relevance
National Policies	2015 Paris Agreement	The Agreement sets out a global framework to address climate change and limit global warming to well below 2°C, and ideally 1.5°C compared to pre-industrial levels.	To achieve the reduction in the greenhouse gas emissions resulting in global warming, the development of renewable energy Projects is critical. The Project will contribute to meeting Australia's greenhouse gas (GHG) emission reduction targets.
	Renewable Energy Act 2000 (RE Act)	The Australian Government ratified the Agreement in November 2016.	The Project will contribute to both the increasing local and global need for such renewable projects, as well as aid in mitigating the issues of global warming and climate change.
	National Electricity Market (NEM)	The RE Act encourages investment in large-scale renewable power by incentivising renewable energy through a Renewable Energy Certificate Market.	As the NEM increasingly looks to integrated variable renewable energy solutions to supply the energy market, wind power will be required to efficiently generate and deploy energy within the NEM and provide system strength. With a proposed generation capacity of 738 MW, the Project is well positioned to contribute to this need through its connection to the NEM.
	Climate Change Act 2022	The NEM connects transmission grid infrastructure cross-state and responsible for the wholesale of electricity within Australia.	The Project would contribute to the reduction of emissions generated in Australia required in this legislation by contributing zero emission electricity into the grid.
	Australian Energy Market Operator (AEMO) Integrated System Plan (ISP) 2024	The Plan sets out Australia's greenhouse gas emissions reduction targets, provide annual climate change statements, confer advisory functions on the Climate Change Authority, and other related purposes.	The Project would contribute to addressing the objectives of supplying firmed, reliable renewable energy to consumers within the NEM.
State Policies	Climate Change (Net Zero Future) Act 2023	This Act legislates the NSW targets to reduces GHG emissions target by 50% by 2030, 70% by 2035 and achieve net zero by 2050.	The Project would generate electricity from renewable sources reducing GHG emissions when compared with fossil fuels.
	The Net Zero Plan	The Net Zero plan is the foundation for NSW's action on climate change and goal to reach net zero emissions by 2050. It outlines the NSW Government's plan to grow the economy, create jobs and reduce emissions over the next decade.	The Project aligns with the Net Zero Plan through the generation of electricity through renewable energy.

Strategy, Plan or Policy		Description	Project Relevance
	NSW Electricity Strategy	The Strategy is the NSW Government's plan for a reliable, affordable, and sustainable electricity future that supports a growing economy.	The Project would positively contribute to the sale of reliable, affordable, and sustainable energy.
	NSW Electricity Infrastructure Roadmap (2020)	The NSW Roadmap plans on capitalising on that opportunity by 'transforming the electricity system into one that is cheap, clean and reliable' (DoE, 2020). The implementation of the NSW Roadmap sets the foundation for considerable investment and job creation in NSW while also addressing electricity affordability.	The Project aligns with the Electricity Infrastructure Roadmap through the generation of cheap, clean and reliable electricity.
Regional and Local Policies	Riverina Murray Regional Plan 2041	The *Riverina Murray Regional Plan 2041* (DPE, 2022) is an update to the *Riverina Murray Regional Plan 2036* (DPIE, 2017). Since the release of the *Riverina Murray Regional Plan 2036* (DPIE, 2017), amendments to planning legislation have elevated the importance of strategic planning at a regional and local level in managing population growth and change and require higher-level planning to account for local strategic planning statements.	The Project will assist in meeting the objectives of the plan outlined below: • **Objective 1** – The Project will adopt the design hierarchy of avoid, minimise, mitigate, and offset. Through avoiding native vegetation with high conservation value and locating the Development Corridor on previously disturbed land. Further, a flexible approach to design will be adopted whereby the preliminary Project layout will continuously be updated to respond to identified constraints. • **Objective 3** – The Project seeks to develop a wind farm on land that minimises the potential for natural hazards to occur or impact the Project, particularly with regards to bushfire. To assist in natural hazard resilience, the Project will deploy asset protection zones to mitigate fire risk, as well as construct access roads which can be used by emergency services and act as potential fire breaks. • **Objective 4** – An Aboriginal Cultural Heritage Assessment (ACHA) will be undertaken at the EIS stage to identify and record any sites of Aboriginal cultural heritage (social, historical, scientific, and aesthetic values) within the Project Site. Consultation with the Brungle/Tumut Local Aboriginal Land Council will continue, and the archaeological survey will be undertaken with all Registered Aboriginal Parties (RAPs) to ensure appropriate management and mitigation strategies for Aboriginal sites. This will also include areas identified as culturally significant by the local Aboriginal community that are identified to be directly or indirectly impacted by the proposed Project. • **Objective 8** –The Region has seen significant housing stress in some towns and villages from an influx of temporary workers during the construction of large-scale developments, such as renewable energy Projects. Both the Social Impact Assessment and Economic Impact Assessment, proposed to

Strategy, Plan or Policy		Description	Project Relevance
			be undertaken at the EIS stage, will seek to confirm that temporary workforces are accommodated to support local economic development. • **Objective 13** – The Project would deliver an additional 738 MW of renewable energy generating capacity into the NEM and help effectively transition Australia's energy grid towards the 2050 goal of net zero emissions.
	Draft South East and Tablelands Regional Plan 2041	The regional plan is a 20-year blueprint for the future seeking to capitalise on the growing population and proximity to Canberra and Sydney by developing strong, diverse, and competitive local and regional economies while supporting the protection of high value environmental assets across the region.	The Project will assist in meeting several objectives as outlined in the draft Plan. These include the following objectives: • **Objective 8** – Plan for a net zero region by 2050: the Project will support the implementation of renewable energy that will directly contribute to a net zero emissions region. • **Objective 11** – Realise economic benefits from a connected regional economy: the Project will inject significant economic value into the local economy through several streams, including direct payments to landowners and local business as well as ancillary economic injection through local spending from the workforce. • **Objective 25** – Adapt infrastructure to meet future needs: the Project will support the development of energy infrastructure that will be essential for the future while also addressing energy challenges associated with climate change.
	Yass Valley Local Strategic Planning Statement 2020	A core element of the 'Vision' for the region seeks to 'position the region as a hub of renewable energy excellence" under Goal 1 'A Connected and Prosperous Economy' (DPIE, 2017).	Planning Priority 6 seeks to 'maximise opportunities for tourism, industry, and investment within the Yass Valley'. The Project will be an important asset to that priority as it will involve a rapidly growing industry that can utilise local workforces while also providing significant investment into the area, both in the short and long term. Planning Priority 7 interacts with planning priority 6 as it seeks to 'increase Yass Valley's resilience to climate and natural hazards.
	Yass Valley Community Strategic Plan 2042	The Statement sets out a plan for the economic, social, and environmental land use needs of the community over the coming 20 years. It sets land use planning priorities to ensure that the future development within the LGA is appropriate for the local context.	The Project aligns with the key themes and objectives EC.3 – 'Our local and emerging businesses are supported to thrive' and EN.1 – 'Our Natural environment is maintained, protected, and enhanced in line with community expectations'.
	Cootamundra-Gundagai Local Strategic Planning Statement 2020	The Cootamundra-Gundagai Local Strategic Planning Statement (LSPS) sets out a plan for the economic, social, and environmental land use needs of the community over the coming 20 years. It sets land use planning priorities to ensure that the future	The five (5) themes of the LSPS include *Liveability, Sustainability, Productivity, Technology* and *infrastructure and Planning.* The LSPS does not directly acknowledge renewable energy as having a key role in contributing towards a sustainable future. *Planning Priority 5 Opportunities to adapt to the changing climate* does include actions that are focused on a smaller

Strategy, Plan or Policy		Description	Project Relevance
		development within the LGA is appropriate for the local context. The LSPS is closely linked to Council's plans, studies, strategies, both the Gundagai LEP 2011 and the Cootamundra LEP 2013 and Development Control Plan, as well as the Regional Plan.	scale, for example solar street lighting, sensitive stormwater management and wastewater reuse and electrical vehicle charging stations. However, the LSPS acknowledges that these will contribute to the long-term viability and growth of renewable and sustainable industries.
	Snowy Valleys Council Local Strategic Planning Statement: Envisage 2040	The Snowy Valleys Local Strategic Plan 2040 sets out the economic, social and spatial land use intentions for the Snowy Valleys Council Area. The LSPS sets out clear local priorities for employment, housing, services and infrastructure.	The four (4) themes of the LSPS include *Towns and Villages, Growth Through Innovation, Our Natural Environment* and *Our Infrastructure*. The LSPS directly acknowledges renewable energy as key components of several planning priorities, including: • Planning Priority 2(A25) – demonstrating leadership in environmental sustainability by increasing renewable energy generation • Planning Priority 3 (D11) – promoting the diversification of energy supplies through renewable energy generation The Project will directly contribute to these planning priorities, as well as indirectly support other priorities related to environmental protection and conservation.

2.3. Project Location Context

The Project Site is situated within the Cootamundra-Gundagai Regional Council, Yass Valley Council and Snowy Valleys Council LGAs, in the highly productive agricultural Riverina region of NSW which supports a range of diverse industries, including manufacturing, tourism, and forestry (Figure 1-1). The Riverina region provides a range of natural landscapes from the foothills of the Snowy Mountains through to the flat dry inland plains of Hay and Carrathool, covering an area of 80,545 km^2 (Regional Development Australia, 2018). The nearest large regional centre to the Project Site is Gundagai, approximately 45 km to the west. As of 2021, the population of Gundagai is 1,699 and the median age is 45 (ABS, 2021).

The nearest community to the Project Site is Adjungbilly, approximately 1,820 m away. In 2021, the town of Adjungbilly had a population of 101 people. The Adjungbilly community is dominated by rural residences and structures associated with agricultural land uses. The local context of the Project is summarised in Table 2-2.

Table 2-2: Local context of the Project

Project	Details
Size	Project Site: 10,462.21 ha Development Corridor: 6,693.40 ha
Local Government Area	Cootamundra-Gundagai Council, Yass Valley Council and Snowy Valleys Council
Land Zoning	RU1 – Primary Production (Figure 2-2)
Land Tenure	Freehold, Crown Land, Crown waterways, Crown roads and Council roads
Land Use	Cropping, Managed Resource Protection, Grazing Native Vegetation, Landscape, Grazing Modified Pastures, Mining, River, Softwood Plantation Forestry, Reservoir/Dam (Figure 2-3)
Water Catchment	Murrumbidgee River Catchment
Local Land Services Region	South East and Riverina

2.3.1. Preliminary Environmental Constraints

In accordance with Section 4.2 of the Wind Energy Guideline (DPHI, 2024a), constraints mapping was undertaken to provide an overview of the relevant constraints regarding the Project Site. Figure 2-1 provides an overview of the identified constraints within proximity (approximately 25 km) to the Project Site, which include:

- Local government areas and the extent of the Project Site
- WTG locations
- Associated and non-associated receivers
- Current, approved and proposed infrastructure, including HumeLink
- Current, approved and proposed renewable energy projects (where SEARs have been issued)
- Vegetation, including potential visual screening
- Areas of high biodiversity value
- Relevant environmental and land use constraints on and around the Project Site, including National Parks, large waterways and waterbodies.

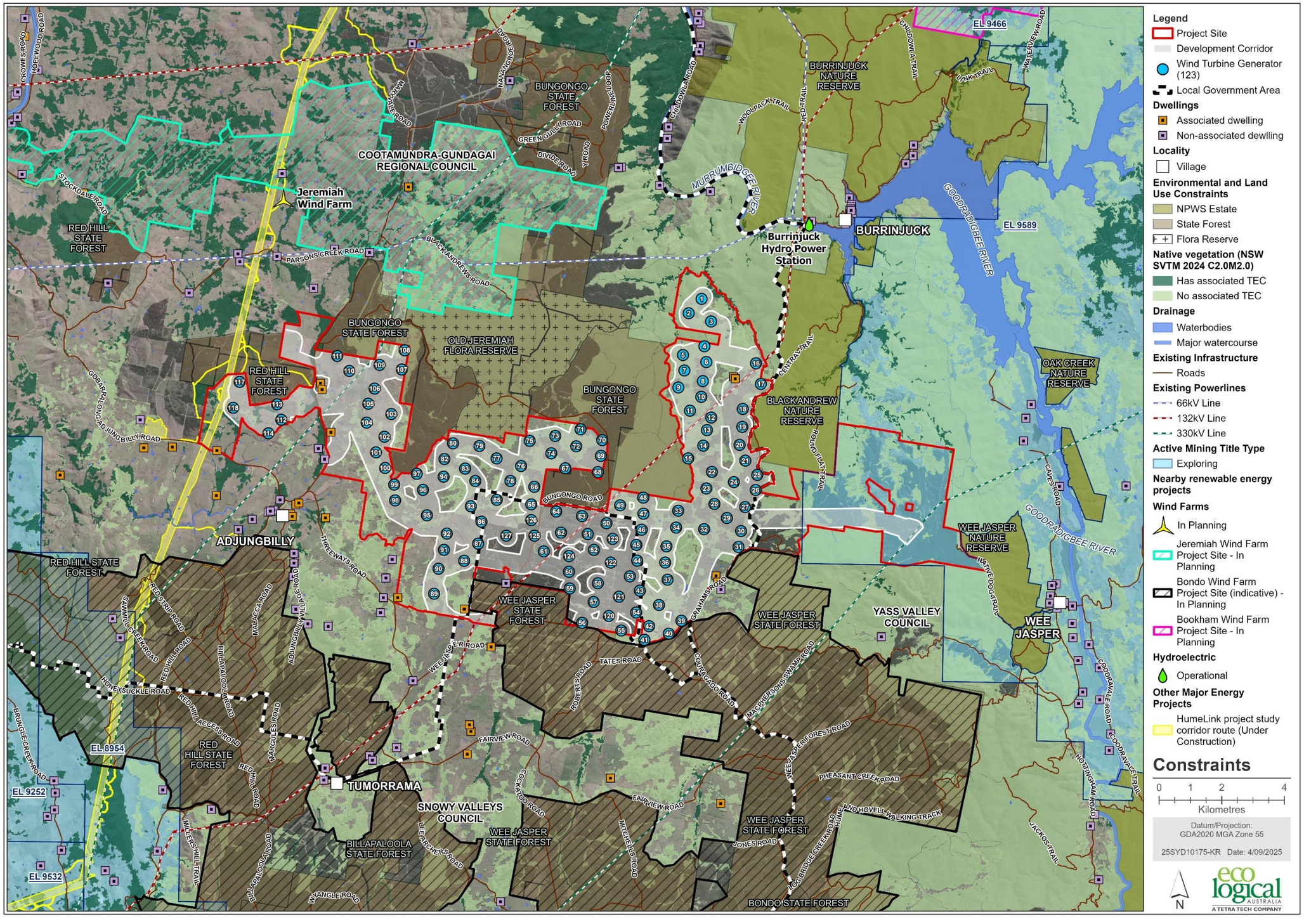

Figure 2-1: Preliminary environmental constraints within and in proximity to the Project Site

2.3.2. Key Landscape Features

In addition to the agricultural land uses, the region is characterised by scenic landscapes, natural environments, and productive forests, including the following protected areas within a 10 km radius of the Project Site:

- Old Jeremiah Flora Reserve
- Black Andrew Natural Reserve
- Burrinjuck Nature Reserve
- Oak Creek Nature Reserve
- Wee Jasper Nature Reserve
- Bungongo State Forest
- Red Hill State Forest
- Wee Jasper State Forest
- Bondo State Forest.

The Project Site borders the Bungongo State Forest and Old Jeremiah Flora Reserve to the north, Black Andrew Nature Reserve and Wee Jasper Nature Reserve to the east and the Red Hill State Forest to the northwest.

The Project Site is within the Murrumbidgee catchment. The Murrumbidgee River, a major tributary of the Murray-Darling River system, drains much of southern NSW and is located to the west of the Project Site. The Murrumbidgee is regulated downstream of Burrinjuck Dam, located to the northeast of the Project Site, with the Tumut, Gudgenby, Naas, Molonglo, Queanbeyan, Cotter, and Yass rivers as key tributaries. The Tumut River, the Murrumbidgee's largest tributary, is regulated downstream of Blowering Dam and forms part of the Snowy Hydro Scheme.

The Murrumbidgee River does not traverse the Project Site however, several tributaries do, including:

- Rough Yard Creek
- Gildarts Creek
- Old Jeremiah Creek
- Adjungbilly Creek.

2.3.2.1. Topography and Wind Resources

The Project Site is characterised by steep to rolling hills, located between 454.15 m AHD to 909.85 m AHD, with a mean AHD of 719.81 m (Figure 2-4). Figure 2-5 provides an overview of wind resources in the area as mapped by the Geological Survey of New South Wales (2019).

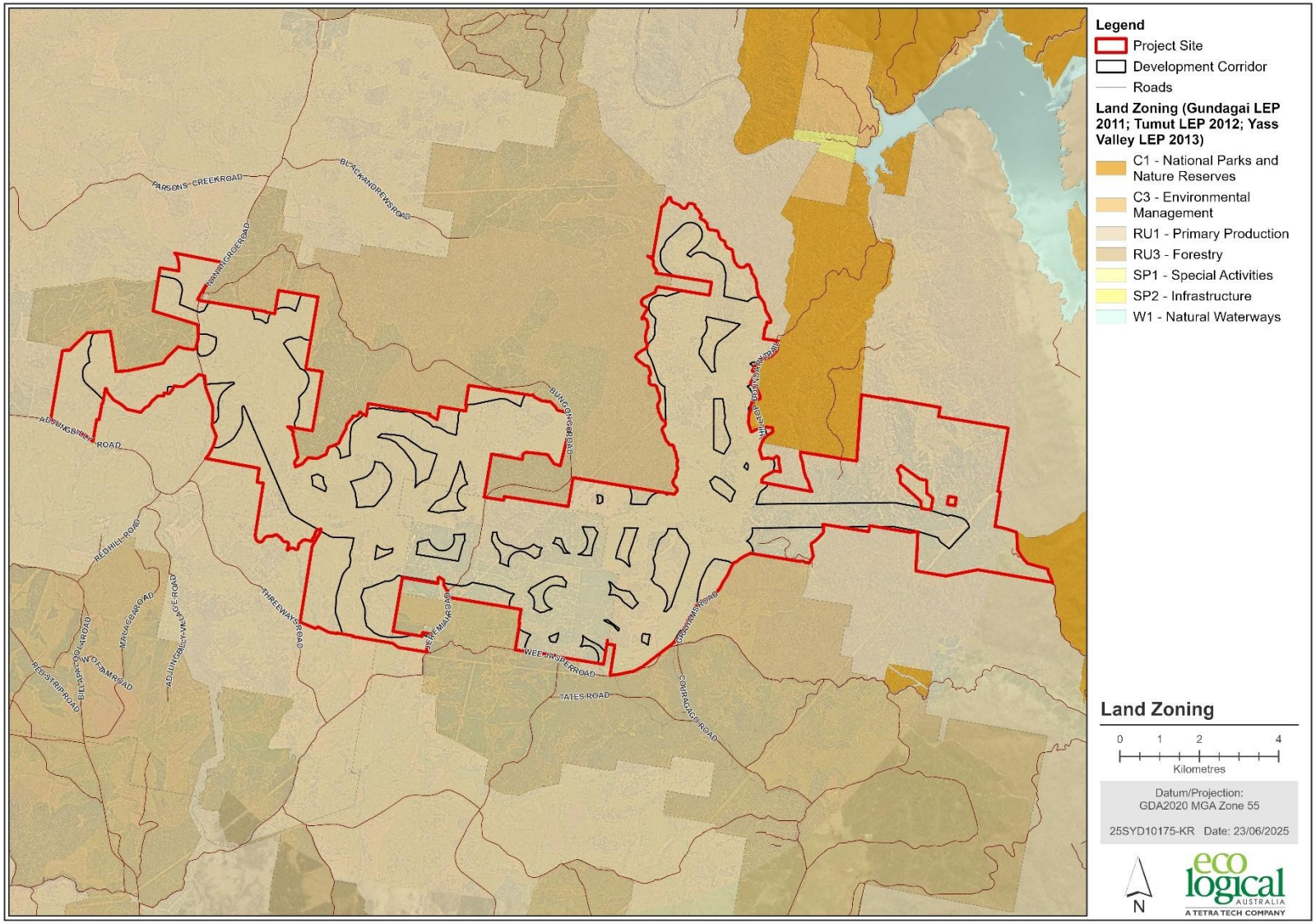

Figure 2-2: Land zoning within the Project Site

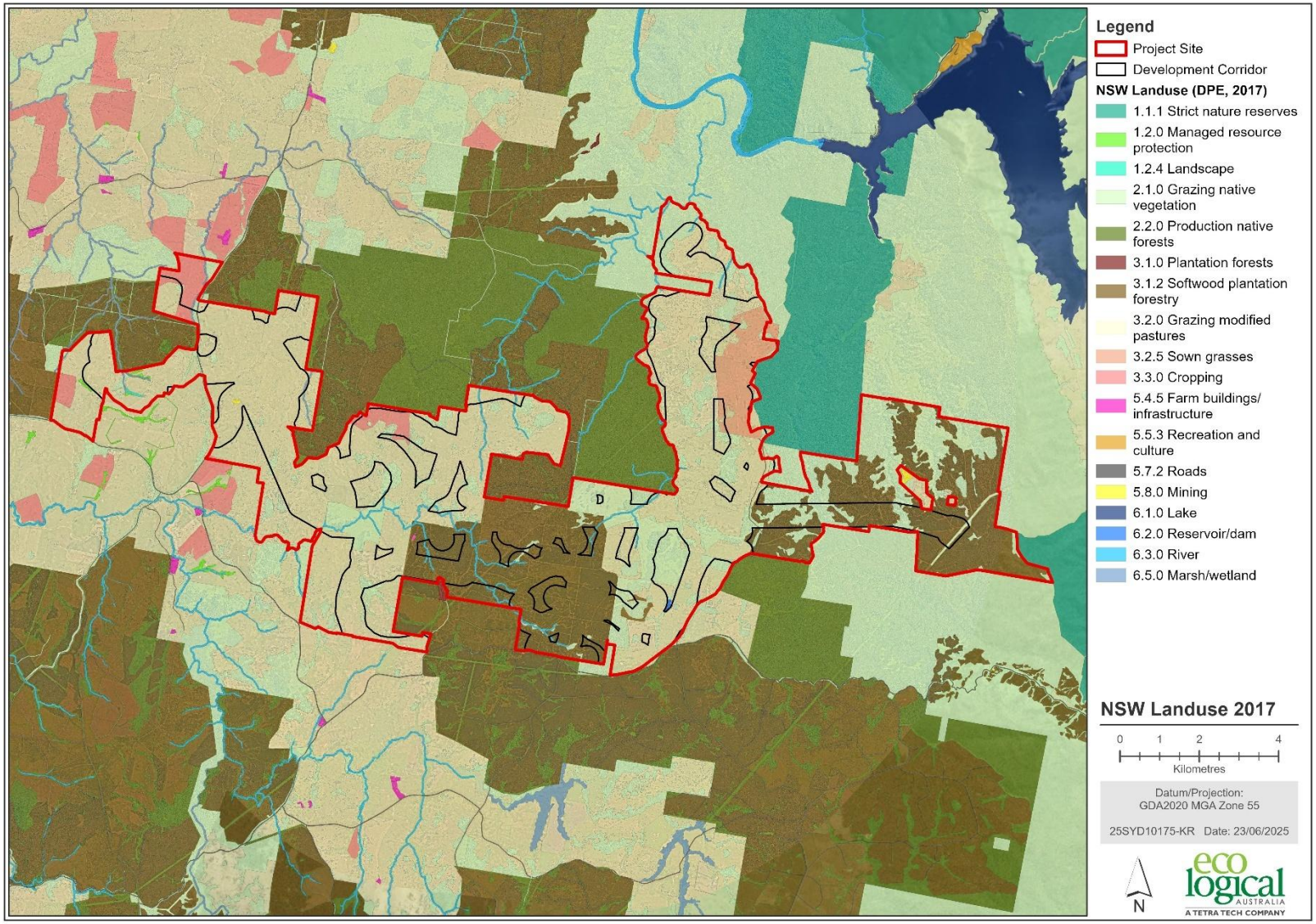

Figure 2-3: Existing land uses within the Project Site

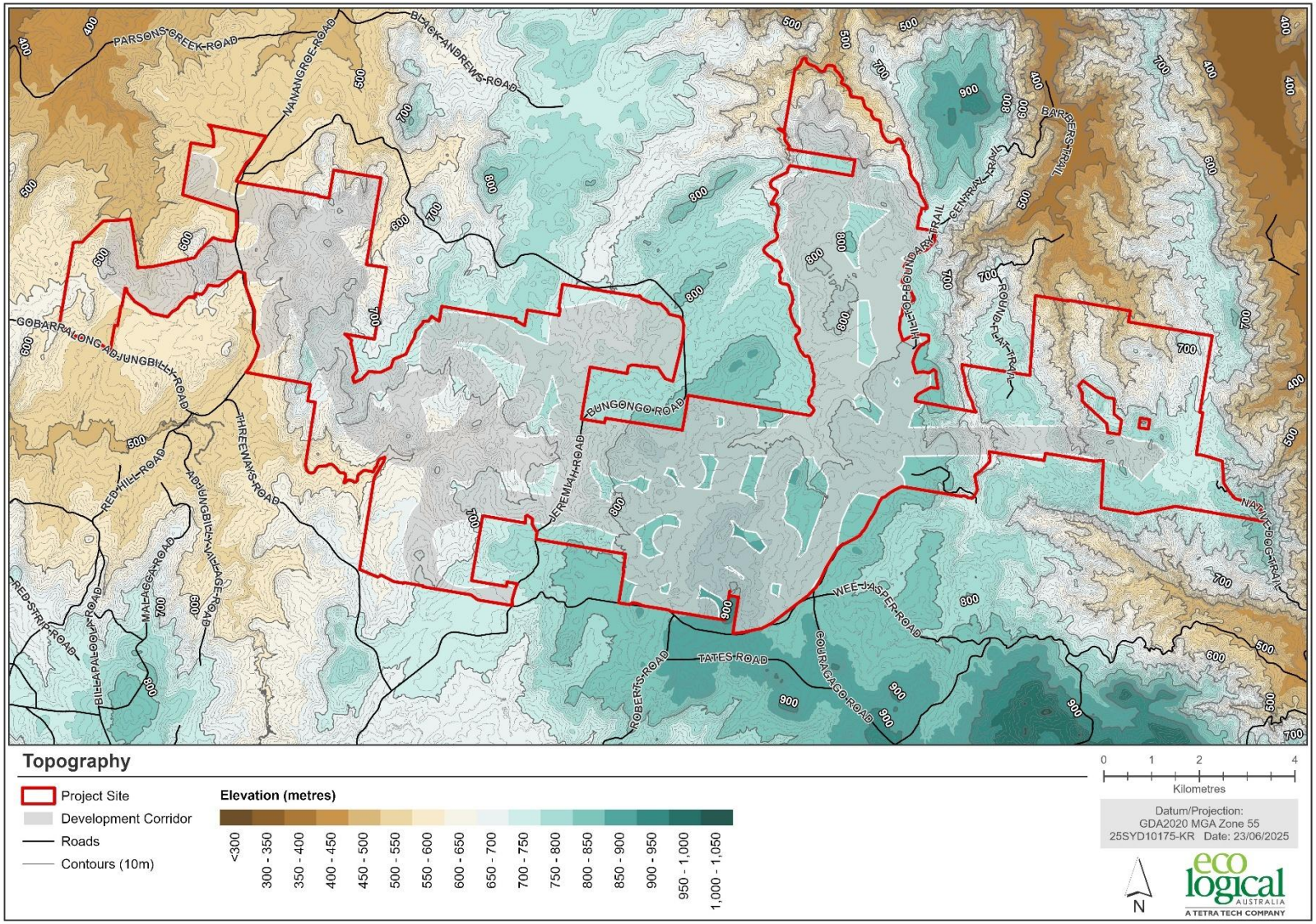

Figure 2-4: Topography across the Project Site

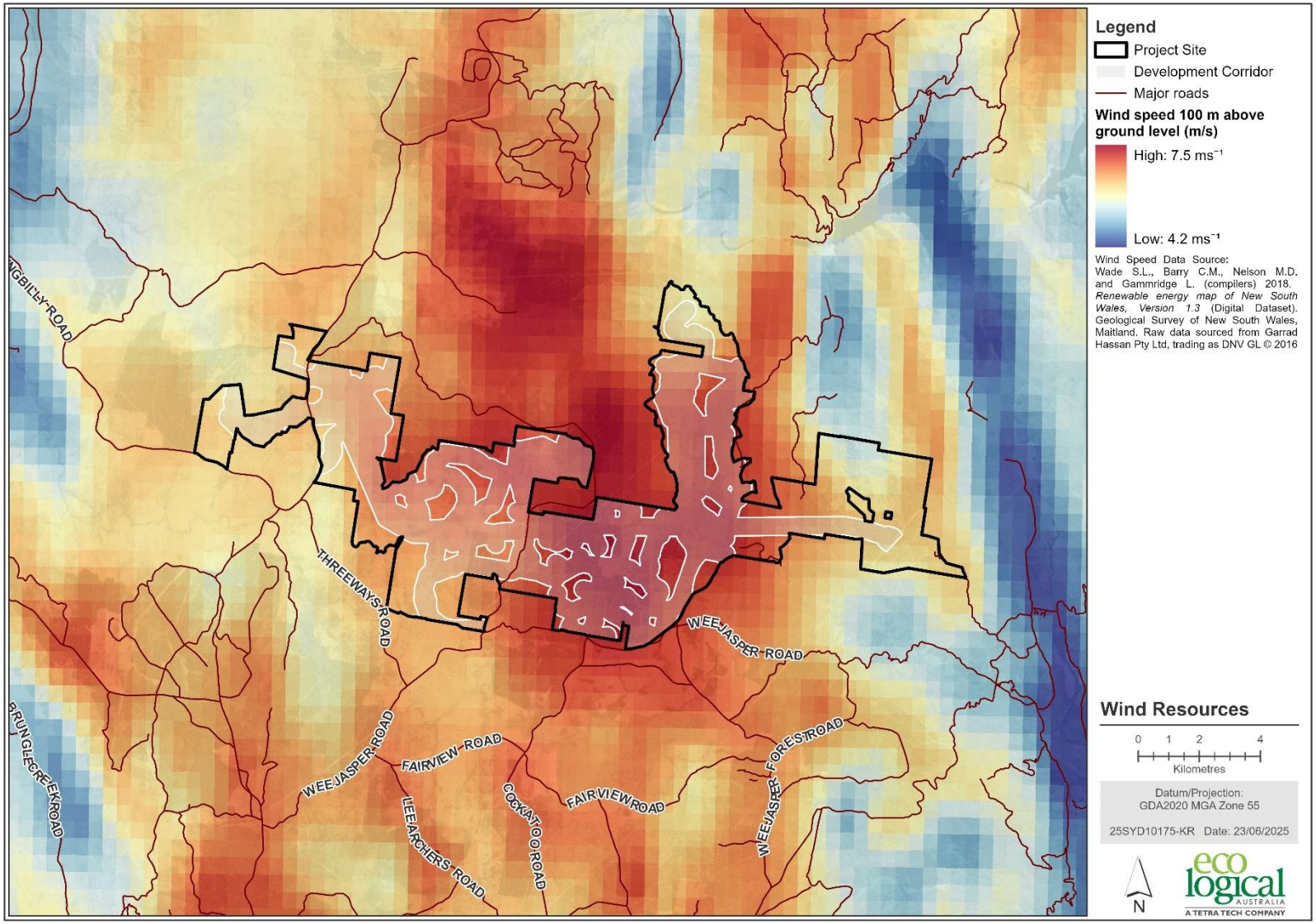

Figure 2-5: Wind resources within the Project Site

2.3.3. Key Transport and Infrastructure

The Project Site is in proximity to the major centres of Wagga Wagga (129 km by road to the east) and Canberra (183 km by road to the southeast) and benefits from major road and rail routes that connect the LGA to the wider region, including the Hume Highway, Sturt Highway, Barton Highway, and the Sydney to Melbourne Rail Line. These strategic transport links will increase the prominence and strategic importance of the region as a freight interchange. The region is also serviced by regional aerodromes including Tumut Airport and Cootamundra Airport, as well as non-certified aerodromes such as Harden Airport, Jindalee Airport and Hall Airport, all located within 30 nautical miles (nm) to the Project. Note that certified aerodromes include those that are available for use in regular public transport operations or charter operations (ABLIS, 2022).

The WTG equipment may be supplied through domestic manufacturing or imported and arriving at port. The closest port of entry to the Project Site is Port Kembla, located 360 km by road. However, other NSW ports including (but not limited to) Port of Newcastle may be considered following Project procurement and construction decisions. A Preliminary Route Study has been prepared by Rex J. Andrews (2025) and the results are summarised in Section 6.5.

2.3.4. Other Major Renewable Energy Projects in proximity to the Project Site

There are several other renewable energy Projects at various stages of development within 100 km of the Project Site (Table 2-3 and Figure 2-6). Further, the Project Site is in proximity to two other Projects currently in planning by Squadron Energy, including the Jeremiah Wind Farm and Bookham Wind Farm, as well as Neoen's proposed Bondo Wind Farm, which borders the Project Site to the south (Figure 2-7).

Table 2-3: Other major renewable energy projects within 100 km of the Project Site

Project Name	Stage	Distance from Project Site (km)
Bondo Wind Farm	In planning	0.00
Jeremiah Wind Farm	In planning	1.21
Burrinjuck Hydro Power Station	Operational	3.51
Bookham Wind Farm	In planning	10.23
Conroy's Gap Wind Farm	Approved	27.59
Coppabella Wind Farm (Previously known as Yass Valley Wind farm)	Approved	29.74
Wallaroo Solar Farm	Approved	33.12
McMahons Reef Solar Farm	In planning	42.46
Springdale Solar Farm	Approved	49.68
Gunning Solar Farm	Approved	50.97
Cootamundra solar farm	Approved	54.57
Murrumburrah Battery Energy Storage System	In planning	55.05
Bango Wind Farm	Operational	56.52
Rye Park Wind Farm	Under construction	61.99
Collector Wind Farm	Operational	71.69
Cullerin Range Wind Farm	Operational	72.25
Junee Solar Farm	Operational	74.42
Snowy 2.0 Stage 2 - Main Works	Under construction	75.08
Capital 2 Wind Farm	Approved	75.10
Gunning Wind Farm	Operational	75.61

Project Name	Stage	Distance from Project Site (km)
Blind Creek Solar Farm (previously Capital Solar Farm)	Approved	78.65
Capital Wind Farm	Operational	79.99
Biala Wind Farm	Operational	83.72
Woodlawn Wind Farm	Operational	84.75
Bomen Solar Farm	Operational	84.86
Wagga Wagga North Solar Farm 1 (Terrain)	Operational	85.26
Wagga Wagga North Solar Farm 2 (East Bomen Solar Farm, Wagga Wagga Solar Farm South)	Operational	85.26
Sebastopol Solar Farm	Operational	89.21
Gullen Range Wind Farm	Operational	90.37
Gullen Solar Farm	Operational	91.87
Gregadoo Solar Farm	Approved	92.84
Temora Solar Farm	Approved	99.11
Merino Solar Farm	In planning	99.20

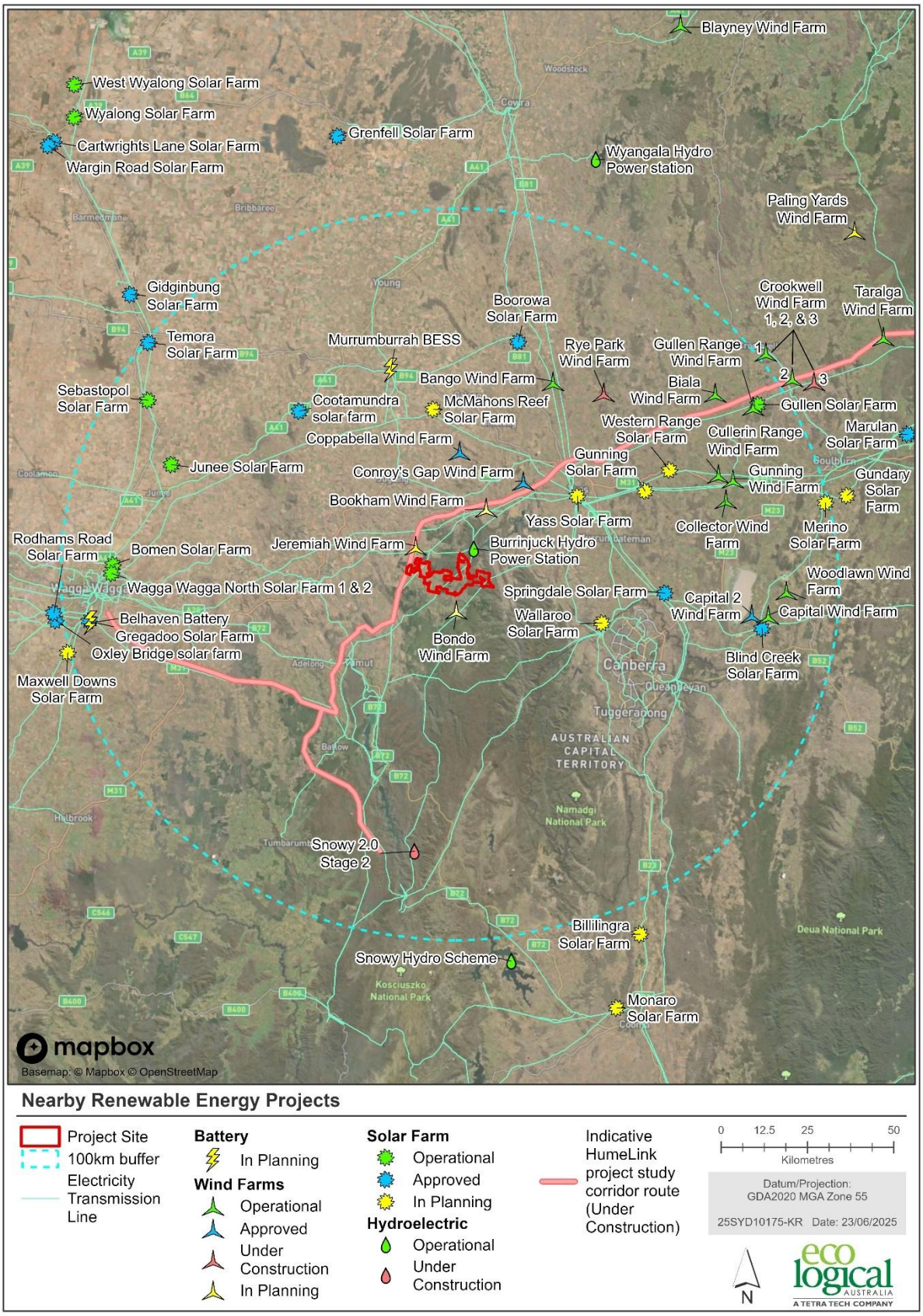

Figure 2-6: Other renewable energy projects within 100 km of the Project Site (Major Projects website)

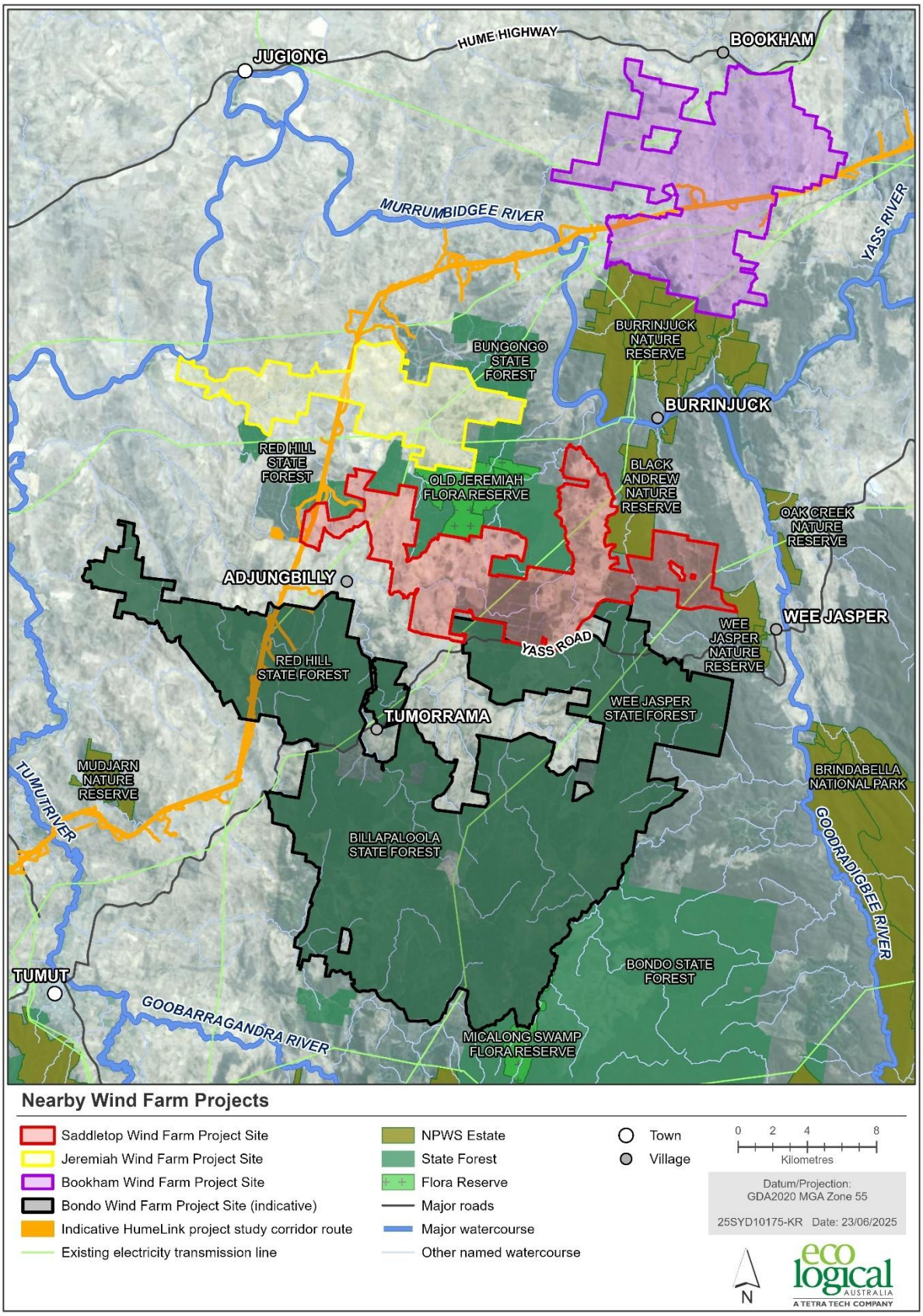

Figure 2-7: Nearby wind farm projects

2.4. Project Agreements

2.4.1. Associated Landowners

There are 75 landowners within 5 km of the Project Site, of which 25 are associated with the Project There are 10 associated landowners within the Project Site. The land titles associated with the Project Site are identified within Appendix A.

2.4.2. Neighbouring Landowners

Agreements may be entered between the Proponent and relevant neighbouring landowners depending on the potential impacts identified as part of the technical environmental assessments at the EIS stage.

3. Project Description

The Proponent proposes to construct, operate and decommission a commercial-scale wind farm producing clean energy to power the equivalent of approximately 410,000 average NSW households each year.

The proposed 738 MW Project would connect to either the existing 330kV Yass to Upper Tumut (line 2), Yass to Lower Tumut (line 3) transmission lines or the 500kV HumeLink (under construction) connecting Wagga Wagga, Bannaby and Maragle. The inclusion of the BESS is to allow for renewable energy to be stored and dispatched to and from the Project or the NEM when excess is produced during highly productive periods or as required.

Based on experience from projects of a similar size, approximately 300 to 350 full time equivalent (FTE) jobs would be established during the nominal two-year construction phase, with peak jobs up to potentially 400-500 direct FTE a potential during key construction activities, providing local benefits through local employment and requiring local services and amenities. It is anticipated that 12-20 FTE jobs would also be required during the operational phase of the Project, typically utilising local professionals and/or professionals relocating to the region to fill these roles.

The Project at this scoping stage includes a preliminary Project layout which represents the current location sited within the Development Corridor likely to be directly impacted. The Development Corridor details the envelope within which the final Project layout would be placed. The Development Corridor currently includes a buffer area of 300 m from the preliminary Project layout (approximately 600 m wide corridor in total) to provide flexibility for the detailed design of the Project while allowing a detailed environmental assessment process to be completed and matches the proposed biodiversity survey corridor to evaluate direct and prescribed impacts from a linear project. This flexibility enables post approval tendering, contractor selection, optimisation, ongoing geotechnical investigations, 100% detailed design and procurement. The Project layout will be refined throughout the planning and assessment process to avoid impacts where feasible to achieve best for Project environmental and social outcomes that are constructable, cost effective and in line with agreements.

3.1. Key Project Elements

The Project will involve the key components listed in Table 3-1. Siting and dimensions are subject to further design and refinement during preparation of the EIS, ongoing stakeholder consultation, detailed design stage, procurement process, and construction readiness. Avoid and mitigate principles will be integrated into the design of the layout as the Project progresses.

Table 3-1: Key Project elements

Project Elements	Infrastructure	Approximate Dimensions	Quantity
Wind Turbine Generators	WTG Height	Up to 270 m	Up to 123
	Tower (hub) Height	Up to 170 m	
	WTG Foundations (excavation size)	35 m diameter	
	Blade length	Up to 100 m	Up to 369
Battery Energy Storage System	150 MW / 600 MWh (4 hour duration) capacity (to be further assessed during EIS) (Plant Electrical Compound)	360 m by 360 m	1 (3 possible options)
Ancillary Infrastructure	Blade laydown	25(W) x 105(L) m	Up to 123
	WTG hardstand	80(W) m x 80(L) m + additional length for boom support pads	Up to 123

Project Elements	Infrastructure	Approximate Dimensions	Quantity
	Internal Roads	6.5 m (flat terrain) up to 8 m (sloping terrain) + drainage	Approximately 114 km
	Substations (Plant Electrical Compound)	260 x 200m + inclusive of the Asset Protection Zone	Up to 3 collector substations, and 1 switching substation (4 possible options)
	O&M Compounds	150m x 150m	To be Determined
	Overhead and underground transmission cables	Extent to be determined based on field electrical optimisation	To be Determined
	Permanent meteorological masts (concrete footings for mast and guy wires)	At hub height (area of 1 m^2 per mast footing)	To be Determined
	Telecommunication facilities, utility services and external road upgrades	Subject to detailed design	To be Determined
Temporary Facilities	Site compounds and offices, laydown areas (including equipment, stockpile, and material storage), concrete (or asphalt) batching plants, rock crushing facilities, water sources and temporary access roads/spurs	Variable. Subject to detailed design and located within the Development Corridor.	To be Determined
	Temporary meteorological masts (concrete footing for mast and guy wires)	At hub height (footings of 1 m^2 per mast)	To be Determined
	Temporary worker accommodation	Requirements to be assessed during the EIS	To be determined

3.1.1. Wind Turbine Generators

The Project comprises approximately 123 three-bladed WTGs of up to 270 m in height with an anticipated generation capacity of 6-8 MW. This allows for a conservative assessment of a 'worst case' impact scenario, allowing for WTG technology advances between the time of this assessment and the commencement of construction. Final numbers and power output will be dependent on the final geographic footprint as well as outcomes of the detailed design, environmental and social studies and is subject to change. A WTG is made up of the foundation, tower, nacelle, rotor, blades, and a generator transformer. The key components of a WTG are described in Table 3-2.

Table 3-2: Components of a WTG

WTG Component	Description
Design Height	WTG designs continue to evolve, with a trend towards larger WTGs. At the current scoping stage, the Project has been designed to accommodate WTGs of up to 270 m in height.
Foundation	Two types of foundation for the WTG may be required for the Project pending geotechnical investigation of the ground conditions across the Project Site including slab (gravity) foundation or rock anchor foundation.
Towers	The supporting tower structure of a WTG is typically comprised of a reducing cylindrical tower made from either a welded steel shell, concrete, or a concrete steel hybrid, fitted with an internal ladder and lift.
Nacelle	The nacelle is the housing constructed of steel and fibreglass that is mounted on top of the tower and is typically around 15 – 18 m long, 4.5 m high and 4.5 m wide (depending on the wind turbine generator model). It encloses the gearbox, generator, transformers (WTG model dependant), motors, brakes, electronic components, wiring and hydraulic and lubricating oil systems. Weather monitoring equipment located on

WTG Component	Description
	top of the nacelle will provide data on wind speed and direction for the automatic operation of the WTG. Obstacle hazard lighting if required, would be installed to the top of the nacelle.
Rotor	The WTG rotor drives the generator within the nacelle producing electrical output. In general, a larger rotor enables greater generation capacity, however site-specific wind conditions influence the rotor selected for installation at any given wind farm.
Blades	WTG blades are typically made from glass fibre attached to a steel hub and include lightning protection inside the blade.
Generator Transformer	WTGs produce electricity at low voltage which is then stepped up to medium voltage (33 kV or greater) by a transformer located in either the nacelle, within the base of the tower, or adjacent to the base of the tower on a concrete pad. The footprint of the transformer is small as it would sit on the WTG footing and/or the hardstand assembly area.

Figure 3-1 below shows a WTG detailing the component parts.

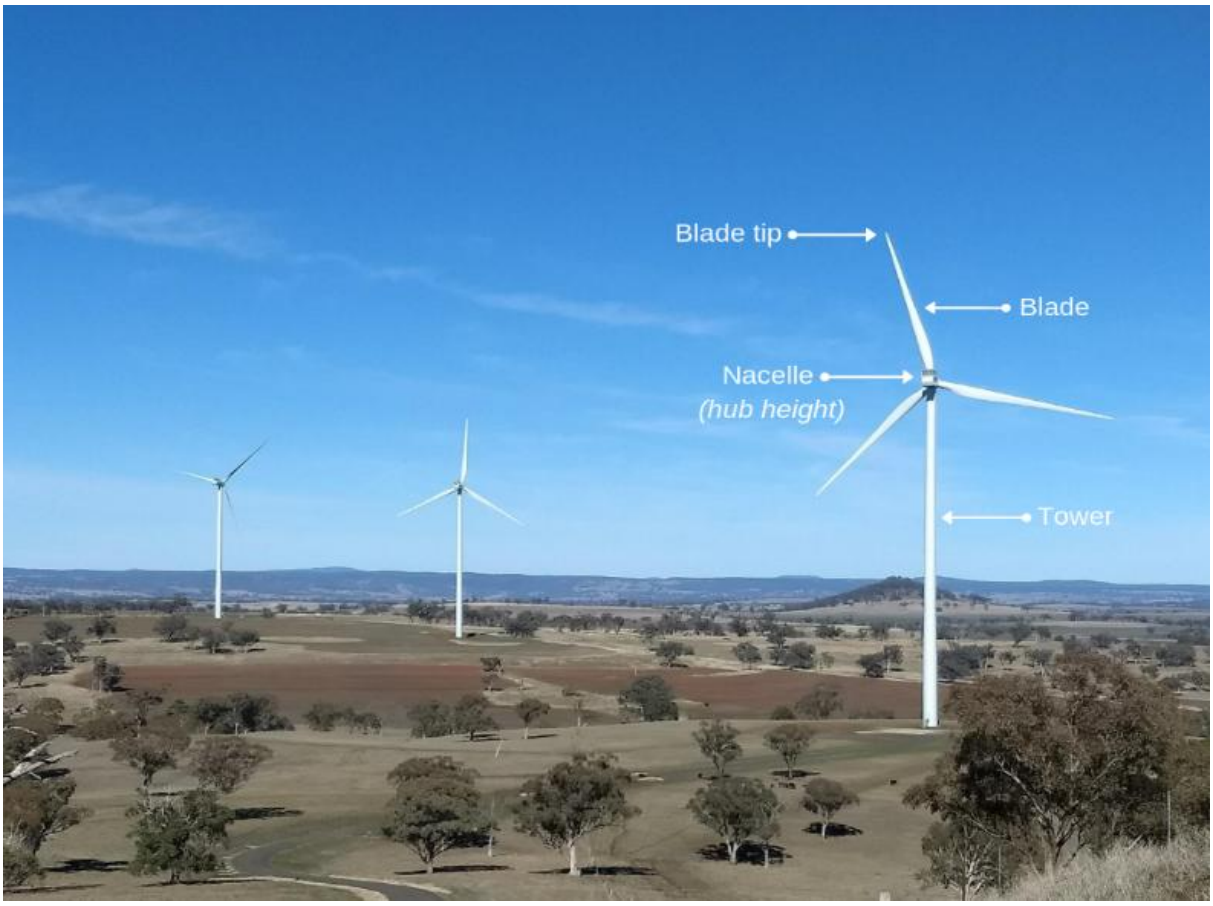

Figure 3-1: Components of a WTG, taken from Squadron Energy's Sapphire Wind Farm

3.1.2. Battery Energy Storage System

Large-scale BESSs allow for the storage and discharge of energy and support stabilising the supply of electricity to the NEM. The indicative electrical capacity of the proposed Plant Electrical Compound containing a BESS is 150 MW / 600 MWh, but this is not intended as an upper limit and will be subject to further design.

Due to consistent evolution in battery storage technology, the proposed battery technology, capacity and location would be refined and assessed during the EIS. The BESS is likely to contain battery storage comprising of gravel hardstand or concrete slab, buildings and shipping containers suitable to contain

the chosen technology type and ancillary infrastructure required for the operation of the BESS and connection to the NEM. Ancillary infrastructure is likely to be required including underground and/or overhead cables, internal roads and construction compounds. The BESS may be constructed as a stand-alone Electrical Plant Compound or as a combined compound co-located with a substation or other non-linear infrastructure.

One of the three proposed Electrical Plant Compounds will be identified as preferred and assessed as part of the EIS.

3.1.3. Ancillary Infrastructure

Other ancillary infrastructure necessary for the operation of the Project is described in Table 3-3.

Table 3-3: Proposed ancillary infrastructure

Permanent Ancillary Infrastructure	Description
WTG Hardstands	Hardstands are required adjacent to each WTG location for the assembly, erection, maintenance, repowering and/or decommissioning activities. Hardstands will be surfaced with gravel pavement material and maintained throughout the construction and operational life of the Project.
Internal Roads and Drainage	Internal roads will be established within the Project Site for the construction, operation, repowering and/or decommissioning of the Project, from the public road access locations, WTGs, the BESS, substations, and other permanent and temporary facilities. Internal roads are planned to follow existing farm tracks where existing and practicable.
External Roads	Subject to blade length and transport routes requiring the use of over-size over-mass (OSOM) vehicles, external road upgrades may be required. This would be determined and assessed during the EIS.
Substations	Substations include infrastructure required to collect electrical reticulation for transmission to connect to the grid, and to physically connect to the grid (switching station).
O&M Compound	One or more permanent O&M compounds will be established for the day-to-day operation of the Project. Each O&M compound may include lay down areas, site operations facilities and services buildings, workshop, storage, parking, and other facilities for operations staff.
Transmission Lines (Overhead / Underground)	A series of underground and overground transmission lines are proposed to conduct electricity generated by the WTGs to potentially connect to the NEM.
Permanent Meteorological Masts	Meteorological masts, up to hub height of the WTGs, will be installed on-site. The purpose of these masts is to aid in performance monitoring of the WTGs.
Telecommunication Facilities	Telecommunications facilities providing for transmission of voice, data, image, graphic and video information are proposed to be installed on site at standalone locations or onto Project infrastructure such as permanent masts.
Utility Services	Backup and emergency power at the substations may be supplied by a local 11kV distribution line or independent power source (i.e. on-site batteries and/or generators). Two separate and independent telephone communications facilities (optic fibre and microwave) will be required to be installed between the substations. Water and sewerage sources/facilities will be defined onsite or augmented by offsite deliveries and collection systems.

3.1.4. Temporary Facilities

Temporary facilities will consist of site offices and compounds, amenities, rock crushing facilities, concrete or asphalt batching plants, accommodation facilities, stockpiles and materials storage compounds, water (and potentially quarry) sources (in combination with offsite sources), temporary field laydown areas, crane pads, minor work front construction access roads and temporary

meteorological masts. All temporary facilities will be rehabilitated once they are no longer required in accordance with detailed measures to be defined in the progressive Rehabilitation Management Plan.

3.1.4.1. Temporary Workers Accommodation

Accommodation options are essential to support every stage of the Project including early works required to facilitate site access. A detailed accommodation strategy will be developed as part of the EIS that reviews existing availability in the context of the Project's construction phases. Temporary worker accommodation may or may not form part of the Project but will be considered and assessed as part of the EIS. This assessment will include consideration of the following potential options:

- Fly camp (for site establishment activities)
- Onsite a) lease or b) purchased land
- Offsite a) lease or b) purchased land
- Offsite updates of existing facilities and
- Offsite local real estate and other commercial accommodation.

Currently there is very limited availability of workers accommodation in the Gundagai and Tumut region. Based on the proposed workforce of 500 FTE peak, and travel distances to the nearest regional hub, the potential for a temporary short-term workers accommodation onsite may be required, this will be further assessed as part of the EIS. Planning and engagement with relevant stakeholders are ongoing.

An onsite accommodation General Arrangement has been developed to provide insights as to the standard of onsite accommodation required by the industry workers to meet health and safety requirements.

If the need for an offsite accommodation is identified as the Project advances, then a change management process will be implemented, and the Project's EIS will fully assess the offsite location.

3.1.4.2. Water and Gravel

The Project seeks to mitigate impacts to the existing supply chain and reduce haulage offsite by identifying preferred sites for water and gravel *insitu*. This will be based on water demand and bill of quantities derived from design and will be subject to feasibility investigation including:

- An assessment of the infrastructure, capacity, suitability and access, for both surface and ground water to the detail necessary to rely on water licencing exemptions available to SSD projects, and meet recommended investigation guidelines
- A geotechnical investigation on the capacity, quality specifications and access, for quarry products.

A water supply point set up will likely involve an access track and turnaround, fill point (bore for groundwater or pump for surface water, with a standpipe) and temporary storage (tanks or ponds) or rely on existing storages onsite facilitated by a network of pipes and pumps, with containerised water treatment to be installed as required based on the suitability of the water for the end use.

A borrow pit for the required quarry products, based on cut and fill earthwork calculations and pavement design, will likely involve an excavation or cut with a set up involving crushing and screening plant, stockpiling, testing facility and enclosed drainage system.

Based on feasibility investigations, combined with cost benefit analysis and stakeholder engagement relating to both in situ and offsite potential sources, the EIS will define preferred sources of water and quarry materials, and assess the potential positive and negative impacts at these locations.

3.1.5. Project Phases

Squadron Energy proposes to construct the Project as a single stage of development however this would be subject to ongoing review depending on factors such as grid connection capacity and evolution of BESS technologies. Figure 3-2 outlines the stages of the Project's development phases. Consultation with the relevant stakeholders and the local community is ongoing throughout these phases.

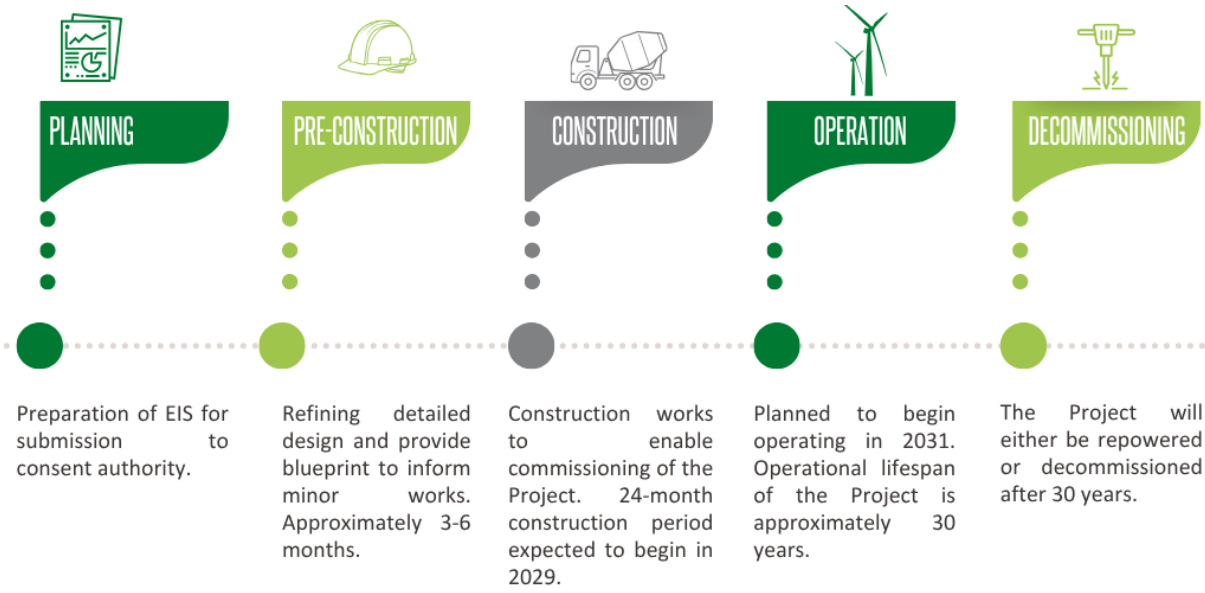

Figure 3-2: Project phases

3.1.6. Transport and Access

Subject to WTG selection and a review of the available transport routes for OSOM vehicles, external road upgrades may be required. Preliminary transport route studies have been assessed for potential ports of entry including Port Kembla and Port of Newcastle. The port of entry is yet to be determined. The preferred option and all required road upgrades will be further assessed during the EIS.

Resources required for the Project may be sourced from local suppliers and may require the use of alternate public roads/routes including for general site access. The routes used to move the resources through the surrounding towns and road network (and access the site) will be along the permitted standard heavy vehicle road network where feasible, or alternatively along routes subject to an endorsed Traffic Management Plan (TMP). This will be further assessed during the EIS.

3.2. Project Design Development and Alternatives

The Project is still in the early stages of design. The development of the preliminary Project layout has considered:

- Results from the preliminary assessments and constraints analysis undertaken to date
- Feedback from associated and neighbouring landowners.

The Project layout will progress through many iterations before construction and will be contained wholly within the final proposed Development Corridor to which the approval will relate subject to the EIS assessment process.

Key principles of Project development that will be adopted to avoid, minimise or offset the impacts of the Project to the extent known at the scoping stage include:

- Minimise vegetation clearing (areas of higher conservation value and/or native vegetation will be strategically avoided, wherever possible)
- Preference the use of previously disturbed land (i.e. land that has been previously modified for agricultural operations, previously cleared land, and established access tracks and local roads)
- Minimise disturbance (footprints for Project infrastructure limited to minimum area required)
- Avoid and/or minimise impacts to significant Aboriginal cultural and historic heritage values (through the identification and evaluation of heritage sites as part of the preparation of the Aboriginal Cultural Heritage Assessment and through consultation with First Nations stakeholders)
- Minimise direct and indirect impacts on neighbouring landowners (locating infrastructure away from nearby residences and adjoining properties, wherever possible)
- An iterative and flexible approach to design (responding to identified environmental and social impacts and constraints)
- Effective stakeholder engagement for developing enhancement or mitigation measures and maximising benefits of the Project.

3.2.1. Site Selection and Design Development

As outlined in the *NSW Wind Energy Guideline* (DPHI, 2024a), a well-sited wind farm can maximise the potential for energy generation while limiting impacts on the environment and provide greater social license to operate. The preliminary layout has been informed by:

- Principles outlined in available guidelines
- Landowner and community feedback in relation to the Project Site
- Wind speed assessments based on publicly available and locally recorded wind data
- Results from the Preliminary Visual Impact Assessment undertaken by Moir Studio (2025; Appendix C and Section 6.2)
- Results from the Preliminary Noise Impact Assessment undertaken by Marshall Day Acoustics (2025; Appendix D and Section 6.3)
- Environmental constraints such as major watercourses, Threatened Ecological Communities (TECs) and threatened species, previously recorded Aboriginal heritage items, etc. identified using desktop and preliminary fieldwork assessments
- Project Site access and anticipated transport routes
- Civil design and (desktop) 3D model
- Internal assessment and consideration of commercial viability.

3.2.2. Alternatives

The development of a wind farm is, by nature an iterative process, with opportunity for refinement and revision as more information is obtained from environmental studies, ongoing feedback from stakeholder consultation and updated wind monitoring. The evolution of the Project design will be focused around three core principles:

- Minimising and/or avoiding negative environmental and social impacts
- Maximising positive impacts (clean energy production resulting in greenhouse gas reduction, social and economic benefits in the region)
- Incorporating practical (constructability) solutions and minimising economic risk in relation to the construction and operation of the Project Site.

3.3. Restrictions or Covenants within the Project Site

The Project is on predominantly privately owned, freehold land, as well as Crown Land and Council land. Several of the freehold land parcels have certain development restrictions.

4. Statutory Context

The relevant statutory requirements for the Project are summarised in Table 4-1.

Table 4-1: Statutory connect of the Project

Matter	Relevance to the Project
Power to Grant Approval	In accordance with Part 2, Clause 6 of the Planning Systems SEPP, development is declared to be SSD for the purposes of the EP&A Act if: a. *the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and* b. *the development is specified in Schedule 1 or 2.* Clause 20 of Schedule 1 of the Planning Systems SEPP states that "development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that have a capital investment value of more than $30 million" shall be classified as SSD under Division 4.7 of the EP&A Act. The Project has a capital investment value estimated to be greater than $30 million and therefore is deemed SSD. Section 4.5(a) of the EP&A Act designates the Minister for Planning and Public Spaces as the consent authority for SSD applications. SSD applications are assessed by DPHI, and in some cases the Minister may delegate decision making to Department staff. However, the Independent Planning Commission (IPC) is the consent authority for SSD applications where specific conditions occur.
Permissibility	The Project Site is located within the Cootamundra-Gundagai Regional Council, Yass Valley Council and Snowy Valleys Council LGAs and is therefore subject to the: • Gundagai LEP 2011 • Yass LEP 2013 • Tumut LEP 2012 The Project Site is situated on land zoned as RU1 (Primary Production). Within this zone, electricity generation is not permitted. However, pursuant to Clause 2.36(1)(b) of the *State Environmental Planning Policy (Transport & Infrastructure) 2021* (Transport and Infrastructure SEPP), development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial, or special use zone, which in this case is the RU1 (Primary Production) zone. Clause 2.36 of the Transport and Infrastructure SEPP outlines that: *electricity generating works means a building or place used for the following purposes, but does not include a solar energy system-* *(a) making or generating electricity,* *(b) electricity storage.* Given that the Project is located on prescribed rural land, and the purpose of the proposed activity is to generate electricity using wind energy and electricity storage, the Project is permissible with consent under Clause 2.36(1)(b) of the Transport and Infrastructure SEPP.
Other Approvals	**Consistent Approvals** In accordance with Section 4.42 of the EP&A Act, an authorisation of the following relevant approvals cannot be refused if it is necessary for carrying out SSD that is authorised by a development consent under this Division and is to be substantially consistent with the consent: • An Environmental Protection Licence (EPL) under Chapter 3 of the *Protection of the Environment Operations Act 1997* (POEO Act) (for any of the purposes referred to in Section 43 of the Act) • A consent under Section 138 of the Roads Act 1993 (Roads Act). **EPBC Act Approval** The Project may have the potential to have a significant impact on EPBC listed threatened species and a Referral to Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) will be undertaken concurrently with the submission of this Scoping Report. Some MNES have been identified as potentially occurring on or near the Project Site, including TECs. If the Commonwealth determine that the Project is likely to have a significant impact on a MNES, the Project will become a 'Controlled Action' and assessed under the recently signed NSW Bilateral Agreement with the Commonwealth. **Other Approvals** A summary of approvals and licences that may be required for the Project prior to construction include:

Matter	Relevance to the Project
	• Approval under Section 138 of the Roads Act to undertake upgrade works in, on or over a public road to allow for the transportation of infrastructure. • A Licence in accordance with Part 5, Division 5.6 of the Crown Land Management Act 2016. • An EPL under Section 48 of the POEO Act for the regulation of noise pollution during both the construction and operational phases of the Project. It is noted that an EPL may also be required during the construction phase for crushing, grinding, or separating if the activity has the capacity to process more than 150 tonnes of materials per day or 30,000 tonnes of materials per year. **Approvals Required if this was not an SSD Project** Although all relevant environmental impacts will be assessed in the EIS for the Project, due to the Project's nature and being SSD, there are several approvals and licences, as listed in Section 4.41 of the EP&A Act, that are not required subject to the EIS suitably assessing these requirements in design and adopting standard requirements as part of environmental controls. These include: • Applications for separate permits under Sections 201, 205 or 219 of the *Fisheries Management Act 1994* (FM Act) however, the offset policy still applies. • Applications for separate approvals under Sections 89, 90 and 91 (other than an aquifer interference policy) of the *Water Management Act 2000* (WM Act). • An Excavation Permit under Section 139 of the *Heritage Act 1977* (Heritage Act). • An Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the *National Parks and Wildlife Act 1974* (NPW Act).
Pre-Condition to Exercising the Power to Grant Approval	No pre-conditions to exercising the power to grant approval have been identified for the Project
Mandatory Matters for Consideration	The following Acts, Regulations and Environmental Planning Instruments (EPIs) are applicable to the Project: **Commonwealth Legislation** • EPBC Act • *Native Title Act 1993* • RE Act • *Crowns Land Management Act 2016* **State Legislation** • *Biodiversity Conservation Act 2016* (BC Act) • *Biosecurity Act 2015* (Biosecurity Act) • EP&A Act • FM Act • Heritage Act • *Mining Act 1992* (Mining Act) • NPW Act • POEO Act • Roads Act • *Rural Fires Act 1997* (RF Act) • *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) • WM Act **State Environmental Planning Policies:** • *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (Biodiversity and Conservation SEPP) • *State Environmental Planning Policy (Primary Production) 2021* (Primary Production SEPP) • *State Environmental Planning Policy (Resilience and Hazards) 2021* (Resilience and Hazards SEPP) • Transport and Infrastructure SEPP • Planning Systems SEPP **Planning Instruments:** • Gundagai LEP 2011 • Yass Valley LEP 2013 • Tumut LEP 2012

5. Engagement

Squadron Energy is committed to undertaking genuine, robust and meaningful community and stakeholder engagement and consultation to better inform the Project. To achieve this the Project team has implemented the following consultation and engagement objectives:

- Engage with the local community to seek feedback on the proposed Project, to be integrated into project planning and design as far as practicable
- Maintain communication to inform the community about potential impacts and benefits in a continuous, accurate and timely manner
- Identify key stakeholders early for further engagement and provide various opportunities and mechanisms for Squadron Energy to meaningfully engage with all stakeholders
- Develop a sound understanding of the potential social impacts of the Project to assist in developing and implementing mitigation measures
- Ensure the development team has a deep understanding of the local context of the Project, including any local impacts that it may have or opportunities that the Project could provide
- Build and maintain Squadron Energy's social licence within the community and among all stakeholders.

Squadron Energy's approach to community and stakeholder engagement is multi-faceted, to ensure comprehensive engagement across all groups, utilising the skills of our various teams. In addition to the Project team, stakeholder groups may be engaging with a wider group of staff with expertise, including First Nations engagement, government relations, media and communications and stakeholder and community engagement.

The first step in developing this relationship is to undertake robust stakeholder mapping and analysis to understand the needs of the community and to begin building early relationships. By consistently building on these relationships, Squadron Energy maintains open and transparent communication with stakeholders throughout the Project lifecycle to ensure community needs are considered.

The Stakeholder Engagement Plan for the Saddletop Wind Farm can be found at: Stakeholder Engagement Plan.

5.1. Consultation and Engagement Undertake to Date

Squadron Energy has been engaging with a broad range of stakeholders since 2021. The Project team has completed a variety of engagement activities with associated landowners, surrounding neighbours, First Nations stakeholders, Council and relevant State and Federal Government members and agencies. There have been more than 460 stakeholder interactions as of 30 June 2025. The engagement undertaken to date is summarised in Figure 5-1 and Table 5-1.

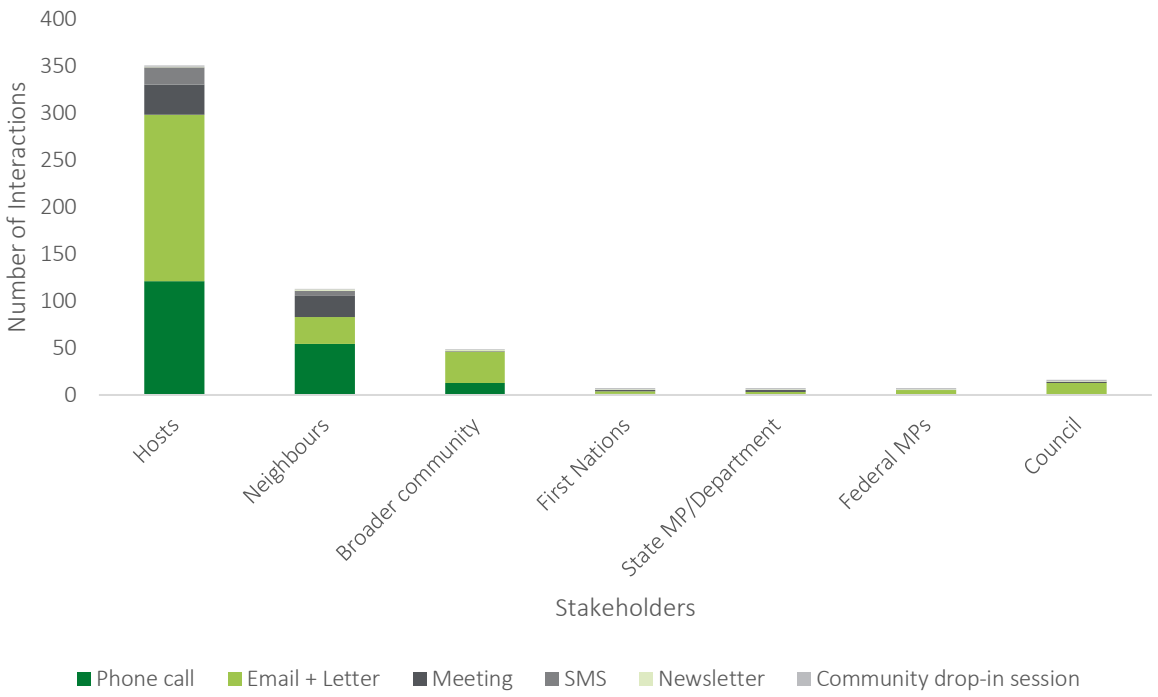

Figure 5-1: Engagement by type, stakeholder and number of interactions

Table 5-1: Type of engagement and number of interactions

Event Type	Number of Interactions
Meeting	60
Phone Call	189
Email and Letter	246
SMS	25
Newsletter	1
Community Drop-in Session	1

5.1.1. Feedback Received

Stakeholder feedback received to date is summarised in Table 5-2.

Table 5-2: Summary of stakeholder feedback received to date

Stakeholder Type	Key Theme / Issue Raised During Consultation to Date	Stakeholder View Category (Grouped per SSD Guidelines)
Associated landowners	• Potential visual & noise impacts • Biodiversity & Biosecurity • Project layout/design • Community sponsorships / benefits funds • Avoidance where possible of local roads or private land areas • Decommissioning/repowering • Transmission • Bushfire risk management • Existing land use • Accommodation • Impact to farming operations (aerial spraying and weed control)	• Strategic context • Alternatives considered • Key matters to be assessed during preparation of the EIS

Stakeholder Type	Key Theme / Issue Raised During Consultation to Date	Stakeholder View Category (Grouped per SSD Guidelines)
	• Impact during construction • Community support	
Neighbours and community	• Potential visual & noise impacts • Project layout/design • Decommissioning/repowering • Use of local roads • Transmission • Bushfire risk management • Property value • Community engagement style • Accommodation / commodities use • Impact to farming operations (aerial spraying and weed control) • Potential impacts to existing water quality	• Strategic context • Alternatives considered • Key matters to be assessed during preparation of the EIS
Snowy Valleys Council (Meeting held May 2025)	• Workforce accommodation • Use of local infrastructure • Skills training • Community benefits (Voluntary Planning Agreement)	• Cumulative impacts • Statutory issues • Key matters to be assessed during preparation of the EIS
Yass Valley Council (Meeting held July 2025)	• Invited to open day, briefing offered.	• Cumulative impacts • Statutory issues • Key matters to be assessed during preparation of the EIS
Cootamundra-Gundagai Council (Meeting held May 2025)	• Workforce accommodation • Use of local infrastructure / roads • Skills training • Cumulative impacts • Community benefits (Voluntary Planning Agreement)	• Cumulative impacts • Statutory issues • Key matters to be assessed during preparation of the EIS
First Nations stakeholders	• Meeting with Brungle Tumut LALC in March 2025, invited to the community session and phone calls in May 2025 • Potential heritage values • Project design process • Opportunities for First Nations involvement in surveys • Skills training • Job opportunities	• Community engagement during the preparation of the EIS • Key matters to be assessed during preparation of the EIS
State MP: Ms Steph Cooke MP	• Invited to open day, briefing offered. Unable to attend • No feedback received	Nil
Federal MP, Hon Kristy McBain MP Federal MP, Hon Michael McCormack MP	• Invited to open day, briefing offered. Unable to attend • No feedback received	Nil
Local business	• Project layout • Community sponsorships • Opportunities during construction / operations	• Strategic context • Cumulative impacts • Community engagement during preparation of the EIS
Community groups	• Project layout • Community sponsorships	Key matters to be assessed during the preparation of the EIS

Stakeholder Type	Key Theme / Issue Raised During Consultation to Date	Stakeholder View Category (Grouped per SSD Guidelines)
Wider community (residents of Adjungbilly / Tummorama and surrounds)	• Potential visual & noise impacts • Project layout/design • Use of local roads • Community benefits • Biodiversity impacts • Decommissioning/repowering • Use of resources • Bushfire risk • Property values • Anti renewable energy • Community division	• Strategic context • Alternatives considered • Community engagement during preparation of the EIS • Key matters to be assessed during preparation of the EIS • Issues beyond the scope of the Project or not relevant
Other Agencies: Transgrid, DPHI	• Transportation route and site access • Transmission line (HumeLink) access application enquiry • BDAR/Bird and Bat Utilisation Surveys (BBUS) design	-
Other Agencies: NPWS (NPWS Tumut office visit, emails and calls)	• Verbal introduction to the Project • Community newsletter including contact details • Squadron Energy brochure • Key Project information • Project map • Offer for Project briefing meeting Area manager provided feedback regarding NPWS key considerations: • Aerial firefighting – turning the WTGs off in the event of a fire. • Low visibility of Met Masts and their guy wires – relevant to aerial firefighting. • Balance of visual impact to those that are utilising the Black Andrew Reserve for recreation with the benefit of renewable energy generation. • Potential impact on management activities. Contact will continue to take place throughout Project development.	-
Other Agencies: State Forest (Project community information session on 27 May 2025, emails and phone calls and ongoing distribution list)	Squadron Energy have a relationship with the local State Forest management regarding their activities in this region and have been engaging since 2021. Squadron Energy has an access agreement in place that allows for access to State Forest land for non-invasive investigations relating to their projects in this region. More recently the following has been discussed specifically regarding the Project with the local State Forest Renewable Energy Liaison: • Key Project information • Project maps • Regional context • Process information • Team members present and contact details provided	-

Stakeholder Type	Key Theme / Issue Raised During Consultation to Date	Stakeholder View Category (Grouped per SSD Guidelines)
	• Further requests for and provision of Key Project information, which was provided • Ongoing discussions regarding the Project, timeline and proximity to State Forest • Regular Project updates	

5.1.2. Drop-in Community Information Session Summary

A Drop-in community information session was held at the Adjungbilly Community Hall on Tuesday 27 May 2025 between 2:00 pm-7:00 pm. The session was attended by approximately 40-50 people, including associated landowners, neighbours and broader community members. A summary of feedback received during the information session is provided in Table 5-3.

Table 5-3: Drop-in community information session feedback received

Stakeholder Type	Key Theme/Issue Raised
Associated Landowner	• Feedback on the Project layout • Permitting process • Project timeline • Potential positive impacts of the Project • Community sentiment • Squadron Energy community engagement style • Decommissioning
Neighbouring Landowner	• Some stakeholders held opposition to renewable energy • Process of amending Project/turbine layout • Potential visual impacts • Decommissioning • Construction impacts (including erosion and sediment control) • Planning and approvals process / technical assessments • Climate impacts • Cumulative activities in the region
Community Members	• Biodiversity and wildlife risks • Resourcing for servicing construction workers and materials (accommodation, water, concrete, etc.) • Concerns regarding visual/noise impacts of other nearby wind farms (Bango) • Penetration of wind energy into the NEM • The Project in relation to HumeLink • Technical questions about capacity, WTG dimensions, decommissioning/repowering • Decommissioning • Bushfire risk and firefighting capabilities • Cumulative activities in the region
Community Groups, schools and businesses	• Use of roads during construction (interaction with school bus times) • Sponsorship opportunities • Benefit sharing schemes

5.1.3. Cumulative Impact Engagement

In accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPIE, 2022), future projects and matters for assessment have been identified. Table 6-21 notes visual, noise, biodiversity, and socio-economic cumulative risks dependent on ongoing studies, timing of construction/operation and layout changes prior to submission of an EIS.

In addition to identifying these cumulative aspects for further assessment, prior to Squadron Energy's public announcement for both this Project and the proposed Bookham Wind Farm, an internal review was undertaken in mid-2024 using point in time data to inform:

- The Project feasibility separate to the adjacent projects based on land tenure complexities.
- Potential cumulative noise and visual impacts from the combination of the Jeremiah Wind Farm, the Project and Bookham Wind Farm.
- Transparent community consultation and host and neighbour agreements at risk of cumulative impacts based on current knowledge.

It was determined that the Project should be undertaken as a discrete project. The findings in Table 5-4 were then identified.

Table 5-4: Findings from point in time data (Squadron Energy, 2025)

Aspect	Findings and Next Steps
Biodiversity	• Key species of concern is the Large Bent-winged Bat (LBB). • A regional model has been completed of the LBB utilisation that covers the Jeremiah Wind Farm and the Project Site and beyond. • Outcomes of the model have informed preliminary design criteria to reduce the potential for all projects to conflict with the LBB utilisation of the respective project sites. • A more detailed risk assessment of the LBB utilisation of the Project Site has been undertaken to inform the future biodiversity survey design given its closest proximity to the Wee Jasper maternity roost. • There is ongoing consultation between Squadron Energy and Conservation Programs, Heritage and Regulation (CPHR) division regarding the LBB assessment and findings to date. • The Biodiversity Development Assessment Report (BDAR) for each project will present the findings as relevant, with the first project to submit the EIS to include the regional model outcomes and take up of regulatory feedback.
Amenity (Noise and Visual)	• The project and Jeremiah Wind Farm combined visual impacts assessed have been relied upon for private agreement negotiations. • Due to the distance and topography separating the Project and the proposed Bookham Wind Farm, cumulative noise impacts are not expected as per the Noise Technical Supplement. • Community consultation to date has included information based on a combined Jeremiah Wind Farm/ the Project Site investigation area to ensure transparency.
Socio-Economic	• Despite apparent proximity on aerial mapping, the travel time between Bookham Wind Farm and the Project is over an hour, with the Murrumbidgee River creating distinct communities. • Separate traffic networks are being proposed between The Project and Bookham Wind Farm. • The Bookham Wind Farm Socio-Economic Impact Assessment currently in progress will assess the potential cumulative impacts of the Project based on a worst-case scenario of overlapping construction (however projects are more likely to be sequential). The Project would consider the same, until updated information materialises.
Community Consultation	• The potential for cumulative impact in respect to visual, noise, traffic and transport is being considered in our consultation with hosts, neighbours, and the surrounding community. • The Squadron Energy project teams coordinate timing for community and stakeholder engagement activities, to reduce the potential for consultation fatigue in the region. This principle extends to engagement with stakeholders shared by the projects, such as elected representatives. • During community engagement activities such as community information sessions, members of both the Project and Bookham Wind Farm project teams attend, to provide detailed project specific information. • The Bookham Wind Farm, Jeremiah Wind Farm and the Project teams incorporate relevant community feedback across projects into project design and planning for each project.

These projects continue to undergo project layout refinement during their development, guided by assessment guidelines and technical studies, community feedback, departmental consultation, and legal precedents. This layout refinement considers and will continue to consider the potential for cumulative effects between these projects based on information that is publicly available.

5.2. Engagement and Consultation Proposed During Preparation of EIS

Squadron Energy will continue to engage and consult with all identified stakeholders throughout the EIS process. This ongoing consultation will be guided by the Project's Stakeholder Engagement Plan (SEP) and in accordance with relevant legislation and guidelines (listed in Section 1.6 of the SEP). The SEP can

be found on the Project's website (Saddletop Wind Farm | Squadron Energy). The feedback and participation from engagement and consultation activities will be used to further inform the environmental and social impact assessments for the Project. Key issues identified in Section 6 and the associated technical reports will help to inform targeted engagement and consultation.

For NPWS and State Forest specifically, Squadron Energy intend to continue to engage with these stakeholders, by way of their preferred consultation method, as the Project progresses. The aim is to understand and respond to the potential for any interactions between the Project and the adjacent sites, including discussion around mitigation measures.

Proposed engagement is included in Section 3.5 of the Project's SEP which will be updated regularly based on feedback from the community regarding their preference for engagement activities.

6. Proposed Assessment of Impacts

6.1. Preliminary Environmental Risk Assessment

In accordance with the SSD Scoping Report Guidelines, the scale of impact, nature of impact and sensitivity of the receiving environment for the environmental issues has been evaluated in the scoping summary table in Appendix B. The scoping summary table groups the matters requiring further assessment in the EIS by the level of assessment required.

Definitions for levels of assessment and the level of assessment proposed for each matter is summarised in Table 6-1. The assessment matters are grouped into the broad categories identified in the *State Significant Development Guidelines – Preparing a Scoping Report* (DPIE, 2022).

Table 6-1: level of assessment required for each environmental and/or social matter

Level of Assessment	Definition	Environmental / Social Matter
Detailed	The Project may result in significant impacts on the matter identified, including cumulative impacts. The assessment of the impacts of the Project on the matter will require detailed studies and investigations to be carried out by technical specialists.	• Biodiversity (Native Vegetation, Fauna, and Aquatic Ecology) • Heritage (Aboriginal and Historic) • Water (Hydrological Flows, Surface and Groundwater Quality and Water Availability) and Water and Soil interface • Landscape and Visual • Noise and Vibration • Traffic and Transport (Property Access and Road Network) • Social (Health, Safety, Housing Availability and Community Benefits) • Economic (Natural Resource Use, Livelihood, Opportunity Cost and Economic Benefits)
Standard	The Project is unlikely to result in significant impacts on the matter, including cumulative impacts. While the assessment of the impacts of the Project on the matter will involve technical specialists, these impacts are likely to be well understood, relatively easy to predict using standard methods and are capable of being mitigated to comply with relevant standards or performance measures.	• Air (Particulate Matter, Gases and Atmospheric Emissions) • Land (Stability, Topography, Geology and Land Use and Capability) • Hazards (Bushfire, Aviation, Telecommunications, Blade Throw, Climate Change and Public Health) • Waste (Resource Use and Waste Management)
Matters Requiring no further Assessment	The Project will have either an insignificant impact or no impact on the matter and it therefore does not require further consideration.	• Port, Airport and Rail Facilities • Greenhouse Gas • Odour

6.2. Landscape and Visual

6.2.1. Existing Environment

The landscape surrounding the Project Site is defined by undulating to steeply sloping ridges, valley floors, and rugged escarpments associated with the Brindabella Range foothills. Large tracts of plantation forest are present in the northern and central parts of the Project Site, while eucalypt-dominated woodland occurs towards the east.

Landscape features within the locality include the Murrumbidgee River, several State Forests including Red Hill, Bungongo, and Wee Jasper and nature reserves, including Burrinjuck and Black Andrew.

6.2.2. Potential Impacts

A Visual Scoping Report was undertaken by Moir Studio (2025) in accordance with the *Wind Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment* (DPHI, 2024) (Appendix C).

STUDY AREA AND WIND TURBINE GENERATOR SETBACK

Based on a maximum proposed WTG tip height of 270 m, the Study Area of the Project is 7,732 m (Figure 6-1) and WTG Visual Setback is 1,705 m (Figure 6-2). There are 59 non-associated receivers within the Study Area and 7 non-associated receivers within the WTG Setback. In accordance with the *Wind Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment* (DPHI, 2024), a high visual impact is triggered for receivers within the WTG Setback unless the WTG(s) are largely screened by topography or vegetation or if a private agreement is in place. Further assessment on these receivers will be undertaken at the EIS stage to determine whether any of these setback exemptions apply.

VIEWSHED MAPPING AND SIMPLE ASSESSMENT

Viewshed mapping was undertaken to determine the area with potential visibility of the Project based on topography alone and no screening, structures or vegetation (therefore considered worse case). Due to the undulating topographic character of the region, 42 non-associated receivers within the Study Area are identified as having potential visibility (Figure 6-3). Of these, 41 non-associated receivers were identified as having a moderate to high visual impact rating from the Project and will require an intermediate assessment as part of the EIS. The other 1 non-associated receiver was identified as having a low visual impact rating.

CUMULATIVE IMPACTS

A preliminary cumulative impact assessment was undertaken for the nearby proposed Jeremiah Wind Farm, which identified 4 non-associated receivers with the potential to experience cumulative visual impacts. Of these, 3 were rated as having a moderate visual impact from the Project alone and 1 non-associated receiver, which was rated as low for the Project alone increase to a moderate impact when cumulative impacts were considered. Therefore, all 42 non-associated receivers within the Study Area will require an intermediate assessment as part of the EIS.

It is noted that although the proposed Bondo Wind Farm is located within the Study Area, the preliminary cumulative impact assessment only included those projects that are either approved or have a publicly available EIS. As this project has only submitted the Scoping Report it has not been included in this assessment however, will be considered in the comprehensive cumulative visual impact assessment as part of the EIS.

6.2.3. EIS Assessment Approach

A visual impact assessment must be undertaken for all individual viewpoints and private receivers identified as being within the Study Area and having a line of sight to the Project, with the level of assessment required being proportionate to the likely impacts.

A simple assessment, using worst-case assumptions about the likely magnitude and visual sensitivity was undertaken, which identified 42 non-associated receivers as having a moderate to high visual impact rating from either the Project alone or when cumulative impacts were considered. These receivers will require an intermediate assessment as part of the EIS, which includes the production of wire frame diagrams to determine the magnitude rating. If impacts to these receivers continue to be moderate or higher, a detailed assessment will also be undertaken as part of the EIS. This will include undertaking field visits and preparing photomontages to accurately assess scenic quality and determine the effectiveness of existing or proposed screening.

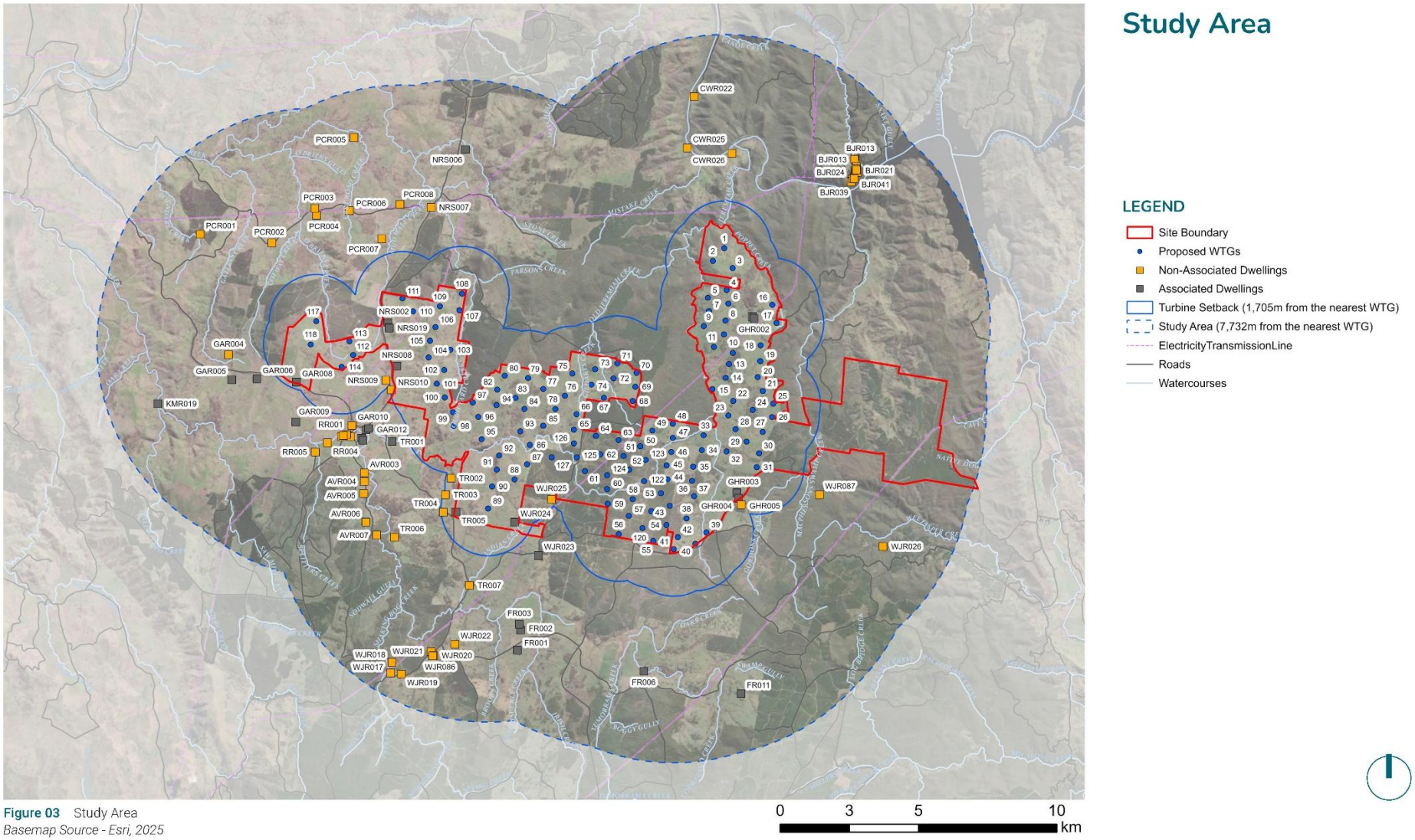

Figure 03 Study Area
Basemap Source - Esri, 2025

Figure 6-1: Visual Scoping Report study area (Moir Studio, 2025)

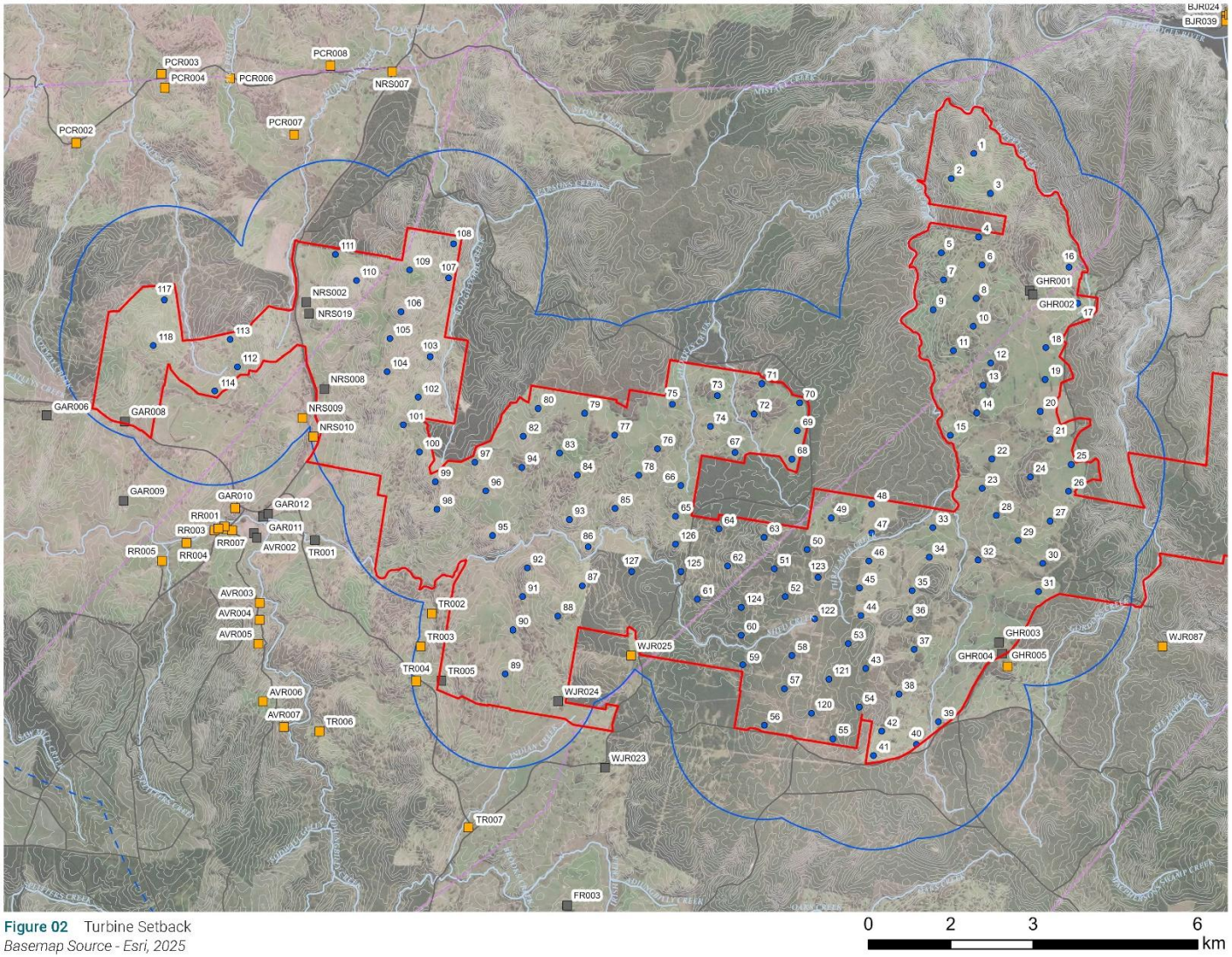

Figure 02 Turbine Setback
Basemap Source - Esri, 2025

Figure 6-2: Visual Scoping Report WTG setback (Moir Studio, 2025)

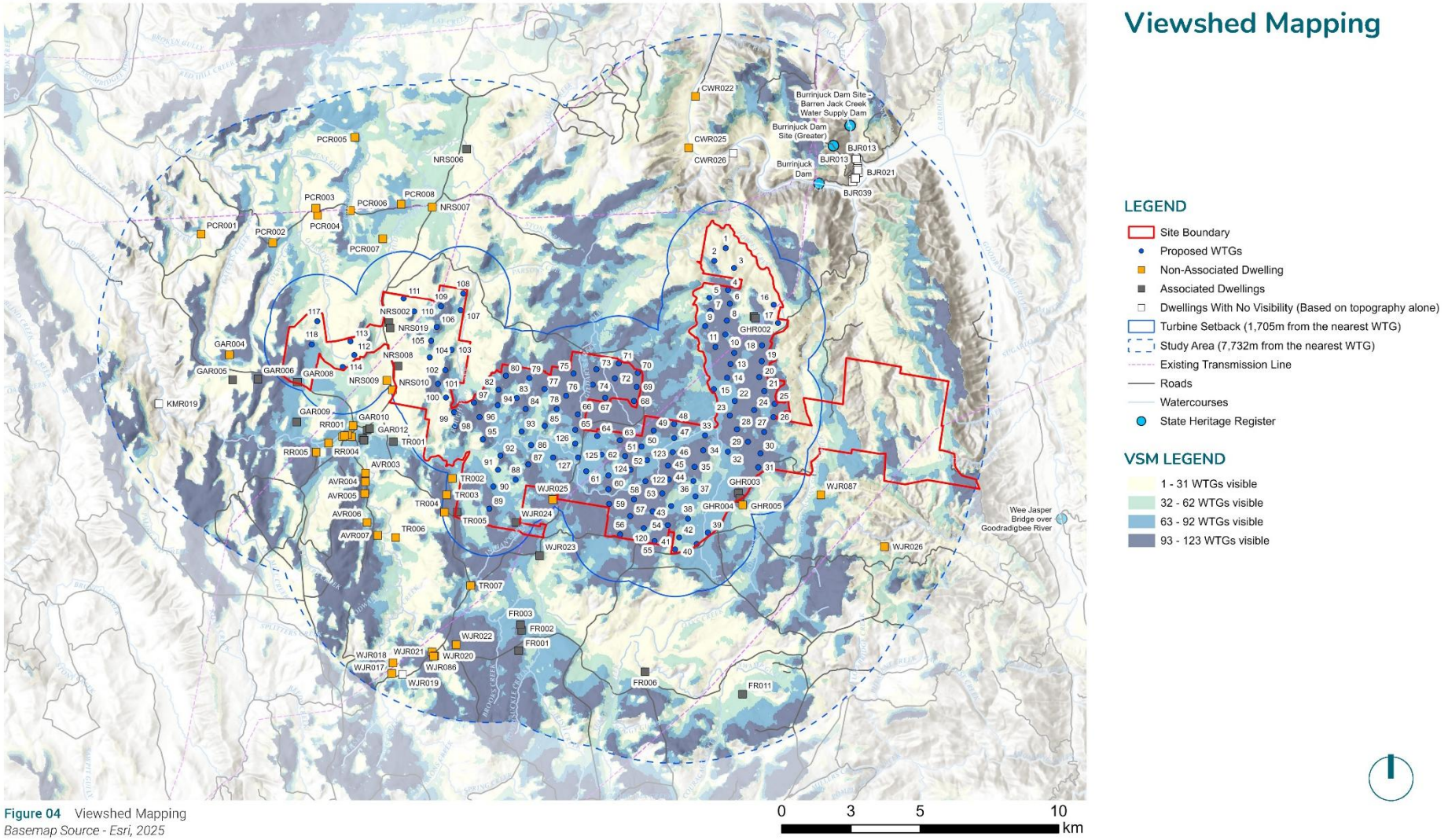

Figure 04 Viewshed Mapping
Basemap Source - Esri, 2025

Figure 6-3: Visual Scoping Report viewshed mapping (Moir Studio, 2025)

6.3. Noise

6.3.1. Existing Environment

The Project is located approximately 30 km north-east of Tumut and 45 km east of Gundagai around the Adjungbilly area. There is a total of 53 receivers within 5 km from a proposed WTG, of which 22 are associated with the Project.

6.3.2. Potential Impacts

A Preliminary Noise Impact Assessment was undertaken by Marshall Day Acoustics (2025) in accordance with the *Wind Energy Guideline: Technical Supplement for Noise Impact Assessment* (DPHI, 2024) (Appendix D). Table 6-2 summarises the details of the candidate WTG utilised for the modelling.

Table 6-2: Candidate WTG model

Candidate WTG Model	
WTG Model	GE 6.0 164
Rated Power	6.0 MW
Hub Height (m)	160
Rotor Diameter (m)	164
Blade Serrations	Yes
Cut-in Wind Speed (Hub Height)	3 m/w
Cut-out Wind Speed (Hub Height)	25 m/s

ASSOCIATED RECEIVERS

The Noise Technical Supplement indicates that assessment of noise impact is not required for associated receivers where a private impact agreement specifically addressing noise is in place between the landowner and the Proponent.

Noise levels at these locations will therefore be managed in accordance with the relative private agreements.

NON-ASSOCIATED RECEIVERS

In accordance with the Noise Technical Supplement (DPHI, 2024), the predicted equivalent noise level, ($L_{Aeq, 10}$), adjusted for tonality and low-frequency noise, should not exceed 35 dB(A) (or background plus), at all relevant receivers for wind speed from cut-in to rated power of the WTG.

Table 6-3 and Figure 6-4 summarises the preliminary noise modelling results, which identified noise level exceedances at seven (7) non-associated receivers by a maximum margin of 4.9 dB. Baseline noise monitoring will be undertaken during the EIS preparation to confirm applicable objectives per receiver. Measures such as the removal or relocation of WTGs or private agreements will be considered for these receivers during the preparation of the EIS to meet adopted noise criteria.

Table 6-3: Noise modelling result for non-associated receivers (Marshall Day Acoustics, 2025)

Non-Associated Receiver	Predicted Equivalent Noise Level ($L_{Aeq, 10}$)	Non-Associated Receiver	Predicted Equivalent Noise Level ($L_{Aeq, 10}$)
PCR004	25.6	**NRS009**	37.0
PCR003	25.1	**WJR064**	19.0

Non-Associated Receiver	Predicted Equivalent Noise Level ($L_{Aeq, 10}$)	Non-Associated Receiver	Predicted Equivalent Noise Level ($L_{Aeq, 10}$)
WJR025	39.9	WJR035	20.7
GAR010	32.1	WJR046	19.6
PCR002	26.5	WJR033	18.5
AVR003	29.3	WJR037	20.9
WJR022	26.6	WJR071	18.4
PCR008	28.9	WJR026	25.6
PCR007	31.0	WJR041	19.8
TR004	35.1	BJR028	24.5
TR007	29.7	WJR070	18.9
TR003	36.6	WJR047	19.7
AVR006	27.7	BJR024	23.5
GHR005	38.6	NRS010	36.6
WJR069	18.8	CWR026	25.2
WJR034	20.5	CWR025	25.0
PCR006	26.8	CWR029	23.2
GAR004	27.6	RR006	30.9
RR002	31.2	SR003	26.7
RR001	31.1	SR010	26.7
RR003	30.8	WJR053	19.7
RR004	29.8	WJR054	19.6
RR005	28.9	WJR050	19.4
TR006	28.1	WJR052	19.3
AVR007	26.9	WJR058	19.4
AVR005	30.3	BJR038	23.5
AVR004	29.9	BJR039	23.6
NRS007	28.4	BJR040	23.4
TR002	37.3	TR010	32.8

CUMULATIVE IMPACTS

There are several proposed wind farms within proximity to the Project including, the Jeremiah Wind Farm, Bookham Wind Farm and Bondo Wind Farm. Both Jeremiah Wind Farm and Bondo Wind Farm are proposing WTGs or project infrastructure within 10 km of the Project's WTGs. Beyond this 10 km range, cumulative impacts are not expected to be relevant for this assessment (Marshall Day Acoustics, 2025; Appendix D).

Cumulative impacts will be addressed in detail within the EIS, including a numerical assessment with reference to the predicted noise levels in the most recent noise assessments available at the time for the other projects.

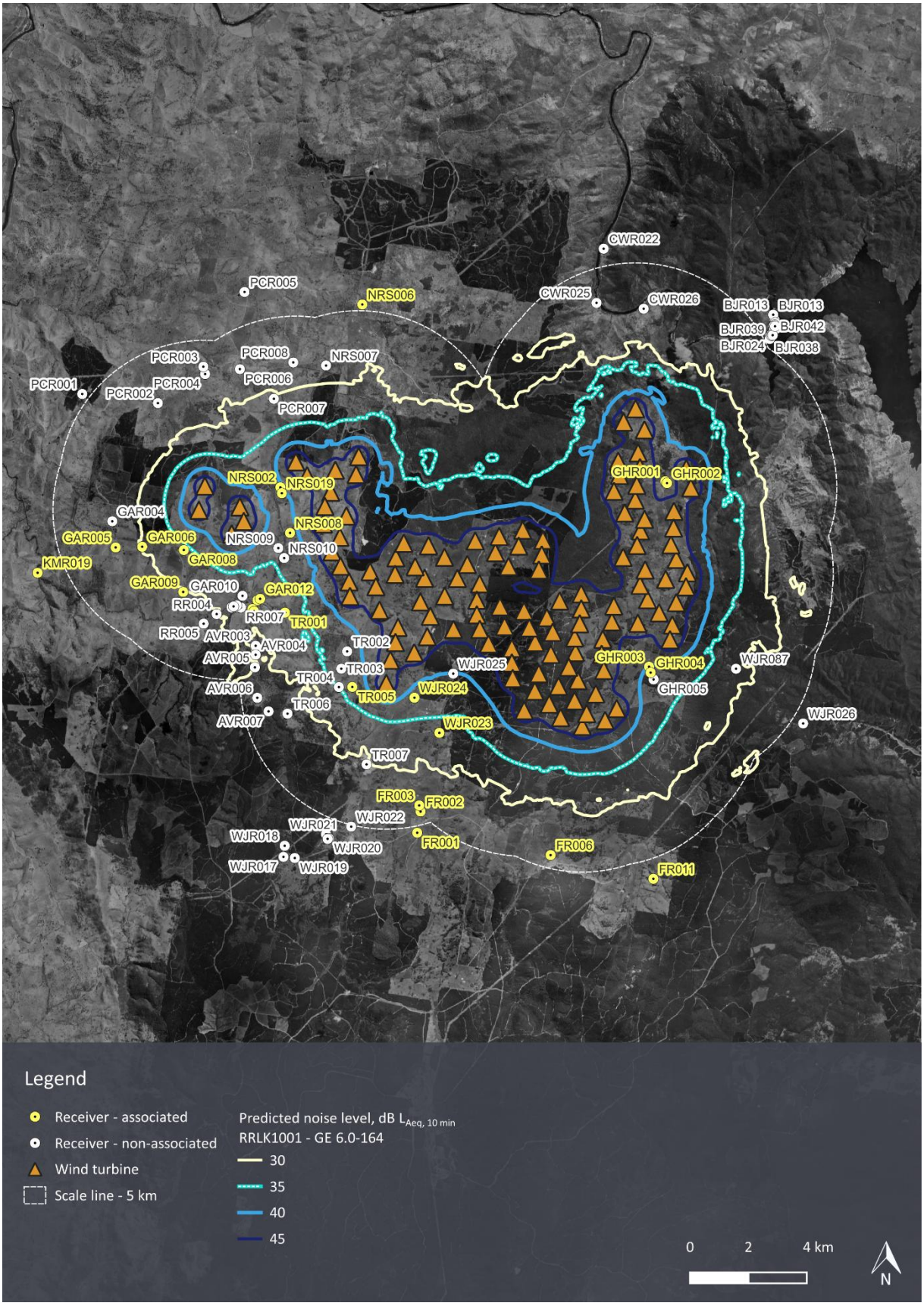

Figure 6-4: Highest predicted noise level (corresponding to hub height wind speeds of 10 m/s (Marshall Day Acoustics, 2025)

6.3.3. EIS Assessment Approach

A detailed Noise and Vibration Impact Assessment will be undertaken at the EIS stage and, dependent on Project SEARs, will likely include assessment of:

- Operational WTG noise in accordance with the Noise Technical Supplement
- Ancillary infrastructure noise, including the BESS in accordance with the Noise Policy for Industry (EPA, 2017)
- Construction noise in accordance with the Interim Construction Noise Guideline (DoECC, 2009)
- Construction traffic noise in accordance with the Road Noise Policy (DoECCW, 2011)
- Construction vibration in accordance with Assessing Vibration: A Technical Guideline (DoEC, 2006)
- Detailed numerical consideration of cumulative impacts with other nearby wind farm projects.

Further detailed assessment work may also involve background noise monitoring at key receivers to determine the applicable noise limits in accordance with the Noise Technical Supplement. Both tonality and low frequency noise will also be considered in more detail with reference to the Project design and candidate WTG model applicable at that time.

6.4. Biodiversity

6.4.1. Existing Environment

PLANT COMMUNITY TYPES

The desktop assessment identified a list of vegetation communities that may potentially occur within the Project Site based on vegetation mapping from the Sharing and Enabling Environmental Data (SEED) portal (SVTM, 2024)

The Project Site is located within two NSW bioregions, comprising the South Western Slopes Bioregion, within the Inland Slopes Sub Region and the South Eastern Highlands Bioregion, within the Bondo Sub Region (Interim Biographic Regionalisation for Australia; IBRA). The South Western Slopes Bioregion is characterised by foothills and isolated ranges comprising the lower inland slopes associated with the Great Dividing Range. The Inland Slopes sub region is characterised by steep, hilly and undulating ranges and Granite basins and confined river valleys with terrace remnants. The South Eastern Highlands Bioregion is typically characterised by rugged hills and stony slopes.

Preliminary Plant Community Type (PCT) identification and mapping has been completed through initial field observations with Rapid Data Points (RDP) collected, noting dominant characteristics of an area including classification of landform, vegetation formation and dominant canopy species identified. The 'best fit' PCTs were then allocated based upon results from field surveys and analysis of data collected at RDPs, and preliminary vegetation mapping created.

Following initial vegetation mapping, 48 Vegetation Integrity (VI) plots were then conducted at several locations within the Project Site. These plots provide a subsample of the composition, structure, and functional attributes of the PCTs within the Project Site.

Eight (8) PCTs have been validated within the Project Site (Appendix E; Figure 6-5). Further field survey, in accordance with the Biodiversity Assessment Method 2020 (BAM 2020) will identify and refine the PCT mapping within the Biodiversity Development Assessment Report (BDAR) and the EIS.

These validated PCTs were stratified into 20 vegetation zones with an additional four (4) non-native vegetation classes (Figure 6-6). Areas of 'Intact' habitat were often found to have a more intact canopy and generally a greater cover in native groundcovers. Areas of 'Disturbed' consisted of more scattered paddock trees, and often a lower percent cover of native species. Areas of 'Derived Native Grassland (DNG)' were generally found to contain greater than 50% native groundcovers.

THREATENED ECOLOGICAL COMMUNITIES

Assessment of each validated PCT was undertaken to determine if any of the vegetation communities present were consistent with TECs listed under the BC Act and/or the EPBC Act. Assessment of the assemblage of species in each vegetation type was considered against potential TECs and their relevant Final Determination (BC Act) or Listing Advice (EPBC Act).

Table 6-4 details both validated and unvalidated PCTs and their associated TECs. Assessment of the presence of TECs has occurred for validated PCTs only. As additional areas of vegetation require validation and assessment through the completion of VI Plots, additional TECs may be identified, and/or the extent of TECs across the Development Corridor. Areas marked in bold indicate validated areas which are considered to conform to an associated TEC.

Table 6-4: TEC associations with PCTs

PCT	PCT Name	Associated TEC	Area of PCT Validated	Area of PCT Not validated
266*	White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion	• White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions (BC Act) • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (EPBC Act)	0	9.07
277*	Blakelys Red Gum - Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion		0	13.80
278*	Riparian Blakelys Red Gum - box - shrub - sedge - grass tall open forest of the central NSW South Western Slopes Bioregion		0	0.15
280*	Red Stringybark - Blakelys Red Gum +/- Long-leaved Box shrub/grass hill woodland of the NSW South Western Slopes Bioregion		0	2.68
283*	Apple Box - Blakelys Red Gum moist valley and footslopes grass-forb open forest of the NSW South Western Slopes Bioregion		0	7.29
306*	Red Box - Red Stringybark - Nortons Box hill heath shrub - tussock grass open forest of the Tumut region	No associated TEC	0	0.47
310*	Nortons Box - Red Stringybark grassy tall open forest on sheltered slopes in the Tumbarumba - Murray River region of the NSW South Western Slopes Bioregion	No associated TEC	0	18.83
316*	Nortons Box - Red Box - Red Stringybark +/- Nodding Flax Lily forb-grass open forest mainly on the Tumut region	No associated TEC	0	1.68
3291	Bondo Montane Valley Flats Forest	No associated TEC	0	87.31
3292	Bondo Slopes Peppermint Moist Grassy Forest	No associated TEC	221.89	45.80
3293	Bondo Slopes Peppermint Sheltered Fern Forest	No associated TEC	600.17	8.74
3337	Bondo Frost Hollow Grassy Woodland	No associated TEC	0	77.39
3365	Bondo Slopes Red Stringybark Grassy Forest	No associated TEC	452.57	481.19
3368	Central Tableland Limestone Woodland	No associated TEC	0	1.73
3376	Southern Tableland Grassy Box Woodland	• White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions (BC Act)	37.36	0.91

PCT	PCT Name	Associated TEC	Area of PCT Validated	Area of PCT Not validated
		• White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (EPBC Act)		
3377	Southwest Foothills Apple Box Grassy Forest	No associated TEC	0	7.53
3406	Southwest Ranges White Box Woodland	• White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions (BC Act) • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (EPBC Act)	9.93	4.99
3542	Southwest Ranges Stringybark-Box Sheltered Forest	No associated TEC	154.25	0
3730	Bondo Slopes Dry Stringybark Forest	No associated TEC	0	11.14
3930	Bondo Montane Flats Swamp Woodland	No associated TEC	214.32	0
4126	Bondo Slopes Dry Peppermint Shrub Forest	No associated TEC	0	37.62

* **Note:** PCTs located within the NSW South Western Slopes subregion are not required to be updated to the East Coast PCT lists, and therefore the SVTM still uses these older PCT numbers. Following the finalisation of the vegetation mapping across the Development Corridor, these numbers will likely be updated to align with the East Coast PCTs to allow for consistency across the Development Corridor.

Those PCTs within the Project Site which have an associated TEC (see Table 6-4 above) are all potentially commensurate with *White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions*, listed as Critically Endangered under the BC Act and *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland*, which is listed as Critically Endangered under the EPBC Act. These TECs are hereafter referred to as 'Box Gum Woodland'.

'*Natural Temperate Grassland of the Southern Tablelands of New South Wales and the Australian Capital Territory*' is an additional TEC listed as Critically Endangered under the EPBC Act which requires consideration for the Project Site. Data collected to date indicate that this TEC is not present within the Project Site, however, as further vegetation validation and VI plots are required, this TEC may be recorded during further assessments.

NSW* BC *Act Critically Endangered Ecological Community: White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box-Gum Woodland)

Under the BC Act, the Final Determination for Box-Gum Woodland provides the basic definition of this community (NSW TSSC 2020), whilst the associated Identification Guideline (DECC 2007) provides additional information for recognising this community in the field. It is noted that the final determination also includes native grasslands derived from clearing of the woodland community as part of the Box-Gum Woodland community, providing they contain characteristic species listed in the determination. All validated vegetation zones of PCTs 3376 and 3406 in the Project Site meet the BC Act definition of Box-Gum Woodland (NSW TSSC 2020), including those mapped as DNG, for the following reasons (following the key for determining whether Box-Gum Woodland exists on a site (DECC 2007)):

- The Project Site is in the broader area which would be defined as the tablelands or western slopes of NSW, specifically all patches occur within either the NSW South Western Slopes or the South Eastern Highlands IBRA region, which are two of the IBRA regions Box-Gum Woodland occurs
- In all patches of PCTs 3376 and 3406 there were native species in the understorey, and the patches have the potential to respond to assisted natural regeneration
- Where a canopy is present, the dominant canopy species of patches of PCT 3376 (*Eucalyptus melliodora* (Yellow Box) and *E. blakelyi* (Blakely's Red Gum)) and PCT 3406 (*E. albens* (White Box)), match those listed in the Final Determination as being characteristic of Box-Gum Woodland: characteristically dominated by one or more of the species *E. albens* (White Box), *E. melliodora* (Yellow Box) and *E. blakelyi* (Blakely's Red Gum). The other canopy species that were recorded only occasionally in these patches, *E. bridgesiana* (Apple Box), *E. macrorhyncha* (Red Stringybark) and *E. nortonii* (Long-leaved Bundy), likewise match the Final Determination description relating to sub-dominants: Other tree species are sometimes associated with the community either as occasional occurrences or infrequent sub-dominants, but rarely as co-dominant species including *E. bridgesiana* (Apple Box) and occasionally *E. nortonii* (Large-Flowered Bundy).
- The patches were predominantly grassy, with minimal shrub layer in all instances of PCT 3376 and PCT 3406, which matches the Final determination description of: Understorey shrubs are typically sparse or absent
- Whilst native ground layer diversity and cover was often low due to ongoing grazing of all patches of PCT 3376 and 3406, many of the species listed in the Final Determination as typically

found throughout almost the entire range of the community were recorded in these patches, including *Themeda triandra, Austrostipa scabra, Cheilanthes sieberi, Lomandra filiformis* and *Oxalis perennans*

- In DNG patches, it was considered likely that they supported White Box, Yellow Box or Blakely's Red Gum prior to clearing, based on the adjacent patches with canopy. These patches contained a similar diversity and cover of native species to adjacent Box-Gum Woodland, including characteristic species listed in the determination.

PCTs not validated, including PCT 266, 277, 278, 280 and 283 may also conform to Box Gum Woodland following field assessment.

Commonwealth EPBC Act Critically Endangered Ecological Community: White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box-Gum Woodland)

Under the EPBC Act, a patch of vegetation must meet both the key diagnostic characteristics and the minimum condition thresholds listed in the listing and conservation advice (DCCEEW 2023) for it be considered Box-Gum Woodland and therefore protected as a matter of national environmental significance. The patches mapped as PCT 3376 (all zones) and 3406 (all zones) within the Project Site aligns with all the key diagnostic characteristics related to location, overstorey dominants or co-dominants, and proportion of native perennial species. Several other thresholds may not align with the key diagnostic characteristics however; this may require update following the completion of VI plots.

Details of the key diagnostics regarding EPBC listed Box-Gum Woodland (DCCEEW 2023) considered for the areas validated to date include:

- All areas of mapped PCT 3376 and 3406 have (or would have previously) the correct overstorey species being *E. melliodora*, *E. blakelyi* or *E. albens*
- Plot data indicates all mapped patches of PCT 3376 and 3406 have a predominantly native perennial understorey, they do not, however generally contain 12 or more native understorey non grass species
- The mapped patches of PCT 3406 (DNG condition) do not meet the minimum thresholds for any of the condition classes, as the plot data found that there were not at least 12 native non grass species, and there were not at least 20 mature trees per hectare or natural regeneration of dominant overstorey eucalypts within any patches of this zone
- The mapped patches of PCT 3376 (Intact condition) did contain natural regeneration of overstorey eucalypts.

Therefore, initial assessment of these vegetation zones indicates that areas of PCT 3376 are considered to align with EPBC Act listed Box Gum Woodland. However, as vegetation validation and completion of additional VI plots is required in areas not yet surveyed, the area of mapped Box Gum Woodland may increase across the Project Site. In addition, following the completion of vegetation mapping, a patch analysis will be completed to allow for further understanding of key diagnostic characteristics and the minimum condition thresholds listed in the conservation advice (DCCEEW 2023). Due to the uncertainty in this determination, only BC Act listed Box Gum Woodland has been provided in Figure 6-7.

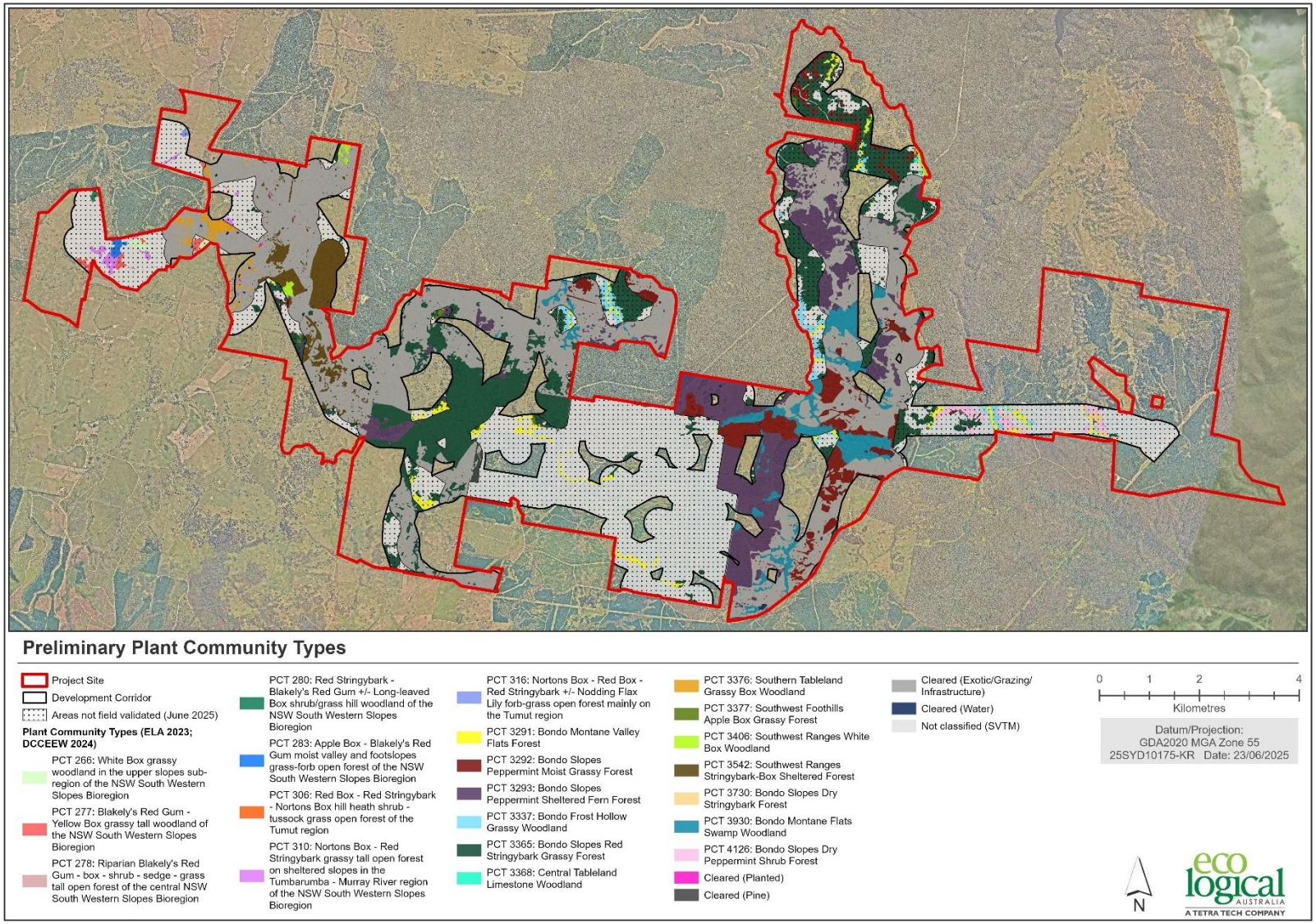

Figure 6-5: Preliminary validated PCTs within the Development Corridor

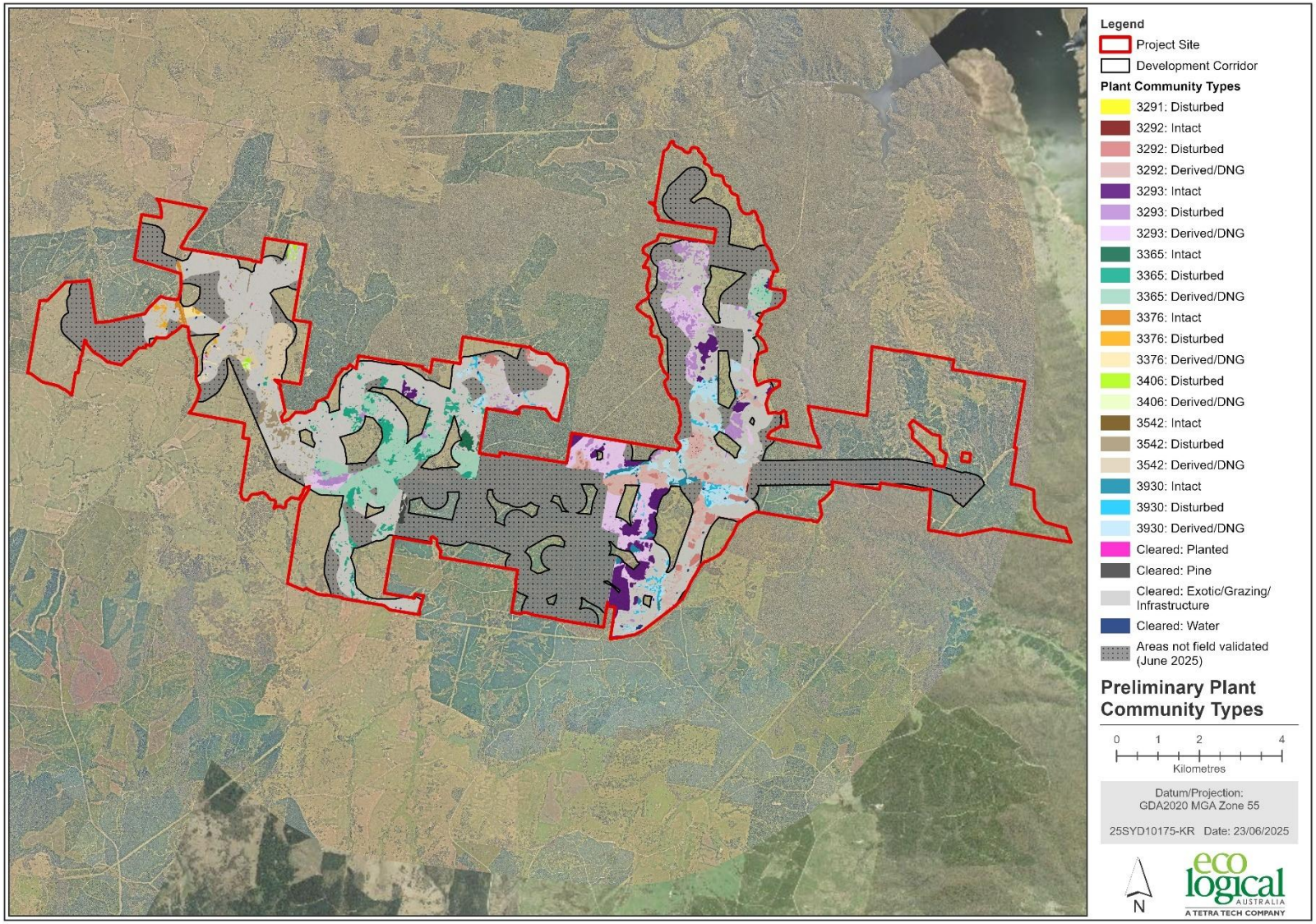

Figure 6-6: Preliminary validated PCTs and condition classes within the Development Corridor

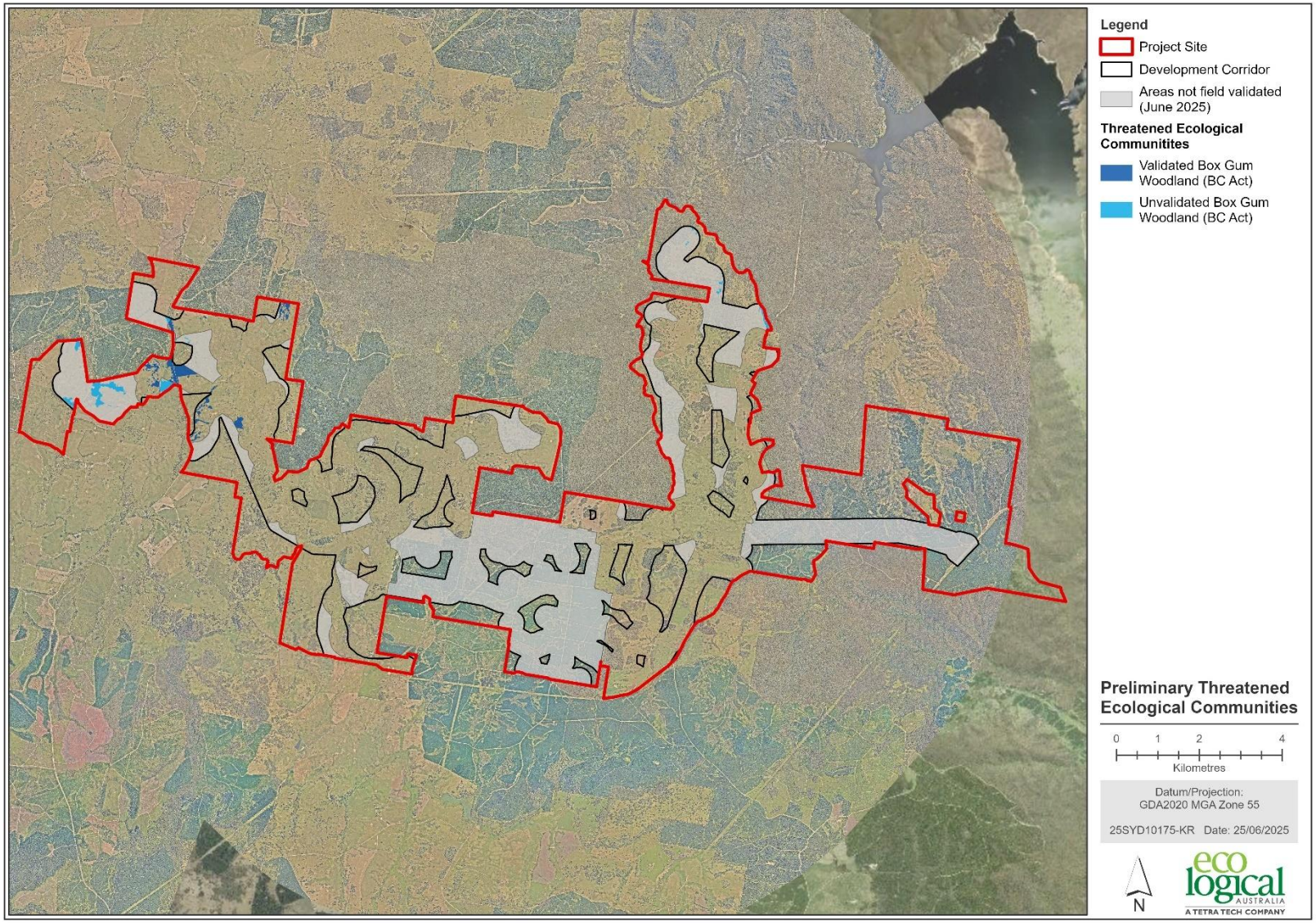

Figure 6-7: Preliminary BC Act listed TECs within the Development Corridor

CATEGORY ONE LAND

Following the completion of RDPs, vegetation mapping and VI plots, an assessment of areas identified as Category One – Exempt Land under the *Local Land Services Act 2013* (LLS Act) within the Project Site will occur. Category One (Unregulated) Land represents an ideal area for the Development Corridor as it represents little to no biodiversity constraint and does not require survey or assessment under the BAM. An assessment of the Native Vegetation Regulatory Map, presence of Critically Endangered Ecological Communities or Critically Endangered flora species is required to determine if the land can meet the definition of Category One Land.

HABITAT FEATURES FOR THREATENED FLORA AND FAUNA

Table 6-5 outlines the type of habitat features identified during the preliminary field surveys undertaken to date, that may provide potential habitat for threatened fauna species. It is noted that surveys are still ongoing. Therefore, further habitat features may be identified in the future.

Table 6-5: Fauna habitat features, and fauna guild recorded within the Development Corridor

Habitat Feature	Species/Guild	Recorded
Woodland and forest vegetation	Birds, microchiropteran bats (microbats), megachiropteran bats (fruit bats), arboreal mammals, reptiles	Yes
Winter flowering species	Winter migratory birds, arboreal mammals and fruit bats	Yes
Hollow-bearing trees	Microbats, birds, arboreal mammals, reptiles, amphibians	Yes
Mistletoe	Arboreal mammals, woodland and migratory birds, fruit bats	No
Stags	Birds, particularly birds of prey, microbats	Yes
Nectar producing trees (Acacia and bloodwoods)	Gliders and other arboreal mammals, birds	Yes
Leaf litter	Invertebrates, reptiles, amphibians	Yes
Trees with defoliating or fibrous bark	Microbats, reptiles, amphibians	Yes
Fallen woody debris	Terrestrial mammals, reptiles, invertebrates	Yes
Water body or dam	Amphibians, birds, reptiles	Yes
Large rocky outcrops	Microbats, reptiles, invertebrates, small mammals	No
Termite mounds	Goannas, Echidnas	No
As per Appendix C Koala (*Phascolarctos cinereus*) Biodiversity Assessment Method Survey Guide	Koala feed trees - Koala	Yes

THREATENED FLORA AND FAUNA

A search for threatened species using the Protected Matters Search Tool and BioNet (within a 10 km buffer around the Project Site) and the review of literature identified several threatened flora species, threatened fauna and migratory species.

The literature review identified 14 threatened flora species and 54 threatened fauna species listed under the BC Act and/or EPBC Act, which have previously been recorded within a 5 km radius of the Project Site (Figure 6-8).

Biodiversity surveys have been conducted by ELA throughout 2021 and 2022 and are ongoing. To date, several threatened flora and fauna species have been identified within the Project Site, which are summarised in Table 6-6.

Table 6-6: Threatened species identified within the Development Corridor

	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Description
Flora	*Ammobium craspedioides*	Yass Daisy	Vulnerable	Vulnerable	The *Ammobium craspedioides* is a perennial herb with yellow, button shaped flowerheads. This species is generally found in dry forest, box-gum woodland and secondary grassland (OEH 2020). This species has been recorded in high numbers across the region, however only a small number have been recorded at the Project Site (Figure 6-8).
Fauna	*Artamus cyanopterus*	Dusky Woodswallow	Vulnerable	-	Dusky Woodswallow is a widespread but sparsely scattered species, primarily recorded in dry, open eucalypt forest and woodlands. This species generally inhabits dry, open eucalypt forests and woodlands, preferring an open or sparse understorey. Dusky Woodswallow feed on the wing, targeting invertebrates above the canopy or over water (OEH 2017b). At this stage, this species has been recorded across multiple locations within the Project Site (Figure 6-8).
	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Endangered	Gang-gang Cockatoos are generally recorded in tall mountain forests and woodlands in the summer months, and move into lower altitudes and drier, more open woodland in the autumn and winter (OEH 2022). Gang-gang Cockatoos have been recorded across the Project Site (Figure 6-8), with one occurrence of breeding recorded. This species uses hollows greater than 10 cm in width and 9 m above the ground for nesting.
	Climacteris picumnus	Brown Treecreeper (eastern subspecies)	Vulnerable	-	Brown treecreeper is found in eucalypt woodlands and dry open forests, dominated by stringybarks or other rough barked eucalypts and generally preferring a grassy understorey (OEH 2017a). Brown Treecreepers nest in hollows of dead or live trees. This species forages both on trees and the ground. At this stage, records for this species within the Project Site have been identified in areas of PCT 3930 only (Figure 6-8).
	Hieraaetus morphnoides	Little Eagle	Vulnerable	-	Little Eagle is generally recorded within open woodland and open eucalypt forest with areas of Acacia woodland and riparian woodland also used (OEH 2021). This species nests in tall living trees building a large stick nest. This species has been recorded once, just to the south of the Project Site (Figure 6-8)
	Miniopterus orianae oceanensis	Large Bent-winged Bat	Vulnerable	-	The Large Bent-winged Bat hunts in areas within or adjacent to forest. A known roost occurs approximately 10km to the east of the Project Site. No roosts occur within the Project Site. Large Bent-winged Bat can fly high from just above canopy height to many times canopy height but will also fly within several metres of the ground in open areas

	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Description
					(Churchill 2008). This species has been recorded using acoustic recorders during Bird and Bat Utilisation Surveys.
	Petauroides volans	Greater Glider	Endangered	-	Greater Glider is distributed across the east cost of mainland Australia, from central Queensland to central Victoria. This arboreal mammal is restricted to eucalypt forests and woodlands, where it is most found in areas of taller, montane, moist eucalypt forests with old trees and abundant hollows (Andrews et al., 1994; Smith et al., 1994, 1995; Kavanagh 2000; Eyre 2004; van der Ree et al., 2004; Vanderduys et al., 2012). Greater Gliders have been recorded within areas of dense forest, including PCT 3293, 3930 and 3292 (Figure 6-8).
	Petroica boodang	Scarlet Robin	Vulnerable	-	Scarlet Robin is found within dry eucalypt forests and woodlands, preferring an open and grassy with a few scattered shrubs (OEH 2017d). They prefer areas of abundant fallen timber. Breeding occurs in areas of ridges, hills and foothills of the Great Dividing Range and eastern coastal regions. At this stage, this species has been recorded in areas adjacent to state forest (Figure 6-8)
	Petroica phoenicea	Flame Robin	Vulnerable	-	The Flame Robin is endemic to southeastern Australia. Flame Robins prefer areas with an open understorey or areas of clearing. In winter months, this species generally migrates to drier and more open habitats (OEH 2017c). The breed in tall moist eucalypt forests and woodlands, often on ridges. Foraging generally occurs in areas of clearings or open understorey. At this stage, Flame Robins have been recorded within the eastern areas of the Project Site (Figure 6-8).

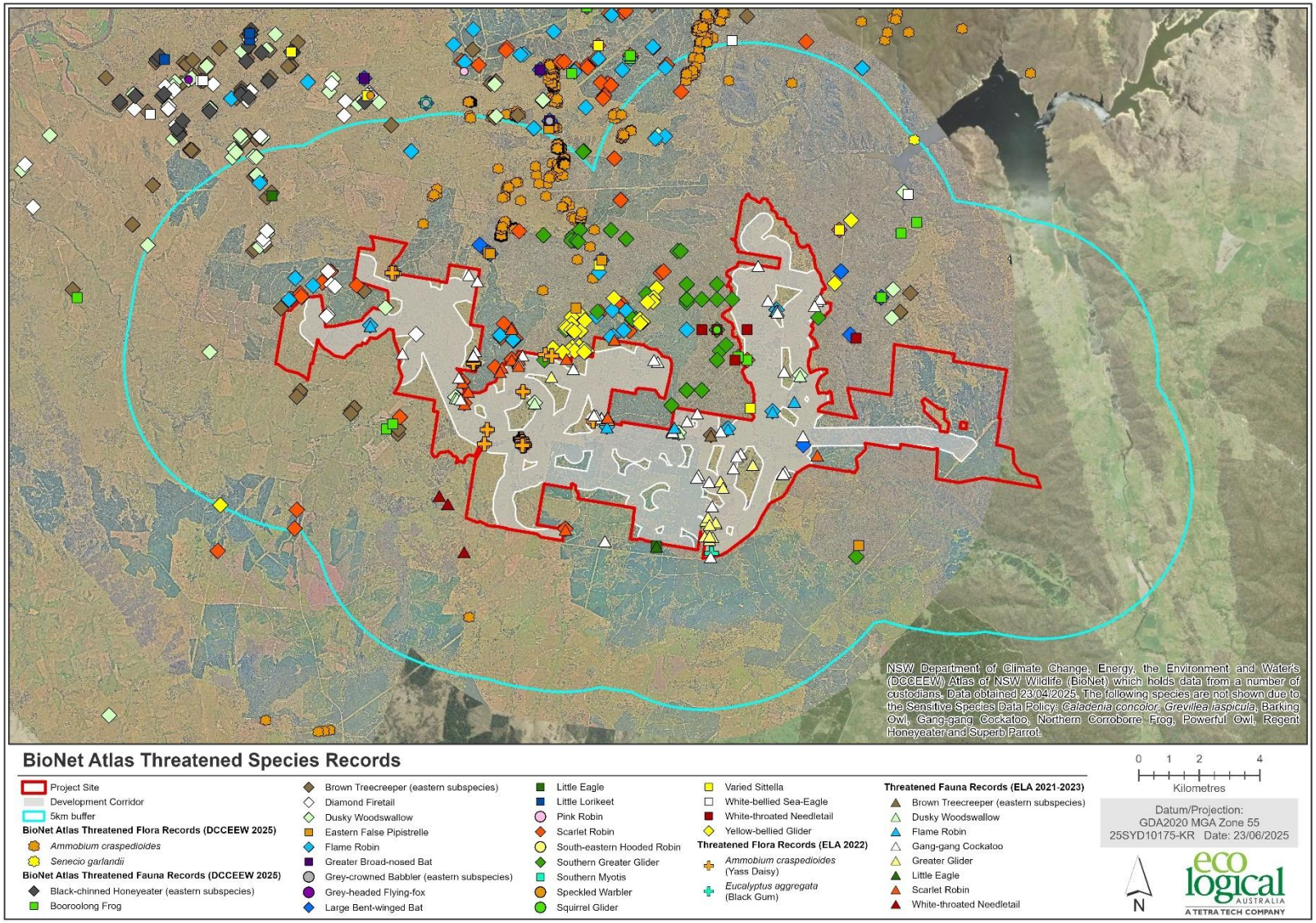

Figure 6-8: Threatened species records within 5 km of the Project Site (Bionet and ELA 2021 and 2022)

MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

Following is a preliminary list of MNES with the potential to occur within the Project Site that may require referral:

- Gang-gang Cockatoo
- Greater Glider
- *Ammobium craspedioides*
- Koala (*Phascolarctos cinereus*)
- Golden Sun Moth (*Synemon plana*)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.

SPECIES CREDIT SPECIES

The vegetation zones within the Development Corridor were entered into the Biodiversity Assessment Methodology Calculator (BAM-C) to generate a list of predicted ecosystem credit species and species credit species. Table 6-7 outlines the species credit species predicted to occur within the Project Site (i.e., candidate species). These species will require targeted survey to confirm presence, during the preparation of the BDAR to accompany the EIS subject to consultation with Conservation Programs, Heritage and Regulation (CPHR) on scope of the biodiversity surveys. Species recorded to date are detailed below, however, as further surveys are required, species not yet recorded may be observed at a later time. The addition of PCTs, species associations or the change of survey requirements can change throughout the life of a project and can be updated in the BAM-C or Threatened Biodiversity Data Collection (TBDC) at any time. Species listed under the EPBC Act also require consideration for assessment as the potential for impact by the Project on these species must be considered.

Table 6-7: Species credit species predicted to occur within the Project Site

	Scientific Name	Common Name	Survey Months	Preliminary Survey Results
Flora	*Ammobium craspedioides*	Yass Daisy	Sep-Nov	Present – Surveys partially completed.
	Caladenia concolor	Crimson Spider Orchid	Sept	Absent – Surveys partially completed
	Caladenia montana	Caladenia montana	Oct – Nov	Absent – Surveys partially completed
	Grevillea iaspicula	Wee Jasper Grevillea	All year	Absent – Surveys partially completed
	Leucochrysum albicans var. *tricolor*	Hoary Sunray	Sep - Apr	Absent – Surveys partially completed
	Pomaderris cotoneaster	Cotoneaster Pomaderris	Oct - Nov	Absent – Surveys partially completed
Fauna	*Anthochaera phrygia*	Regent Honeyeater	-	The Project Site is not within an 'Important Area' for this species. This species does not require assessment.
	Callocephalon fimbriatum	Gang-gang Cockatoo	Oct - Jan	Present – Surveys partially completed.
	Calyptorhynchus lathami	Glossy Black-Cockatoo	All year	Absent – Surveys partially completed
	Cercartetus nanus	Eastern Pygmy-possum	Oct - Mar	Absent – Surveys partially completed
	Delma impar	Striped Legless Lizard	Sep - Dec	Absent – Surveys partially completed
	Haliaeetus leucogaster	White-bellied Sea-Eagle	Jul - Dec	Absent – Surveys partially completed
	Hieraaetus morphnoides	Little Eagle	Aug - Oct	Absent – Surveys partially completed
	Keyacris scurra	Key's Matchstick Grasshopper	Mar – May, Aug - Dec	No surveys completed to date
	Litoria booroolongensis	Booroolong Frog	Oct - Dec	Absent – Surveys completed

	Scientific Name	Common Name	Survey Months	Preliminary Survey Results
	Litoria spenceri	Spotted Tree Frog	Nov - Feb	Absent – Surveys completed
	Lophoictinia isura	Square-tailed Kite	Sep - Jan	Absent – Surveys partially completed
	Miniopterus orianae oceanensis	Large Bent-winged Bat	Dec - Feb	Present – Surveys partially completed
	Myotis macropus	Southern Myotis	Oct - Mar	Unknown – data requires analysis
	Ninox connivens	Barking Owl	May – Dec	Absent – Surveys partially completed
	Ninox strenua	Powerful Owl	May – Aug	Potential – Song-meter analysis ongoing
	Petauroides volans	Greater Glider	All year	Present – Surveys completed.
	Petaurus norfolcensis	Squirrel Glider	All year	Absent – Surveys partially completed
	Petroica rodinogaster	Pink Robin	All year	Absent – Surveys partially completed
	Phascogale tapoatafa	Brush-tailed Phascogale	Dec - Jun	Unknown - Targeted surveys to be completed
	Phascolarctos cinereus	Koala	All year	No surveys completed at this stage in accordance with the Koala (*Phascolarctos cinereus*). Biodiversity Assessment Method Survey Guide (DPE, 2022).
	Polytelis swainsonii	Superb Parrot	Sep - Nov	Absent – Surveys partially completed
	Pseudomys fumeus	Smoky Mouse	Sep – Dec, Feb - Apr	Absent – Surveys partially completed
	Synemon plana	Golden Sun Moth	Nov - Dec	No surveys completed to date
	Tyto novaehollandiae	Masked Owl	May - Aug	Absent – Surveys partially completed

6.4.2. Potential Impacts

Direct and indirect biodiversity impacts are outlined in Table 6-8. The key receptors for these potential impacts are nearby National Parks, State Forest lands, ecosystems, vegetation communities, flora and fauna.

Table 6-8: Potential biodiversity impacts because of the Project

Project Phase	Potential Impact
Construction	There is mapped NPWS Estate and NSW Forestry land adjacent to the Project Site. Whilst direct impacts are not expected to the Reserves, indirect impacts could occur including noise, erosion and sedimentation, dust deposition, and weed introduction and/or spread.
	Disturbance/loss of vegetation during construction, including potential direct (clearing) and indirect impacts (sedimentation, dust deposition, erosion, weed introduction and/or spread, soil and/or water pollution) to TECs and threatened flora species.
	Direct impacts including disturbance / loss of habitat, injury and mortality from vehicle strike, and loss of wildlife corridors. Indirect impacts including impacts resulting from light, noise, and dust.
	Potential direct impacts on terrestrial ecosystems including loss or modification of habitat for aquatic and terrestrial species. Potential indirect impacts through the introduction and spread of weeds and pests, sedimentation and erosion, soil and water pollution, light, noise, and dust.
Operation	Potential direct impacts due to traffic and maintenance activities (though significantly less than the construction phase), as well as potential visitation by tourists.
	Potential direct impacts due to blade strike of bird and bat species.
Cumulative	Cumulative impacts to native vegetation and species associated with several other SSD projects within proximity to the Project Site.

6.4.3. EIS Assessment Approach

A BDAR under the Biodiversity Offset Scheme (BOS) will be undertaken in accordance with the BAM 2020 and Section 5.4 of the *Wind Energy Guideline* (DPHI, 2024a) and included in the EIS to address impacts to threatened ecological communities and species protected by the BC Act.

An assessment of impacts upon MNES will also be undertaken during the preparation of the BDAR for the Project to satisfy the requirements of the EPBC Act.

A Bird and Bat Adaptive Management Plan (BBAMP) will be prepared to support the application. This is to provide an overall strategy for managing and mitigating any significant bird and bat strikes arising from operations.

6.5. Traffic and Transport

6.5.1. Existing Environment

The Project Site is located within the Cootamundra Gundagai, Yass Valley and Snowy Valleys LGAs. It is anticipated that major WTG components will be delivered to the Project Site from either the Port of Newcastle or Port Kembla and transported to the Project Site via the Hume Highway. The most likely route would then exit the Hume Highway onto Gobarralong Adjungbilly Road south of Coolac, then via Nanangroe Road, Threeways Road and Wee Jasper Road to the Project Site. New internal roads will be constructed within the site to provide access to WTGs and relevant project infrastructure.

Upgrades to local roads may be necessary to permit restricted access vehicles and heavy vehicle movements. Preliminary road upgrade designs will be prepared in consultation with the relevant road authorities as part of the EIS following a detailed external route study and traffic modelling. Where possible, the Project will utilise roads already upgraded or proposed to be upgraded by other Projects in the region such as Humelink.

6.5.2. Potential Impacts

Traffic and transport impacts are outlined in Table 6-9. The key receptors for these potential impacts are nearby residences and the community.

Table 6-9: Potential traffic and transport impacts because of the Project

Project Phase	Potential Impact
Construction	Upgrades to existing road network at junctions are likely to be required during the construction phase.
	Likely increase in traffic on external road network is anticipated during the construction phase of the Project, with varying degrees of increase dependant on the phase of construction. During peak construction periods, an increased volume of both employees and materials will generate increased traffic.
	Increased traffic during peak hours may impact local traffic routines such as school bus routes
Operation	No significant increase to traffic movements is expected during operation, although vehicle access to the Project area for plant management and maintenance will be ongoing
	Potential for implementation of road upgrades leading to long term benefits to residents and road users.
Cumulative	Potential for cumulative impacts because of multiple developments using the Hume Highway to transport material and personnel.

6.5.3. EIS Assessment Approach

A detailed External Route Study and Traffic and Transport Impact Assessment will be undertaken as part of the EIS and focus primarily on the preferred transportation route for construction traffic generally in accordance with the 'Guide to Traffic Generating Developments' (RTA, 2002), Road Design Guide and relevant Austroads Standards and 'Austroads Guide to Traffic management' (Austroads) and with reference to the Project SEARs and Section 5.5. of the *Wind Energy Guideline* (DPHI, 2024a). The assessments will also provide important data and analysis on the existing road network, anticipated traffic volumes, accident history and school bus routes to inform the development of the Project.

6.6. Hazards and Risks

6.6.1. Existing Environment

6.6.1.1. Aviation

There are several airports located within 30 nm of the Project Site, including the Tumut Airport, Harden Airport and the Cootamundra Airport. There is also a probability for other aviation activities as non-certified aerodromes exist within proximity to the Project Site (Figure 6-9).

6.6.1.2. Telecommunications and Electromagnetic Interference

The Project Site is in regional NSW with the largest regional centres within 100 km being Tumut, Gundagai and Yass. There are several Australian Communication and Media Authority (ACMA) associated sites within and in proximity to the Project Site, the majority of which have been avoided as part of preliminary layout design constraints analyses, though will require further assessment in the EIS (Figure 6-10).

6.6.1.3. Bushfire and Electrical Fire

The Project is in an area of low to medium bushfire risk due to the vegetation and agricultural practices in the area, having primarily been utilised for cattle and sheep grazing and cropping for stock feed, as well as for private plantation. The vegetation hazard in proximity to the proposed infrastructure is predominately modified grassland with scattered trees and woodland. The topography of the Project Site is characterised by steep to rolling hills with varying degrees of elevation, with WTG locations likely to vary in slope classifications. The usage of the area within and surrounding the Project Site is mostly limited to private landownership and agricultural use, as well as plantation forestry (private and state owned).

6.6.1.4. Blade Throw

Blade throw describes an incident in which a structural failure occurring in the blade of a WTG during operation results in parts of the blade detaching and being thrown into the surrounding area. Reasons for WTG blade failure may include physical damage to the blade caused by external factors such as erosion or lightning, extreme wind conditions that cause the loads on the WTG to exceed the loads that the WTG has been designed to withstand, material or manufacturing defects, and material fatigue.

6.6.2. Potential Impacts

Potential aviation, telecommunications and electromagnetic interference and bushfire and electrical fire impacts are outline in Table 6-10. Key receptors for these impacts include aerodromes, flightpaths, the Project Site, surrounding landowners, ACMA site and links, meteorology stations and AM transmitters.

Table 6-10: Potential hazards and risks because of the Project

Project Phase	Potential Impact	
Construction	Aviation	Impacts to aeronautical activities around the Project Site are not anticipated during the construction period, though will require consultation with various aviation bodies.
	Telecommunications and Electromagnetic Interference	Unlikely for impacts to telecommunication infrastructure because of construction.

Project Phase	Potential Impact	
	Bushfire and Electrical Fire	Potential for plant and construction equipment to ignite bushfires on site under certain conditions.
		Construction of internal routes within the Project Site can create additional infrastructure for use in firefighting operations and act as fire breaks within the Project Site.
Operation	Aviation	Potential aviation impacts may include impacts to airspace protection areas, air routes or air traffic control surveillance systems and navigation aids. However, such impacts are anticipated to be avoided through Project design.
	Telecommunications and Electromagnetic Interference	Potential impacts on point-to-point communication links because of near field effects, diffraction or reflection or scattering effects.
		WTGs have the potential to appear on meteorological radars as static echoes if sited within 5 km of a meteorological radar, impacting radar's ability to detect rain and thunderstorm events.
		Potential impact on AM signals if AM transmitters are located within 2 km of WTG location.
	Bushfire and Electrical Fire	Potential for fire ignition because of plant fires where inadequate fire detection systems are in place.
		Maintenance of Asset Protection Zones and internal roads may assist in fire suppression efforts in the event of a bushfire within the Project Site.
		Development of WTGs may become aerial hazards that risk aerial firefighting suppression operations in the event of fire within the Project Site.
		Construction, and ongoing maintenance of internal access tracks can be used for firefighting operations, act as fire breaks and reduce lightning strikes to vegetation.
	Blade Throw	Potential for a blade throw incident to occur, impacting Project infrastructure or nearby receivers.
Cumulative	Aviation	It is unlikely that cumulative impacts because of the Project will impact stakeholders involved with aviation in the area
	Telecommunications and Electromagnetic Interference	Potential for cumulative impacts to communication links because of multiple developments within the region.
	Bushfire and Electrical Fire	Unlikely potential for cumulative impacts.

6.6.3. EIS Assessment Approach

An Aviation Impact Assessment will be undertaken in accordance with the *National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft* (DIRDC, 2012) and Section 5.3 and Appendix A of the *Wind Energy Guideline* (DPHI, 2024a). The assessment will assist in determining potential impacts of the Project and provide critical information regarding height and co-ordinates of the Project. Consultation with both Civil Aviation Safety Authority (CASA) and Air Services Australia will also be undertaken during preparation of this assessment.

A Telecommunications (Electromagnetic Interference) Assessment will be undertaken to identify all telecommunication infrastructure in proximity to the Project Site. The assessment will seek to identify possible effects on telecommunication systems, assess impacts on telecommunications infrastructure and propose mitigation measures to minimise impacts because of the Project.

An Electromagnetic Field (EMF) Assessment will be undertaken in accordance with the *International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields* and Section 6 of the *Wind Energy Guideline* (DPHI, 2024a).

A Bushfire Risk Assessment will be undertaken in accordance with *Planning for Bush Fire Protection* (NSW RFS, 2019). Similarly, a Preliminary Hazard Assessment will be undertaken in accordance with the NSW *Hazardous Industry Planning Advisory Paper No 4 'Risk Criteria for Land Use Safety Planning'* (HIPAP 4) and *Hazardous Industry Planning Advisory Paper No 6 'Hazard Analysis' (*HIPAP 6) to determine potential risks of electrical fires and other hazards caused by the operation of the Project, including the proposed BESS. Both these assessments will also reference Section 6 of the *Wind Energy Guideline* (DPHI, 2024a).

Other potential hazards and risks such as public health regarding low frequency and noise infrasound and shadow flicker will also be assessed as part of the EIS.

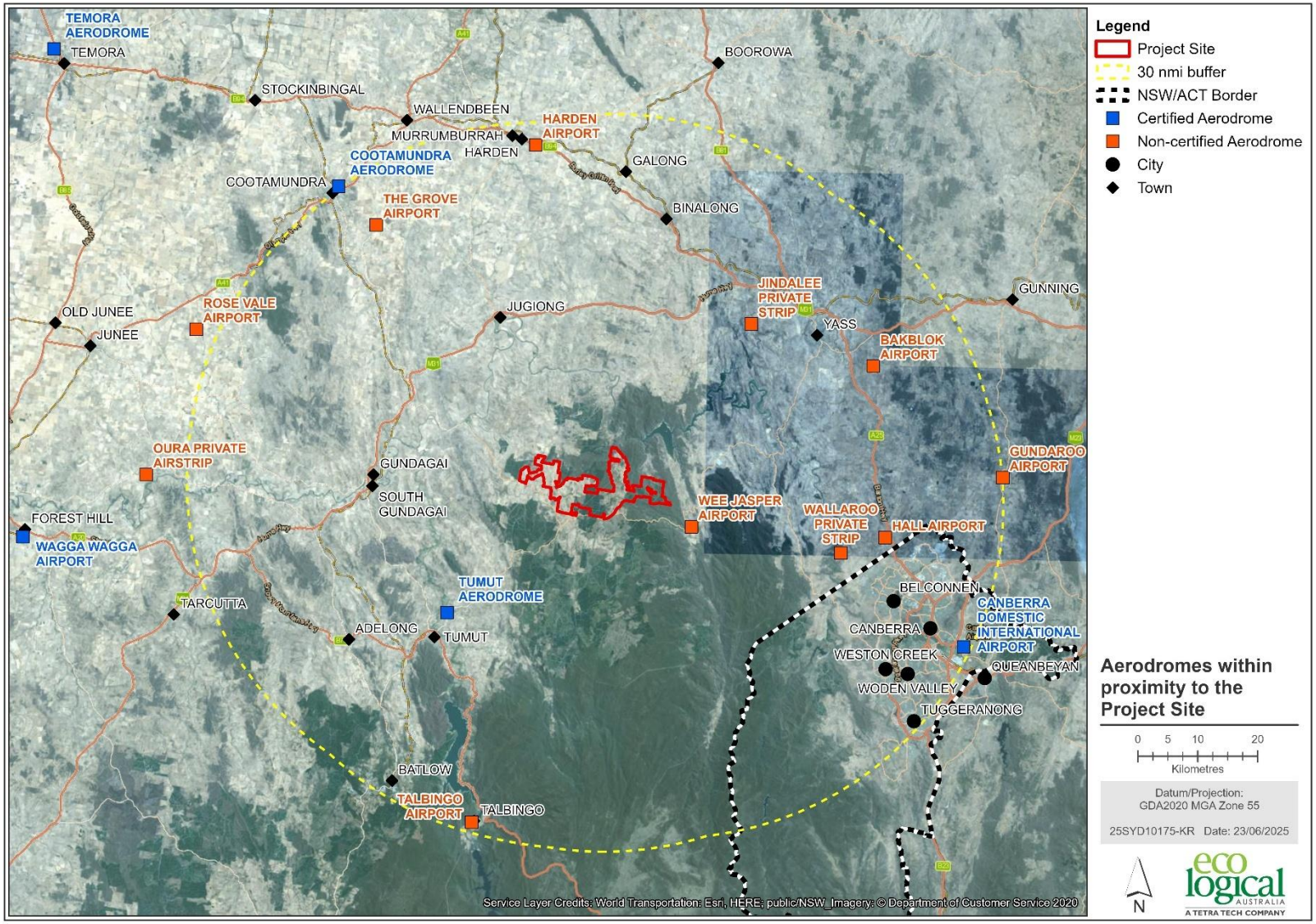

Figure 6-9: Certified and non-certified aerodromes within 30 nautical miles of the Project Site

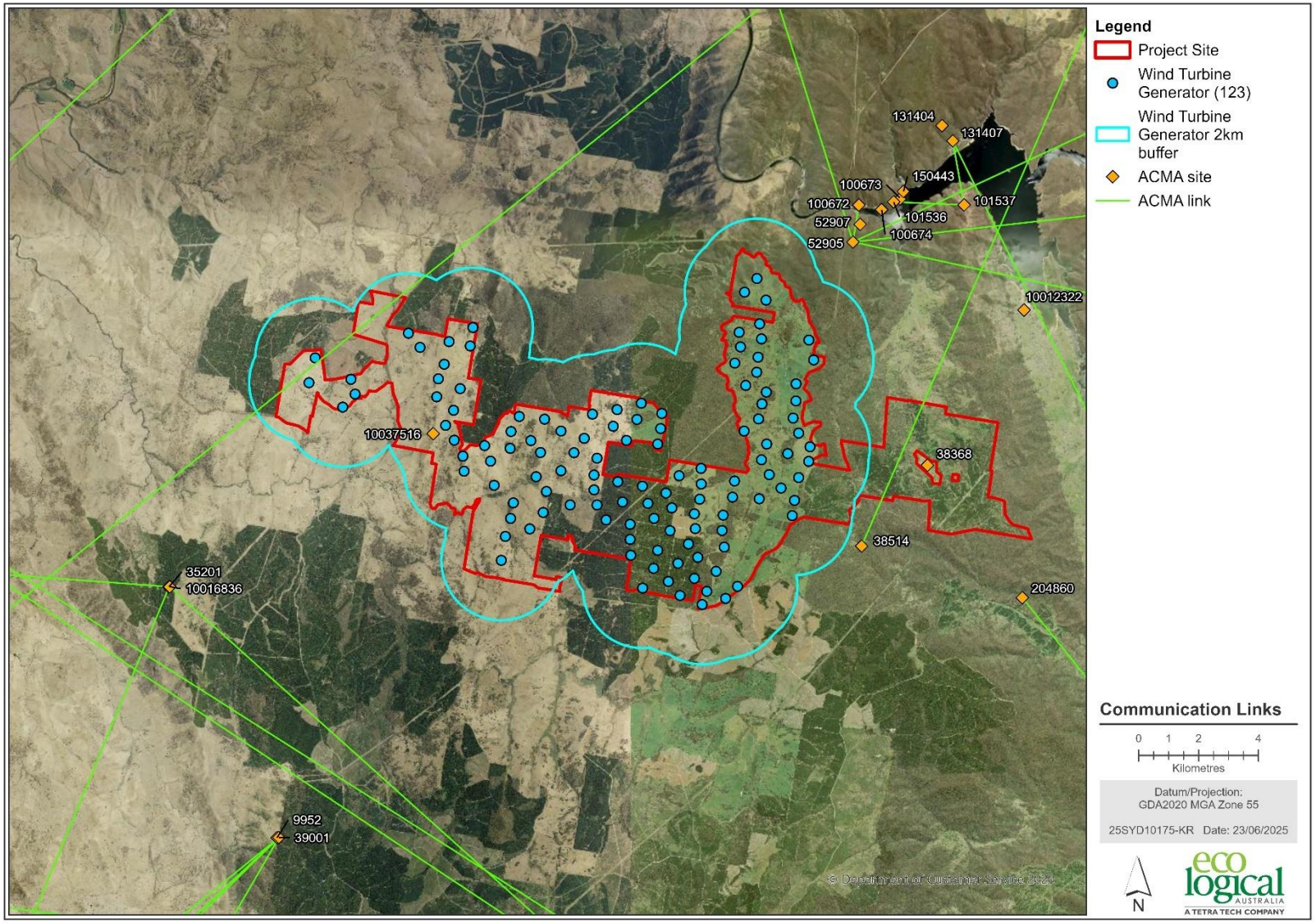

Figure 6-10: Existing communication sites and links within and in proximity to the Project Site

6.7. Aboriginal Heritage

6.7.1. Existing Environment

The Project site is located on the approximate boundary between the traditional lands of the Wiradjuri and Ngunnawal people (Tindale, 1974). An extensive Aboriginal Heritage Information Management System (AHIMS) database search was undertaken on 16 April 2025 within a 14 km area surrounding the Project site. Conducting a search in this proximity allows predictive modelling to be undertaken to inform the potential for sites to occur within the Development Corridor and better assess the Project site during detailed assessment in the EIS phase.

The AHIMS search identified 116 Aboriginal sites, and no Aboriginal places recorded within the search parameters. Of the 116 sites, four (4) are located within the boundaries of the Project Site (Table 6-11; Figure 6-11). Of these four, two (2) are also within the Development Corridor, being AHIMS ID 57-1-0277 and AHIMS ID 56-3-0153.

Table 6-11: AHIMS sites within the Project Site

AHIMS Site IF, Site Name	Site Feature(s)
AHIMS ID 56-3-0152; Brookland Scar Tree 1	Culturally modified tree
AHIMS ID 56-3-0153; Julong Scar Tree 1	Culturally modified tree
AHIMS ID 57-1-0277, Klemms Cut Road	Artefact
AHIMS ID 57-1-0278, Goodradigbee Pine Plantation	Artefact

The NSW *Native Title Act 1994* was introduced to work in conjunction with the Commonwealth *Native Title Act 1993*. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act. There are no Native Title Claims or Native Title Determinations within the Project Site. The Project Site overlaps with the 'Tumut Brungle Area Agreement' (NIA 1998/001) Indigenous Land Use Agreement (ILUA). The Applicant for the Tumut Brungle Area Agreement is the New South Wales Aboriginal Land Council, represented by NTSCORP Limited. Consultation with the relevant parties will be undertaken as part of the ACHA consultation process.

6.7.2. Potential Impacts

Aboriginal heritage impacts are outlined in Table 6-12. The key receptors for these potential impacts are First Nations people and the community.

Table 6-12: Potential Aboriginal heritage impacts because of the Project

Project Phase	Potential Impact
Construction	Excavation and access road construction has the potential to impact on unknown artefacts/values. This could include impacts to Aboriginal sites or places listed in LEP schedules, the State Heritage Register, the AHIMS, the National Heritage List, the World Heritage List, or objects and places not listed of heritage value.
Operation	Permanent change to potentially sacred and cultural landscapes and places for Aboriginal people. The proposed use of the area may impede community access to Aboriginal sites and objects.
Cumulative	Potential for cumulative impacts to Aboriginal heritage and degradation of the intactness and significance of known Aboriginal sites.

6.7.3. EIS Assessment Approach

Based on the size of the Project Site and the presence of multiple archaeologically sensitive landscape features, an ACHA for the proposed Project will be required to be prepared in accordance with the requirements of the NPW Act.

As a component of the ACHA process, consultation with local Aboriginal Communities and representatives will be undertaken in accordance with the 'Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010' (DECCW, 2010a). In addition, it is likely that archaeological test excavation will be required in accordance with the 'Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW' (OEH, 2011), the 'Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW' (DECCW, 2010b).

The ACHA will also have regard to the requirements in Section 6 of the *Wind Energy Guideline* (DPHI, 2024a).

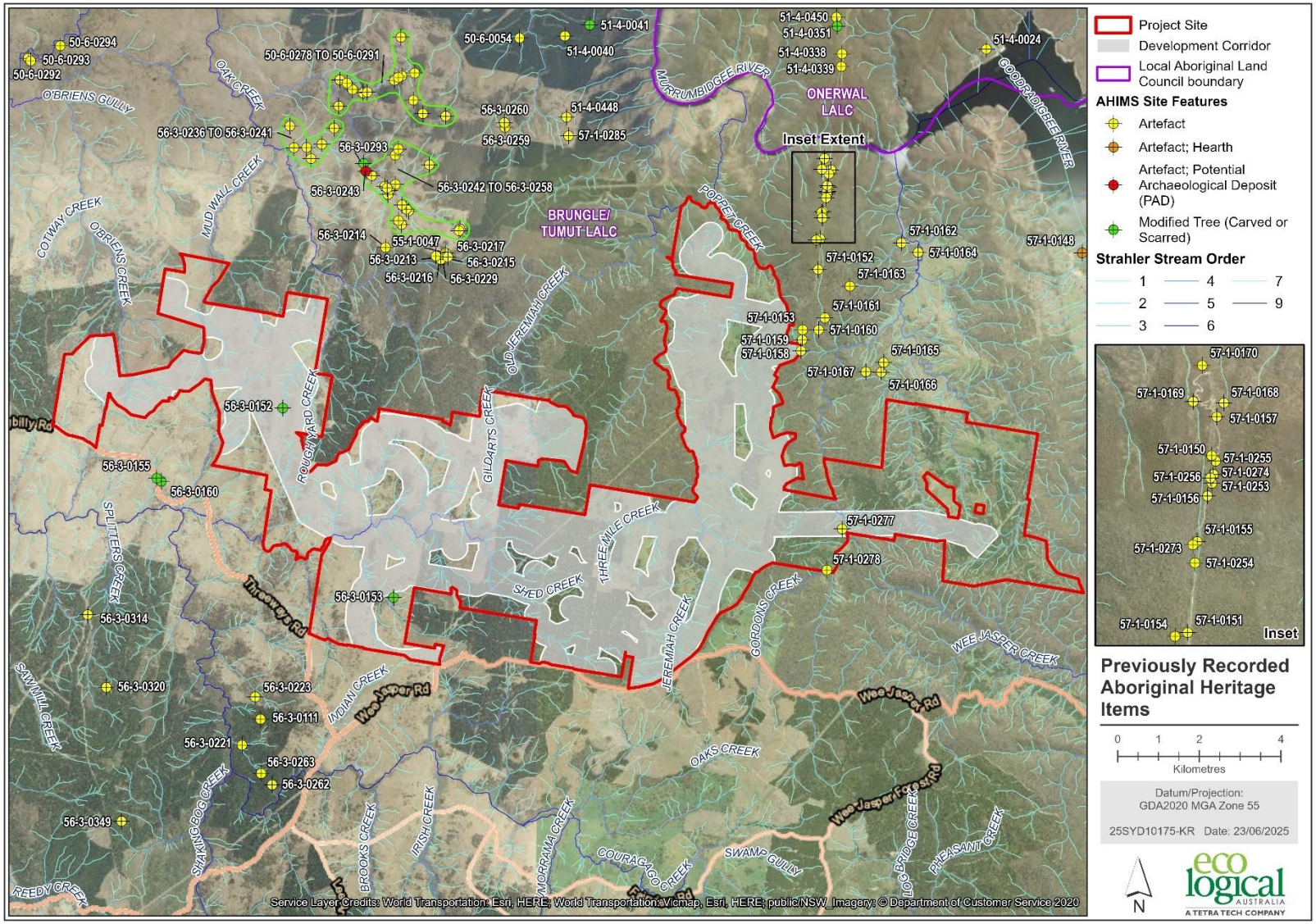

Figure 6-11: AHIMS sites within and surrounding the Project Site

6.8. Historic Heritage

6.8.1. Existing Environment

Searches of the Australian Heritage Database, the State Heritage Register (SHR) and the Gundagai LEP 2011, Yass Valley LEP 2013 and Tumut LEP 2010, utilising the terms "Adjungbilly/Burrinjuck" were conducted on 22 April 2025 to determine if any places of archaeological and/or heritage significance were located within the study area.

No historic items of significance were recorded on these databases as being within the Project Site (Figure 6-12).

6.8.2. Potential Impacts

Historic heritage impacts are outlined in Table 6-13. The key receptors for these potential impacts are the community.

Table 6-13: Potential historic heritage impacts because of the Project

Project Phase	Potential Impact
Construction	Excavation and access road construction has the potential to impact on unknown historic relics/artefacts. This could include impacts to built structures, archaeological sites, or artefacts/relics.
Operation	Potential impact to unknown historic heritage.
Cumulative	Potential for cumulative impacts to historic heritage

6.8.3. EIS Assessment Approach

If required, a Statement of Heritage Impact (SoHI) will be completed for the Project in accordance with the Guidelines for Preparing a Statement of Heritage Impact (DPE, 2023).

This will have regard to the requirements in Section 6 of the *Wind Energy Guideline* (DPHI, 2024a).

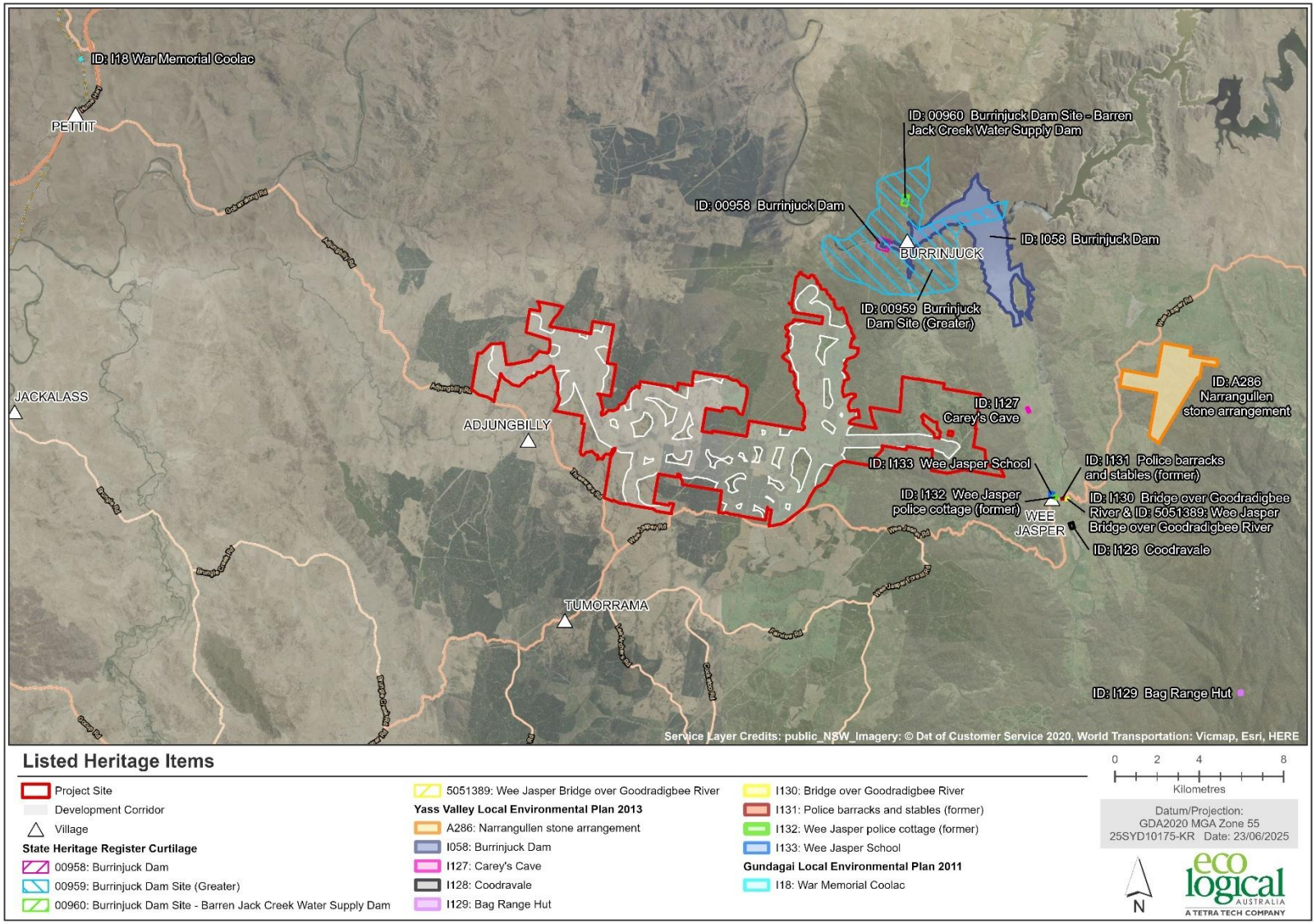

Figure 6-12: Listed heritage items in proximity to the Project Site

6.9. Soils and Land Use

6.9.1. Existing Environment

6.9.1.1. Soil Landscapes

The Project is located with two NSW Bioregions, the South Western Slopes Bioregion and the South Eastern Highlands Bioregion. The climate within the South Western Slopes Bioregion is dominated by a sub-humid climate, with hot summers and no dry season. Three soil classifications dominate the Project Site, being Chromosols, Ferrosols and Kandosols, with pockets of Kurosols occurring as well. These soils have a range of fertility classes, ranging from low to moderate (Kandosols and Kurosols), to moderate (Chromosols) to high agricultural potential (Ferrosols). As the fertility capability ranges for these soil classes, so does the water holding capacity.

Additionally, three NSW (Mitchell) Landscapes occur across the Project Site, with Young Hills and Slopes being the dominant Mitchell Landscape.

6.9.1.2. Naturally Occurring Asbestos

The Project Site is in the vicinity of geological units comprising serpentine minerals, with the potential for Naturally Occurring Asbestos (NOA) to be present. Reference to the Tumut 1:100,000 Geological Sheet (Basden, 1990) shows that the Coolac Serpentinite forms the Serpentine Ridge and Honeysuckle Range to the west of the Project Site. As seen in Figure 6-13, small areas of NOA are mapped as having low potential within the Development Corridor. However, given the map is an indicative tool, testing by a National Association of Testing Authorities (NATA) accredited laboratory is required to confirm the absence/presence of NOA.

6.9.1.3. Contamination

A search of the NSW EPA contaminated land register was carried out and identified no contaminated sites recorded within or in proximity (within 5 km) of the Project Site. However, past agriculture land uses have the potential to result in land contamination through chemical use and storage.

6.9.1.4. Land and Soil Capability

Figure 6-14 outlines the Land and Soil Capability (LSC) across the Project Site. The mapping is based on an eight-class system with values ranging between 1 and 8 which represent a decreasing capability of the land to sustain various types of agricultural land use. Class 1 represents land capable of sustaining most land uses including those that have a high impact on the soil (e.g., regular cultivation), whilst Class 8 represents land that is not suitable for agricultural production (DPIE, 2020). The Project Site contains land broadly classified as Classes 4, 6 and 7 (Table 6-14). However, the Project Site is currently used for agricultural purposes (mainly grazing) and contains no land mapped as Biophysical Agricultural Strategic Land (BSAL), or Critical Industry Cluster (CIC).

Table 6-14: LSC Classes within the Project Site and Development Corridor

Land and Soil Capability Class (LSC)	Within Project Site (ha)	Within Development Corridor (ha)
Class 1	0.00	0.00
Class 2	0.00	0.00
Class 3	0.00	0.00
Class 4	302.31	225.86
Class 5	0.00	0.00
Class 6	8,171.96	5,901.65
Class 7	1,987.94	565.90

6.9.1.5. Mining Titles

There is currently one active exploration mining title within the Project Site for minerals. It is held by Legacy Minerals Pty Ltd (Figure 6-15).

6.9.2. Potential Impacts

Soils and land use impacts are outlined in Table 6-15. The key receptors for these potential impacts are the Project Site, adjacent landowners and local ecosystems.

Table 6-15: Potential soil and land use impacts because of the Project

Project Phase	Potential Impact
Construction	The exposure of natural ground surface and subsurface through vegetation removal and soil excavation for infrastructure works, and management of material quantities for balancing earthworks.
	Potential erosion with soils on steep slopes more susceptible to erosion given their thin nature and lesser vegetation cover. Sediments eroded from soil material at higher elevations can be deposited in habitat zones and waterways further downslope, potentially impacting ecosystem functions of terrestrial vegetation communities and receiving waters
	Contamination of land and soils can occur during construction works because of spills and leaks from vehicles, plant, and equipment; stored fuels and hazardous materials; and the inappropriate disposal of waste
Operation	The Project is likely to have limited potential impact on soil and land resources during the operational phase. The primary impact would be run off from spills and leaks from vehicles, plant and equipment, stored fuels and hazardous materials, and the inappropriate disposal of waste if appropriate controls are not implemented and undertaken.
	Provided the appropriate erosion and sediment controls, designed, and constructed to suit the properties of site soils and climatic conditions during the construction phase are implemented, there will be a low potential for soil erosion and sediment
	Disturbance during the removal of infrastructure and temporary landforms may have similar impacts to those described in the construction and operation phases above. The construction of safe, stable, and non-polluting final landforms during decommissioning may be impacted if not sympathetic to the properties of the soils and any waste rock/spoil used
Cumulative	Project expansion and enhancement would likely result in further land clearing at WTG sites, contamination events and increased potential of weed migration and colonisation in the area
	Unexpected finds or uncontrolled contamination events may contribute to land contamination if not adequately identified and appropriately disposed of
	Inadequate or failed rehabilitation efforts could lead to unfavourable ecological outcomes and visual amenity impacts in the broader community

6.9.3. EIS Assessment Approach

Impacts to soils will be addressed within the EIS and will include assessment on the climate, topography, Mitchell landscapes, geology, soil landscapes, soil erodibility and dispersibility, erosion hazards and erosion potential of the Project Site and surrounding area as part of the land use assessment and conceptual erosion and sediment control plan. The assessment will describe mitigation measures aimed to minimise the potential for soil erosion and negative land use impacts, including invasive weed mitigation and contamination controls.

If required, an NOA Assessment will be undertaken to confirm the presence of NOA and provide appropriate mitigation measures.

This will have regard to the requirements in Section 6 of the Wind Energy Guideline (DPHI, 2024a).

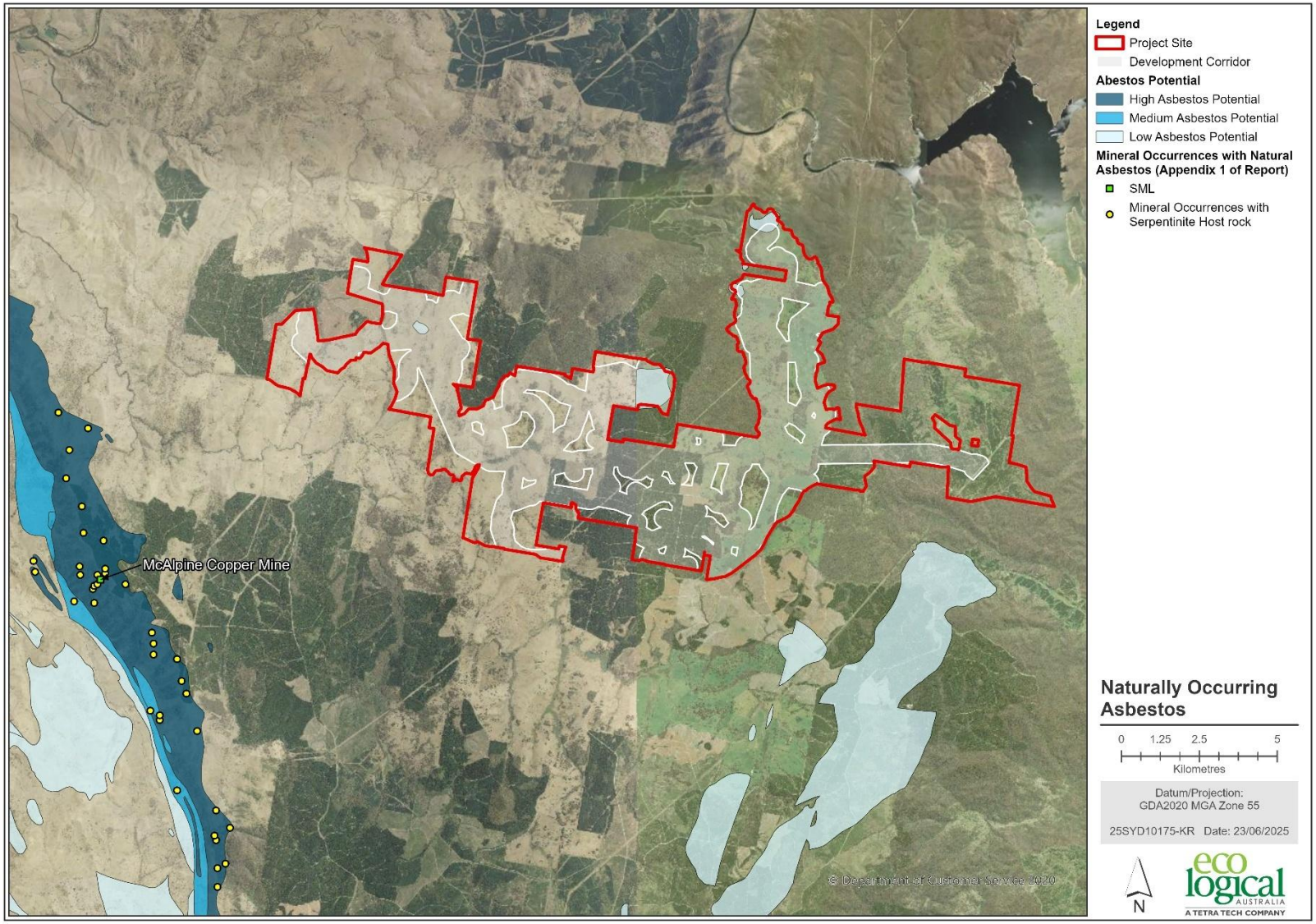

Figure 6-13: Potentially Naturally Occurring Asbestos within the Project Site

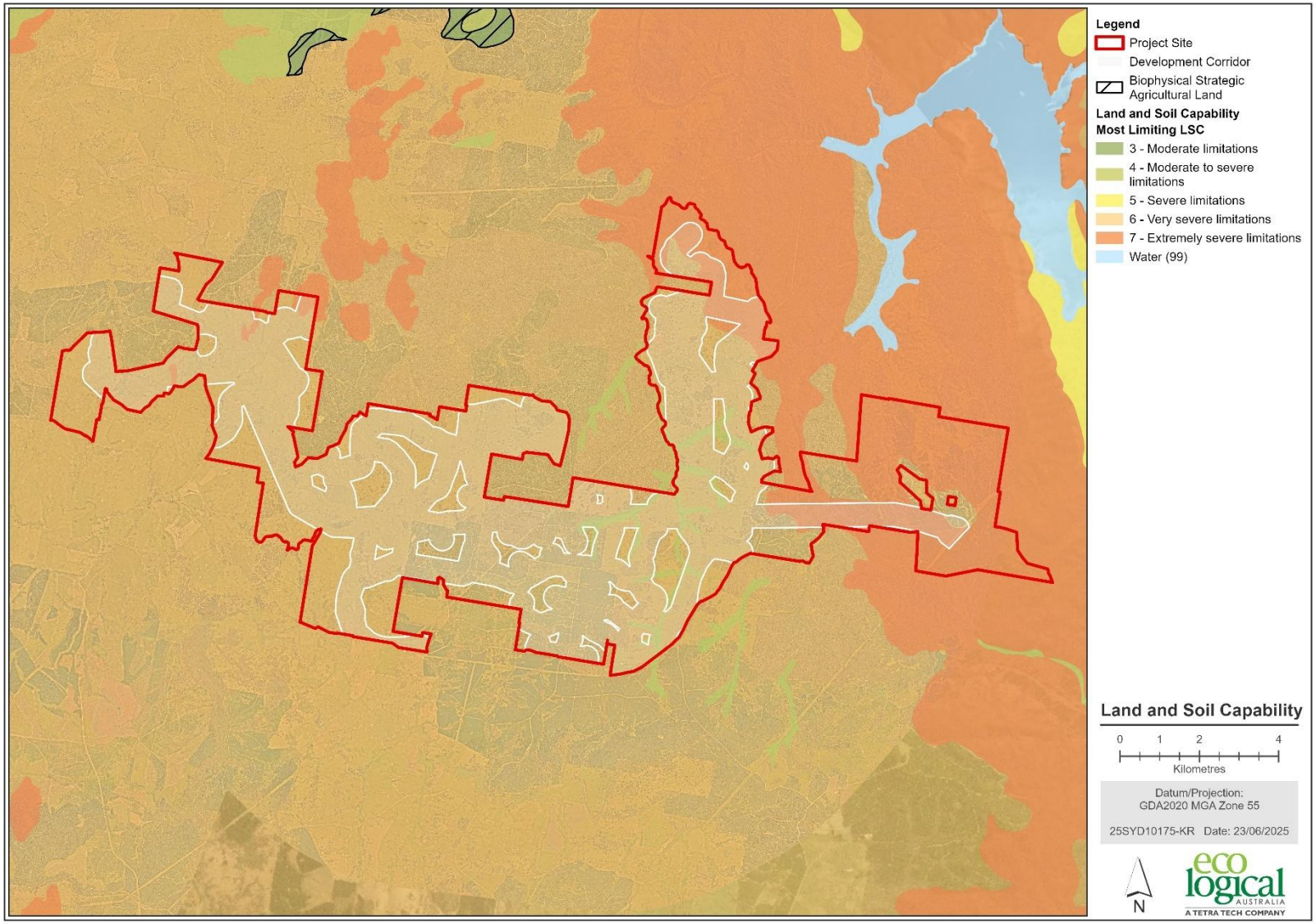

Figure 6-14: Land and soil capability within the Project Site

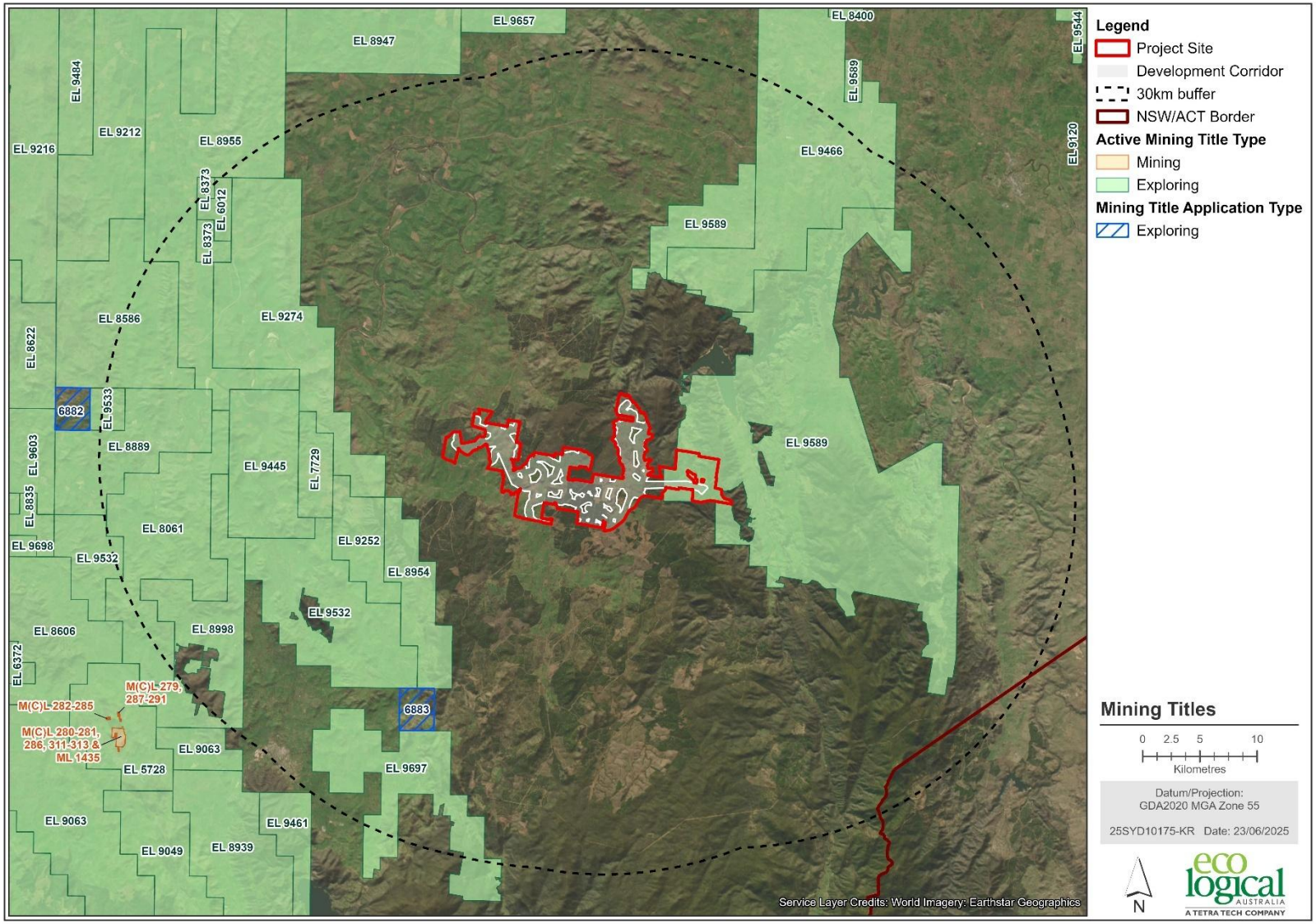

Figure 6-15: Active mining titles within the Project Site

6.10. Surface Water, Groundwater and Aquatic Habitat

6.10.1. Existing Environment

The Project Site is within the Murrumbidgee River catchment area. The Burrinjuck Dam and its impounded reservoir Lake Burrinjuck are also located to the east of the Project Site. From Burrinjuck Dam, the Murrumbidgee River flows through a rugged narrow gorge and is joined by Jugiong and Muttama Creeks from the north and the Tumut River from the south, before emerging onto the western plains near Gundagai. The Murrumbidgee River does not enter the Project Site. However, the Jeremiah Creek, Old Jeremiah Creek, Mud Wall Creek, Three Mile Creek, Gildarts Creek, and Rough Yard Creek all run through the Project Site and constitute 5th and 6th order Strahler watercourses and tributaries of the Murrumbidgee and Tumut Rivers (Figure 6-16). Several smaller tributaries also run through the landscape comprising 1st, 2nd, 3rd, and 4th order Strahler watercourses and ephemeral creeks (Figure 6-16).

Surface water in the Project Site is regulated by the Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2003 which covers approximately 1,200 km of regulated rivers and creeks below Burrinjuck and Blowering Dams, including the Yanco-Billabong Creek System. Groundwater is regulated by the Lower Murrumbidgee Groundwater Sharing Plan, which is managed by the Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2016 and the NSW Government, who manages licensed water for the environment. Further some areas of the Project Site are mapped as Sensitive Land under the respective LEPs.

Several creeks and drainage lines, which occur in or around the Project Site have been identified as Key Fish Habitat, including Gildarts, Old Jeremiah, Jeremiah, and Three Mile Creeks (Figure 6-16). These are aquatic areas that have been identified as important to the sustainability of the maintenance of fish populations.

6.10.2. Potential Impacts

Surface water, groundwater and aquatic habitat impacts are outlined in Table 6-16. The key receptors for these potential impacts are aquatic habitat, flora and fauna, as well as the community.

Table 6-16: Potential surface water, groundwater and aquatic habitat impacts because of the Project

Project Phase	Potential Impact
Construction	Pre-construction and construction impacts may impact water quality associated with erosion and sedimentation.
	The potential for changes to downstream flood extents because of the temporary works.
	Contamination of surface water and groundwater could occur during construction works in the event of spills and leaks from vehicles, plant, and equipment; stored fuels and hazardous materials; and the inappropriate disposal of waste.
	Impacts to aquatic ecosystems because of WTG, access track and ancillary infrastructure construction, where activities cross or are constructed within close vicinity to waterways
	Removal of riparian vegetation for the construction of watercourse crossings may destabilise sections of creek banks and potentially lead to erosion of adjacent banks and cause subsequent sedimentation of the water
	Potential impacts to water quantity and availability due to construction water requirements, alterations to overland flow paths and a reduction in environment health from groundwater drawdown or reduced streamflow.
Operation	Management of temporary sewage systems established onsite for the duration of the Project pose potential risk to surface water quality should spills occur

Project Phase	Potential Impact
Cumulative	Cumulative impacts to watercourses and aquatic habitats are not anticipated because of the Project if appropriate mitigations measures are implemented however, cumulative impacts associated with water usage and availability may occur.

6.10.3. EIS Assessment Approach

A Surface Water Assessment, Groundwater Assessment and Aquatic Ecology Assessment will be undertaken as part of the EIS and will include, but not be limited to:

- A site water balance assessment to quantify water demand, identify water sources (surface and groundwater), based on a resource assessment and feasibility investigations, and define water requirements and supply arrangements for construction and operation
- Flood modelling (if required depending on the routes chosen for the access tracks and the likely flood extents expected)
- Assessing the likely impacts to Waterfront Land and aquatic habitat, and how activities will be designed and implemented in accordance with the relevant guidelines
- Identification of any necessary impact mitigation and management measures.

This will have regard to the requirements in Section 6 of the Wind Energy Guideline (DPHI, 2024a).

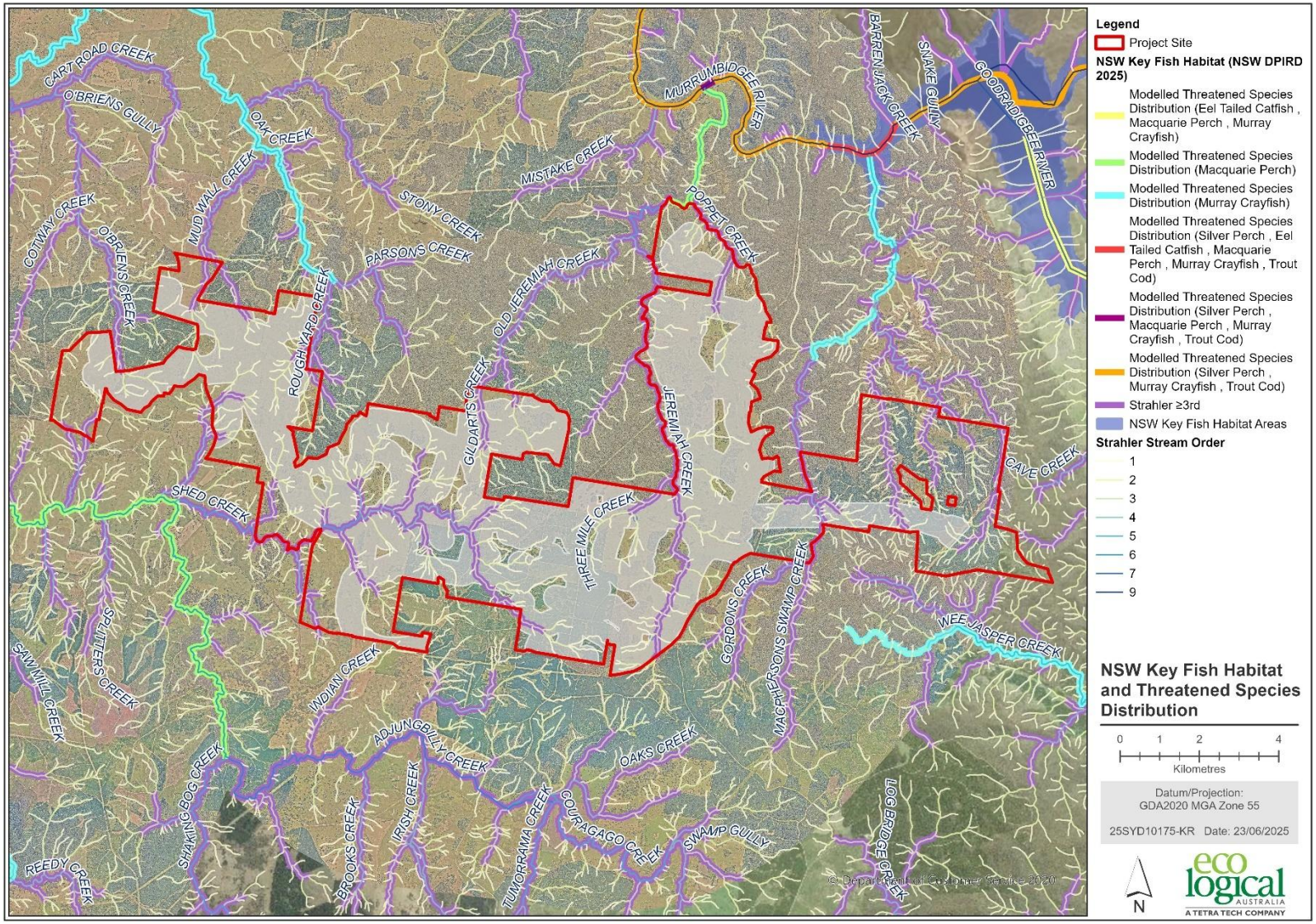

Figure 6-16: Mapped watercourses and aquatic habitat within the Project Site

6.11. Social and Economic

6.11.1. Existing Environment

A Social Impact Scoping Report was undertaken by AAP Consulting (2025) in accordance with the *Social Impact Assessment Guideline for State Significant Projects* (DPHI, 2025) (Appendix F), which has identified the following:

- The Project's social locality
- The Project's social baseline data
- Vulnerabilities and opportunities within the Project's social locality
- Potential social impacts associated with the Project, including cumulative impacts.

SOCIAL LOCALITY

The social locality for the Project has been defined through a combination of spatial, demographic and land-use characteristics, informed by preliminary engagement and the proposed preliminary Project layout. Spatial categories include:

- Associated Receivers: There are currently 27 associated receivers within 4 km of the Project Site, of which 10 are within the Project Site boundary, who are likely to experience the most direct construction and operational impacts.
- Non-Associated Receivers and Neighbours: There are currently 67 non-associated receivers within 8 km of a WTG, who may experience visual, noise or traffic impacts
- Regional Communities: Parts of the Yass Valley, Cootamundra-Gundagai and Snowy Valleys LGAs that may experience indirect effects or benefits through workforce accommodation, road usage or regional employment.

SOCIAL BASELINE

The Project spans parts of the Cootamundra-Gundagai Regional Council, Yass Valley Council, and Snowy Valleys Council areas. Based on the high-level demographic and housing indicators for these surrounding localities within the 2021 ABS Census data, Table 6-17 identifies some of the comparatives with the social locality compared to the rest of NSW.

Table 6-17: Demographic and housing indicators comparative to the rest of NSW (AAP Consulting, 2025; Appendix F)

Category	Indicator	Snowy Valleys LGA	Cootamundra-Gundagai Regional LGA	Yass Valley LGA	Rest of NSW	Comparative Discussion
People	Total population	14,891	11,403	17,281	2,829,637	The surrounding LGAs have small populations, typical of rural and regional areas, which may affect service availability and community resilience.
	Median age	45	49	43	43	Cootamundra-Gundagai has a notably older population (49), which may increase demand for aged care and health services. Yass Valley has the youngest median age (43), equal to the NSW average.
Employment and Income	Labour force participation	56.3%	49.7%	66.8%	56.0%	Yass Valley has a stronger labour market, while Cootamundra-Gundagai shows lower participation, possibly reflecting ageing or fewer job opportunities.
	Median weekly household income	$1,306	$1,132	$2,289	$1,434	Yass Valley significantly exceeds the state and regional averages, suggesting higher earning capacity or commuting to higher-paid jobs.
	Worked full-time **Worked part-time**	57.9% 31.2%	56.5% 32.3%	61.4% 29.8%	54.5% 33.7%	High full-time employment rates suggest job stability and potentially strong availability of employment opportunities; Yass Valley shows the highest full-time share.
	Unemployment rate	4.2%	4.0%	2.7%	4.6%	All LGAs have lower unemployment rates than NSW overall, indicating generally favourable job conditions.
	Did voluntary work last 12 months	19.9%	20.5%	22.2%	15.5%	Higher levels of volunteering in local LGAs suggest strong community networks and civic engagement.
	Industry of employment, top responses	• Beef Cattle Farming (Specialised) 4.9% • Log sawmilling 4.0% • Supermarket and Grocery Stores 3.4%.	• Aged Care Residential Services 4.1%. • Supermarket and Grocery Stores 4%. • Meat Processing 3.9%.	• Central Government Administration 7.6% • Defence 3.4% • State Government Administration 2.9% • Sheep Farming (specialised) 2.6%	• Hospitals (except Psychiatric Hospitals) 4.4% • Other Social Assistance Services 3.1%	Industries reflect rural settings: agriculture and health dominate. Yass Valley leans more to government and professional services.

Category	Indicator	Snowy Valleys LGA	Cootamundra-Gundagai Regional LGA	Yass Valley LGA	Rest of NSW	Comparative Discussion
		• Corrugated Paperboard and Paperboard Container Manufacturing 3.1% • Other Social Assistance Services 3.1%.	• Sheep Farming (specialised) 3.2% • Beef Cattle Farming (Specialised) 2.6%	• Primary Education 2.6%	• Aged Care Residential Services 2.9% • Supermarket and Grocery Stores 2.7% • Primary Education 2.5%	
	Average number of motor vehicles per dwelling	2	1.9	2.4	1.9	Higher rates of vehicle ownership in rural areas reflect limited public transport and longer travel distances.

VULNERABILITIES AND OPPORTUNITIES WITHIN THE SOCIAL LOCALITY

Based on the data collected to inform the social baseline, Table 6-18 outlines the potential vulnerabilities and opportunities identified within the Project's social locality, as defined above.

Table 6-18: Potential vulnerabilities and opportunities within the social locality (AAP Consulting, 2025; Appendix F)

Vulnerabilities / Opportunities		Description
Vulnerabilities	Ageing Population	The higher median age indicates a significant proportion of older residents. This demographic shift may lead to increased demand for healthcare services and specialised support, potentially straining local healthcare resources.
	Low Population Density	With only 20 people in Tumorrama and 101 in Adjungbilly, many households may be socially or geographically isolated, presenting communication and emergency response challenges during construction and operation.
	Education and Income Disparity	Lower levels of tertiary education attainment and lower median personal incomes in the Snowy Valleys and Cootamundra-Gundagai LGAs may indicate barriers to economic mobility and employment participation in higher-value project-related roles.
	Transport Dependency	High rates of motor vehicle ownership and limited public transport reflect car dependence, which could be further impacted by Project-related traffic volumes.
	Rental and Mortgage Stress	Although housing stress is generally lower than the NSW average, some households in Yass Valley LGA are experiencing higher mortgage repayments, which could compound with any perceived Project-related cost-of-living pressures.
Opportunities	Strong Community Engagement	High rates of voluntary work across all LGAs (up to 22.2%) indicate strong civic participation, which may support inclusive Project engagement, local stewardship, and community benefit sharing initiatives.
	Low Unemployment	All three LGAs exhibit unemployment rates below the NSW average, suggesting relatively stable job markets. The Project may support regional employment during construction, particularly through targeted local procurement and contracting.
	Established Rural Industries	The prominence of agriculture and local services (e.g. aged care, education) in the employment profile could support synergies with the Project's operational needs and local supply chains.
	Relatively High Household Incomes in Some Areas	Adjungbilly and Tumorrama report higher-than-average household incomes, reflecting potential resilience to short-term economic shocks and greater capacity to participate in benefit-sharing programs.
	Existing Social Cohesion	Small community sizes and traditional family structures may support community resilience, provided the Project maintains clear communication and transparent engagement practices.

6.11.2. Potential Impacts

Potential social impacts have been scoped with the consideration of the following and are outlined in Table 6-19:

- The population likely to be affected, including different community subgroups.
- The timing of potential social impacts across Project phases (construction, operation, decommissioning).
- The characteristics of each impact (extent, duration, scale, and community sensitivity).

- The likelihood and magnitude of each social impact to inform unmitigated significance ratings

The proximity of the Project to other proposed renewable energy developments presents potential cumulative social impacts. These will be assessed in the EIS phase in collaboration with relevant technical studies.

Table 6-19: Scoped potential social impacts associated with the Project (AAP Consulting, 2025: Appendix F)

Theme	ID	Impact to People	Timing	Significance Type	Stakeholder Group	Social Impact Ranking (Without Mitigation)			Social impact categories	Potential Vulnerabilities or Opportunities	Level of Assessment in SIA
						Likelihood	Magnitude	Significance Rating			
Visual Impacts	S01	Perceived loss of rural landscape character and visual amenity from WTG height, density, shadow flicker, and night lighting.	Operations	Negative	Associated landowners, neighbouring landowners and surrounding communities	Likely	Minor	High	Surroundings	Vulnerability: Aging populations and those living in an area for a long period of time may be more affected by visual changes as they impact their familiar environment and sense of place.	Detailed, requiring broader consultation and targeted research.
	S02	Cumulative visual fatigue and erosion of rural identity from combined impacts of the Project and nearby wind farms.	Operations	Negative	Surrounding communities and local Councils	Likely	Moderate	High	Surroundings	Opportunity: Explore visual mitigation and community amenity initiatives. Vulnerability: Residents with long-standing ties to the area may perceive greater change or loss.	Surroundings
Noise Impacts	S03	Operational noise, including low-frequency and infrasound, may cause annoyance, sleep disturbance and reduce wellbeing.	Operations	Negative	Associated landowners and neighbouring landowners	Possible	Moderate	Medium	Health and wellbeing	Vulnerability: Health impacts may be exacerbated for older residents, young children, or those with respiratory conditions	Standard, requiring targeted engagement with those directly impacted.
Construction Impacts	S04	Temporary loss of amenity from construction dust, vibration, and noise, affecting comfort and daily routines.	Construction	Negative	Associated landowners, neighbouring landowners and surrounding communities	Possible	Moderate	Medium	Health and wellbeing	Vulnerability: Older residents and families may be more affected by temporary disruptions.	Standard, requiring targeted engagement with those directly impacted.
Economic Participation and Equity	S05	Local job creation and procurement opportunities during construction may enhance economic security and options for residents, businesses, and First Nations communities.	Construction	Positive	First Nations people and organisations; surrounding communities, local industry and business	Likely	Minor	Medium	Livelihoods	Opportunity: First Nations people and organisations; surrounding communities, local industry and business.	Standard, requiring targeted engagement with those directly impacted.
	S06	Workforce training, skills development, and employment initiatives during construction may improve economic security and social participation for residents and First Nations people.	Construction	Positive	First Nations people and organisations; surrounding communities, local industry and business	Possible	Moderate	Medium	Livelihoods	Opportunity: Leverage local procurement to engage small and First Nations businesses, supporting regional economic participation and benefit sharing.	Standard, requiring targeted engagement with those directly impacted.
	S07	Perceived inequitable distribution of project benefits between associated and non-associated community members, potentially reducing social cohesion.	Construction / Operations	Negative	Associated and neighbouring landowners surrounding community, Local Councils	Possible	Moderate	Medium	Community	Vulnerability: Concerns about inequitable distribution of benefits may lead to community dissatisfaction, especially among lower-income households. Opportunity: Strengthen community benefit sharing.	Standard, requiring targeted consultation and secondary data analysis.
	S08	Temporary reduced availability and affordability of short- and long-term accommodation due to workforce demand, especially during peak tourism or event periods, potentially displacing local workers, residents or visitors.	Construction	Negative	Local businesses, Local Councils, surrounding communities	Likely	Major	High	Accessibility	Vulnerability: Limited affordable housing options may exacerbate housing stability issues for lower-income households, leading to increased demand for local resources.	Detailed, requiring targeted consultation and secondary data analysis.
	S09	Perceived decline in visitor appeal or amenity-based business opportunities (e.g., Airbnbs) due to visual landscape changes and cumulative development.	Construction / Operations	Negative	Local businesses, local councils	Possible	Moderate	Medium	Livelihoods	Vulnerability: Tourism-reliant operators are more sensitive to amenity changes. Opportunity: Local benefit-sharing could target tourism promotion or community infrastructure.	Standard, requiring secondary data review and stakeholder interviews.
Community Cohesion and Decision-Making	S10	Perceived lack of transparency or influence in project decision-making may reduce trust and engagement.	Construction / Operations	Negative	Community interest and service groups, surrounding communities	Possible	Moderate	Medium	Community	Opportunity: High rates of volunteering can be harnessed to support community initiatives, promoting social cohesion and engagement among vulnerable groups.	Standard, requiring targeted consultation and secondary data analysis.
Cultural Heritage	S11	First Nations community members may experience distress if changes to Country are perceived as diminishing cultural values, continuity, and identity.	Construction	Negative	First Nation people and groups	Possible	Moderate	Medium	Culture	Vulnerability: Changes to land use may threaten the cultural practices and identity of First Nations communities, requiring targeted support and engagement.	Standard, requiring targeted consultation and secondary data analysis.

Theme	ID	Impact to People	Timing	Significance Type	Stakeholder Group	Social Impact Ranking (Without Mitigation)			Social impact categories	Potential Vulnerabilities or Opportunities	Level of Assessment in SIA
						Likelihood	Magnitude	Significance Rating			
Mental Health and Wellbeing	S12	Stress, anxiety, or reduced sense of wellbeing caused by noise, visual change, and cumulative project activity.	Construction / Operations	Negative	Associated landowners; Neighbouring landowners; Surrounding communities	Possible	Moderate	Medium	Health and wellbeing	Vulnerability: Long-term residents and those with strong place attachment more prone to social fatigue. Opportunity: Early engagement and clear communication can reduce uncertainty.	Standard, requiring targeted engagement and integration with other impact themes.
Emergency Response and Accessibility	S13	Improved access roads may enhance convenience and emergency response for local residents, especially in isolated or rural areas.	Construction / Operations	Positive	Associated and neighbouring landowners, emergency services.	Possible	Moderate	Medium	Accessibility	Opportunity: Enhanced road infrastructure can improve access to services for isolated residents and vulnerable populations, including those with limited mobility.	Standard, requiring targeted consultation and secondary data analysis.
	S14	Increased construction may cause travel delays, road safety risks and disruption to daily activities.	Construction	Negative	Associated and neighbouring landowners, emergency services.	Possible	Moderate	Medium	Accessibility	Vulnerability: Increased traffic may pose challenges for older residents or those with disabilities who rely on safe access to services.	Standard, requiring targeted consultation and secondary data analysis.
	S15	WTG placement may reduce effectiveness of aerial firefighting, increasing perceived bushfire risk.	Operations	Negative	Associated and neighbouring landowners, emergency services.	Possible	Moderate	Medium	Accessibility	Vulnerability: Residents in fire-prone areas, particularly those with limited mobility or in isolated locations, may face increased risk during emergencies.	Standard, requiring targeted consultation and secondary data analysis.
Environmental Impacts	S16	Distress over potential harm to wildlife and ecosystems, including threatened species.	Construction / Operations	Negative	Community interest groups, surrounding communities, local councils, state governments	Possible	Moderate	Medium	Surroundings	Vulnerability: changes to local ecosystems and biodiversity may disproportionately affect First Nation communities with connections to Country, as well as residents and interest groups who value the area's natural landscapes and biodiversity for recreation and amenity.	Standard, requiring targeted consultation and secondary data analysis.
	S17	Perceived contradiction between renewable energy goals and the use of high-carbon materials (e.g. concrete, steel) may lead to scepticism about the Project's sustainability credentials.	Construction	Negative	Community interest groups, surrounding communities	Possible	Moderate	Medium	Surroundings	Vulnerability: Individuals with strong environmental values may perceive wind infrastructure as inconsistent with sustainability goals, particularly in communities with low existing industry or perceived natural character.	Standard, informed by EIS materials and targeted engagement on environmental values/perceptions
Alternative Energy Preferences	S18	Frustration from community members who prefer alternative energy sources (e.g. solar, hydro).	Construction / Operations	Negative	Industry, surrounding communities, Local councils	Possible	Minor	Low	Livelihoods	Vulnerability: The potential impact on agricultural resources could threaten local livelihoods, particularly for farmers and those dependent on agricultural production.	Minor, informed by secondary research.

6.11.3. EIS Assessment Approach

Based on the scoping findings and early engagement a Social Impact Assessment will be undertaken at the EIS stage in accordance with the *Social Impact Assessment Guideline for State Significant Projects* (DPHI, 2025), which will focus on the following core social themes:

- Community cohesion and decision making
- Way of life and rural amenity
- Health and wellbeing
- Livelihood and economic participation
- Cultural heritage and First Nations engagement
- Accessibility and transport
- Surrounding and environmental values
- Cumulative impacts.

Further the Social Impact Assessment will:

- Update the social baseline to reflect new census data and engagement insights
- Validate and refine the defined area of social influence
- Apply qualitative and quantitative research methods, including targeted interviews and surveys
- Coordinate with technical specialists to interpret indirect social impacts
- Integrate feedback from engagement activities to inform mitigation, benefit-sharing, and monitoring strategies.

6.12. Cumulative Impacts

A preliminary cumulative impact assessment was undertaken in accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPIE, 2022) (Table 6-21). Key considerations for scoping cumulative impacts included the relevant strategic planning frameworks, overlaps in study areas with other projects, the timing of construction, and level of uncertainty. Cumulative impacts were assigned one of three categories of assessment (Table 6-20), which will further be assessed at the EIS stage.

Table 6-20: Cumulative impact assessment categories

Key	
Detailed Assessment	The project may result in significant impacts on the matter, including cumulative impacts. Detailed assessment is characterised by: • Potential overlap in impacts between a future project (e.g., Project A) and the proposed project. • Potential for significant cumulative impacts because of the overlap, requiring detailed technical studies to assess the impacts. • Sufficient data is available on the future project to allow a detailed assessment of cumulative impacts with the proposed project for the relevant matter. • Uncertainties exist with respect to data, mitigation, assessment methods and criteria.
Standard Assessment	The project is unlikely to result in significant impacts on the matter, including cumulative impacts. Standard assessments are characterised by: • Impacts are well understood. • Impacts are relatively easy to predict using standard methods. • Impacts are capable of being mitigated to comply with relevant standards or performance measures. • the assessment is unlikely to involve any significant uncertainties or require any detailed cumulative impact assessment.
N/A	No potential overlap in impacts between a future project and the proposed project that would warrant any consideration in the cumulative impact assessment.

Table 6-21: Cumulative impacts scoping assessment

Project Name	Stage	Distance from Project Site (km)	Landscape and Visual	Noise	Biodiversity	Traffic and Transport	Aboriginal Heritage	Social and Economic
Bondo Wind Farm	In planning	0.00	Potential overlap in impact areas	Potential overlap in impact areas	Potentially impacting same PCTs, TECs and threatened species habitat. Cumulative prescribed impacts (bird and bat WTG strike)	Possible construction overlap	Local context	Construction workforce and short-term accommodation
Jeremiah Wind Farm	In planning	1.21	Potential overlap in impact areas	Potential overlap in impact areas	Potentially impacting same PCTs, TECs and threatened species habitat. Cumulative prescribed impacts (bird and bat WTG strike)	Possible construction overlap	Local context	Construction workforce and short-term accommodation
Burrinjuck Hydro Power Station	Operational	3.51	Local visual catchment	Possible operational overlap	Impacts completed	No construction overlap	Local context	No construction overlap
Bookham Wind Farm	In planning	10.23	Local visual catchment	Possible construction and operational overlap	Potentially impacting same PCTs, TECs and threatened species habitat. Cumulative prescribed impacts (bird and bat WTG strike)	Possible construction overlap	Local context	Construction workforce and short-term accommodation
Conroy's Gap Wind Farm	Approved	27.59	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat. Cumulative prescribed impacts (bird and bat WTG strike)	No construction overlap	Regional context	No construction overlap
Coppabella Wind Farm (Previoulsy known as Yass Valley Wind farm)	Approved	29.74	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat. Cumulative prescribed impacts (bird and bat WTG strike)	No construction overlap	Regional context	No construction overlap
Wallaroo Solar Farm	Approved	33.12	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat.	No construction overlap	Regional context	No construction overlap
McMahons Reef Solar Farm	In planning	42.46	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat.	Possible construction overlap	Regional context	Construction workforce and short-term accommodation
Springdale Solar Farm	Approved	49.68	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat.	No construction overlap	Regional context	No construction overlap
Gunning Solar Farm	Approved	50.97	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	No construction overlap
Cootamundra solar farm	Approved	54.57	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	No construction overlap
Murrumburrah Battery Energy Storage System	In planning	55.05	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	Construction workforce and short-term accommodation
Bango Wind Farm	Operational	56.52	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap
Rye Park Wind Farm	Under construction	61.99	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap
Collector Wind Farm	Operational	71.69	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap

Project Name	Stage	Distance from Project Site (km)	Landscape and Visual	Noise	Biodiversity	Traffic and Transport	Aboriginal Heritage	Social and Economic
Cullerin Range Wind Farm	Operational	72.25	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap
Junee Solar Farm	Operational	74.42	Sufficient separation	Sufficient separation	Impacts completed	Sufficient separation	Regional context	No construction overlap
Snowy 2.0 Stage 2 - Main Works	Under construction	75.08	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	No construction overlap
Capital 2 Wind Farm	Approved	75.10	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	No construction overlap
Gunning Wind Farm	Operational	75.61	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap
Blind Creek Solar Farm (previously Capital Solar Farm)	Approved	78.65	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	No construction overlap
Capital Wind Farm	Operational	79.99	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap
Biala Wind Farm	Operational	83.72	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap
Woodlawn Wind Farm	Operational	84.75	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap
Bomen Solar Farm	Operational	84.86	Sufficient separation	Sufficient separation	Impacts completed	Sufficient separation	Regional context	No construction overlap
Wagga Wagga North Solar Farm 1 (Terrain)	Operational	85.26	Sufficient separation	Sufficient separation	Impacts completed	Sufficient separation	Regional context	No construction overlap
Wagga Wagga North Solar Farm 2 (East Bomen Solar Farm, Wagga Wagga Solar Farm South)	Operational	85.26	Sufficient separation	Sufficient separation	Impacts completed	Sufficient separation	Regional context	No construction overlap
Sebastopol Solar Farm	Operational	89.21	Sufficient separation	Sufficient separation	Impacts completed	Sufficient separation	Regional context	No construction overlap
Gullen Range Wind Farm	Operational	90.37	Sufficient separation	Sufficient separation	Cumulative prescribed impacts (bird and bat WTG strike)	Sufficient separation	Regional context	No construction overlap
Gullen Solar Farm	Operational	91.87	Sufficient separation	Sufficient separation	Impacts completed	Sufficient separation	Regional context	No construction overlap
Gregadoo Solar Farm	Approved	92.84	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	No construction overlap
Temora Solar Farm	Approved	99.11	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	No construction overlap
Merino Solar Farm	In planning	99.20	Sufficient separation	Sufficient separation	Potentially impacting same PCTs, TECs and threatened species habitat (>50 km).	Sufficient separation	Regional context	Sufficient separation

6.13. Other Matters

The EIS will address several issues identified in Table 6-22, however detailed assessments are not proposed as the issues identified can be readily defined, assessed and mitigated using well recognised approaches. These matters will be addressed in the EIS to an appropriate degree of detail and investigation.

Table 6-22: Other matters to be assessed

Matter	Comment
Air Quality	A qualitative air quality assessment will be undertaken for construction activities and will include relevant construction phase air quality controls and mitigation measures. The assessment will be in accordance with relevant NSW Guidelines. Air quality issues relating to the operation of the Project would be minimal and likely only relate to the operation of maintenance vehicles, site staff light vehicles and the occasional heavy vehicles required for deliveries or other works. This will be considered within the qualitative assessment.
Climate Change	Climate change projections for the operational phase of the Project show the potential for an increase in operational risks, associated extreme weather events. These issues will be considered as part of the design development for the Project. Direct climate risks may include increased frequency and severity of extreme rainfall events, increased average temperatures and frequency of heatwaves and increased severity and frequency of bushfires.
Waste	The EIS will describe the likely waste streams to be generated during construction and operation and describe measures to manage, reuse, recycle and dispose of this waste in accordance with relevant guidelines.

6.14. Matters Requiring No Further Assessment

In accordance with the SSD Guidelines, matters that require no further assessment are identified and justified in Table 6-23. This is a result of the Project either not being in proximity to the matter requiring an assessment or the assessment not being applicable to the proposed development.

Table 6-23: Matters that require no further assessment in the EIS

Matter	Justification
Air – Gases (greenhouse)	The Project will produce emissions free energy and avoid emissions generated from traditional energy generation technology. This will offset emissions resulting from the Project, with the emissions payback period for windfarms generally occurring within 6-9 months of operation. Greenhouse gas emissions will be addressed in the justification for the Project as part of the EIS. Scope 1 – 3 GHG emissions generated from construction and operation of the Project will be assessed as part of the EIS.
Access – port, airport and rail facilities	The Project does not involve the development of, or affect access to port, airport or rail facilities.
Amenity – odour	The Project would not produce odorous emissions because of the nature of the Project
Hazards and Risks – coastal hazards, land movement, dam safety	The Project is not proposed on or in proximity to a coastal setting. The Project does not generate a risk of land movement. The Project does not propose to construct, maintain or decommission a dam.
Social – decision-making systems	The Project would have no impact on decision making systems but would be undertaken in accordance with the relevant systems

7. Conclusion

This Scoping Report has outlined the proposed Saddletop Wind Farm and established the planning context of the Project, which is currently in the early planning stage. The purpose of this Scoping Report is to request and inform the content of the SEARs for the Project. The SEARs will specify the requirements of the EIS which will be prepared to accompany the SSD Project application and will address the management of key issues and other issues identified in the assessment process.

The scope of the Project includes the construction, operation, decommissioning, and rehabilitation of the Project Site, including the construction and operation of key Project elements as outlined in Table 3-1. The operation of the Project will involve the generation of electricity utilising the abundant wind resources of the Riverina and South East regions and the storage of electricity in the NEM. The Project has the potential to provide numerous benefits, including:

- Providing sustainable, renewable energy and storage that directly contributes to the reduction of greenhouse gas emissions and mitigating the impacts of climate change
- Aiding both the State and Federal Government in achieving renewable energy targets
- Providing additional generation and storage capacity to the grid to assist in meeting future load demands as coal powered generators retire
- Providing local and regional economic and social benefits through investment opportunities, direct and indirect full-time employment in construction and operation jobs and the creation of community enhancement funds
- Providing ongoing economic stimulus through payments to associated landowners, including providing 'drought proof' income through times of environmental hardships.

The Project has been declared SSD in accordance with the provisions of both the Planning Systems SEPP and the EP&A Act.

Regarding the provisions of the EPBC Act, while preliminary biodiversity surveys have been carried out, additional detailed surveys are required to determine potential impacts on MNES. Accordingly, the Proponent will refer the Project to the Commonwealth Minister for the Environment and will likely conservatively nominate that there is potential to have a significant impact on MNES. It has therefore been assumed that a single EIS will be required for the Project, and that the EIS will address the requirements of all State and Commonwealth agencies. The EIS will be supported by comprehensive technical reports by suitable technical experts as appendices to the main report.

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Saddletop Wind Farm

Appendix A – Schedule of Lands

Squadron Energy

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Tenure Type	Description
FREEHOLD	99/DP751002
FREEHOLD	93/DP750970
FREEHOLD	9/DP625769
FREEHOLD	88/DP751002
FREEHOLD	87/DP751002
FREEHOLD	87/DP750978
FREEHOLD	86/DP750979
FREEHOLD	86/DP750978
FREEHOLD	85/DP751002
FREEHOLD	85/DP750979
FREEHOLD	8/DP625769
FREEHOLD	77/DP751002
FREEHOLD	76/DP751002
FREEHOLD	75/DP750979
FREEHOLD	70/DP750979
FREEHOLD	7/DP625769
FREEHOLD	69/DP750979
FREEHOLD	68/DP750979
FREEHOLD	64/DP750979
FREEHOLD	64/DP750978
FREEHOLD	6/DP625764
FREEHOLD	6/DP1304595
FREEHOLD	59/DP750979
FREEHOLD	57/DP750979
FREEHOLD	57/DP750970
FREEHOLD	56/DP750970
FREEHOLD	54/DP750970
FREEHOLD	53/DP751002
FREEHOLD	53/DP750978
FREEHOLD	52/DP750978
FREEHOLD	5/DP750978

FREEHOLD	5/DP625764
FREEHOLD	49/DP751002
FREEHOLD	48/DP751002
FREEHOLD	45/DP750979
FREEHOLD	44/DP750979
FREEHOLD	43/DP750982
FREEHOLD	41/DP750979
FREEHOLD	40/DP750979
FREEHOLD	4/DP830591
FREEHOLD	4/DP625764
FREEHOLD	4/DP1000838
FREEHOLD	37/DP750979
FREEHOLD	34/DP750978
FREEHOLD	33/DP750979
FREEHOLD	31/DP750979
FREEHOLD	31/DP625765
FREEHOLD	30/DP750979
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FREEHOLD	26/DP625771
FREEHOLD	252/DP750978
FREEHOLD	25/DP625771
FREEHOLD	24/DP750979
FREEHOLD	24/DP625766
FREEHOLD	231/DP750978
FREEHOLD	231/DP750970

FREEHOLD	23/DP750979
FREEHOLD	23/DP625766
FREEHOLD	22/DP625766
FREEHOLD	219/DP750978
FREEHOLD	21/DP625763
FREEHOLD	202/DP750970
FREEHOLD	201/DP750970
FREEHOLD	200/DP750970
FREEHOLD	20/DP625763
FREEHOLD	2/DP861528
FREEHOLD	2/DP792771
FREEHOLD	2/DP734601
FREEHOLD	2/DP581810
FREEHOLD	2/DP232547
FREEHOLD	2/DP1241503
FREEHOLD	2/DP1000839
FREEHOLD	19/DP625763
FREEHOLD	183/DP750970
FREEHOLD	18/DP625767
FREEHOLD	17/DP625767
FREEHOLD	161/DP750979
FREEHOLD	16/DP750979
FREEHOLD	16/DP625768
FREEHOLD	158/DP750979
FREEHOLD	155/DP750970
FREEHOLD	15/DP625768
FREEHOLD	144/DP750970
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FREEHOLD	13/DP750979
FREEHOLD	13/DP625762
FREEHOLD	12/DP625762
FREEHOLD	114/DP750979
FREEHOLD	112/DP750978
FREEHOLD	11/DP793422

FREEHOLD	11/DP750982
FREEHOLD	11/DP625762
FREEHOLD	108/DP750979
FREEHOLD	106/DP750982
FREEHOLD	104/DP750970
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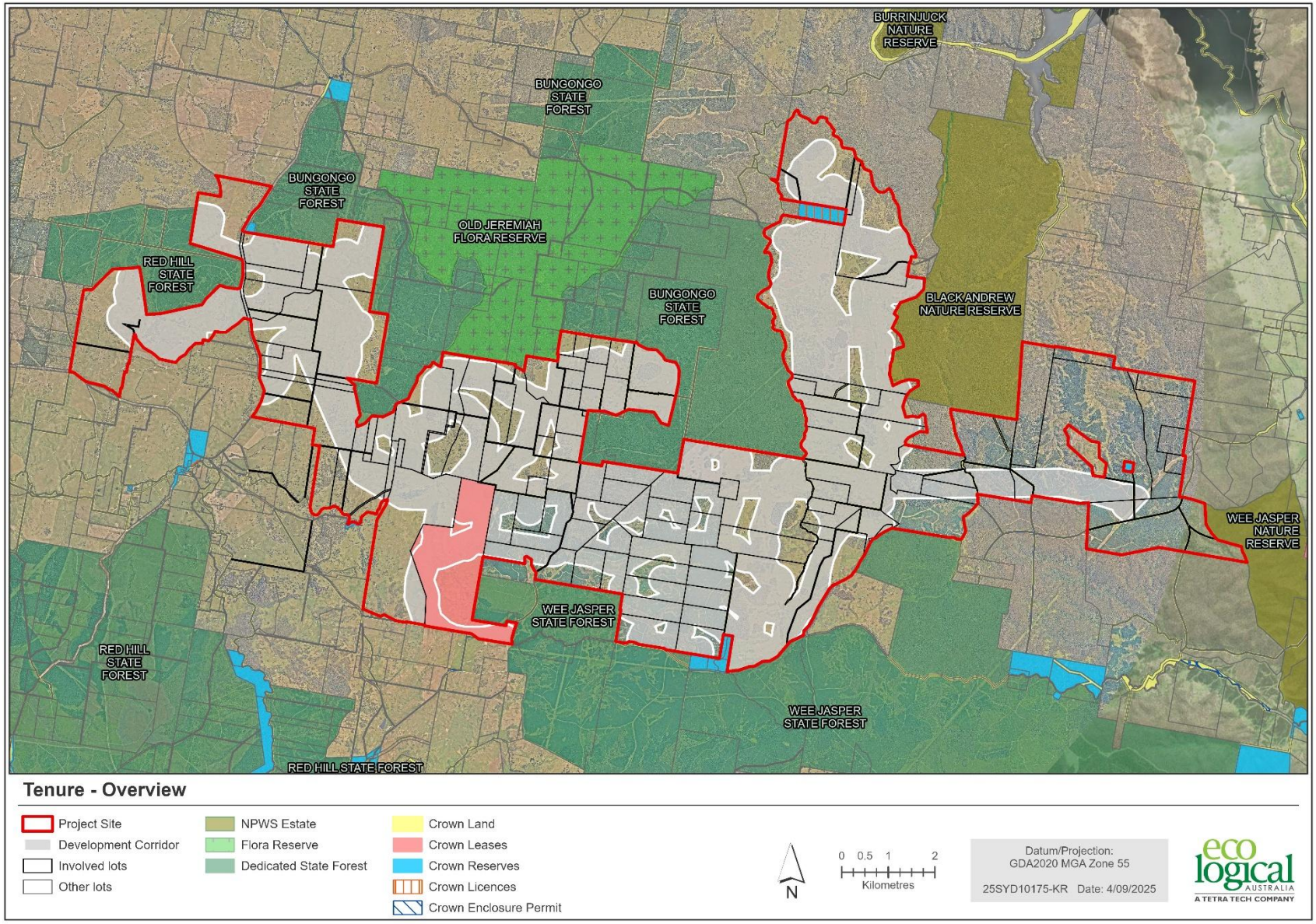
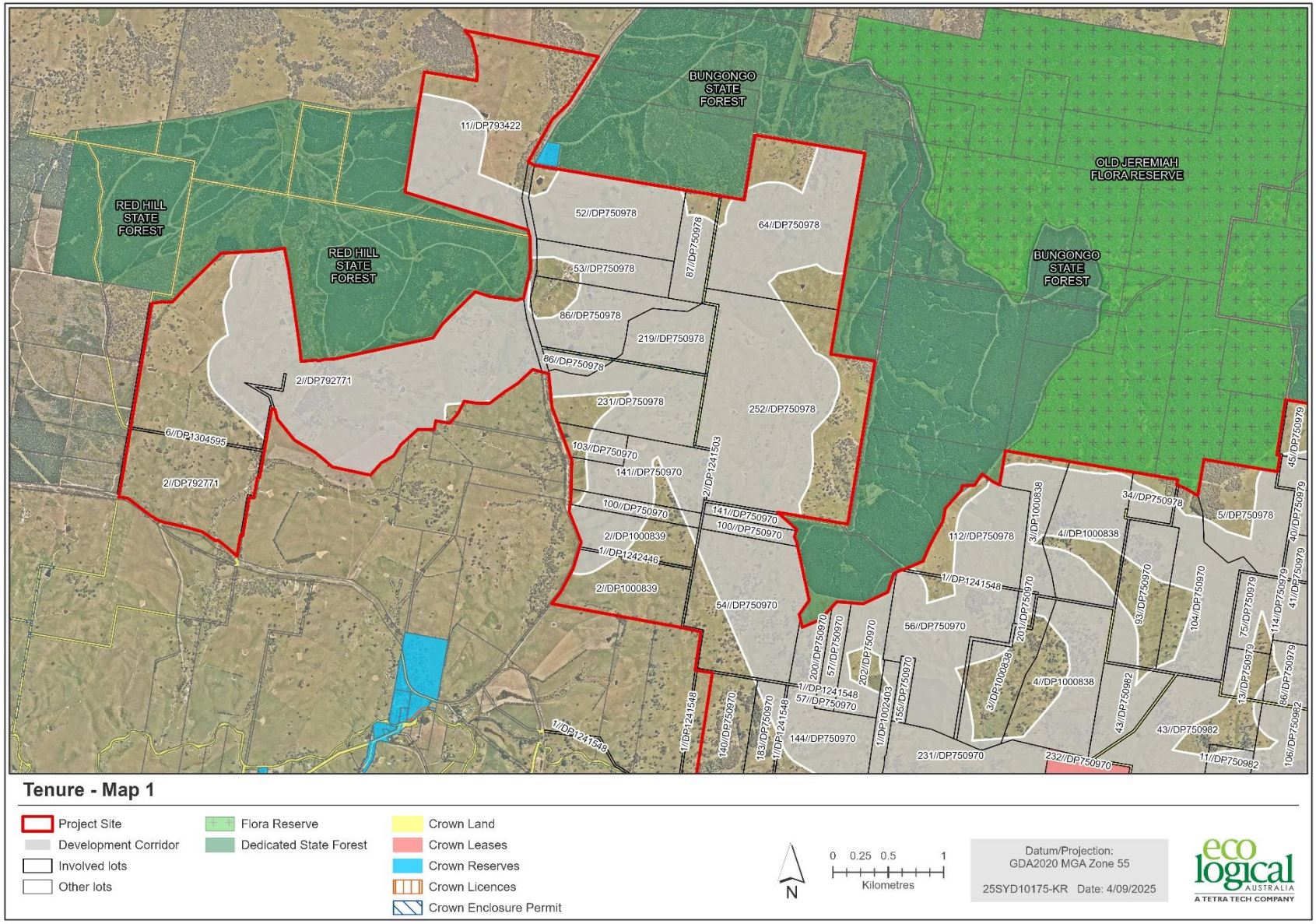
FREEHOLD	1/DP734601
FREEHOLD	1/DP651929
FREEHOLD	1/DP232547
FREEHOLD	1/DP1248412
FREEHOLD	1/DP1242446
FREEHOLD	1/DP1002403
COUNCIL	Unnamed Council Parcels
CROWN	232/DP750970
CROWN	Jeremiah Creek
CROWN	Macphersons Swamp Creek
CROWN	Crown Roads
NSW GOVERNMENT	Bungongo State Forest road parcels
PUBLIC ROAD	Unidentified public roads
PUBLIC ROAD	Council owned Nanagroe Road
PUBLIC ROAD	Council owned Wee Jasper Road
PUBLIC ROAD	Council owned Jeremiah Road


BURRINJUCK NATURE RESERVE
BUNGONGO STATE FOREST
BUNGONGO STATE FOREST
OLD JEREMIAH FLORA RESERVE
RED HILL STATE FOREST
BUNGONGO STATE FOREST
BLACK ANDREW NATURE RESERVE
WEE JASPER NATURE RESERVE
WEE JASPER STATE FOREST
RED HILL STATE FOREST
WEE JASPER STATE FOREST
RED HILL STATE FOREST
Tenure - Overview
Project Site
Development Corridor
Involved lots
Other lots
NPWS Estate
Flora Reserve
Dedicated State Forest
Crown Land
Crown Leases
Crown Reserves
Crown Licences
Crown Enclosure Permit
N
0 0.5 1 2
Kilometres
Datum/Projection:
GDA2020 MGA Zone 55
25SYD10175-KR Date: 4/09/2025
eco logical AUSTRALIA
A TETRA TECH COMPANY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OLD JEREMIAH FLORA RESERVE
RED HILL STATE FOREST
RED HILL STATE FOREST
BUNGONGO STATE FOREST
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Tenure - Map 1
Project Site
Development Corridor
Involved lots
Other lots
Flora Reserve
Dedicated State Forest
Crown Land
Crown Leases
Crown Reserves
Crown Licences
Crown Enclosure Permit
N
0 0.25 0.5 1
Kilometres
Datum/Projection:
GDA2020 MGA Zone 55
25SYD10175-KR Date: 4/09/2025
eco logical AUSTRALIA
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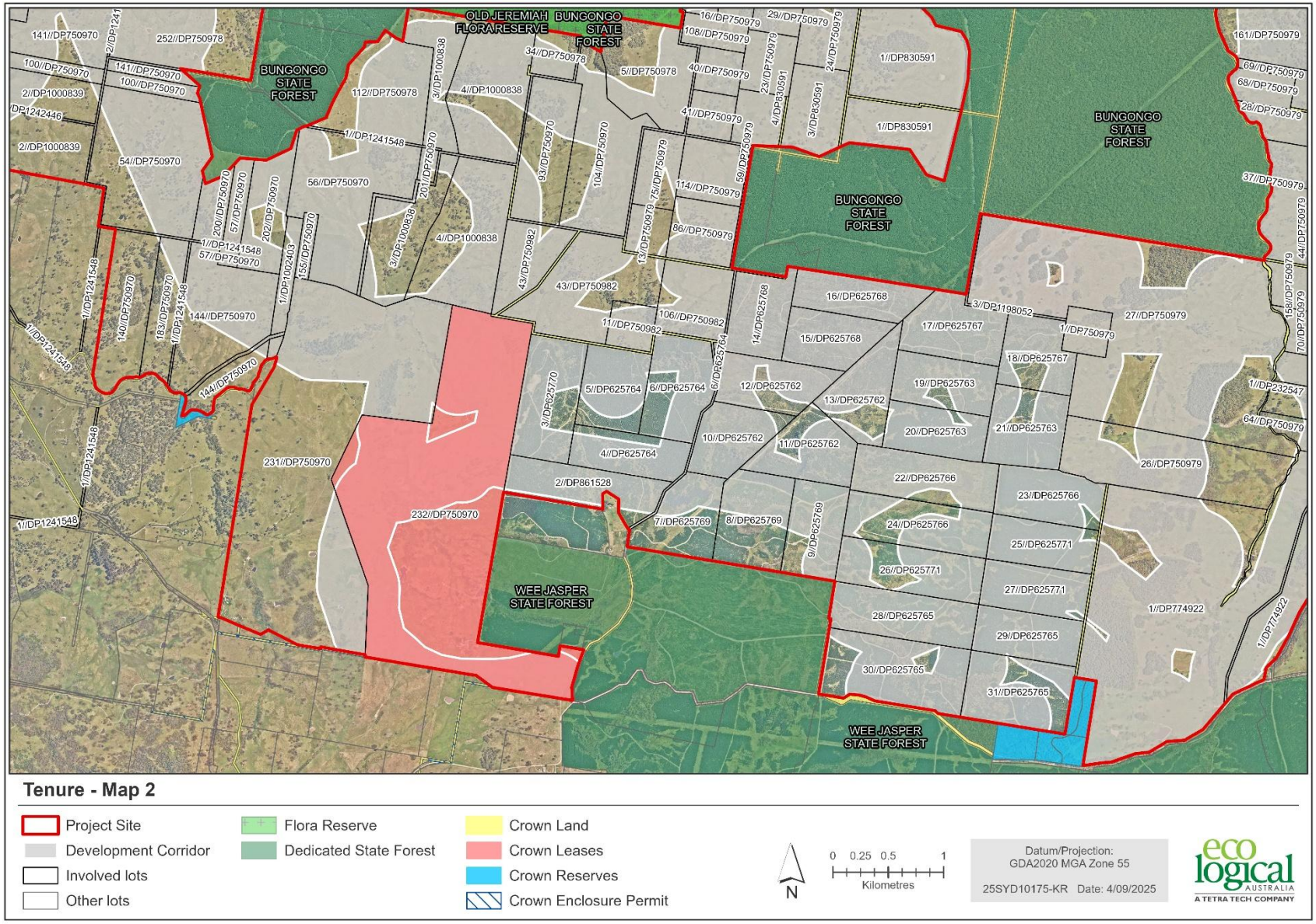
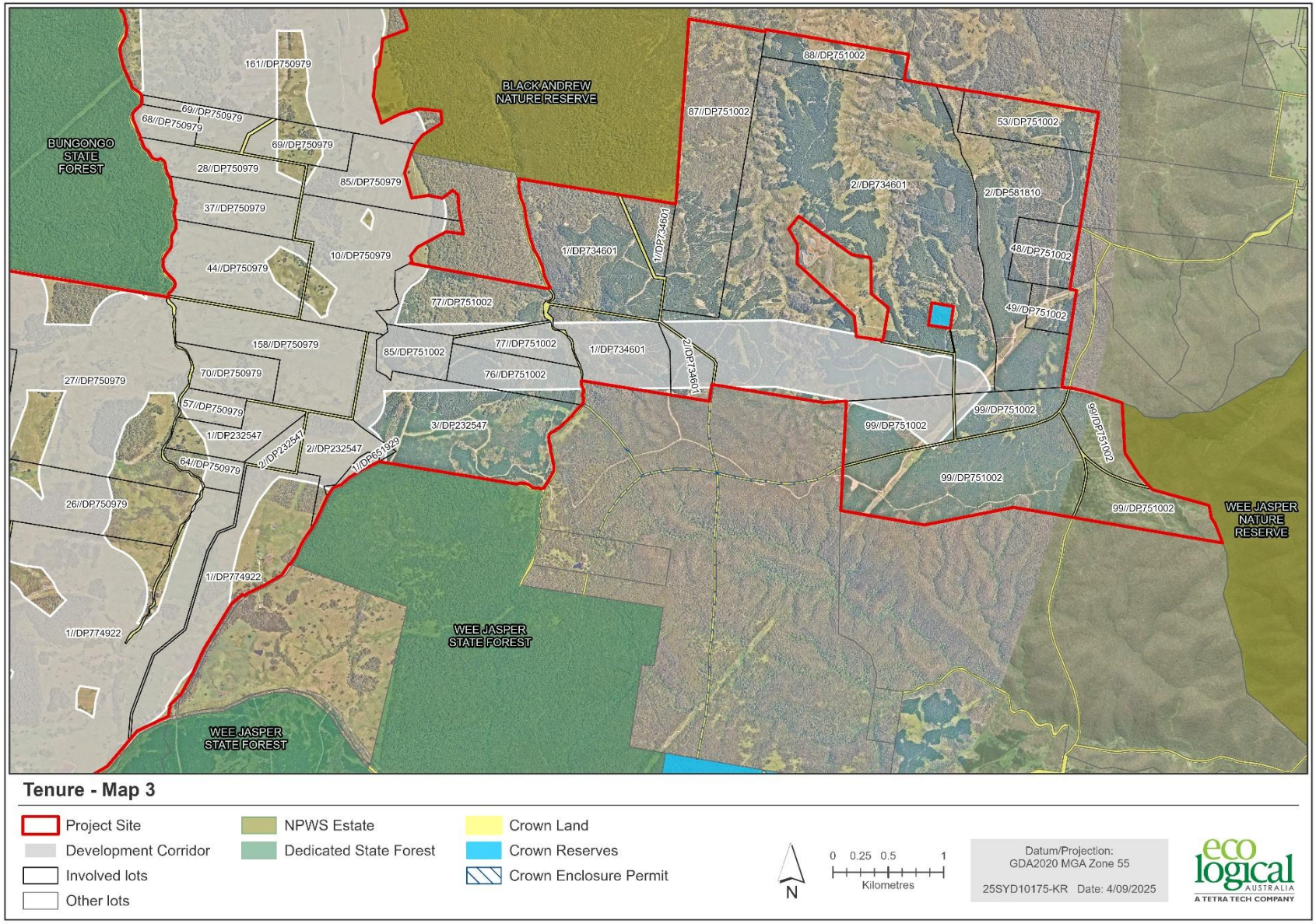

OLD JEREMIAH FLORA RESERVE
BUNGONGO STATE FOREST
WEE JASPER STATE FOREST
Tenure - Map 2
Project Site
Development Corridor
Involved lots
Other lots
Flora Reserve
Dedicated State Forest
Crown Land
Crown Leases
Crown Reserves
Crown Enclosure Permit
N
0 0.25 0.5 1
Kilometres
Datum/Projection:
GDA2020 MGA Zone 55
25SYD10175-KR Date: 4/09/2025
eco logical AUSTRALIA
A TETRA TECH COMPANY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BLACKANDREW NATURE RESERVE
WEE JASPER NATURE RESERVE
WEE JASPER STATE FOREST
WEE JASPER STATE FOREST
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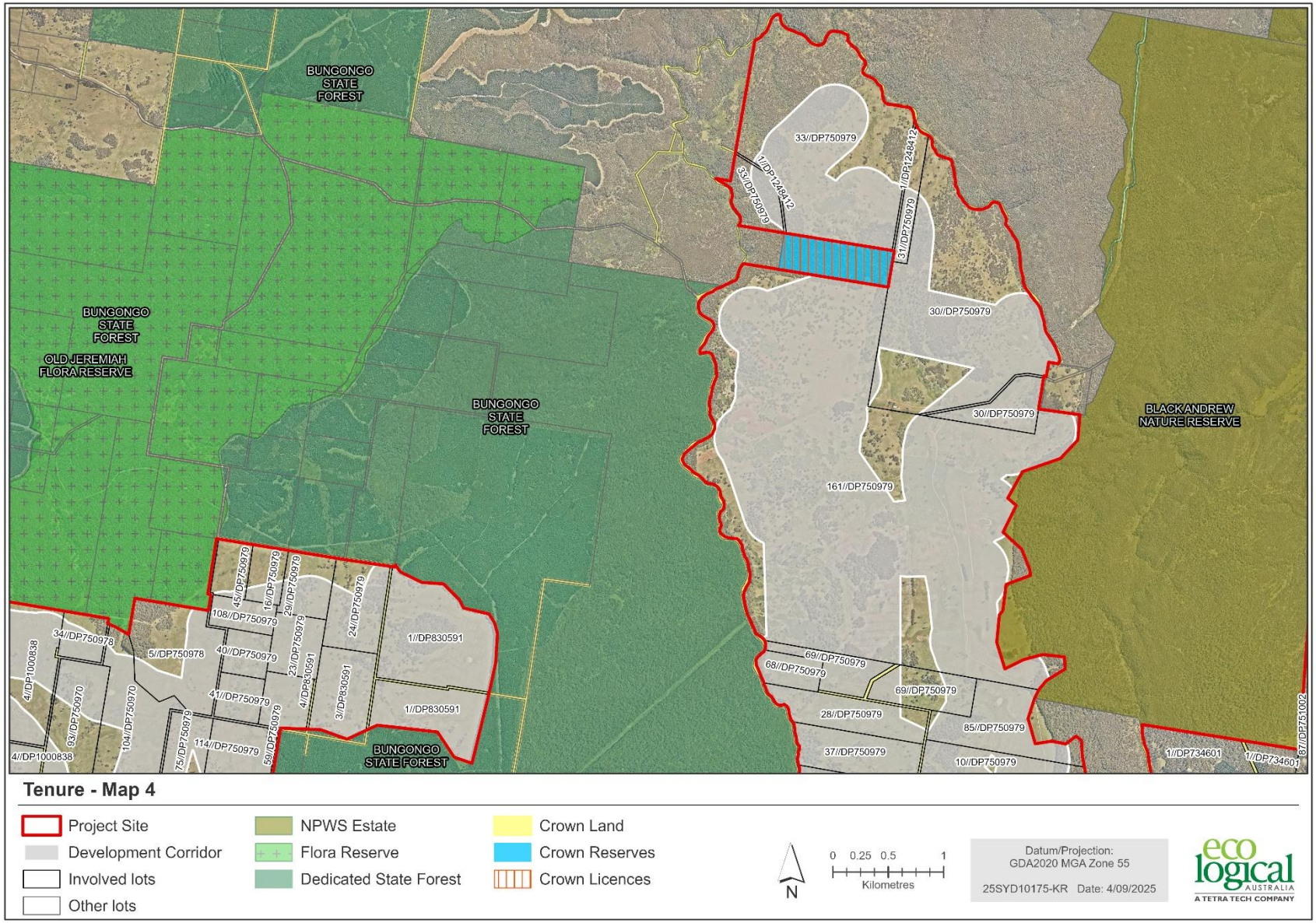
Tenure - Map 3
Project Site
Development Corridor
Involved lots
Other lots
NPWS Estate
Dedicated State Forest
Crown Land
Crown Reserves
Crown Enclosure Permit
N
0 0.25 0.5 1
Kilometres
Datum/Projection:
GDA2020 MGA Zone 55
25SYD10175-KR Date: 4/09/2025
eco logical AUSTRALIA
A TETRA TECH COMPANY


BUNGONGO STATE FOREST
BUNGONGO STATE FOREST
OLD JEREMIAH FLORA RESERVE
BUNGONGO STATE FOREST
BUNGONGO STATE FOREST
BLACKANDREW NATURE RESERVE
33//DP750979
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87//DP751002
Tenure - Map 4
Project Site
Development Corridor
Involved lots
Other lots
NPWS Estate
Flora Reserve
Dedicated State Forest
Crown Land
Crown Reserves
Crown Licences
N
0 0.25 0.5 1
Kilometres
Datum/Projection:
GDA2020 MGA Zone 55
25SYD10175-KR Date: 4/09/2025
eco logical AUSTRALIA
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Saddletop Wind Farm

Appendix B – Scoping Summary Table

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Matter	Level of Assessment[1]	Cumulative Impact Assessment	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
Landscape and Visual	Detailed	Yes	Department of Planning, Housing and Infrastructure (DPHI)	• Wind Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2024) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021) • Dark Sky Planning Guidelines (DPE, 2016) • Guidelines for Landscape and Visual Impact Assessment (GLVIA) Third Edition (2013)	Section 6.2
Noise and Vibration	Detailed	Yes	DPHI and Environment Protection Authority (EPA)	• Construction Noise and Vibration Strategy (TfNSW, 2019) • Draft Construction Noise Guideline (Environment Protection Authority, 2020) • Noise Policy for Industry (NPfI) (EPA, 2017) • NSW Industrial Noise Policy (Environment Protection Authority, 2000) • NSW Road Noise Policy (Environment Protection Authority, 2011) • Assessing Vibration: A Technical Guideline (DECC, 2006) •Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021) •Wind Energy Guideline (DPHI, 2024) •Wind Energy Guideline: Technical Supplement for Noise Impact Assessment – Noise Supplement (DPHI, 2024)	Section 6.3
Biodiversity	Detailed	Yes	DPHI, NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) and Commonwealth Department of Climate Change, Energy, the Environment and	• Biodiversity Assessment Method (DPIE, 2020) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021) • Wind Energy Guideline (DPHI, 2024)	Section 6.4

[1] **Level of Assessment**

Detailed Assessment: The Project may result in significant impacts on the matter, including cumulative impacts requiring detailed studies and investigations carried out by technical specialists.

Standard Assessment: The Project is unlikely to result in significant impacts on the matter, including cumulative impacts.

No Further Assessment: The Project will have no impact on the matter, or the impacts of the Project on the matter will be so small that they are not worth considering.

Matter	Level of Assessment	Cumulative Impact Assessment	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
			Water (Commonwealth DCCEEW)		
Traffic and Transport	Detailed	Yes	Transport for NSW (TfNSW) and Councils	• Guide to Traffic Generating Developments (RTA, 2022) • Austroads Guide to Traffic Management (Austroads) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPE, 2021) • Wind Energy Guideline (DPHI, 2024)	Section 6.5
Bushfire	Standard	Yes	RFS and Fire and Rescue	• Planning for Bushfire Protection Guidelines (NSW RFS, 2019) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPE, 2021) • Wind Energy Guideline (DPHI, 2024)	Section 6.6
Aviation	Detailed	Yes	CASA and Air Services Australia	• National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft (DIRDC, 2012) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021) • Wind Energy Guideline (DPHI, 2024)	Section 6.6
Telecommunications	Detailed	Yes	Telco Authority	• Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021)	Section 6.6
Public Health	Standard	Yes	DPHI	• International Commission on Non-Ionizing Radiation Protection Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields (ICNIRP, 2010) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021)	Section 6.6
Battery Storage	Detailed	Yes	DPHI	• Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis' and Multi-level Risk Assessment (DoP, 2011). • Hazardous Industry Advisory Paper No. 4, 'Risk 6 Criteria for Land Use Safety Planning (DoP, 2011) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021)	Section 6.6
Aboriginal Heritage	Detailed	Yes	LALCs, RAPs and Heritage NSW	• Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DEECCW, 2010a)	Section 6.7

Matter	Level of Assessment	Cumulative Impact Assessment	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
				• Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) • Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (DECCW, 2010b) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPE, 2021)	
Historic Heritage	Standard	Yes	Heritage NSW	• Guidelines for preparing a statement of heritage impact (DPE, 2023) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021)	Section 6.8
Soils and Land Use	Standard	Yes	MEG and DPI – Agriculture	• Land Use Conflict Risk Assessment Guide (DPI, 2011) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021) • Wind Energy Guideline (DPHI, 2024)	Section 6.9
Surface Water and Groundwater	Standard	Yes	NSW DCCEEW and Water NSW	• NSW aquifer interference policy (DPI 2012) - Water • Best practice erosion and sediment control (BPESC) books 1-6 (IECA, 2008) • Controlled Activities – guidelines for Riparian Corridors on Waterfront Land (DPE, 2022) • Floodplain Development Manual (DIPNR, 2005) • Liquid Chemical Storage, Handling and Spill Management: Part B Review of Best Practice Regulation (DEC 2005) • Storing and handling liquids - environmental Protection: Participant's Manual (DEC, 2007) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021) • Wind Energy Guideline (DPHI, 2024)	Section 6.10
Aquatic Habitat and Riparian Land	Standard	Yes	NSW DCCEEW and DPI – Fisheries	• Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (Dept. of Planning and Industry, 2003) • Policy & Guidelines for Fish Habitat Conservation and Management (Dept. of Planning and Industry, 2013) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021)	Section 6.10
Social	Detailed	Yes	DPHI and Councils	• Social Impact Assessment Guideline (DPHI, 2025)	Section 6.11

Matter	Level of Assessment	Cumulative Impact Assessment	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
				• Cumulative Impact Assessment Guidelines for State Significant Projects (DPE, 2021) • Wind Energy Guideline (DPHI, 2024)	
Economic	Detailed	Yes	DPHI and Councils	• Social Impact Assessment Guideline (DPHI, 2025) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2021)	Section 6.11
Resource and Waste	Standard	Yes	DPHI and EPA	• Waste Classification Guidelines Part 1 Classifying Waste (DECCW, 2009) • Cumulative Impact Assessment Guidelines for State Significant Projects (DPE, 2021)	Section 6.12

Saddletop Wind Farm

Appendix C – Visual Scoping Report (Moir Studio, 2025)

Squadron Energy

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moir STUDIO

Image Source: Adobe Stock, 2025

Saddletop Wind Farm

Visual Scoping Report

We at Moir Studio acknowledge the traditional custodians of the lands and waters of Australia - most notably the Awabakal Nation in which our office resides and the Wiradjuri and Ngunnawal Nation(s), on whose traditional land this Project is proposed. As a practice, we recognise First Nations' ongoing contribution to Country and deep spiritual connection to Place. We pay our respects to Elders both past and present.

Saddletop Wind Farm

Visual Scoping Report

Prepared for
Eco Logical Australia

Project Number
2681

Revision	Date	Author	Checked	Comment
A	10/06/25	CA	AR	Draft for Review
B	19/06/25	CA	-	For Review
C	07/07/25	CA	-	For Review
D	06/08/25	CA	AR	For Submission
E	21/08/25	CA	-	For Submission

Moir Landscape Architecture Pty Ltd
(T/A **Moir Studio**)
Studio 1, 88 Fern Street
PO Box 111, Islington NSW 2296
admin@moirla.com.au
Ph.(02) 4965 3500
www.moirstudio.com.au
ACN: 097 558 908
ABN: 48 097 558 908

1.0 Project Overview

1.1 Overview

Moir Landscape Architecture Pty Ltd (Moir Studio) has been engaged by Eco Logical Australia on behalf of Squadron Energy to conduct a Visual Scoping Report to support the Scoping Report for the Saddletop Wind Farm (the Project).

Squadron Energy is seeking development consent for the construction, operation, maintenance and decommissioning of a large-scale wind energy project, including battery energy storage infrastructure. The Project will involve the construction, operation and maintenance of up to **123** wind turbines generators (WTGs) with a generating capacity of up to approximately 738 MW, ancillary civil and electrical engineering infrastructure, permanent operational facilities and temporary construction facilities.

The Scoping Report applies to the Project Site as shown in **Figure 01**.

1.2 Existing Landscape Character

The Project is located approximately 30 km northeast of Tumut. The Project sits between the South Eastern Highlands (specifically Bondo subregion) and South Western Slopes (specifically Inland Slopes subregion) bioregions of New South Wales (NSW), within the Yass Valley Local Government Area (LGA). The surrounding landscape is defined by undulating to steeply sloping ridges, valley floors, and rugged escarpments associated with the Brindabella Range foothills.

Land use across the area is predominantly cleared agricultural paddocks used for grazing, interspersed with state and privately owned production forestry, and patches of remnant native vegetation, particularly on steeper slopes and less accessible terrain. Large tracts of plantation forest are present in the northern and central parts of the Study Area (refer to **Section 2.3**), while eucalypt-dominated woodland becomes more prominent towards the eastern extent, particularly near Wee Jasper.

Notable landscape features within the Study Area (refer to **Section 2.3**) include the Murrumbidgee River, several State Forests—such as Red Hill, Bungongo, and Wee Jasper—and important nature reserves, including Burrinjuck and Black Andrew.

Figure 01 Regional Context
Basemap Source - Esri, 2025

1.3 Overview of Study Method

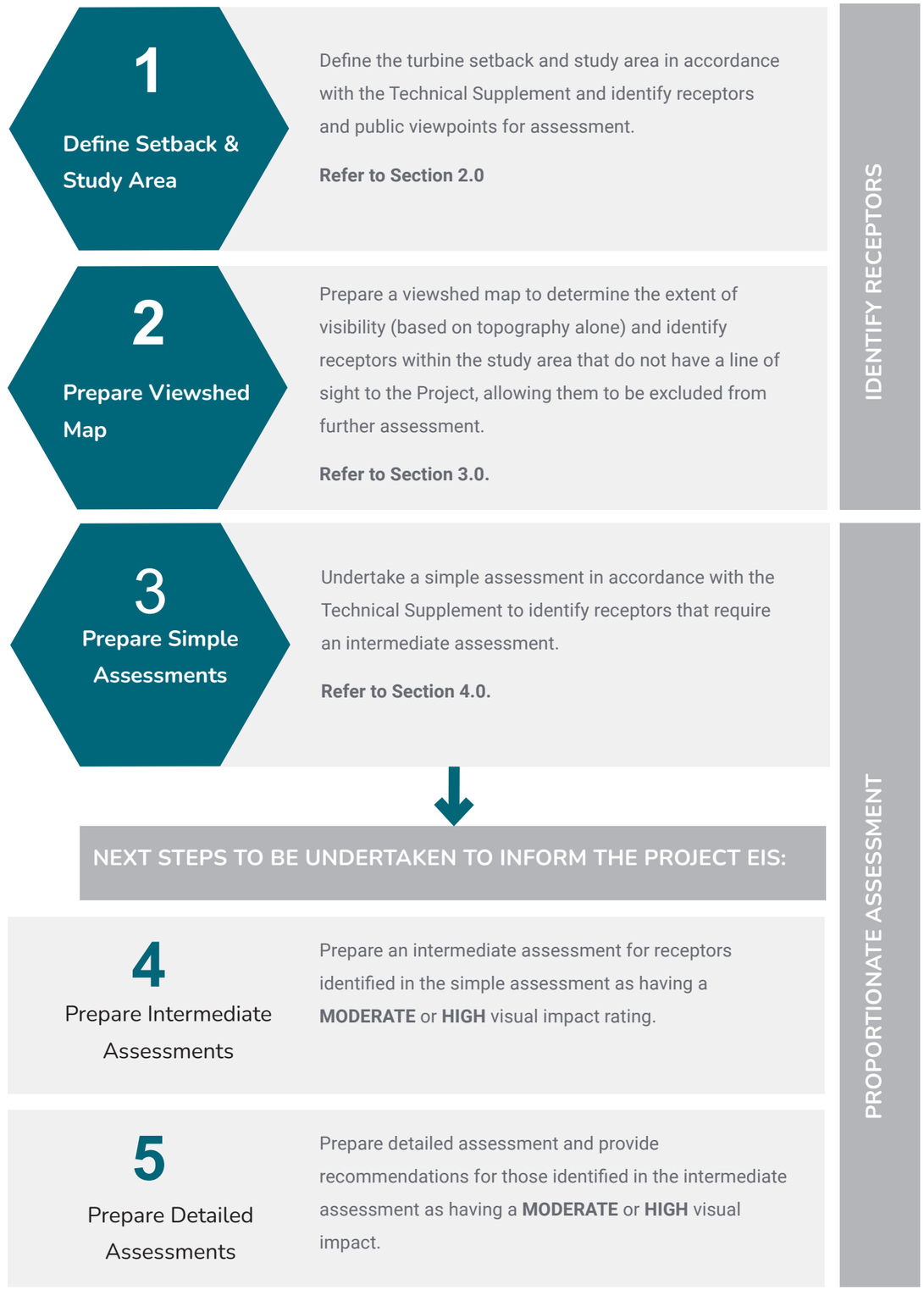
The study method for determining the visual impact of a project is in accordance with the *Wind Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment* (DPHI, 2024) referred to hereafter as the 'Technical Supplement'.

The first step in the assessment process is to identify any non-associated dwellings (hereafter referred to as 'receptors') and public viewpoints that may be affected by the Project. This involves **Step 1- Defining the Study Area and Setback** using distance thresholds and **Step 2 - Generating Viewshed Mapping** to determine areas of potential visibility.

Once receptors are identified, a proportionate assessment (**Step 3 - Prepare Simple Assessment**) approach is applied to focus the analysis on those receptors most likely to experience visual impacts. A summary of the assessment structure is shown adjacent.

The next steps include:

- **Step 4 - Intermediate Assessment;** which involves the preparation of wireframe diagrams and 3D modelling of the WTGs to provide a more accurate visual magnitude (based on topography alone); and,
- **Step 5 - Detailed Assessment**; which involves undertaking field visits for the preparation of photomontages, and assessing the effectiveness of existing or proposed screening in mitigating potential impacts. This assessment allows a more in-depth visual representation of of the potential impacts from the Project.



2.0 Setback and Study Area

2.1 Overview

Defining the setback and study area enables the identification of private receptors and public viewpoints that are likely to experience visually dominant views of the Project.

In accordance with the Technical Supplement, the Applicant is required to define the Turbine Setback and Study Area based on the maximum turbine tip height. For this Project, the maximum proposed turbine height (at tip height) is **270 m**.

2.2 Turbine Setback

The Turbine Setback is defined as the horizontal distance at which a turbine occupies 9° of a person's vertical field of view. According to the Technical Supplement, if a sensitive dwelling is located within this distance, it is considered to experience a high visual impact—unless the view of the turbine is largely screened by topography or vegetation, as outlined in the setback exemptions.

Turbines should generally not be sited within this setback unless there are strong mitigating factors or a private agreement with the affected landowner.

- The Turbine Setback for the Project is a horizontal buffer distance of **1,705 metres** from the proposed wind turbine generators (WTGs) (based on 9° vertical field of view)
- **Seven (7)** non-associated receptors were identified within the Turbine Setback.

Refer to Figure 04.

2.3 Study Area

The visibility of wind turbines reduces with increasing distance, to the point where they become visually inconsequential and are difficult to distinguish from the surrounding landscape. In accordance with the Technical Supplement, any turbine that occupies less than 2° of a person's vertical field of view is not considered to contribute meaningfully to visual magnitude and should not be counted when calculating magnitude.

For this Project, the Study Area has been defined using this 2° threshold, based on the maximum turbine height. As a result, the Study Area extends to a distance of **7,732 metres** from the proposed wind turbine locations (see **Figure 02**). This applies to both private receptors and other public viewpoints.

Within this defined Study Area, a total of **59** non-associated receptors have been identified for further consideration in the visual impact assessment.

Refer to Figure 05.

Turbine Setback = 1,705 m

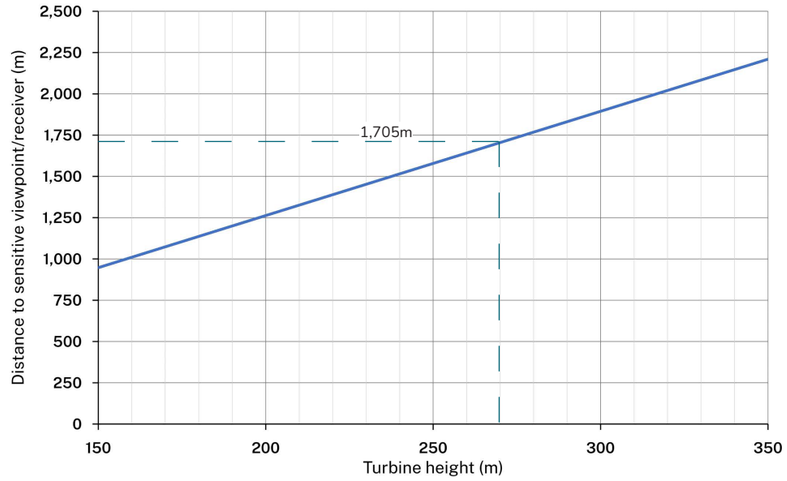
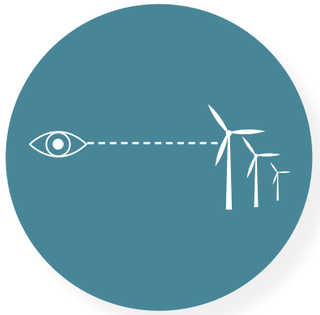


Figure 03 Setback from Sensitive Receivers
Source: NSW DPHI, Wind Energy Guideline - Technical Supplement, 2024



Study Area = 7,732 m

Private Receptors & Public Viewpoints

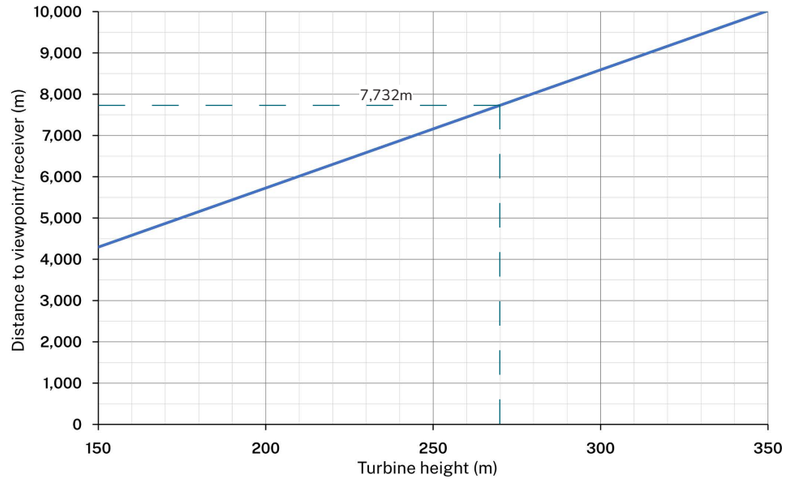
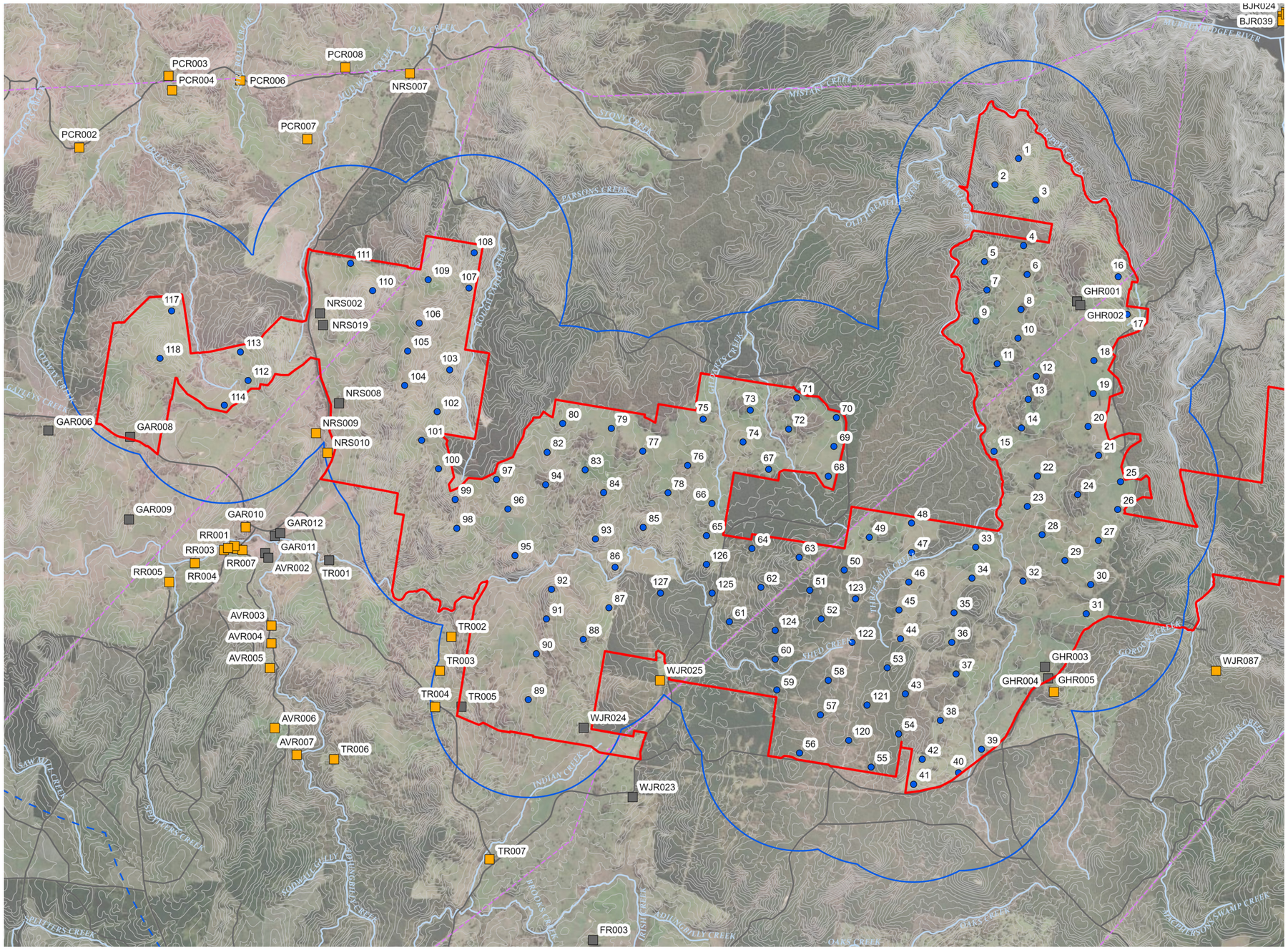


Figure 02 Extent of the Scoping Study Area
Source: NSW DPHI, Wind Energy Guideline - Technical Supplement, 2024



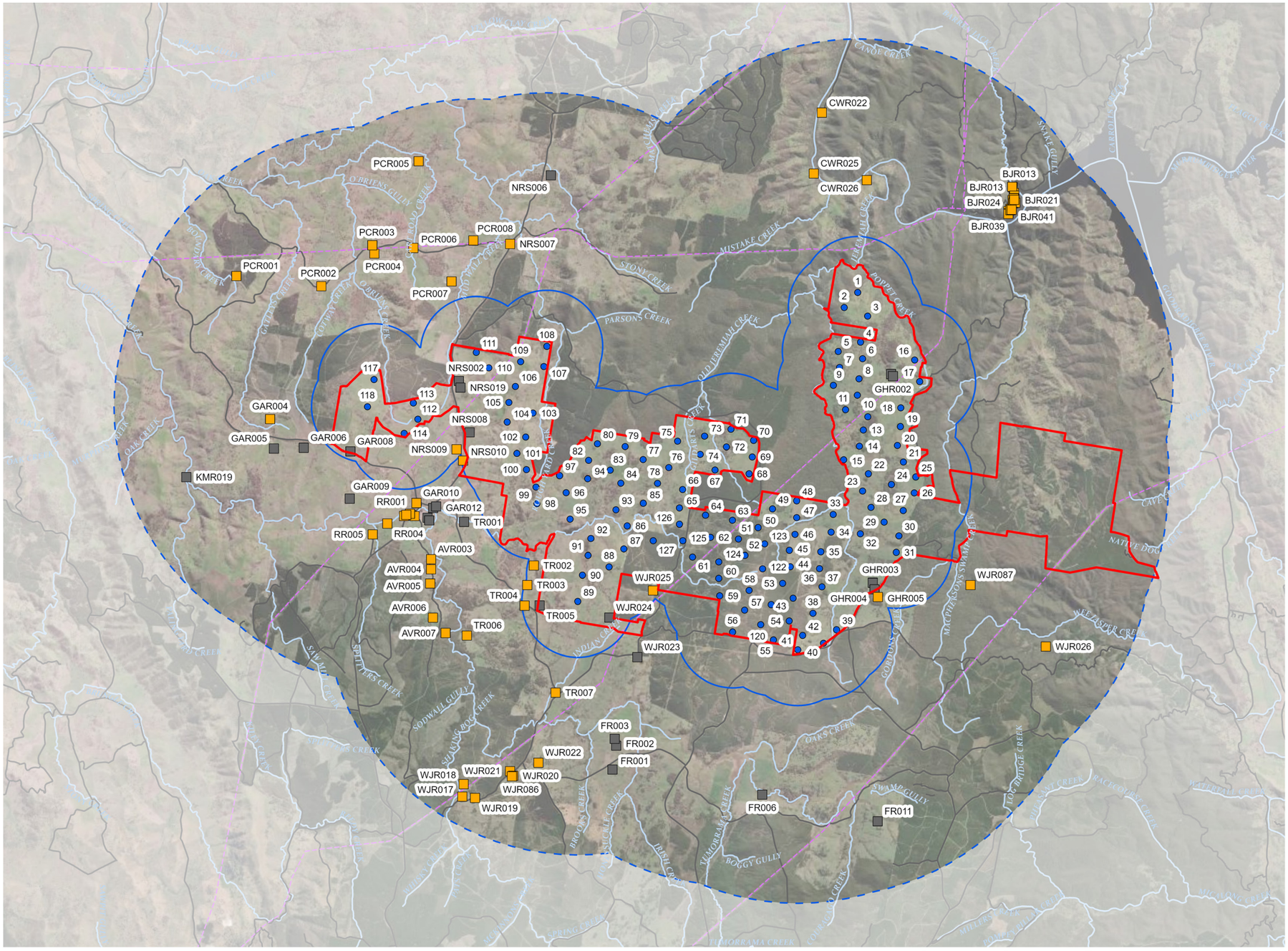
Turbine Setback

Refer to Section 2.2

LEGEND

- Site Boundary
- Proposed WTGs
- Non-Associated Dwellings
- Associated Dwellings
- Turbine Setback (1,705m from the nearest WTG)
- Study Area (7,732m from the nearest WTG)
- ElectricityTransmissionLine
- Roads
- Watercourses
- Contours

Figure 04 Turbine Setback
Basemap Source - Esri, 2025



Study Area

Refer to Section 2.3

LEGEND

- Site Boundary
- Proposed WTGs
- Non-Associated Dwellings
- Associated Dwellings
- Turbine Setback (1,705m from the nearest WTG)
- Study Area (7,732m from the nearest WTG)
- ElectricityTransmissionLine
- Roads
- Watercourses

Figure 05 Study Area
Basemap Source - Esri, 2025

3.0 Viewshed Mapping

3.1 Viewshed Mapping

Moir have undertaken Viewshed Mapping (VSM) to determine the areas with potential visibility of the Project. The VSM has been prepared for the Project to illustrate the theoretical visibility based on topography alone. **Figure 06** presents the viewshed for the wind turbines based on the tip height of **270 m**.

The VSM represents the area over which a development can theoretically be seen, and is based on a Digital Terrain Model (DTM). It presents a bare ground scenario - ie. a landscape without screening, structures or vegetation, and is usually presented on a base map (Scottish Natural Heritage, 2017). Receptors with no line of sight to the Project due to topographic screening are excluded from further assessment as they do not have the potential to be visually impacted by the Project. Conversely, receptors identified by the VSM as having a potential line of sight to the Project will require further assessment, initially a simple assessment (refer to **Section 4.0**).

3.2 Viewshed Mapping Results

- Due to the undulating topographic character of the region, views can range from fragmented, where landform partially obscures the view, to open, where long-distance visibility is uninterrupted. As indicated by the VSM, views toward the Project are likely to be visible to a varied extent across the Study Area.
- As per the VSM of the Project, 42 non-associated receptors within the Study Area are identified as having potential visibility.

It is important to note that the preliminary VSM represents a worst-case scenario, as it is based solely on topography and does not account for the screening effects of vegetation, buildings, or other structures. To refine this initial analysis, ground truthing will be undertaken during the Environmental Impact Statement (EIS) phase. This process will verify actual visibility from identified receptors, taking into consideration additional factors that may influence visual impact—such as the presence of structures and vegetation.

Refer to Figure 06.

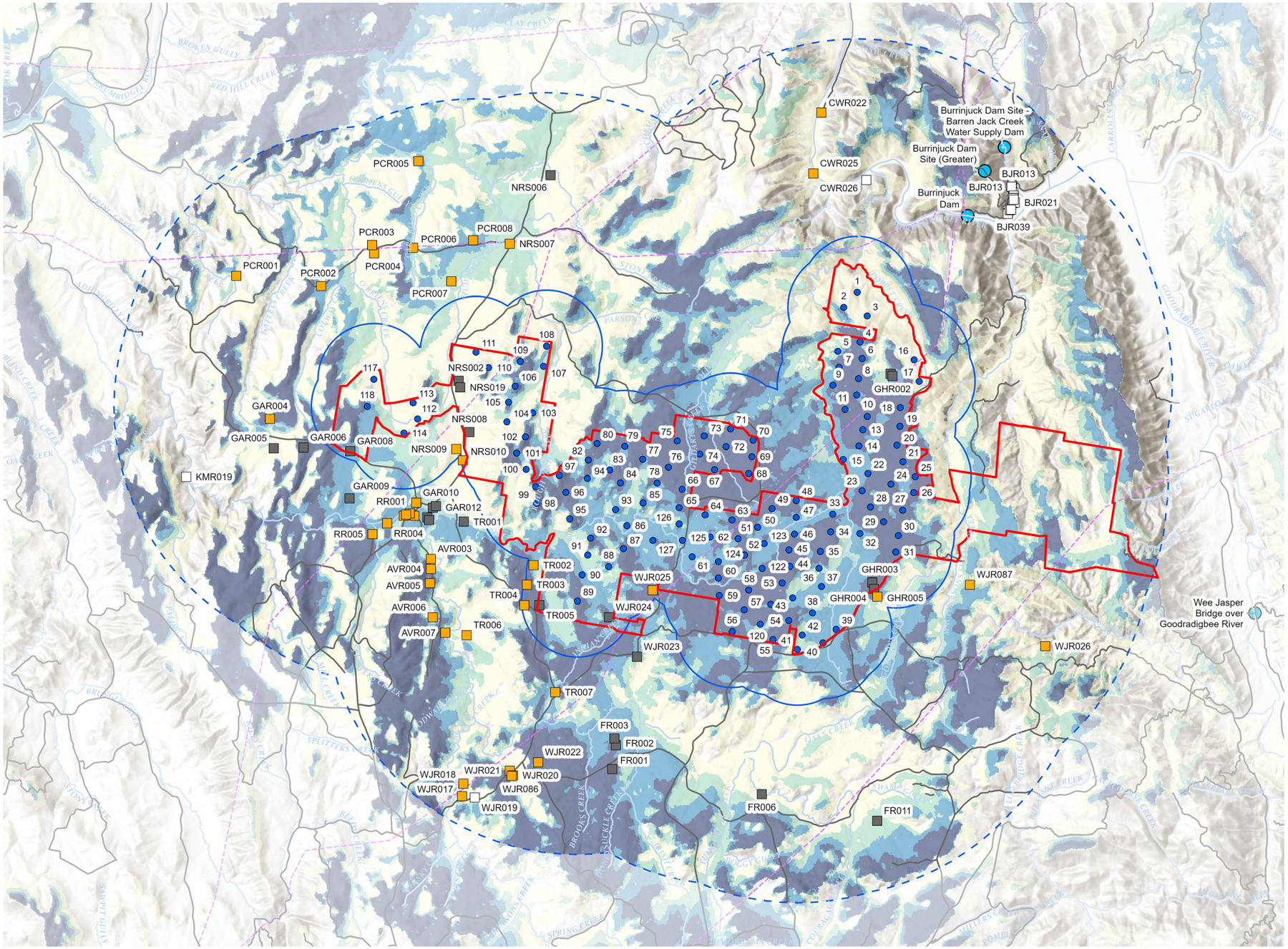


Figure 06 Viewshed Mapping
Basemap Source - Esri, 2025

Viewshed Mapping

Refer to Section 3.0

LEGEND

- Site Boundary
- Proposed WTGs
- Non-Associated Dwelling
- Associated Dwellings
- Dwellings With No Visibility (Based on topography alone)
- Turbine Setback (1,705m from the nearest WTG)
- Study Area (7,732m from the nearest WTG)
- Existing Transmission Line
- Roads
- Watercourses
- State Heritage Register

VSM LEGEND

- No WTGs visible
- 1 - 31 WTGs visible
- 32 - 62 WTGs visible
- 63 - 92 WTGs visible
- 93 - 123 WTGs visible

4.0 Visual Impact Assessment Process

4.1 Overview of Proportionate Assessment Process

A visual impact assessment must be undertaken for all private receptors and public viewpoints identified as being within the Study Area and having a line of sight to the Project.

The level of visual assessment should reflect the potential scale of impact. A simple assessment, based on desktop analysis and general assumptions, should be undertaken initially. If this indicates the potential for moderate or greater visual impacts, a more detailed intermediate assessment should then be completed.

Simple Assessment

Conduct a simple assessment using worst-case assumptions about the likely magnitude and visual sensitivity (refer to **Section 4.2**).

Low or **Very Low** = No further action

Moderate or **High** = Proceed to Intermediate Assessment

Next Steps:

Intermediate Assessment

Produce wire frame diagrams to determine the magnitude rating. Proceed to undertake a detailed assessment if impacts continue to be moderate or higher.

Low or **Very Low** = No further action

Moderate or **High** = Proceed to Detailed Assessment

Detailed Assessment

Undertake field visits and prepare photomontages to accurately assess scenic quality, and determine the effectiveness of existing or proposed screening.

Low or **Very Low** = No further action

Moderate or **High** = Consider mitigation / layout changes / Neighbour agreement

4.2 Overview of Simple Assessment Process

In the simple assessment, the overall visual impact rating of each viewpoint must be determined for each assessable viewpoint by combining the visual magnitude and visual sensitivity using the matrix shown in **Figure 09**. This initial assessment assumes that the maximum line of sight from each receptor to the Project represents the primary view in terms of sensitivity. This assumption is further refined during the intermediate and detailed assessment stages.

Step 1 - Determine Visual Sensitivity

Visual sensitivity is assessed by combining viewpoint sensitivity and the scenic quality of the view (see **Table 01** and **Table 02**), based on conservative assumptions aligned with the NSW DPHI Wind Energy Guideline – Technical Supplement. **Figure 07** illustrates this framework.

Step 2 - Determine Visual Magnitude

Visual magnitude provides an estimate of how visible the Project may be from a given receptor or viewpoint, based on turbine height and distance. This is calculated by assessing the vertical and horizontal fields of view the Project occupies, which are then converted into 'cells' (see example **Figure 08**) as outlined in **Section 4.2 of the NSW DPHI Technical Supplement**. The vertical and horizontal cell values are multiplied to determine the overall visual magnitude, with further refinement applied during the intermediate assessment.

Step 3 - Determine Visual Impact Rating

The overall visual impact rating of each viewpoint must be determined for each assessable viewpoint by combining the visual magnitude and visual sensitivity using the matrix below. Any receptors with a moderate or high visual impact (demonstrated by white circles in **Figure 09**) will require an intermediate assessment.

SCENIC QUALITY RATING FRAME OF REFERENCE			
VERY LOW			**HIGH**
LANDFORM			
Large expanses of flat or gently undulating terrain Indistinct, dissected or broken landforms that provide little illusion of spatial definition or landmarks with which to orient	Mostly flat or gently undulating terrain with isolated areas of undulating topography	Steep, hilly and undulating ranges that are not visually dominant Broad, shallow valleys Moderately deep gorges or moderately steep valley walls Minor rock outcrops	Isolated peaks, steep rocky ridges, cones or escarpments with distinctive form and colour contrast that become focal points Large areas of distinctive rock outcrops or boulders Well-defined, steep valley gorges
VEGETATION			
Extensively cleared and cropped areas with very limited variation in colour and texture Pastoral areas, human-created paddocks, pastures or grasslands and associated buildings typical of grazing lands	Predominantly cleared and cropped areas with small areas of variation in colour and texture Most pastures or grasslands with small blocks of distinct native vegetation	Predominantly open forest or woodland combined with some natural openings in patterns that offer some visual relief Vegetative stands ranging in size, form, colour, texture and spacing, including human-influenced vegetation (for example, vineyards, plantation forests and orchards)	Strongly defined natural patterns with combinations of native forest, naturally appearing openings, streamside vegetation and scattered exotics Distinctive stands of vegetation that may create unusual forms, colours or textures compared with surrounding vegetation
WATER FORMS			
Absence of natural waterbody Farm dams, irrigation canals or stormwater infrastructure	Minor water forms, such as creeks and streams	Intermittent streams, lakes, rivers, swamps and reservoirs	Visually prominent lakes, reservoirs, rivers, streams, wetlands and swamps Presence of harbour inlet, bay or open ocean
SOCIAL AND CULTURAL			
Places of worship, cemeteries, memorial parks, private open spaces	Places of worship, cemeteries, memorial parks, private open spaces Local heritage sites	Local or state heritage sites Distinguishable entry ways to a regional city identified in the State Environmental Planning Policy (Transport and Infrastructure) 2021	Culturally important sites, wilderness, world heritage areas and protected areas World, national and state heritage sites
HUMAN PRESENCE			
Dominating presence of infrastructure, human settlements, highly modified landscapes and higher density populations, such as regional cities, industrial areas, agricultural transport or electricity infrastructure	Highly modified landscapes with visible infrastructure, such as transmission lines and railway corridors	Dispersed yet evident presence of human settlement, such as villages, small towns, isolated pockets of production and industry, lower scale and trafficked transport infrastructure	Natural, undisturbed landscape Minimal evidence of human presence and production

Table 01 Scenic Quality Frame of Reference
Source: NSW DPHI, Wind Energy Guideline - Technical Supplement, 2024

	VIEWPOINT SENSITIVITY			
	Very Low	**Low**	**Moderate**	**High**
Private Receptor	Private recreation areas and sporting fields (land zoned RE2).	Secondary view from dwellings in rural areas (zoned RU1, RU2, RU3, RU4 and RU6), large lot residential areas (zoned R5) and environmental or conservation areas (zoned C2, C3 and C4).	Primary view from dwellings in rural areas (zoned RU1, RU2, RU3, RU4 and RU6), large lot residential areas (zoned R5) and environmental or conservation areas (zoned C2, C3 and C4). Tourist and visitor accommodation (bed-and-breakfasts, motels and hotels and places of worship.	Dwellings in residential and rural villages (zoned R1, R2, R3, R4 and RU5). Historic rural homesteads residences on the national, state or local heritage list.

Table 02 Viewpoint Sensitivity Levels & Examples for Private Receptor
Source: NSW DPHI, Wind Energy Guideline - Technical Supplement, 2024

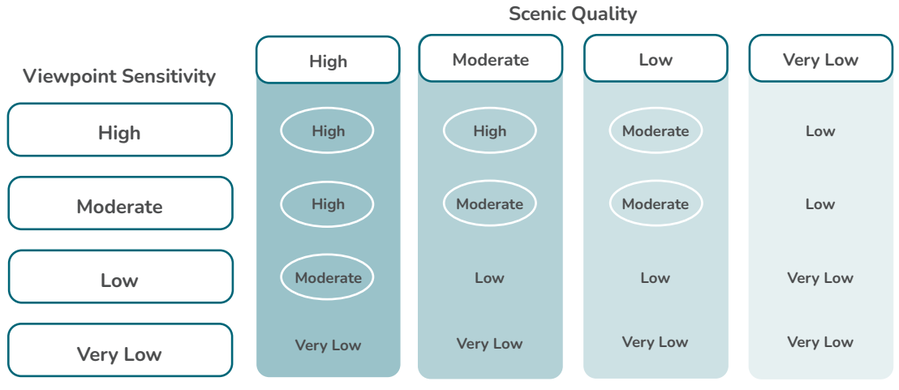


Figure 07 Visual Sensitivity Matrix
Source: NSW DPHI, Wind Energy Guideline - Technical Supplement, 2024

Figure 08 Visual example of cells in determining visual magnitude
Source: NSW DPHI, Wind Energy Guideline - Technical Supplement, 2024

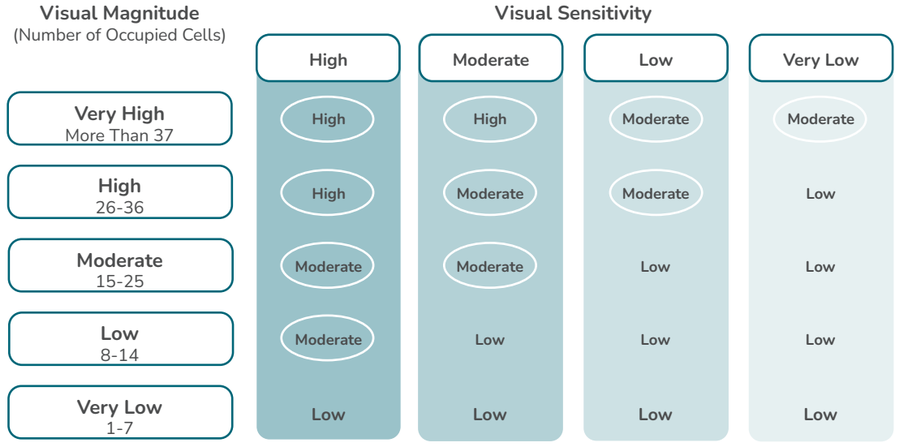


Figure 09 Visual Impact Rating Matrix

5.0 Simple Assessment

5.1 Results of Simple Assessment

The simple assessment is a desktop-based preliminary analysis that uses worst-case assumptions regarding both the likely magnitude of visual change and the visual sensitivity of receptors. This approach involves calculating the theoretical extent of visibility of the Project from each identified dwelling, based on both vertical and horizontal fields of view.

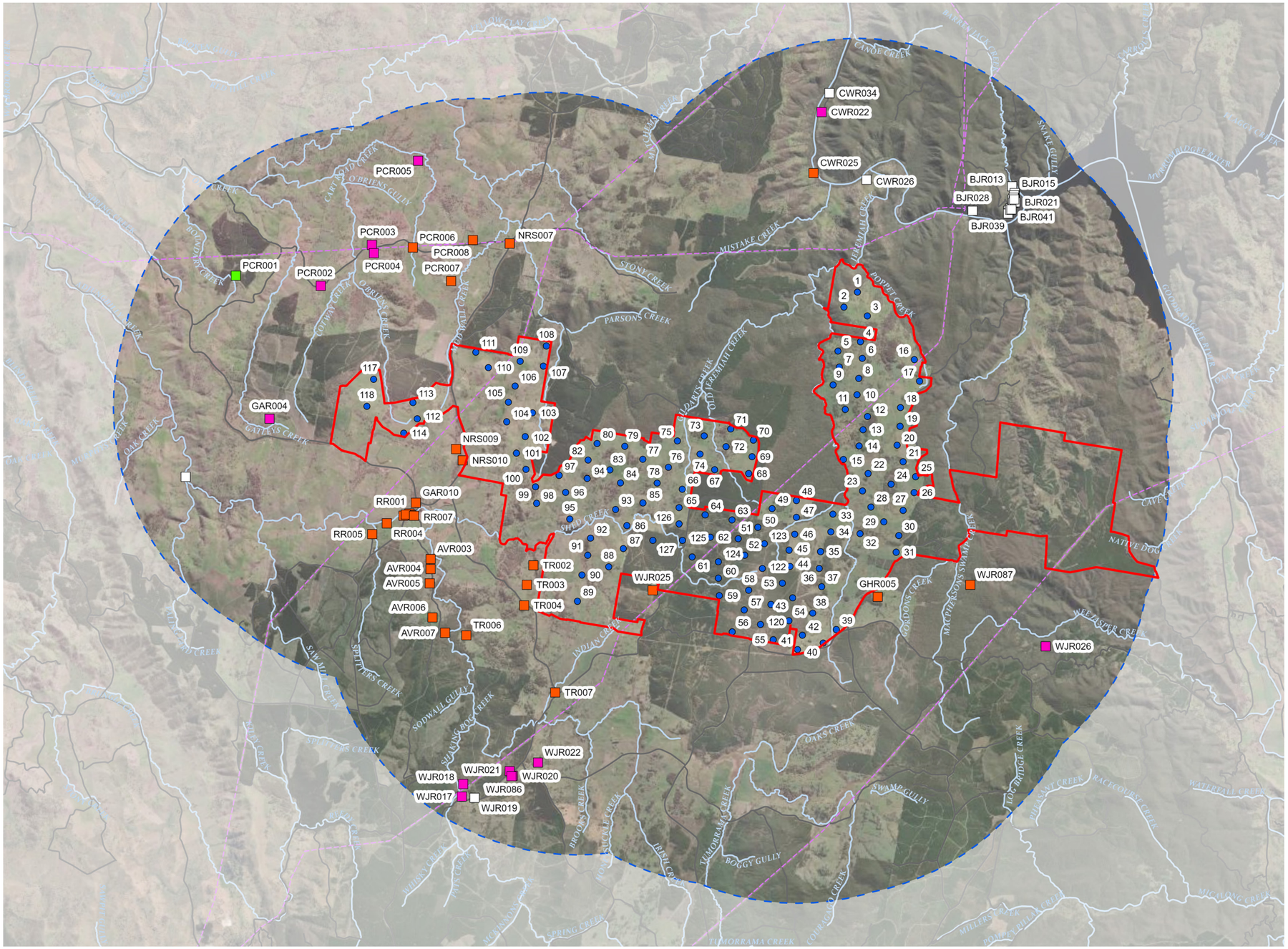
42 non-associated receptors and public viewpoints were identified within 7,732 m of the nearest turbine with a theoretical line of sight to the Project (based on the VSM). In accordance with the Technical Supplement, a simple assessment was undertaken for all these receptors.

As per the simple assessment, **41** non-associated receptors and public viewpoints were identified as having a moderate or high visual impact rating from the Project and will require an intermediate assessment (refer to **Table 03**).

The EIS of the Project will include a more comprehensive cumulative visual impact assessment of the Project alongside any proposed or approved renewable energy projects.

Nearby proposed development, located within the Study Area, include:

- Jeremiah Wind Farm - Preparing EIS, 2025
- Bondo Wind Farm - Preparing EIS, 2025



Simple Assessment Results

Refer to Section 5.0

LEGEND

- Site Boundary
- Proposed WTGs
- Study Area (7,732m from the nearest WTG)
- Non-Associated Dwellings (High Impact)
- Non-Associated Dwellings (Moderate Impact)
- Non-Associated Dwellings (Low Impact)
- Dwellings With No Visibility (Based on topography alone)
- Existing Transmission Line
- Roads
- Watercourses

Figure 10 Simple Assessment Results
Basemap Source - Esri, 2025

Results of Simple Assessment

Receptor ID	Distance to Nearest Turbine (m)	Preliminary Visual Sensitivity	Vertical FOV of the Project (cells)	Horizontal FOV of the Project (cells)	Occupied Cells of the Project (Horizontal FOV x Vertical FOV)	Visual Magnitude of the Project	Visual Impact Rating	Intermediate Assessment (With Cumulative Assessment) Required?
GHR005	1473	Moderate	10	15	159	Very High	High	Yes
NRS009	1498	Moderate	10	22	220	Very High	High	Yes
TR002	1511	Moderate	10	18	178	Very High	High	Yes
WJR025	1519	Moderate	10	21	213	Very High	High	Yes
TR003	1621	Moderate	9	15	142	Very High	High	Yes
TR004	1628	Moderate	9	14	130	Very High	High	Yes
NRS010	1655	Moderate	9	21	191	Very High	High	Yes
GAR010 (School)	2158	Moderate	7	15	106	Very High	High	Yes
PCR007	2292	Moderate	7	13	85	Very High	High	Yes
RR001	2459	Moderate	6	14	87	Very High	High	Yes
WJR87	2473	Moderate	6	10	61	Very High	High	Yes
RR006	2489	Moderate	6	14	84	Very High	High	Yes
RR002 (Church)	2509	Moderate	6	14	85	Very High	High	Yes
RR003	2522	Moderate	6	14	82	Very High	High	Yes
RR007	2543	Moderate	6	14	85	Very High	High	Yes
RR004	2799	Moderate	6	12	67	Very High	High	Yes
TR007	2862	Moderate	5	11	61	Very High	High	Yes
GAR004	2994	Moderate	5	5	26	High	Moderate	Yes
RR005	3227	Moderate	5	11	53	Very High	High	Yes
PCR002	3269	Moderate	5	7	33	High	Moderate	Yes
NRS007	3316	Moderate	5	13	60	Very High	High	Yes
PCR008	3414	Moderate	5	12	53	Very High	High	Yes
TR006	3542	Moderate	4	12	51	Very High	High	Yes
AVR003	3649	Moderate	4	13	55	Very High	High	Yes
PCR006	3719	Moderate	4	10	42	Very High	High	Yes
AVR004	3804	Moderate	4	12	50	Very High	High	Yes
PCR004	3843	Moderate	4	9	35	High	Moderate	Yes
CWR025	3868	Moderate	4	9	37	Very High	High	Yes
AVR005	4068	Moderate	4	12	46	Very High	High	Yes
PCR003	4095	Moderate	4	9	32	High	Moderate	Yes
AVR007	4148	Moderate	4	11	42	Very High	High	Yes
AVR006	4449	Moderate	3	11	39	Very High	High	Yes
WJR022	5060	Moderate	3	9	28	High	Moderate	Yes
PCR001	5257	Moderate	3	4	13	Low	Low	Yes

WJR026	5393	Moderate	3	7	19	Moderate	Moderate	Yes
WJR021 (Church)	5573	Moderate	3	9	25	Moderate	Moderate	Yes
CWR022	5594	Moderate	3	8	22	Moderate	Moderate	Yes
WJR020 (Community Hall)	5673	Moderate	3	9	24	Moderate	Moderate	Yes
WJR86 (RFS Shed)	5701	Moderate	3	9	24	Moderate	Moderate	Yes
PCR005	6090	Moderate	3	9	22	Moderate	Moderate	Yes
WJR018	6570	Moderate	2	8	20	Moderate	Moderate	Yes
WJR017	6917	Moderate	2	8	18	Moderate	Moderate	Yes

Table 03 Results of Simple Assessment

Saddletop Wind Farm

Appendix D – Noise Scoping Report (MDA, 2025)

Squadron Energy

ecological AUSTRALIA
A TETRA TECH COMPANY

MARSHALL DAY Acoustics

SADDLETOP WIND FARM
SCOPING REPORT - NOISE

Rp 001 r02 20250051 | 21 August 2025

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Project: **Saddletop Wind Farm**

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Report No.: **Rp 001 r02 20250051**

Document Control

Status:	Rev:	Comments	Date:	Author:	Reviewer:
Superseded	-	For client information	11 Jul 2025	A Morrison O Wesley-Smith	A Stoker
Superseded	01	Minor corrections	7 Aug 2025	O Wesley-Smith	A Stoker
Complete	02	Minor correction	21 Aug 2025	O Wesley-Smith	A Stoker

SUMMARY

Saddletop Wind Farm (Project) is proposed to be developed by Saddletop Wind Farm Pty Ltd (Applicant) and comprises the construction, operation and decommissioning of a wind farm and associated battery energy storage system (BESS). The Project is located approximately 30 km north-east of Tumut and 45 km east of Gundagai, and within the Cootamundra-Gundagai Regional Council, Yass Valley Council and Snowy Valleys Council local government areas (LGAs).

Marshall Day Acoustics (Australia) Pty Ltd (MDA) have been commissioned by Eco Logical Australia Pty Ltd (ELA) on behalf of the Applicant to undertake a noise scoping assessment of operational noise associated with the Project. The purpose of the assessment is to identify and describe noise scoping assessment matters to be accommodated into the Scoping Report for the Project and to inform potential layout changes to satisfy the applicable noise limits as part of future design and target consultation and land agreements. The Scoping Report will be submitted as part of a request for Project-specific Planning Secretary's Environmental Assessment Requirements (SEARs) as part of a future state significant development application (SSDA).

The Project is proposed to have an installed capacity of up to 738 MW of renewable energy generated from up to 123 wind turbines, a battery energy storage system with a proposed capacity of up 150 MW/600 MWh, switching yard, substations and associated ancillary infrastructure including an underground reticulation network and internal overhead transmission line.

A preliminary assessment of operational noise for the proposed Project has been conducted in accordance with the NSW Technical Supplement for Noise.[1]

The Technical Supplement for Noise refers to the SA Guidelines as the underlying noise assessment method for wind energy projects, subject to a set of supplementary procedures that are specific to NSW.[2]

The noise assessment has been carried out based on a candidate wind turbine model, as nominated by the Applicant, with a generation capacity of 6.0 MW. The candidate wind turbine is representative of the type of wind turbine being considered for the Project. Noise emission data for the candidate wind turbine model has been reviewed and is consistent with the range of values expected for comparable types of multi megawatt wind turbine models.

The noise emission data has been used with international standard ISO 9613-2:1996 to develop a 3D noise model allowing the prediction of the level of noise expected to occur at neighbouring receivers, under worst-case noise propagation conditions.[3] The ISO 9613-2:1996 standard has been applied based on well-established input choices and adjustments, based on research and international guidance, that are specific to wind farm noise assessments. ISO 9613-2:1996 (without reference to a specific version of the standard) is nominated as being an acceptable noise prediction method in the SA Guidelines.

The predicted noise levels for the proposed wind turbine layout are above the base noise limit determined in accordance with the Technical Supplement for Noise at 7 non-associated receivers by a maximum margin of 4.9 dB. The results of the noise modelling therefore demonstrate that the Applicant will need to consider compliance with the applicable noise limits as part of the ongoing development for the Project. This is expected to include detailed design, noise assessment and investigation of potential noise mitigation strategies including agreements, following the completion of background noise monitoring and wind-speed based noise limits being established.

---

1 *Wind Energy Guideline: Technical Supplement for Noise Assessment*, NSW Department of Planning, Housing and Infrastructure, November 2024 (Technical Supplement for Noise)

2 *Wind farms environmental noise guidelines*, SA Environmental Protection Authority, published in 2009; updated in 2021 (SA Guidelines)

3 ISO 9613-2:1996 *Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation* (ISO 9613-2:1996)

With regards to cumulative noise, review of currently available information in the public domain has shown that there are two other proposed wind energy facilities with wind turbines located within 10 km of the wind turbines associated with the Project. These projects are referred to as Jeremiah Wind Farm (JWF) and Bondo Wind Farm (BWF). On this basis, a qualitative review of cumulative wind turbine noise is included within this report, identifying that cumulative wind turbine noise will need to be considered in detail at as part of the Project Environmental Impact Statement (EIS).

Once the SEARs are issued for this Project, further detailed noise assessment will be undertaken to support the Project EIS which will be lodged with the NSW Department of Planning, Housing, and Infrastructure (DPHI) as part of the SSDA. The detailed assessment would demonstrate how compliance would be achieved for the specific noise matters defined by the SEARs.

This would include background noise monitoring at key receivers around the Project, a revised operational wind turbine noise modelling assessment and other noise considerations, including cumulative wind turbine noise, considering information available at the time, special noise characteristics, construction, and ancillary infrastructure.

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APPENDIX H TABULATED PREDICTED NOISE LEVEL DATA

1.0 INTRODUCTION

Saddletop Wind Farm (Project) is proposed to be developed by Saddletop Wind Farm Pty Ltd (Applicant) and comprises the construction, operation and decommissioning of a wind farm and associated battery energy storage system (BESS). The Project is located approximately 30 km north-east of Tumut and 45 km east of Gundagai, and within the Cootamundra-Gundagai Regional Council, Yass Valley Council and Snowy Valleys Council local government areas (LGAs).

Marshall Day Acoustics (Australia) Pty Ltd (MDA) have been commissioned by Eco Logical Australia Pty Ltd (ELA) on behalf of the Applicant to undertake a scoping assessment of operational noise associated with the Project. The purpose of the assessment is to identify and describe noise related assessment matters to be accommodated into the Scoping Report for the Project and to inform potential layout changes required to satisfy applicable noise limits. The Scoping Report will be submitted as part of a request for Project-specific Planning Secretary's Environmental Assessment Requirements (SEARs) as part of a future state significant development application (SSDA).

The primary noise related matter associated with the Project is noise from the operation of wind turbines. On this basis, a preliminary assessment of noise has been conducted to provide a robust evaluation of potential noise impacts related to this matter under conservative conditions.

Other, secondary noise related matters associated with the Project include operational noise from the proposed BESS, and other Project related ancillary infrastructure, as well as construction noise and vibration, including construction traffic. These secondary matters have not been numerically evaluated but are identified as being matters requiring detailed assessment as part of the Project Environmental Impact Statement (EIS).

The noise scoping assessment has been prepared in accordance with the Technical Supplement for Noise and is based on:[4]

- The minimum (base) operational noise limit determined in accordance the Technical Supplement for Noise.
- Preliminary noise modelling for the Project based on the current Project design comprising 123 multi-megawatt wind turbines and a candidate wind turbine model representative of the size and type of wind turbine being considered for the Project.
- A comparison of the predicted noise levels at nearby receivers with the base noise limit.

A review of information currently available in the public domain indicates two other proposed wind energy facilities with wind turbines located within 10 km of the wind turbines associated with the Project. These projects are referred to as Jeremiah Wind Farm (JWF) and Bondo Wind Farm (BWF). On this basis, a qualitative review of cumulative wind turbine noise is included within this report.

Acoustic terminology used in this report is presented in Appendix A.

[4] *Wind Energy Guideline: Technical Supplement for Noise Assessment*, NSW Department of Planning, Housing and Infrastructure, November 2024 (Technical Supplement for Noise)

2.0 PROJECT DESCRIPTION

2.1 Overview

The Project is located approximately 30 km north-east of Tumut and 45 km east of Gundagai around the Adjungbilly area, within the Riverina Local Land Services region of NSW and within the Cootamundra-Gundagai Regional Council, Yass Valley Council and Snowy Valleys Council LGAs. The Project is on predominantly privately owned, freehold land, as well as Crown Land and land that contains Council crossings.

The key components of the proposed Project include:

- Up to 123 wind turbines
- A BESS with a proposed capacity of 150 MW/600 MWh
- Permanent electrical infrastructure including switching yard, substations, underground reticulation network and internal overhead transmission line.

The coordinates of the wind turbines are presented in tabular format in Appendix B.

Throughout this report, the term *receiver* is used when referring to any dwelling identified by the Applicant in the vicinity of the Project. Receivers are categorised as *associated receivers* i.e. host properties or receivers where a private impact agreement specifically addressing noise is in place between the landowners and the Applicant, or *non-associated receivers* which comprises the remaining receivers without a private agreement with the Applicant.

Based on information provided by the Applicant, a total of 53 receivers are located within 5 km from a proposed wind turbine location, of which 22 are classified as being associated with the Project. 5 km is a nominal distance selected as being greater than the distance typically required to achieve compliance with the base noise limit.

The coordinates of the receivers are tabulated in Appendix C.

A site layout plan illustrating the wind turbine layout and receivers is provided in Appendix D.

2.2 Candidate wind turbine model

The wind turbine model to be assessed in detail as part of the EIS will be determined from ongoing Project design development. Further, if the Project is approved, the final wind turbine model would only be selected after a tender process to procure the supply of wind turbines. The final selection would be made based on a range of design requirements, including achieving compliance with relevant noise limits at surrounding noise sensitive receivers.

Accordingly, to assess the proposed development at this stage of the Project, it is necessary to use a representative candidate wind turbine model for the type of wind turbines being considered. The purpose of using a candidate wind turbine in this assessment is to inform a preliminary assessment of operational noise, accounting for the base noise limit and noise emission levels that are typical of the capacity of wind turbines being considered for the Project. For this assessment, the Applicant has nominated the General Electric 6.0-164 as the candidate wind turbine model and provided manufacturer specifications.

This model is a variable speed wind turbine, with the speed of rotation and the amount of power generated by the wind turbines being regulated by control systems which vary the pitch of the wind turbine blades (the angular orientation of the blade relative to its axis).

This assessment has been based on the wind turbines operating in an unconstrained mode of generation (i.e. without noise reduced operating modes) and with blade serrations.

Details of the assessed candidate wind turbine are provided in Table 1.

Table 1: Selected candidate wind turbine model

Item	Detail
Make	General Electric
Model	GE 6.0-164
Rated power, MW	6.0
Rotor diameter, m	164
Operating mode	Standard
Modelled hub height, m	160
Blade serrations	Yes
Cut-in wind speed (hub height), m/s	3
Cut-out wind speed (hub height), m/s	25

3.0 OPERATIONAL WIND FARM NOISE LIMITS

3.1 Non-associated receivers

The Technical Supplement for Noise provides guidance on how noise impacts are to be assessed for large-scale wind energy development projects that are classed as State significant development.

The Technical Supplement for Noise states that the SA Guidelines, are to be used as the relevant assessment standard, subject to a set of variations that apply to the assessment of NSW projects.[5] The variations are defined for:

- noise limits (and the receiver types they apply to)
- special noise characteristics
- noise monitoring.

In relation to noise limits, the variation defined in the Technical Supplement for Noise sets the base criterion at a value of 35 dB L_{Aeq} for all projects, in lieu of the 35 to 40 dB L_{Aeq} base criterion range defined in the SA Guidelines. It is noted that the Technical Supplement for Noise uses the terms 'limits' and 'criteria' interchangeably.

The noise limits in the Technical Supplement for Noise are subsequently defined as follows:

> *The predicted equivalent noise level, ($L_{Aeq,\ 10}$),[1] adjusted for tonality and low-frequency noise, should not exceed 35 dB(A) or the background noise ($L_{A90,\ 10}$) by more than 5 dB(A), whichever is greater, at all relevant receivers for wind speed from cut-in to rated power of the wind turbine generator and each integer wind speed in between.*
>
> *1 Determined in accordance with section 4 of the SA Guidelines.*

Variations are also defined in the Technical Supplement for Noise for the assessment of special noise characteristics. These procedures would be referenced in subsequent detailed assessment phases for the Project.

The Technical Supplement for Noise notes the following in relation to the types of receivers where the noise limits apply:

> *Setting noise level objectives for wind turbines aims to retain noise levels that are compatible with surrounding land uses and ensure that noise levels do not significantly affect the lifestyle of people living in the area.*
>
> *Applicants commonly negotiate agreements with private landholders to manage impacts where projects may not achieve noise limits. This means that landholders may enter into an agreement with applicants to accept noise levels above the prescribed noise limits. Where such an agreement is in place, these receivers do not require an assessment of noise impacts. Where known, these receivers should be identified in the scoping report and environmental impact statement, including on any relevant maps.*

3.2 Associated receivers

The Technical Supplement for Noise indicates that assessment of noise impact is not required for associated receivers i.e. host properties or receivers where a private impact agreement specifically addressing noise is in place between the landowner and the Applicant.

Noise levels at these locations would ultimately need to be managed in accordance with the private agreement.

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[5] *Wind farms environmental noise guidelines*, SA Environmental Protection Authority, published in 2009; updated in 2021 (SA Guidelines)

4.0 NOISE PREDICTION METHOD

Operational wind turbine noise levels are predicted using:

- Noise emission data for the candidate wind turbines.
- A 3D digital model of the Project and the surrounding environment.
- International standards used for the calculation of environmental sound propagation.

The method selected to predict noise levels is ISO 9613-2:1996.[6] The prediction method is consistent with the guidance provided by the SA Guidelines (referenced in the Technical Supplement for Noise) and has been shown to provide a reliable method of predicting the typical levels of noise expected to occur in practice.

The ISO 9613-2:1996 method is used in conjunction with a set of input choices and procedural modifications that are specific to wind farm noise assessment, based on international research and guidance.

Key elements of the noise prediction method are summarised in Table 2. Further discussion of the method and the calculation choices is provided in Appendix E.

Table 2: Downwind prediction method

Detail	Description
Software	Proprietary noise modelling software SoundPLANnoise version 9.1
Method	ISO 9613-2:1996, with adjustments to the method applied on the basis of the UK Institute of Acoustics guidance.[7] The adjustments are applied within the SoundPLANnoise modelling software and relate to the influence of terrain screening and ground effects on sound propagation. Specific details of adjustments are noted below and are discussed in Appendix E.
Source characterisation	To model the operational wind turbine noise associated with the Project, the following specific procedures are noted: • Calculations of wind turbine to receiver distances and average sound propagation heights are made on the basis of the point source being located at the position of the hub of the wind turbine. • Each wind turbine is modelled as a point source of sound. • The total wind turbine noise associated with the operation of the Project is then calculated on the basis of simultaneous operation of all wind turbines and summing the contribution from each. • Calculations of terrain related screening are made on the basis of the point source being located at the maximum tip height of each wind turbine. Further discussion of terrain screening effects is provided below.
Terrain data	Digital elevation map with a cell size of 1 arcsecond throughout the Project and surrounds, sourced from ELVIS.[8]

[6] ISO 9613-2:1996 *Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation* (ISO 9613-2:1996)

[7] UK Institute of Acoustics, *A good practice guide to the application of ETSU-R-97 for the assessment and rating of WTG noise (*UK Institute of Acoustics guidance)

[8] *Elvis - Elevation and Depth* - Foundation Spatial Data - https://elevation.fsdf.org.au/

Detail	Description
Terrain effects (wind turbine-specific procedures)	Adjustments for the effect of terrain are determined and applied on the basis of the UK Institute of Acoustics guidance and research outlined in Appendix E. *Valley effects*: +3 dB is applied to the calculated noise level of a wind turbine when a significant valley exists between the wind turbine and calculation point. A significant valley is determined to exist when the actual mean sound propagation height between the wind turbine and calculation point is 50% greater than would occur if the ground were flat. *Terrain screening effects*: only calculated if the terrain blocks line of sight between the maximum tip height of the wind turbine and the calculation point. The value of the screening effect is limited to a maximum value of -2 dB. The topography of the Project area and surrounds features varied terrain characterised by significant differences in ground elevation between the wind turbines and surrounding receivers. These terrain characteristics resulted in the application of adjustments to the predicted noise levels at receivers, ranging from +1.4 to -1.9 dB based on the effects listed above. For reference purposes, the ground elevations at the wind turbine and receiver positions are tabulated in Appendix B and Appendix C, respectively. The topography of the Project area and surrounds is depicted in the elevation map provided in Appendix F.
Ground conditions	Ground factor of G = 0.5 on the basis of the UK Institute of Acoustics guidance and research outlined in Appendix E. The ground around the Project corresponds to acoustically soft conditions (G = 1) according to ISO 9613-2:1996. The adopted value of G = 0.5 assumes that 50% of the ground cover is acoustically hard (G = 0) to account for variations in ground porosity and provide a cautious representation of ground effects.
Atmospheric conditions	Temperature 10°C and relative humidity 80% These represent conditions which result in relatively low levels of atmospheric sound absorption and are chosen on the basis of the UK Institute of Acoustics guidance and SA Guidelines. The calculations are based on sound speed profiles which increase the propagation of sound from each wind turbine to each receiver, whether as a result of thermal inversions or wind directed toward each calculation point.[9] The primary consideration for wind farm noise assessment is wind speed and direction. The noise level at each calculation point is assessed on the basis of being simultaneously downwind of every wind turbine at the Project. Other wind directions in which part or the entire wind farm is upwind of the receiver will result in lower noise levels. In some cases, it is not physically possible for a receiver to be simultaneously downwind of each wind turbine and the approach is therefore conservative in these instances.

[9] The sound speed profile defines the rate of change in the speed of sound with increasing height above ground.

Detail	Description
Receiver heights	1.5 m above ground level. It is noted that the UK Institute of Acoustics guidance refers to predictions made at receiver heights of 4 m. Predictions in Australia are generally based on a lower prediction height of 1.5 m which results in lower noise levels. However, importantly, predictions in Australia do not generally subtract a margin recommended by the UK Institute of Acoustics guidance to account for differences between L_{Aeq} and L_{A90} noise levels. The magnitude of these differences is comparable and therefore balance each other out to provide similar predicted noise levels. This approach has been shown to be valid for predicting noise level of wind farms expected to be measured using the L_{A90} parameter (as per the Technical Supplement for Noise).

5.0 WIND TURBINE NOISE ASSESSMENT

5.1 Wind turbine noise emissions

The noise emissions of the wind turbines are described in terms of the sound power level for different wind speeds. The sound *power* level is a measure of the total sound energy produced by each wind turbine and is distinct from the sound *pressure* level which depends on a range of factors such as the distance from the wind turbine at which it is measured or predicted.

Sound power level data for the candidate wind turbine model, including sound frequency characteristics, has been sourced from the GE Renewable Energy document *Technical Documentation Wind Turbine Generator Systems Cypress 6.0-164-50Hz Product Acoustic Specifications According to IEC 61400-11 (Rev. 02 – EN)*, dated 16 March 2021.

Based on the data sourced from the manufacturer's documentation, the noise modelling undertaken for this assessment involved conversion of third octave band levels to octave band levels (where applicable), and adjustment by addition of +1.0 dB at each wind speed to provide a margin for typical values of test uncertainty. The modification for test uncertainty is in line with recommendations outlined in the UK Institute of Acoustics guidance.

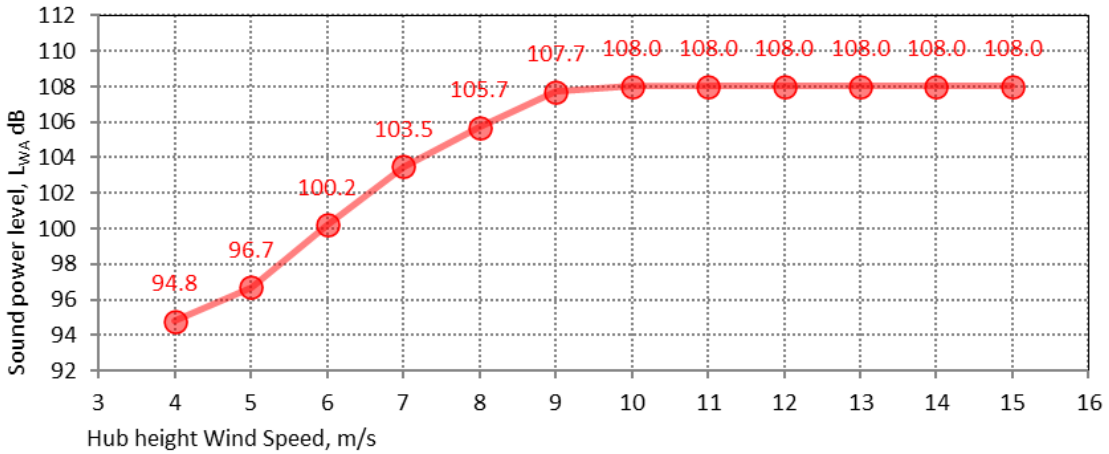
The overall A-weighted sound power levels (including the +1.0 dB addition) as a function of hub height wind speed are presented in Table 3 and Figure 1. These represent the total noise emissions of the wind turbine, including the secondary contribution of ancillary plant associated with each wind turbine (e.g. cooling fans and internal transformer).

Table 3: Wind turbine sound power levels versus hub height wind speed (including +1 dB uncertainty), dB L_{WA}

Hub height wind speed, m/s						
4	**5**	**6**	**7**	**8**	**9**	**≥10 [a]**
94.8	96.7	100.2	103.5	105.7	107.7	108.0

a Overall sound power levels in the manufacturer provided noise datasheet for wind speeds between 10 – 15 m/s are equal to 108.0 dB L_{WA}.

Figure 1: Wind turbine sound power levels versus hub height wind speed (including +1 dB uncertainty), dB L_{WA}



The sound power levels in Figure 1 are considered typical of the range of noise emissions associated with comparable multi-megawatt wind turbines. The data is therefore considered appropriate to

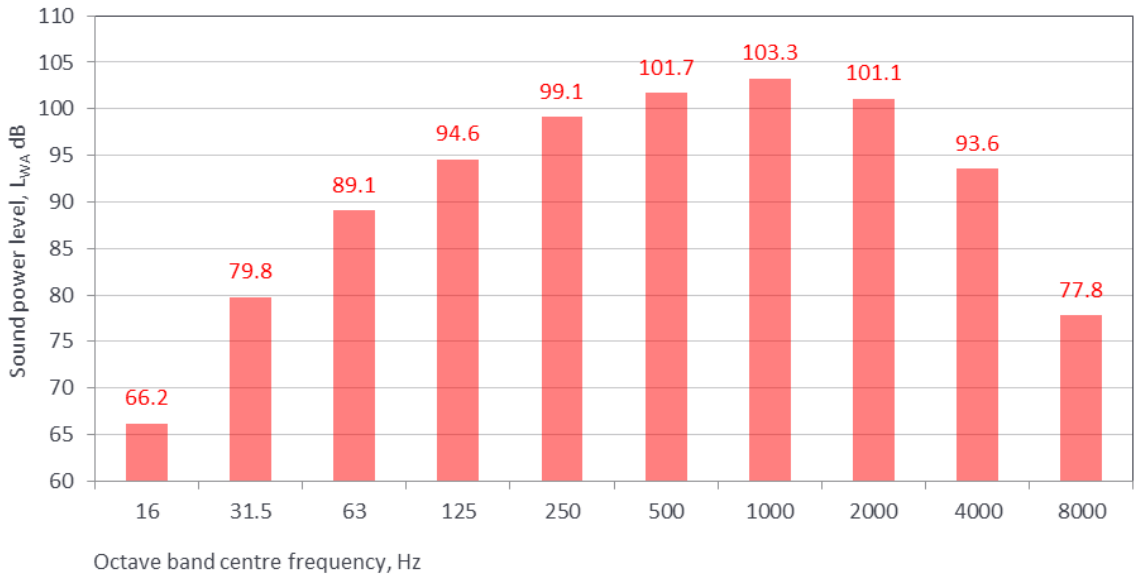
reference in this scoping assessment as a representation of the apparent sound power levels of the wind turbine if it were to be tested and rated in accordance with IEC 61400-11.[10]

The sound frequency characteristics of the wind turbine have been sourced from the manufacturer's specification document. The reference spectrum used as the basis for this assessment is presented in Table 4 and Figure 2, and corresponds to the highest overall sound power level tabulated in Table 3, occurring at a hub height wind speed of 10 m/s (when considering cumulative low frequency content below 125 Hz and 250 Hz).

Table 4: Wind turbine octave band sound power levels (at 10 m/s - including +1 dB uncertainty), dB L_{WA}

Octave band centre frequency, Hz									
31.5	**63**	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**	**Total**
79.8	89.1	94.6	99.1	101.7	103.3	101.1	93.6	77.8	108.0

Figure 2: Wind turbine octave band sound power levels (at 10 m/s including +1 dB uncertainty), dB L_{WA}



Industry research conducted with reference to sound power data for a range of wind turbine models has shown that there is not a clear relationship between wind turbine size, or power output, and the noise emission characteristics of a given wind turbine model.[11] In practice, the overall noise emissions of a wind turbine are dependent on a range of factors, including the wind turbine size, power output, blade design and rotational speed of the wind turbine.

While wind turbine sizes and power ratings of contemporary wind turbines have increased, the noise emissions of the wind turbines are comparable to, or lower than, previous generations of wind turbines. This is a result of design improvements, notably, measures to reduce the speed of rotation of the wind turbines, and enhanced blade design features such as serrations for noise control.

[10] International Electrotechnical Commission, IEC 61400-11:2012 *Wind turbines - Part 11: Acoustic noise measurement techniques*

[11] Van den Berg, Frits & Koppen, Erik & Boon, Jaap & Ekelschot-Smink, Madelon. - *Sound power of onshore wind turbines and its spectral distribution*. Sound & Vibration. 59 - 2025

5.1.1 Tonality

The manufacturer specification for the candidate wind turbine model does not provide information about tonality.

The occurrence of tonality in the noise of contemporary multi-megawatt wind turbine designs is generally limited. This is supported by evidence of operational wind farms in Australia which indicates that the occurrence of tonality at receivers is atypical. On this basis, adjustments for tonality have not been applied to the predicted noise levels presented in this scoping assessment.

Notwithstanding this, the subject of tonality would be addressed in subsequent assessment stages for the Project. As part of this, further information will need to be obtained from the manufacturer concerning tonality.

5.1.2 Low frequency noise

The other special noise characteristic which is assessable in accordance with the Technical Supplement for Noise is low frequency noise. While there is a prescribed criterion for the application of low frequency noise penalty adjustments in the Technical Supplement for Noise (based on C-weighted noise levels), there is no established or verified engineering prediction method of C-weighted noise levels associated with the operation of wind turbines.

For the purposes of this report, a risk assessment approach has been adopted using a simplified prediction method to estimate the C-weighted noise levels. Details of the study have been provided in Section 5.3 and Appendix G.

5.2 Preliminary predicted noise levels

This section of the report presents the preliminary predicted A-weighted noise levels of the Project at surrounding non-associated receivers, and an assessment of compliance with the base noise limit. Predicted noise levels at associated receivers have also been included for information only.

Sound levels in environmental assessments are typically reported to the nearest integer to reflect the practical use of measurement and prediction data. However, in the case of wind farm layout design, significant layout modifications may only give rise to fractional changes in the predicted noise level. This is a result of the relatively large number of sources influencing the total predicted noise level, as well as the typical separating distances between the wind turbine locations and surrounding assessment positions. It is therefore necessary to consider the predicted noise levels at a finer resolution than can be perceived or measured in practice. It is for this reason that the levels presented in this section are reported to one decimal place.

The predicted noise levels are for conditions when the noise emissions of the candidate wind turbine have reached their highest level (corresponding to a hub height wind speed of 10 m/s), and the wind is directed from each wind turbine to each receiver. The predicted noise levels presented include the +1.0 dB allowance to account for wind turbine sound power level measurement uncertainty, as described in Section 5.1.

5.2.1 Non-associated receivers

Table 5 lists the predicted noise levels for all identified non-associated receivers within 5 km of the Project. The minimum (base) noise limit applicable to the wind farm at non-associated receivers is 35 dB $L_{Aeq\ 10\ min}$ in the absence of baseline monitoring which is yet to be undertaken.

Table 5: Predicted noise levels at non-associated receivers within 5 km (including +1 dB uncertainty)

Receiver	Distance to nearest wind turbine, m	Predicted noise level, dB $L_{Aeq, 10\,min}$
AVR003	3,652	29.3
AVR004	3,806	29.9
AVR005	4,070	30.3
AVR006	4,451	27.7
AVR007	4,150	26.9
CWR025	3,871	25.0
CWR026	3,441	25.2
GAR004	2,998	27.6
GHR005	1,481	38.6
NRS007	3,319	28.4
NRS009	1,507	37.0
NRS010	1,662	36.6
PCR002	3,273	26.5
PCR003	4,097	25.1
PCR004	3,846	25.6
PCR006	3,722	26.8
PCR007	2,297	31.0
PCR008	3,417	28.9
RR001	2,464	31.1
RR003	2,527	30.8
RR004	2,803	29.8
RR005	3,231	28.9
RR006	2,493	30.9
RR007	2,547	31.2
TR002	1,519	37.3
TR003	1,628	36.6
TR004	1,636	35.1
TR006	3,544	28.1
TR007	2,865	29.7
WJR025	1,527	39.9
WJR087	2,478	32.0

Predicted noise levels for each integer wind speed are tabulated in Appendix H for all receivers within 5 km of a wind turbine.

It can be seen from Table 5 that the predicted noise levels for the Project are above the base noise limit of 35 dB $L_{Aeq,\ 10\ min}$ at 7 non-associated receivers by a maximum margin of 4.9 dB at one receiver, with a majority of the remaining receivers being 2.3 dB or less above the base noise limit.

This indicates that more detailed assessment is required to determine if modifications to the Project design and/or mitigation strategies will be required during the EIS stage such that the requirements of the Technical Supplement for Noise can be achieved as part of the ongoing design development for the Project.

Such works will occur when background noise monitoring is completed and wind-speed based noise limits are established, taking into account any further changes to layout as design progresses.

5.2.2 Associated receivers

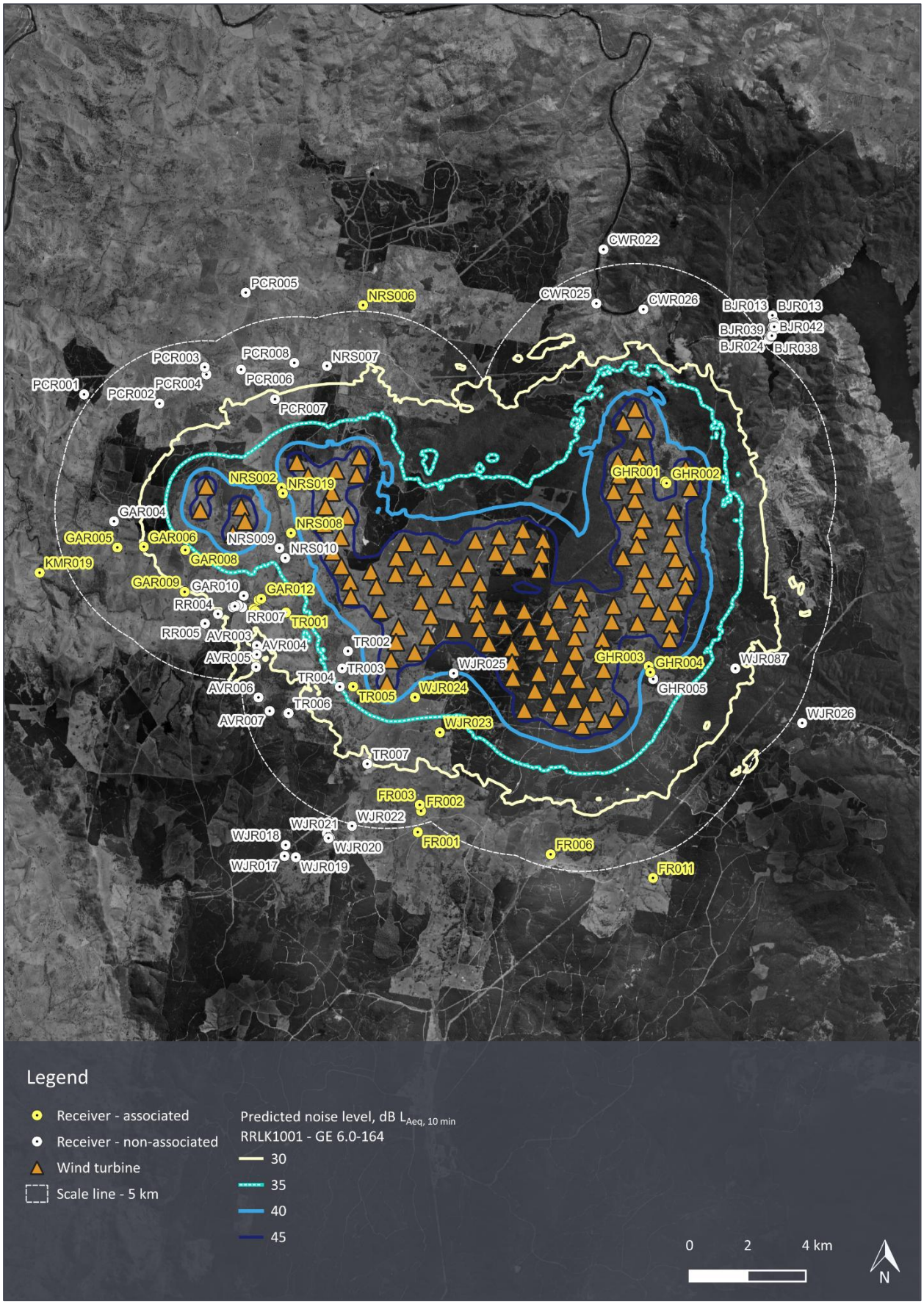
Table 6 presents the predicted noise levels for all associated receivers for informative purposes only.

Table 6: Predicted noise levels at associated receivers (including +1 dB uncertainty)

Receiver	Distance to nearest wind turbine, m	Predicted noise level, dB $L_{Aeq,\ 10\ min}$
AVR001	2,677	31.5
AVR002	2,769	31.4
FR002	4,555	28.2
FR003	4,339	28.4
FR006	4,551	26.7
GAR005	3,131	27.0
GAR006	2,318	30.2
GAR008	1,470	34.0
GAR009	2,598	29.7
GAR011	2,446	32.1
GAR012	2,437	32.3
GHR001	851	43.5
GHR002	841	43.5
GHR003	1,181	40.0
GHR004	1,316	39.4
NRS002	1,011	39.6
NRS008	1,195	38.7
NRS019	1,065	39.4
TR001	2,300	33.2
TR005	1,181	36.7
WJR023	2,494	33.6
WJR024	1,095	38.3

Noise levels at associated receivers will ultimately need to be managed in accordance with the private agreements established between the Applicant and the landowners.

Figure 3: Highest predicted noise levels (corresponding to hub height wind speeds of 10 m/s)



5.3 Low-frequency noise

The risk assessment provided in Appendix G indicates calculated low frequency noise levels above the applicable threshold at 2 non-associated receivers- WJR025 and GHR005.

On the basis that the Project will be designed and operated to achieve either the base noise limit or the background adjusted noise limits applicable under the Technical Supplement for Noise, it is not expected that adjustments for low frequency noise are likely to be required. Adjustments have therefore not been applied within in this assessment.

Notwithstanding the above, detailed assessment of low frequency and tonality special noise characteristics would need to be carried out as part of the EIS and post-construction compliance assessments.

5.4 Cumulative noise review

In relation to other wind farm developments, the Technical Supplement for Noise does not make specific recommendations concerning cumulative noise. The SA Guidelines do, however, refer to cumulative noise, noting that the criteria have been specified to allow for other potential development, and that any noise criteria that are set relative to background noise levels should not include the influence of other wind farms. While neither document explicitly states a requirement to assess the combined noise levels of multiple wind farm projects, nor do they define noise limits which directly apply to cumulative noise, a qualitative review of cumulative noise from the Project and other nearby projects has been included for completeness.

Based on information currently available within the public domain, the following developments have been identified in the vicinity of the Project:

- Bondo Wind Farm (SSD-86276211) – adjoining the Project boundary to the south/south-east.
- Bookham Wind Farm (SSD-79885459) – approximately 20 km from the Project boundary to the nearest Bookham Wind Farm wind turbine.
- Jeremiah Wind Farm (SSD-22472709) – approximately 1.5 km from the Project boundary to the nearest Jeremiah Wind Farm wind turbine.

Of the Projects listed above, two include wind turbines or project infrastructure within 10 km of the Project wind turbines.

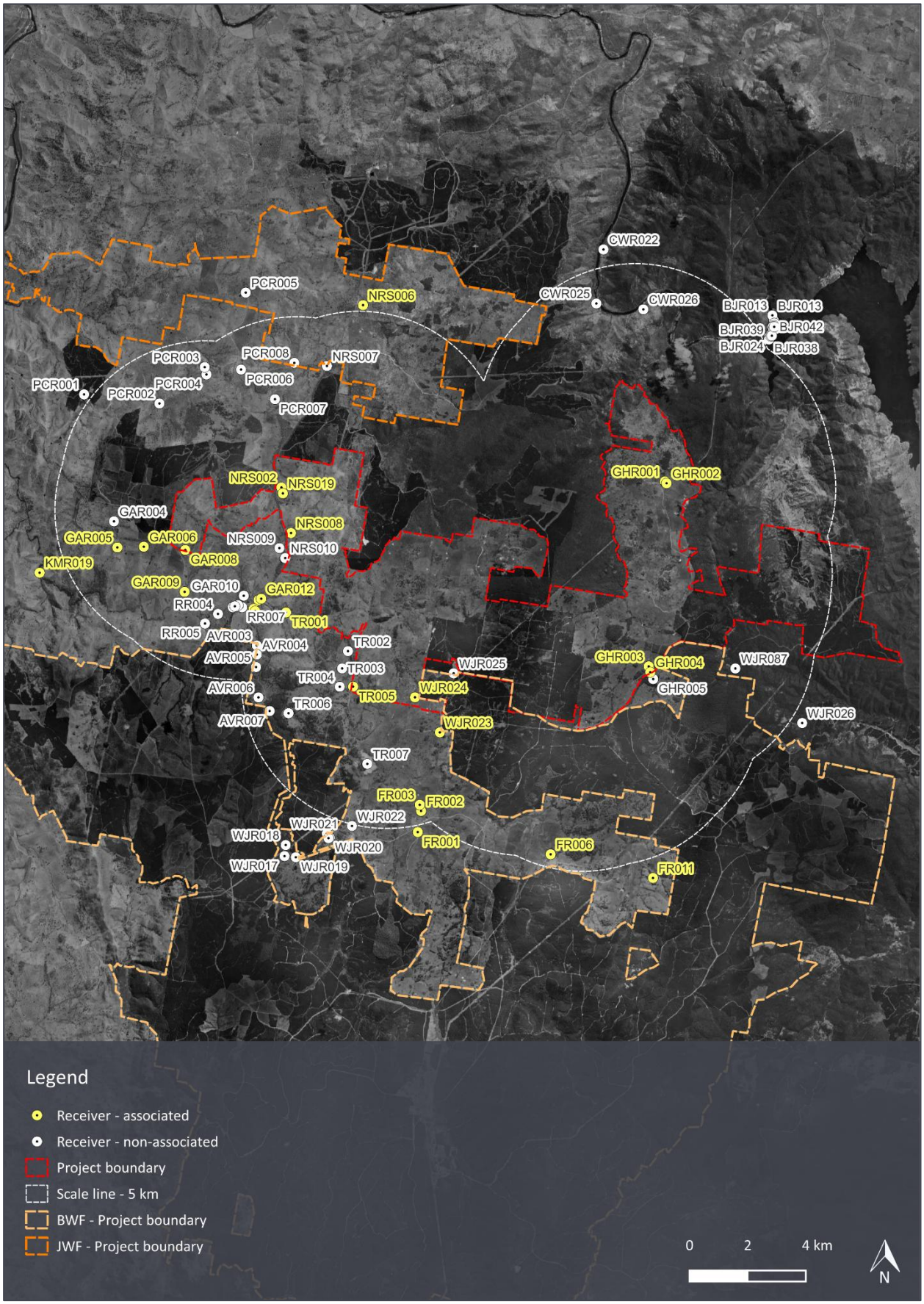
Beyond this 10 km range, cumulative noise impacts are not expected to be relevant for this assessment.

These projects are identified as Bondo Wind Farm (BWF) and Jeremiah Wind Farm (JWF), with both projects having submitted an SSDA Scoping Report. The development status of BWF is currently listed as '*Prepare SEARs*', while JWF is currently listed as '*Prepare EIS'*, having received the project-specific SEARs in May 2025.

Indicative project boundaries for both BWF and JWF are shown in relation to the Project in Figure 4.

Based on the above it is expected that cumulative noise will be a relevant assessment matter for the Project and will need to be considered in detail as part of the EIS assessment. It is expected that this would involve numerical assessment of the cumulative noise impacts with reference to the predicted noise levels in the most recent noise assessments available at the time for the other projects.

Figure 4: Other projects



6.0 DETAILED ASSESSMENT PHASE

A detailed assessment of a wind farm development in NSW involves addressing several environmental noise considerations detailed in project-specific SEARs. Whilst SEARs specific to the Project are yet to be issued, typical requirements include assessment of:

- operational wind turbine noise – in accordance with the Technical Supplement for Noise
- ancillary infrastructure noise, including the BESS – in accordance with the NPfI[12]
- construction noise – in accordance with the ICNG[13]
- construction traffic noise – in accordance with the RNP[14]
- construction vibration – in accordance with the AVTG[15]
- detailed numerical consideration of cumulative impacts with other nearby wind farm projects.

Environmental noise considerations relating to construction and ancillary infrastructure will be addressed at the EIS stage of the assessment once the project specific SEARs have been issued.

Further detailed assessment work may involve background noise monitoring at key receivers to determine the applicable noise limits in accordance with the Technical Supplement for Noise. The results of any background noise monitoring would be documented in a format suitable for submission alongside the Project EIS report.

The Technical Supplement for Noise also specifies additional criteria relating to special noise characteristics, including tonality and low frequency.

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[12] NSW Environment Protection Authority, *Noise Policy for Industry* dated October 2017 (NPfI)

[13] NSW Department of Environment and Climate Change, *Interim Construction Noise Guideline* dated July 2009 (ICNG)

[14] NSW Department of Environment, Climate Change and Water, *Road Noise Policy* dated March 2011 (RNP)

[15] NSW Department of Environment and Conservation, *Assessing Vibration: A Technical Guideline* dated February 2006 (AVTG)

7.0 SUMMARY

A preliminary assessment of operational noise for the proposed Saddletop Wind Farm has been carried out in accordance with the Technical Supplement for Noise.

The noise scoping assessment has been prepared based on the current Project design comprising 123 multi-megawatt wind turbines.

Noise modelling was carried out based on a candidate wind turbine model, as nominated by the Applicant, with a generation capacity of 6.0 MW, representative of the type of wind turbine being considered for the Project.

Based on the results of the preliminary noise assessment, the Applicant will need to consider compliance with the applicable noise limits as part of ongoing design development for the Project. This would include detailed noise assessment, receiver consultation and investigation of potential mitigation strategies, following the completion of background noise monitoring and wind-speed based noise limits being established.

Other, secondary noise assessment matters associated with the Project include operational noise from the proposed BESS, and other Project related ancillary infrastructure, as well as construction noise and vibration, including construction traffic. These secondary matters have not been numerically evaluated but are identified as being matters requiring detailed assessment as part of the EIS.

Once the SEARs are issued for this Project, further detailed assessment will be undertaken to support the Project EIS, to be lodged with DPHI.

APPENDIX A GLOSSARY OF TERMINOLOGY

The basic quantities used within this document to describe noise adopt the conventions outlined in ISO 1996-1:2016 *Acoustics - Description measurement and assessment of environmental noise – Basic quantities and assessment procedures*.

Accordingly, all frequency weighted sound pressure levels are expressed as decibels (dB) in this report.

For example, sound pressure levels measured using an "A" frequency weighting are expressed as L_A dB. Alternative ways of expressing A-weighted decibels such as dBA or dB(A) are therefore not used within this report, except as part of a direct quote of third-party information.

Term	Definition	Abbreviation
A-weighting	A method of adjusting sound levels to reflect the human ear's varied sensitivity to different frequencies of sound.	See discussion above this table.
A-weighted 90th centile	The A-weighted pressure level that is exceeded for 90 % of a defined measurement period. It is used to describe the underlying background sound level in the absence of a source of sound that is being investigated, as well as the sound level of steady, or semi steady, sound sources.	L_{A90}
A-weighted equivalent level	The A-weighted equivalent continuous pressure level.	L_{Aeq}
C- weighting	A method of adjusting sound levels to account for non-linear frequency response of the human ear at high noise levels (typically greater than 100 decibels).	-
C-weighted equivalent level	The C-weighted equivalent continuous pressure level.	L_{Ceq}
Decibel	The unit of sound level.	dB
Hertz	The unit for describing the frequency of a sound in terms of the number of cycles per second.	Hz
Low frequency	A sound with perceptible content in the audible frequency range typically below 200 Hz	-
Octave Band	A range of frequencies. Octave bands are referred to by their logarithmic centre frequencies, these being 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, and 16 kHz for the audible range of sound.	-
Sound power level	A measure of the total sound energy emitted by a source, expressed in decibels.	L_W
Sound pressure level	A measure of the level of sound expressed in decibels.	L_p
Special characteristics	A term used by the Technical Supplement for Noise to define sound characteristics that increase the likelihood of adverse reaction to the sound. The characteristics are tonality and low frequency.	-
Tonality	A characteristic to describe sounds which are composed of distinct and narrow groups of audible sound frequencies (e.g. whistling or humming sounds).	-

APPENDIX B WIND TURBINE COORDINATES

The following table sets out the coordinates of the current proposed wind turbine layout supplied by the Applicant on 22 May 2025.

Table 7: Wind turbine coordinates – GDA2020 MGA zone 55

Wind turbine ID	Easting, m	Northing, m	Terrain elevation, m
1	641,116	6,123,176	596
2	640,705	6,122,720	716
3	641,419	6,122,452	723
4	641,204	6,121,661	773
5	640,521	6,121,380	736
6	641,266	6,121,158	786
7	640,563	6,120,888	763
8	641,157	6,120,548	787
9	640,375	6,120,346	756
10	641,105	6,120,045	798
11	640,743	6,119,603	799
12	641,424	6,119,383	804
13	641,286	6,118,985	807
14	641,169	6,118,486	804
15	640,688	6,118,079	779
16	642,853	6,121,118	719
17	643,010	6,120,460	740
18	642,428	6,119,657	793
19	642,417	6,119,086	796
20	642,327	6,118,510	796
21	642,510	6,118,009	802
22	641,443	6,117,646	788
23	641,267	6,117,120	789
24	642,145	6,117,323	820
25	642,890	6,117,551	810
26	642,842	6,117,067	818
27	642,508	6,116,525	828
28	641,525	6,116,626	815
29	641,922	6,116,176	834
30	642,374	6,115,759	828

Wind turbine ID	Easting, m	Northing, m	Terrain elevation, m
31	642,294	6,115,252	824
32	641,194	6,115,818	794
33	640,369	6,116,408	790
34	640,303	6,115,870	821
35	639,991	6,115,268	830
36	639,952	6,114,754	838
37	640,027	6,114,201	841
38	639,752	6,113,394	848
39	640,470	6,112,892	832
40	640,070	6,112,483	836
41	639,288	6,112,283	875
42	639,438	6,112,719	868
43	639,142	6,113,856	855
44	639,058	6,114,815	859
45	639,031	6,115,316	834
46	639,201	6,115,801	813
47	639,254	6,116,313	812
48	639,251	6,116,827	821
49	638,514	6,116,582	837
50	638,076	6,116,010	848
51	637,476	6,115,660	855
52	637,676	6,115,160	855
53	638,826	6,114,310	875
54	639,026	6,113,160	893
55	638,547	6,112,582	867
56	637,299	6,112,827	841
57	637,663	6,113,491	837
58	637,800	6,114,090	837
59	636,904	6,113,925	806
60	636,876	6,114,460	813
61	636,076	6,115,110	768
62	636,626	6,115,710	816
63	637,293	6,116,233	858

Wind turbine ID	Easting, m	Northing, m	Terrain elevation, m
64	636,471	6,116,384	776
65	635,676	6,116,610	772
66	635,771	6,117,170	771
67	636,761	6,117,765	767
68	637,800	6,117,645	788
69	637,900	6,118,163	783
70	637,941	6,118,665	786
71	637,248	6,119,009	755
72	637,110	6,118,464	755
73	636,442	6,118,796	735
74	636,313	6,118,240	752
75	635,621	6,118,640	725
76	635,349	6,117,835	771
77	634,567	6,118,082	749
78	635,007	6,117,357	756
79	634,020	6,118,478	756
80	633,173	6,118,563	774
82	632,902	6,118,062	750
83	633,563	6,117,756	732
84	633,886	6,117,360	730
85	634,573	6,116,753	745
86	634,083	6,116,059	674
87	633,976	6,115,357	720
88	633,529	6,114,806	708
89	632,572	6,113,756	705
90	632,713	6,114,555	652
91	632,887	6,115,161	658
92	632,975	6,115,676	693
93	633,741	6,116,552	694
94	632,874	6,117,497	695
95	632,341	6,116,263	692
96	632,217	6,117,072	679
97	632,017	6,117,588	740

Wind turbine ID	Easting, m	Northing, m	Terrain elevation, m
98	631,328	6,116,739	736
99	631,297	6,117,240	754
100	631,006	6,117,775	696
101	630,714	6,118,270	724
102	630,984	6,118,770	740
103	631,204	6,119,497	705
104	630,418	6,119,224	673
105	630,468	6,119,825	671
106	630,671	6,120,311	701
107	631,539	6,120,919	647
108	631,629	6,121,537	647
109	630,827	6,121,066	694
110	629,860	6,120,876	635
111	629,475	6,121,350	578
112	627,690	6,119,313	586
113	627,556	6,119,809	579
114	627,274	6,118,882	573
117	626,356	6,120,522	524
118	626,152	6,119,696	604
120	638,155	6,113,048	854
121	638,476	6,113,660	875
122	638,213	6,114,753	841
123	638,276	6,115,510	835
124	636,876	6,114,960	808
125	635,776	6,115,610	727
126	635,676	6,116,110	742
127	634,876	6,115,610	701

APPENDIX C RECEIVER LOCATIONS

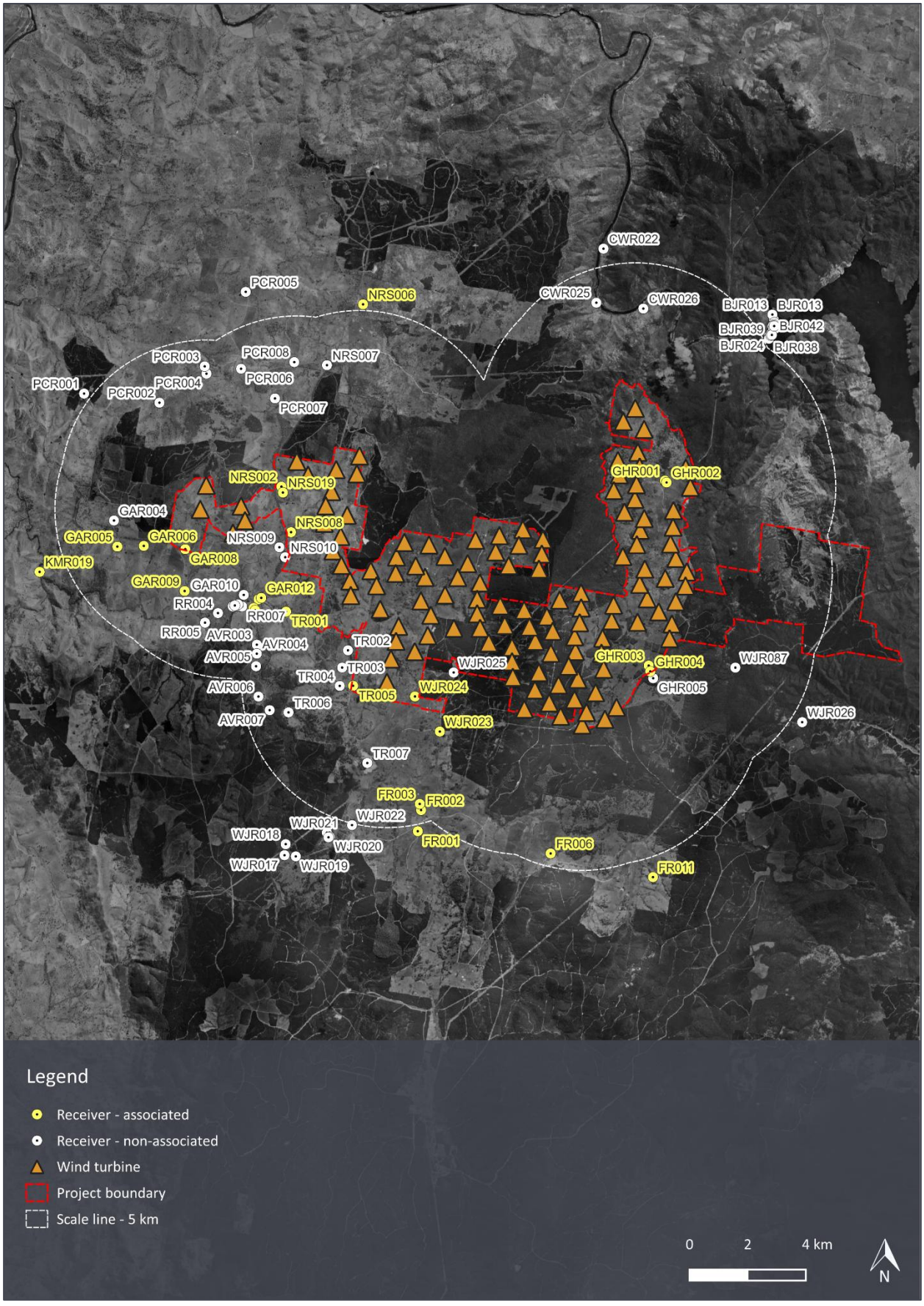
The following table sets out the 53 noise sensitive receivers located within 5 km of a proposed wind turbine and considered in the noise scoping assessment, together with their respective distance to the nearest wind turbine. Data has been provided to MDA by the Applicant on 16 June 2025.

Table 8: Receiver coordinates – GDA2020 MGA zone 55

Receiver ID	Easting, m	Northing, m	Terrain elevation, m	Distance to nearest wind turbine, m
Non-associated receivers				
AVR003	628,096	6,115,045	523	3,649
AVR004	628,095	6,114,735	549	3,803
AVR005	628,070	6,114,304	591	4,067
AVR006	628,152	6,113,261	575	4,448
AVR007	628,538	6,112,794	554	4,147
CWR025	639,776	6,126,804	286	3,868
CWR026	641,393	6,126,602	297	3,437
GAR004	623,183	6,119,314	587	2,993
GHR005	641,732	6,113,891	846	1,473
NRS007	630,509	6,124,657	497	3,315
NRS009	628,874	6,118,395	547	1,498
NRS010	629,074	6,118,052	539	1,654
PCR002	624,746	6,123,366	456	3,269
PCR003	626,304	6,124,615	447	4,094
PCR004	626,364	6,124,364	459	3,842
PCR006	627,554	6,124,534	478	3,718
PCR007	628,721	6,123,514	526	2,291
PCR008	629,385	6,124,762	521	3,413
RR001	627,452	6,116,430	506	2,459
RR003	627,270	6,116,361	505	2,522
RR004	626,761	6,116,131	504	2,798
RR005	626,315	6,115,801	508	3,227
RR006	627,340	6,116,395	506	2,488
RR007	627,590	6,116,360	512	2,542
TR002	631,232	6,114,851	606	1,510
TR003	631,031	6,114,258	651	1,620
TR004	630,949	6,113,628	663	1,628
TR006	629,187	6,112,717	574	3,541

Receiver ID	Easting, m	Northing, m	Terrain elevation, m	Distance to nearest wind turbine, m
TR007	631,897	6,110,976	693	2,861
WJR025	634,868	6,114,089	773	1,519
WJR087	644,558	6,114,257	753	2,473
Associated receivers				
AVR001	627,987	6,116,306	515	2,673
AVR002	628,041	6,116,226	515	2,764
FR002	633,747	6,109,358	705	4,553
FR003	633,700	6,109,569	703	4,336
FR006	638,204	6,107,866	704	4,548
GAR005	623,298	6,118,417	596	3,127
GAR006	624,209	6,118,442	631	2,313
GAR008	625,634	6,118,329	547	1,461
GAR009	625,613	6,116,891	513	2,593
GAR011	628,157	6,116,606	508	2,441
GAR012	628,249	6,116,655	507	2,431
GHR001	642,136	6,120,688	769	836
GHR002	642,192	6,120,623	772	826
GHR003	641,577	6,114,327	827	1,170
GHR004	641,631	6,114,126	837	1,307
NRS002	628,943	6,120,479	566	999
NRS008	629,274	6,118,914	572	1,185
NRS019	628,994	6,120,276	576	1,053
TR001	629,102	6,116,181	522	2,294
TR005	631,409	6,113,633	659	1,170
WJR023	634,392	6,112,058	736	2,489
WJR024	633,537	6,113,264	739	1,083

APPENDIX D SITE LAYOUT PLAN



APPENDIX E NOISE PREDICTION MODEL

In Australia, wind turbine noise predictions are typically calculated using ISO 9613-2:1996. with a set of conservative assumptions tailored to wind farm assessment, as detailed in the UK Institute of Acoustics guidance.

A revised version of the standard, ISO 9613-2:2024, was published earlier in 2024 based on broadly equivalent procedures to ISO 9613-2:1996, subject to refinements, clarifications, and supplementary advice for different types of sources. [16] Notably, ISO 9613-2:2024 introduces an informative annex on wind turbine noise modelling to reflect the recommendations of the UK Institute of Acoustics guidance.

At the date of preparing this report, MDA is reviewing the implementation of ISO-9613-2:2024 in SoundPLANnoise. This is a standard quality assurance process undertaken by MDA before using any revised noise modelling standard.

The core elements of the two versions (particularly with respect to wind farm noise modelling), are similar, and proprietary software options already implement the UK Institute of Acoustics guidance with respect to ISO 9613-2:1996.

On this basis ISO 9613-2:1996 continues to be used and referenced in Australia and has been chosen as the most appropriate method to calculate the level of broadband A-weighted wind farm noise expected to occur at surrounding receptor locations. This method is considered the most robust and widely used international method for the prediction of wind farm noise.

The use of this standard is supported by international research publications, measurement studies conducted by MDA and direct reference to the standard in the South Australia EPA W*ind farms environmental noise guidelines*, NZS 6808:2010 *Acoustics – Wind farm noise* and AS 4959:2010 *Acoustics – Measurement, prediction and assessment of noise from wind turbine generators.*

The standard specifies an engineering method for calculating noise at a known distance from a variety of sources under meteorological conditions favourable to sound propagation. The standard defines favourable conditions as downwind propagation where the source blows from the source to the receiver within an angle of ±45 degrees from a line connecting the source to the receiver, at wind speeds between approximately 1 m/s and 5 m/s, measured at a height of 3 m to 11 m above the ground. Equivalently, the method accounts for average propagation under a well-developed moderate ground based thermal inversion. In this respect, it is noted that at the wind speeds relevant to noise emissions from wind turbines, atmospheric conditions do not favour the development of thermal inversions throughout the propagation path from source to receiver.

To calculate far-field noise levels according to ISO 9613-2:1996, the noise emissions of each wind turbine are firstly characterised in the form of octave band frequency levels. A series of octave band attenuation factors are then calculated for a range of effects including:

- geometric divergence
- air absorption
- reflecting obstacles
- screening
- vegetation
- ground reflections.

The octave band attenuation factors are then applied to the noise emission data to determine the corresponding octave band and total calculated noise level at receivers.

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[16] ISO 9613-2:2024 *Acoustics — Attenuation of sound during propagation outdoors Part 2: Engineering method for the prediction of sound pressure levels outdoors* (ISO 9613-2:2024)

Calculating the attenuation factors for each effect requires a relevant description of the environment into which the sound propagation such as the physical dimensions of the environment, atmospheric conditions, and the characteristics of the ground between the source and the receiver.

Wind farm noise propagation has been the subject of considerable research in recent years. These studies have provided support for the reliability of engineering methods such as ISO 9613-2:1996 when a certain set of input parameters are chosen in combination. Specifically, the studies to date tend to support that the assignment of a ground absorption factor of G = 0.5 for the source, middle and receiver ground regions between a wind farm and a calculation point tends to provide a reliable representation of the upper noise levels expected in practice, when modelled in combination with other key assumptions; specifically all wind turbines operating at identical wind speeds, emitting sound levels equal to the test measured levels plus a margin for uncertainty (or guaranteed values), at a temperature of 10°C and relative humidity of 70% to 80%, with specific adjustments for screening and ground effects as a result of the ground terrain profile.

In support of the use of ISO 9613-2:1996 and the choice of G = 0.5 as an appropriate ground characterisation, the following references are noted:

- A factor of G = 0.5 is frequently applied in Australia for general environmental noise modelling purposes as a way of accounting for the potential mix of ground porosity which may occur in regions of dry/compacted soils or in regions where persistent damp conditions may be relevant
- NZS 6808:2010 refers to ISO 9613-2:1996 as an appropriate prediction method for wind farm noise, and notes that soft ground conditions should be characterised by a ground factor of G = 0.5
- In 1998, a comprehensive study (commonly cited as the Joule Report), part funded by the European Commission found that the ISO 9613-2:1996 model provided a robust representation of upper noise levels which may occur in practice and provided a closer agreement between predicted and measured noise levels than alternative standards such as CONCAWE and ENM. Specifically, the report indicated the ISO 9613-2:1996 method generally tends to marginally over predict noise levels expected in practice
- The UK Institute of Acoustics journal dated March/April 2009 published a joint agreement between practitioners in the field of wind farm noise assessment (the UK IOA 2009 joint agreement), including consultants routinely employed on behalf of both developers and community opposition groups, and indicated the ISO 9613-2:1996 method as the appropriate standard and specifically designated G = 0.5 as the appropriate ground characterisation. This agreement was subsequently reflected in the recommendations detailed in the UK Institute of Acoustics guidance. It is noted that these publications refer to predictions made at receiver heights of 4 m. Predictions in Australia are generally based on a lower prediction height of 1.5 m which tends to result in higher ground attenuation for a given ground factor, however conversely, predictions in Australia do not generally incorporate a -2 dB factor (as applied in the UK) to represent the relationship between L_{Aeq} and L_{A90} noise levels. The result is that these differences tend to balance out to a comparable approach and thus supports the use of G = 0.5 in the context of Australian prediction methods.

A range of measurement and prediction studies for wind farms in which MDA staff have been associated in have provided further support for the use of ISO 9613-2:1996 and G = 0.5 as an appropriate representation of typical upper noise levels expected to occur in practice.[17]

The findings of these studies demonstrate the suitability of ISO 9613-2:1996 method to predict the propagation of wind turbine noise for:

- The types of noise source heights associated with a modern wind farm, extending the scope of application of the method beyond the 30 m maximum source heights considered in the original ISO 9613;
- The types of environments in which wind farms are typically developed, and the range of atmospheric conditions and wind speeds typically observed around wind farm sites. Importantly, this supports the extended scope of application to wind speeds in excess of 5 m/s.

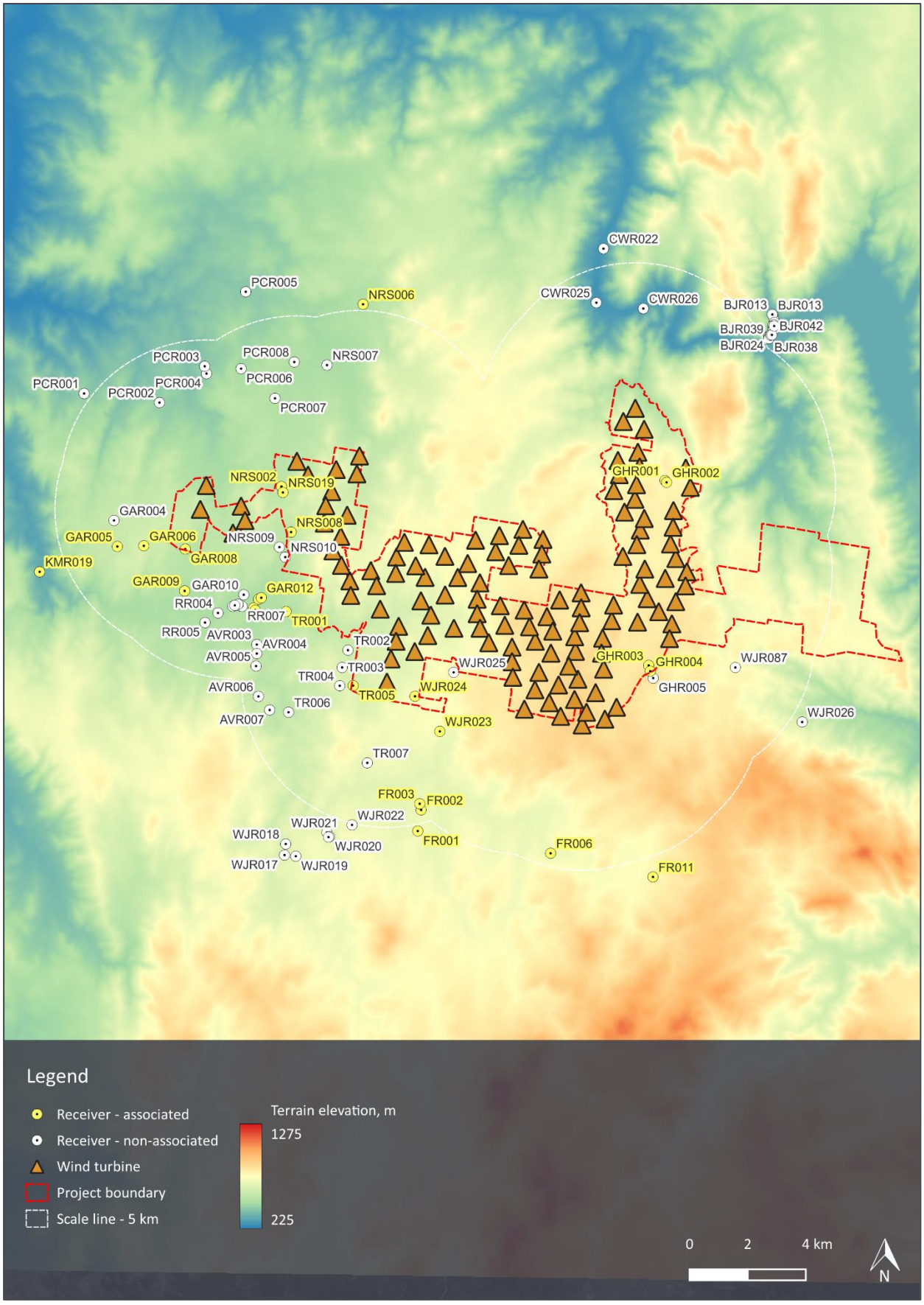
In addition to the choice of ground factor referred to above, adjustments to ISO 9613-2:1996 for screening and valleys effects are applied based on recommendations of the Joule Report, UK IOA 2009 joint agreement and the UK Institute of Acoustics guidance. The following adjustments are applied to the calculations:

- Screening effects as a result of terrain are limited to 2 dB;
- Screening effects are assessed based on each wind turbine being represented by a single noise source located at the maximum tip height of the wind turbine rotor; and
- An adjustment of 3 dB is added to the predicted noise contribution of a wind turbine if the terrain between the wind turbine and receiver in question is characterised by a significant valley. A significant valley is defined as a situation where the mean sound propagation height is at least 50% greater than it would be otherwise over flat ground.

The adjustments detailed above are implemented in the wind turbine calculation procedure of the SoundPLANnoise 9.1 software used to conduct the noise modelling. The software uses these definitions in conjunction with the digital terrain model of the Project and surrounds to evaluate the path between each wind turbine and receiver pairing, and then subsequently applies the adjustments to each wind turbine's predicted noise contribution where appropriate.

[17] Bullmore, Adcock, Jiggins & Cand – *Wind Farm Noise Predictions: The Risks of Conservatism*; Presented at the Second International Meeting on Wind Turbine Noise in Lyon, France September 2007;
Bullmore, Adcock, Jiggins & Cand – *Wind Farm Noise Predictions and Comparisons with Measurements*; Presented at the Third International Meeting on Wind Turbine Noise in Aalborg, Denmark June 2009;
Delaire, Griffin, & Walsh – *Comparison of predicted wind farm noise emission and measured post-construction noise levels at the Portland Wind Energy Project in Victoria, Australia*; Presented at the Fourth International Meeting on Wind Turbine Noise in Rome, April 2011.

APPENDIX F SITE TOPOGRAPHY



APPENDIX G C-WEIGHTING ASSESSMENT

G1 Introduction

Presented below are details of the risk assessment carried out for the purpose of gauging whether penalties for low frequency, as detailed in the Technical Supplement for Noise, are applicable.

G2 Assessment requirement

The following excerpt concerning C-weighted wind turbine noise have been reproduced from Technical Supplement for Noise.

> ***Low-frequency noise***
>
> *Analysis of wind turbine spectra shows that low-frequency noise is typically not a significant feature of modern wind turbine noise when it complies with the A-weighted criteria in section 3.1.*
>
> *In the unlikely event that excessive low-frequency noise is a repeated characteristic – that is, noise from the wind project would repeatedly be greater than 60 dB(C) – of the wind turbine noise, dB(A) must be added to the predicted or measured noise level from the wind energy project.*
>
> ***Penalties for special noise characteristics***
>
> *In NSW, assessments must adjust the wind energy project noise level where they identify excessive levels of tonality, low-frequency noise, or a combination of both, in accordance with this technical supplement to a maximum adjustment of 5 dB(A). The noise monitoring report should report the results of these calculations.*

G3 Prediction method

As stated in Section 5.1.2, there are no commonly used, practical methods to accurately predict the wind turbine low frequency noise levels at receptor locations.

In this case, the C-weighted noise levels at receptor locations have been estimated using a simplified approach which constitutes the same noise modelling methods as described above for A-weighted levels, but with the following modifications:

- The range of band frequencies has been expanded to include bands down to the 16 Hz third octave frequency band
- The ground absorption parameter has been set to G = 0 (hard ground) to account for the increased influence of ground reflections at low frequencies.

C-weighted noise levels have been predicted for wind speed at which the worst-case sound power levels occur, as specified in Section 5.1, being 10 m/s.

G4 Results

Table 9 presents the results of the preliminary C-weighted noise predictions for identified non-associated receivers within 5 km of a wind turbine. Predicted noise levels above the screening level of 60 dB $L_{Ceq,\ 10\ min}$ are highlighted in grey.

Table 9: Predicted C-weighted noise levels, dB $L_{Ceq,\ 10\ min}$

Receiver	Predicted noise level
AVR003	54.9
AVR004	55.7
AVR005	56.0
AVR006	54.1
AVR007	53.7
CWR025	52.3
CWR026	52.3
GAR004	53.8
GHR005	61.0
NRS007	54.4
NRS009	59.0
NRS010	58.9
PCR002	53.1
PCR003	52.0
PCR004	52.1
PCR006	53.3
PCR007	55.4
PCR008	54.6
RR001	56.1
RR003	55.9
RR004	55.4
RR005	54.9
RR006	56.0
RR007	56.2
TR002	59.8
TR003	59.4
TR004	58.6
TR006	54.3
TR007	55.9

Receiver	Predicted noise level
WJR025	61.9
WJR087	56.8

APPENDIX H TABULATED PREDICTED NOISE LEVEL DATA

Table 10: Predicted noise levels, dB L_{Aeq}, for non-associated receivers within 5 km of a wind turbine

Receiver	Hub-height wind speed, m/s						
	4	5	6	7	8	9	≥10
Non-associated receivers							
AVR003	16.1	18.0	21.5	24.8	27.0	29.0	29.3
AVR004	16.7	18.6	22.1	25.4	27.6	29.6	29.9
AVR005	17.1	19.0	22.5	25.8	28.0	30.0	30.3
AVR006	14.5	16.4	19.9	23.2	25.4	27.4	27.7
AVR007	13.7	15.6	19.1	22.4	24.6	26.6	26.9
CWR025	11.8	13.7	17.2	20.5	22.7	24.7	25.0
CWR026	12.0	13.9	17.4	20.7	22.9	24.9	25.2
GAR004	14.4	16.3	19.8	23.1	25.3	27.3	27.6
GHR005	25.4	27.3	30.8	34.1	36.3	38.3	38.6
NRS007	15.2	17.1	20.6	23.9	26.1	28.1	28.4
NRS009	23.8	25.7	29.2	32.5	34.7	36.7	37.0
NRS010	23.4	25.3	28.8	32.1	34.3	36.3	36.6
PCR002	13.3	15.2	18.7	22.0	24.2	26.2	26.5
PCR003	11.9	13.8	17.3	20.6	22.8	24.8	25.1
PCR004	12.4	14.3	17.8	21.1	23.3	25.3	25.6
PCR006	13.6	15.5	19.0	22.3	24.5	26.5	26.8
PCR007	17.8	19.7	23.2	26.5	28.7	30.7	31.0
PCR008	15.7	17.6	21.1	24.4	26.6	28.6	28.9
RR001	17.9	19.8	23.3	26.6	28.8	30.8	31.1
RR003	17.6	19.5	23.0	26.3	28.5	30.5	30.8
RR004	16.6	18.5	22.0	25.3	27.5	29.5	29.8
RR005	15.7	17.6	21.1	24.4	26.6	28.6	28.9
RR006	17.7	19.6	23.1	26.4	28.6	30.6	30.9
RR007	18.0	19.9	23.4	26.7	28.9	30.9	31.2
TR002	24.1	26.0	29.5	32.8	35.0	37.0	37.3
TR003	23.4	25.3	28.8	32.1	34.3	36.3	36.6
TR004	21.9	23.8	27.3	30.6	32.8	34.8	35.1
TR006	14.9	16.8	20.3	23.6	25.8	27.8	28.1
TR007	16.5	18.4	21.9	25.2	27.4	29.4	29.7

Receiver	Hub-height wind speed, m/s						
	4	5	6	7	8	9	≥10
WJR025	26.7	28.6	32.1	35.4	37.6	39.6	39.9
WJR087	18.8	20.7	24.2	27.5	29.7	31.7	32.0
Associated receivers							
AVR001	18.3	20.2	23.7	27.0	29.2	31.2	31.5
AVR002	18.2	20.1	23.6	26.9	29.1	31.1	31.4
FR002	15.0	16.9	20.4	23.7	25.9	27.9	28.2
FR003	15.2	17.1	20.6	23.9	26.1	28.1	28.4
FR006	13.5	15.4	18.9	22.2	24.4	26.4	26.7
GAR005	13.8	15.7	19.2	22.5	24.7	26.7	27.0
GAR006	17.0	18.9	22.4	25.7	27.9	29.9	30.2
GAR008	20.8	22.7	26.2	29.5	31.7	33.7	34.0
GAR009	16.5	18.4	21.9	25.2	27.4	29.4	29.7
GAR011	18.9	20.8	24.3	27.6	29.8	31.8	32.1
GAR012	19.1	21.0	24.5	27.8	30.0	32.0	32.3
GHR001	30.3	32.2	35.7	39.0	41.2	43.2	43.5
GHR002	30.3	32.2	35.7	39.0	41.2	43.2	43.5
GHR003	26.8	28.7	32.2	35.5	37.7	39.7	40.0
GHR004	26.2	28.1	31.6	34.9	37.1	39.1	39.4
NRS002	26.4	28.3	31.8	35.1	37.3	39.3	39.6
NRS008	25.5	27.4	30.9	34.2	36.4	38.4	38.7
NRS019	26.2	28.1	31.6	34.9	37.1	39.1	39.4
TR001	20.0	21.9	25.4	28.7	30.9	32.9	33.2
TR005	23.5	25.4	28.9	32.2	34.4	36.4	36.7
WJR023	20.4	22.3	25.8	29.1	31.3	33.3	33.6
WJR024	25.1	27.0	30.5	33.8	36.0	38.0	38.3

Saddletop Wind Farm

Appendix E – Summary of Validated Plant Community Types within Development Corridor

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PCT	Condition Classes	Area within Development Corridor (ha)	Corresponding TEC	BC Act Status	EPBC Act Status	Vegetation Description	Photos
3406: Southwest Ranges White Box Woodland	• Disturbed • Derived Native Grasses	9.93 (validated) 4.99 (unvalidated)	White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions	Critically Endangered	Potential - Critically Endangered (part)	Vegetation mapped as PCT 3406 occurred as a few small, isolated patches on the upper slopes of the hilly landscape in the western part of the Project Site. It was characterised by a canopy dominated by *Eucalyptus albens* (White Box). Other tree species that also occurred in this PCT were *Brachychiton populneus* (Kurrajong), *E. melliodora* (Yellow Box) and *E. nortonii* (Long-leaved Bundy), along with a sparse sub canopy of *Acacia implexa* (Hickory Wattle). This PCT occurred on the ridgetops and upper steep slopes predominantly in the western portion of the Project Site, where there is a history of substantial disturbance from agricultural practices. All stands of PCT 3406 were degraded, with the understorey consisting almost entirely of exotic weeds and pasture species. One native grass species, *Austrostipa scabra*, was common in these patches, however at low to moderate cover. Soil nutrients and the seed bank of these areas have likely been modified considerably, due to past pasture improvement and fertilisers use.	
3376: Southern Tableland Grassy Box Woodland	• Disturbed • Derived Native Grasses	37.36 (validated) 0.91 (unvalidated)	White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions	Critically Endangered	Potential - Critically Endangered (part)	Vegetation mapped as PCT 3376 occurred predominantly in the western part of the Project Site on flats and slopes where *Eucalyptus blakelyi* (Blakley's Red Gum) and *E. melliodora* (Yellow Box) were the dominant canopy species. Other tree species that also occasionally occurred in this PCT were *E. bridgesiana* (Apple Box), *E. macrorhyncha* (Red Stringybark) and *E. nortonii* (Long-leaved Bundy). Similar to the other PCTs mapped in the western side of the Project Site (3406 and 3542), most areas mapped as PCT 3376 were substantially degraded due to land clearing, pasture improvement and ongoing sheep grazing, resulting in a modified vegetation structure and a predominantly exotic understorey. Therefore, attributes used to confirm the PCT were often limited to the location, landscape position and dominant canopy species. The patches mapped as PCT 3376 within the road verge along Nanangroe Rd were not grazed as intensively as the patches within the grazed paddocks and therefore had a taller and denser ground cover. This was still dominated by exotic pasture species, such as Phalaris aquatic and Dactylis glomerata (Cocksfoot), however there was a higher diversity of native ground layer species than the patches beyond the road verge, including *Microlaena stipoides, Themeda triandra, Poa labillardierei, Rytidosperma penicillatum,* and *Acaena novae-zelandiae.*	 
3542: Southwest Ranges Stringybark-Box Sheltered Forest	• Disturbed • Derived Native Grasses	154.25 (validated)	No associated TEC	*Critically Endangered	N/A	PCT 3542 was the most common vegetation community mapped for the many small to medium patches of vegetation situated within a predominantly cleared agricultural landscape of the western part of the Project Site. It occurs on steep, sometimes rocky, upper slopes and ridgelines and was consistently dominated by *Eucalyptus macrorhyncha* (Red Stringybark). The most common co-occurring tree species were *E. nortonii* (Long-leaved Bundy), *E. melliodora* (Yellow Box). A couple of patches also contained *E. albens* (White Box), or *E. dives* (Broad-leaved Peppermint). As with PCTs 3376 and 3406, most areas mapped as PCT 3542 were substantially degraded through past and ongoing management practices, resulting in minimal mid-layer and a predominantly exotic ground layer. Despite this, two common shrub species, *Acacia implexa* and *Hibbertia obtusifolia*, were recorded within some patches, and common native grass species, such as *Microlaena stipoides, Rytidosperma spp., Bothriochloa macra,* and *Themeda triandra*, were regularly recorded within this PCT. However, due to the ubiquity of these mid- and ground layer species across many of the PCTs	

PCT	Condition Classes	Area within Development Corridor (ha)	Corresponding TEC	BC Act Status	EPBC Act Status	Vegetation Description	Photos
						in this region, attributes used to confirm this PCT were limited to the location, landscape position and dominant canopy species. Soil nutrients and the seed bank of these areas have likely been modified considerably, due to past cropping, fertilisers and pasture improvements.	
3930: Bondo Montane Flats Swamp Woodland	• Intact • Disturbed • Derived Native Grasses	214.32 (validated)	No associated TEC			Vegetation mapped as PCT 3930 occurred predominantly in the central and eastern part of the Project Site on moist creek flats and drainage lines. In these locations *Eucalyptus camphora* (Broad-leaved Salley) was always present as the dominant canopy species, and was often the only canopy species present. The most common co-occurring tree species was *E. stellulata* (Black Sally), with *E. pauciflora* (Snow Gum) occurring occasionally in some patches. Whilst all patches were a part of the open grassland – woodland – forest grazing mosaic found in the eastern part of the Project Site, and were clearly regularly disturbed by cattle, there was still a moderate diversity of native ground layer species remaining in some of the better condition patches, including many characteristic grass, rush and sedge (*Carex spp., Eleocharis pusilla, Gahnia aspera, Juncus spp., Poa labillardierei*) and forb species (*Acaena novae-zelandiae, Epilobium billardierianum, Hydrocotyle laxiflora*). The minimal mid layer in most patches was dominated by the exotic, *Rubus fruticosus sp.* agg. (Blackberry), however in some of the larger patches in the eastern portion of the Project Site, a moderate cover of the native shrub, *Leptospermum continentale* (Prickly Tea-tree) was present..	 
3293: Bondo Slopes Peppermint Sheltered Fern Forest	• Intact • Disturbed • Derived Native Grasses	600.17 (validated) 8.74 (unvalidated)	No associated TEC	-	-	PCT 3293 was the dominant vegetation type in the high elevation rolling hills of the eastern third of the Project Site. It generally occurred on sheltered slopes and was characterised by a tall dense canopy which was consistently dominated by *Eucalyptus robertsonii* (Robertsons Peppermint) and *Eucalyptus viminalis* (Ribbon Gum). Other tree species which occurred occasionally throughout these patches included *E. bridgesiana* (Apple Box), *E. macrorhyncha* (Red Stringybark), *E. dalrympleana* (Mountain Gum), and in the far north-east of the Project Site, *E. bicostata* (Eurabbie). As with PCT 3292, all patches of PCT 3293 were a part of the grassland – forest mosaic, which was predominantly used for cattle grazing, which meant that there was minimal mid-layer vegetation, usually only consisting of tall *Acacia melanoxylon* (Blackwood) and *A. dealbata* (Silver Wattle) and lower layer *Coprosma quadrifida, Cassinia spp*. and *Rubus parvifolius* (Native raspberry). Some of the larger patches had heavy infestations of the weed, *Rubus fruticosus sp*. agg. (Blackberry). The ground layer also showed impacts from grazing including churned up soil and high levels of exotic pasture and weed species. Despite this, there remained a moderate cover of	

PCT	Condition Classes	Area within Development Corridor (ha)	Corresponding TEC	BC Act Status	EPBC Act Status	Vegetation Description	Photos
						common native grasses and forbs, including *Poa sieberiana, Microlaena stipoides, Themeda triandra, Acaena novae-zelandiae, Hydrocotyle laxiflora*, and *Stellaria pungens*, and a high cover of the native fern, *Pteridium esculentum* (Bracken) in some patches.	
3365: Bondo Slopes Red Stringybark Grassy Forest	• Intact • Disturbed • Derived Native Grasses	452.57 (validated) 481.19 (unvalidated)	No associated TEC	-	-	PCT 3365 was the dominant vegetation type in the hilly middle section of the Project Site. Unlike all the other PCTs identified and mapped in the Project Site, areas mapped as PCT 3376 were largely consistent with the State Vegetation Type Map. Within the Project Site, this community was characterised by a moderately dense to open canopy dominated by *Eucalyptus macrorhyncha* (Red Stringybark), usually associated with *E. dives* (Broad-leaved Peppermint). Other co-occurring, though less frequent, tree species included *E. bridgesiana* (Apple Box) and E. *robertsonii* (Robertsons Peppermint), and more localised occurrences of *E. nortonii* (Long-leaved Bundy). As with all the other PCTs in the Project Site, patches of PCT 3365 were usually impacted by ongoing grazing, and therefore had minimal diversity and coverage of mid-layer vegetation, with the only species recorded including common shrub / small tree species: *Acacia dealbata* (Silver Wattle), *A. melanoxylon* (Blackwood), *A. implexa* (Hickory wattle) and *Hibbertia obtusifolia* (Hoary guinea flower). The native diversity of the ground layer was impacted by ongoing grazing and pasture improvement, however there was still a moderate cover of the common grass species, *Microlaena stipoides, Rytidosperma spp.,* and *Themeda triandra*, and a low cover but moderate diversity of native forbs including: *Hydrocotyle laxiflora*, *Gonocarpus tetragynus, Glycine clandestina, Geranium solanderi, Acaena novae-zelandiae, Cymbonotus preissianus* and *Dichondra repens.*	 
3292: Bondo Slopes Peppermint Moist Grassy Forest	• Intact • Disturbed • Derived Native Grasses	221.89 (validated) 45.80 (unvalidated)	No associated TEC	-	-	Vegetation mapped as PCT 3292 occurred predominantly in the eastern part of the Project Site on rolling hills where *Eucalyptus robertsonii* (Robertsons Peppermint) was the dominant canopy species, usually with one or more of *E. dalrympleana* (Mountain Gum), *E. bridgesiana* (Apple Box), or *E. pauciflora* (Snow Gum), and occasional occurrences of *E. rubida* (Candlebark), *E. dives* (Broad-leaved Peppermint), and *E. viminalis* (Ribbon Gum). In most patches, these trees form a tall (often > 20 m), dense canopy. All patches were a part of a grassland – forest mosaic which characterises the eastern part of the Project Site, that is predominantly used for cattle grazing. This has resulted in minimal mid-layer vegetation, usually only consisting of tall *Acacia melanoxylon* (Blackwood) and very scattered low *Leptospermum continentale* (Prickly Tea-tree) and *Hibbertia obtusifolia* (Hoary guinea flower). The ground layer was often heavily disturbed by cattle and past management resulting in a high cover and diversity of exotic weeds and pasture species. However, a moderate cover and diversity of common native species endured, including *Microlaena stipoides, Rytidosperma spp.,*	

PCT	Condition Classes	Area within Development Corridor (ha)	Corresponding TEC	BC Act Status	EPBC Act Status	Vegetation Description	Photos
						Poa sieberiana, Hydrocotyle laxiflora, Acaena novae-zelandiae, and *Pteridium esculentum.*	
Exotic/ grazing/ infrastructure	N/A	2,100.73	N/A	-	-	Exotic areas lack canopy and midstorey species. Very few native species were recorded in these areas. Common species recorded included *Anthoxanthum odoratum, Carthamus lanatus, Dactylis glomerata, Lolium perenne* and *Trifolium subterraneum*	

*Further investigation warranted into whether this PCT conforms to the final determination for Box Gum Woodland based on canopy species assemblage

Saddletop Wind Farm

Appendix F – Social Impact Scoping Report (AAP Consulting, 2025)

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Social Impact Scoping Report

Saddletop Wind Farm, NSW

21 August 2025

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1 Introduction

1.1 Overview

AAP Consulting has been engaged to identify the likely social impacts of the proposed Saddletop Wind Farm (STWF) (the Project), located approximately 30 km north-east of Tumut and 45km east of Gundagai around the Adjungbilly area, within the Riverina Local Land Services region of New South Wales (NSW) and within the Cootamundra-Gundagai Regional Council, Yass Valley Council and Snowy Valleys Council Local Government Areas (LGAs). The Project is also located south of two other projects currently in planning by Squadron Energy, being Jeremiah Wind Farm and Bookham Wind Farm.

The capital value of the Project is valued at more than $30 million and is therefore considered State Significant Development (SSD) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *State Environmental Planning Policy* (Planning Systems) *2021* (Planning Systems SEPP). The value of the Project will be refined over the assessment and design process.

This Social Impact Scoping Report (this report) has been prepared to provide preliminary insights into the likely social impacts relating to the Project. The process undertaken to scope the impacts considered the New South Wales Department of Planning, Housing and Industry (NSW DPHI) Social Impact Assessment (SIA) Guideline (NSW DPHI, 2025) and Social Impact Scoping Tool and demonstrates an understanding of:

- the Project's social locality
- high-level characteristics of the communities within the social locality (social baseline)
- potential or likely social impacts (both positive and negative) for different groups in the social locality and the level to which these impacts need to be addressed
- any project refinements or approaches to date in response to likely social impacts.

1.2 The Project

STWF currently comprises 123 wind turbines and battery storage, providing an expected capacity of 738MW, enough to power around 410,000 homes. The main components of the Project include:

- wind turbine generators: Up to 123 WTGs
- transmission works: including new electricity lines to connect the Project to the internal electrical reticulation network, and the National Electricity Market (NEM) and the construction and operation of a new electrical plant compound
- battery energy storage system (BESS): including the construction and operation of an electrical plant compound (includes battery and/or substation) to store and deploy energy with a proposed capacity of 150 MW/600 MWh
- ancillary infrastructure: including (but not limited to) internal access roads/tracks, utilities and communications infrastructure, operation and maintenance (O&M compounds), hardstands, meteorological masts and external road upgrades (subject to blade sizing and transport routes)

- temporary facilities: including construction compounds, laydown and storage areas, construction working areas, rock crushing and concrete batch plants, temporary roads, and temporary meteorological masts.
    - worker accommodation: pending further investigation, temporary accommodation is likely to be required for the construction workforce. Accommodation within Yass and surrounds is limited. Accommodation requirements will be further assessed in the Environmental Impact Statement (EIS).

An indicative Project layout is provided in Figure 1.3.

1.3 The proponent

The proponent for the Project is Squadron Energy, one of Australia's leading renewable energy companies that develops, operates, and owns renewable energy assets across Australia. Currently, Squadron Energy has 1.1 GW of renewable energy in operation and 900MW under construction.

1.4 Structure of this report

The structure of this report is influenced by the SIA Guideline requirements (NSW DPHI, 2025) and is outlined below.

Table 1.1 Structure of this report

Chapter	Description
Chapter 1	introduces the Project and structure of this report and describes the methodology during the scoping phase
Chapter 2	describes the social locality and establishes the social baseline
Chapter 3	outlines the preliminary stakeholder mapping and engagement that has helped to inform this report
Chapter 4	identifies the likely social impacts for different groups in the social locality
Chapter 5	outlines the framework for approach to SIA in the assessment phase
Chapter 6	concludes the scoping report

1.5 Preliminary assessment method

The methods used to inform this scoping phase are outlined in Table 1.2.

Table 1.2 Preliminary assessment method

Stage	Approach
Understanding of project context	Regional planning policies and strategies were reviewed to contextualise the Project. Outcomes of community engagement completed by Squadron Energy relating to the Project, as well as a review of various comparative studies of nearby projects, have also informed this context.

Stage	Approach
Identifying the preliminary social locality and description of the existing environment	The approach used to identify the preliminary social locality considered who is most likely to experience direct and indirect impacts because of the Project and where those groups of people are located. The social locality will be further refined and updated according to Project changes and further investigation of impacts during the assessment phase. The description of the existing environment provides a summary of the social locality, including a high-level overview of regional demographic characteristics, socio-economic backgrounds, land use, key industries, and social infrastructure and an overview of directly impacted state suburbs and localities.
Scoping of likely social impacts	The scoping of likely social impacts resulting from the Project has been guided by the SIA Guideline and regarding the social impact categories presented in Table 1.3. The scoping of likely social impacts included: • gaining an understanding of the Project's social locality • considering the characteristics of the communities within the social locality (the social baseline) • identifying likely social impacts for different groups in the social locality. The initial scoping of likely social impacts was informed by: • understanding the Project context • reviewing the outcomes of consultation activities conducted by Squadron Energy to date • reviewing the existing environment and outcomes of preliminary assessments completed as part of the Scoping Report for the Project • considering community opinions and sentiments towards the Project activities through: • desktop research and review of other comparative projects • social commentary of comparative projects and issues in the social locality • outcome of engagement undertaken by Squadron Energy • review of submissions and research from comparative projects.
Determining the complexity of Phase 2 SIA report	The approach used to determine the level of assessment required for an identified social impact has been completed in accordance with the SIA. A key objective of the SIA scoping phase is to identify the level of assessment required for each impact in the assessment phase. The level of assessment determines the extent of effort and data required to assess the impact. The levels of assessment and the indicative data requirements are shown in Figure 1.1.

Table 1.3 Social impact categories (SIA guideline)

Categories	Definition
Way of life	How people live, how they get around, how they work, how they play, and how they interact each day.
Community	Community composition, cohesion, character, how the community functions, and people's sense of place.
Accessibility	How people access and use infrastructure, services and facilities, whether provided by a public, private or not-for-profit organisation.
Culture	Aboriginal and non-Aboriginal, including shared beliefs, customs, values and stories, and connections to Country, land, waterways, places and buildings.

Categories	Definition
Health and wellbeing	Physical and mental health especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, access to open space and effects on public health.
Surroundings	Ecosystem services such as shade, pollution control, erosion control, public safety and security, access to and use of the natural and built environment, aesthetic value and amenity.
Livelihoods	People's capacity to sustain themselves through employment or business.
Decision-making systems	Including the extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms.

Assessment level for each impact	Secondary data	Primary data	
		Engagement	*Research*
Minor	Required	Limited –if required (e.g. local council)	Not required
Standard	Required	Targeted engagement	Potentially targeted research
Detailed	Required	Broad engagement	Targeted research

Figure 1.1 Indicative data requirements for different levels of assessment (source, NSW SIA Guidelines Technical Supplement, pg. 13) (2025)

	Magnitude level				
	1	2	3	4	5
Likelihood level	Minimal	Minor	Moderate	Major	Transformational
A Almost certain	Low	Medium	High	Very high	Very high
B Likely	Low	Medium	High	High	Very high
C Possible	Low	Low	Medium	High	High
D Unlikely	Negligible	Low	Low	Medium	High
E Very unlikely	Negligible	Negligible	Low	Medium	Medium

Figure 1.2 Social impact significance matrix (source, NSW SIA Guidelines Technical Supplement, pg. 17) (2025)

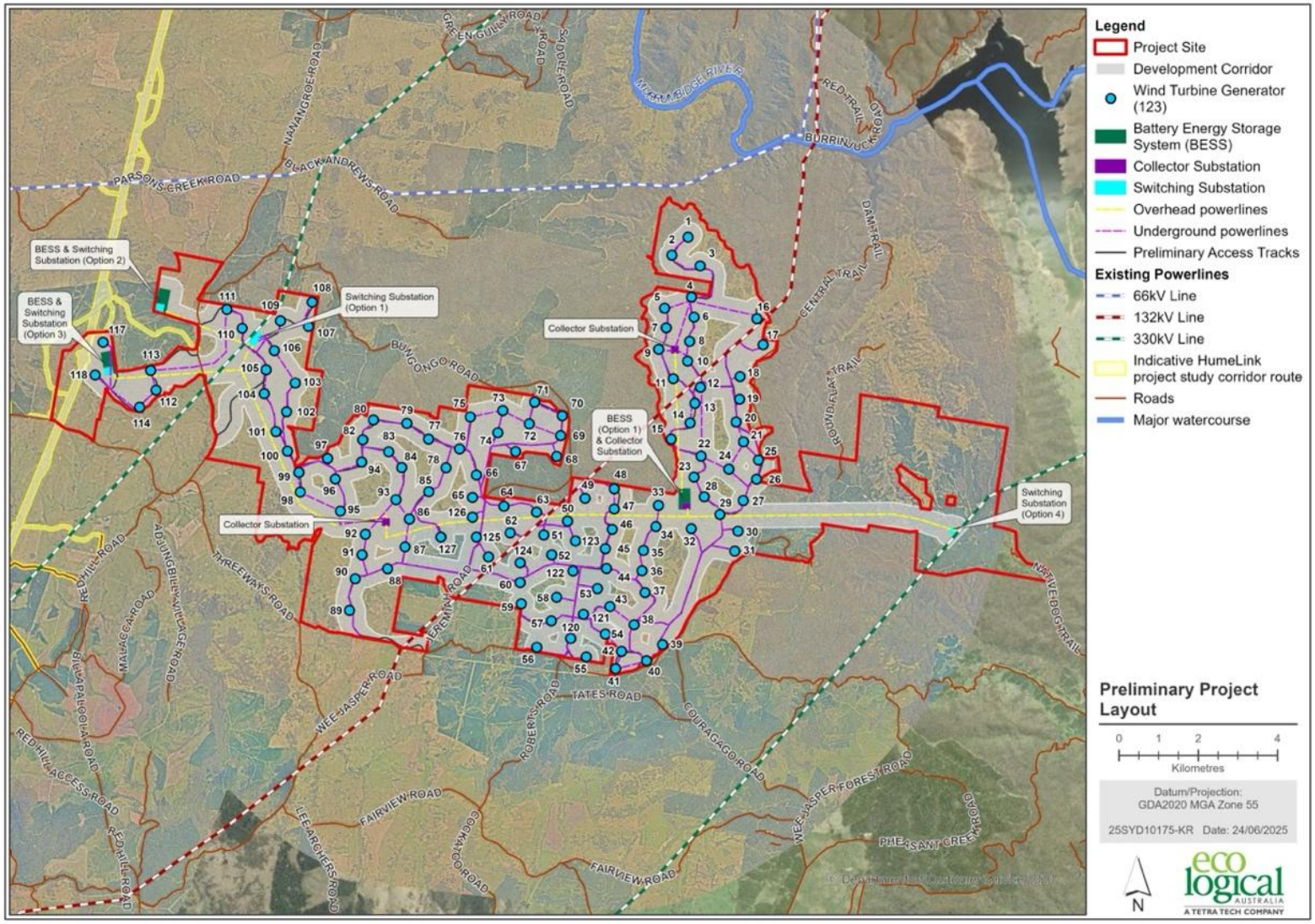

Figure 1.3 Preliminary Project Layout

2 Preliminary social locality and baseline

2.1 Social Locality

For the purposes of this Scoping Social Impact Assessment (SIA), the social locality refers to the area in which people are likely to experience the potential social impacts of the STWF. Consistent with the NSW Social Impact Assessment Guideline (2025), the social locality is not defined by a fixed geographic boundary or arbitrary distance (e.g. a specific suburb or radius). Instead, it reflects the spatial distribution of potential impacts for different groups, recognising that these impacts can vary in nature, duration, and intensity.

The social locality for STWF has been identified during the scoping phase based on:

- The nature and scale of the project.
- The characteristics of affected communities (see Section 2.3 Social Baseline).
- Pathways through which positive and negative impacts may be reasonably perceived or experienced.
- Spatial, demographic, economic, and land-use features of the surrounding area.
- Preliminary engagement insights.

The STWF is located on Wiradjuri Country, in the South East region of New South Wales, approximately 30 km north-east of Tumut. It spans parts of the Cootamundra-Gundagai Regional Council, Yass Valley Council, and Snowy Valleys Council areas. The site is situated in a highly-productive agricultural setting near the villages of Adjungbilly and Tumorrama. Adjungbilly lies closest to the project site, with the proposed infrastructure situated south of Squadron Energy's proposed Bookham and Jeremiah Wind Farms.

The social locality has been described using spatial categories that reflect likely gradients of impact:

Host landowners: this term applies to landowners that would enter into agreements to host wind turbines and associated infrastructure. These properties are located within the immediate project site and are likely to experience the most direct construction and operational impacts. There are currently 25 associated landholders within 5 km of the Project Site, of which 10 are within the project site.

Neighbouring landholders and residents: this group includes non-host residents and landowners located near the proposed wind farm who may experience visual, noise, or traffic impacts. There are approximately 50 non-associated dwellings within 5km of the Project Site. These properties are likely to be more affected by perceived or actual changes to rural amenity during construction and operations than the broader regional communities.

Regional communities: the broader region includes nearby towns and service centres that may experience indirect effects or benefits through workforce accommodation, road usage, or regional employment. For STWF, this includes parts of the Yass Valley, Cootamundra-Gundagai, and Snowy Valleys LGAs. While these communities are further from the site, they may benefit from local economic activity or experience changes in infrastructure demand or regional identity.

This layered approach allows for both concentrated impacts (e.g. construction noise near turbine locations) and more diffuse benefits or changes (e.g. increased economic activity in regional centres) to be identified and assessed.

The social locality will be refined as the project progresses, particularly once workforce supply chains, transport routes, and service catchments are confirmed. Locations associated with sourcing construction workers, materials, or specialist services will form part of the broader area of social influence. Some communities of interest, such as industry groups or cultural stakeholders, may also experience impacts that are not easily represented spatially; these will be described in the SIA.

The use of mapping in this SIA will illustrate the social locality, highlight where different types and intensities of impact are likely to occur, and inform targeted engagement and research. Figures 2.1 and 2.2 in this report provide an overview of the regional context, nearby settlements, and other existing or proposed developments relevant to cumulative impact assessment.

2.2 Preliminary social baseline data collection

A social baseline profile gathers knowledge from both primary and secondary data sources to increase understanding of the existing social environment in which a project is proposed. It provides a point of comparison. It can be used as a reference against which to measure the impacts of the Project as it develops and/or to determine the adequacy or otherwise of existing facilities (Vanclay, 2015).

A key element of the baseline involves collating and interpreting relevant demographic and social data. For this assessment, primary areas of statistical interest were selected based on proximity to the project site and the likelihood of experiencing direct or indirect social impacts.

A key component of this baseline is the collation and interpretation of demographic and housing data from the Australian Bureau of Statistics (2021). For STWF the primary areas of statistical interest include the Suburbs and Localities (SALs) that are closest to the project site and most likely to experience direct or indirect impacts. These include:

- Adjungbilly – located within Cootamundra-Gundagai Regional Council
- Tumorrama – located within Snowy Valleys Council
- Wee Jasper – located within Yass Valley Council

These rural localities are the most proximate settlements to the proposed infrastructure and are the focus of localised social baseline data. Each is situated within a different Local Government Area (LGA), all of which form part of the project's broader social context.

Broader demographic patterns have also been drawn from the LGA-level profiles of Snowy Valleys, Cootamundra-Gundagai Regional, and Yass Valley, with the 'Rest of New South Wales' providing a regional benchmark for comparison.

Table 2.1 Primary areas of interest for the purpose of statistical data collection

ABS Geography Type	Name/Localities Included	Description
Suburb and Locality (SAL)	Adjungbilly Tumorrama	nearby neighbours - the area in which the Project is located

ABS Geography Type	Name/Localities Included	Description
	Wee Jasper	
Local Government Area (LGA)	Yass Valley Snowy Valley Cootamundra Gundagai	broader community - the regional LGAs in which the Project is located
State/Territory	The Rest of New South Wales	provides a more specific and detailed comparison of areas outside the major cities of New South Wales.

2.3 Social baseline overview

Appendix 1 provides statistics relating to the key characteristics of those people living within the social locality.

2.4 Vulnerabilities and opportunities within the social locality

Analysing demographic profiles is essential for identifying groups that may be disproportionately affected by vulnerabilities and opportunities within a community. This understanding can inform targeted strategies that address challenges while leveraging community strengths. When compared with NSW Averages, the following vulnerabilities and opportunities have been identified in STWF social locality:

Vulnerabilities

- ageing population: the higher median age indicates a significant proportion of older residents. This demographic shift may lead to increased demand for healthcare services and specialised support, potentially straining local healthcare resources.
- low population density: with only 20 people in Tumorrama and 101 in Adjungbilly, many households may be socially or geographically isolated, presenting communication and emergency response challenges during construction and operation.
- education and income disparity: at the broader LGA scale, Snowy Valleys and Cootamundra-Gundagai have lower levels of tertiary education attainment and lower median personal incomes than the NSW average. This may indicate barriers to employment participation in higher-value project-related roles.
- transport dependency: high rates of motor vehicle ownership and limited public transport reflect car dependence, which could be further impacted by project-related traffic volumes.
- rental and mortgage stress: while housing stress is generally lower than the NSW average, some households – particularly in Yass Valley LGA - experience higher mortgage repayments. This could compound with any perceived project-related cost-of-living pressures.

Opportunities

- strong community engagement: high rates of voluntary work across all LGAs (up to 22.2%) indicate strong civic participation, which may support inclusive project engagement, local stewardship, and community benefit sharing initiatives.
- low unemployment: all three LGAs exhibit unemployment rates below the NSW average, suggesting relatively stable job markets. The project may support regional employment during construction, particularly through targeted local procurement and contracting.
- established rural industries: the prominence of agriculture and local services (e.g. aged care, education) in the employment profile could support synergies with the project's operational needs and local supply chains.
- Pockets of economic resilience: although some LGAs show lower personal incomes, small localities such as Adjungbilly and Tumorrama have higher-than-average household incomes, indicating resilience to short-term economic shocks and greater capacity to participate in benefit-sharing programs.
- existing social cohesion: small, long-established communities where many residents have multi-generational ties can foster strong local networks and neighbourly support, contributing to community resilience, provided the project maintains clear communication and transparent engagement practices.

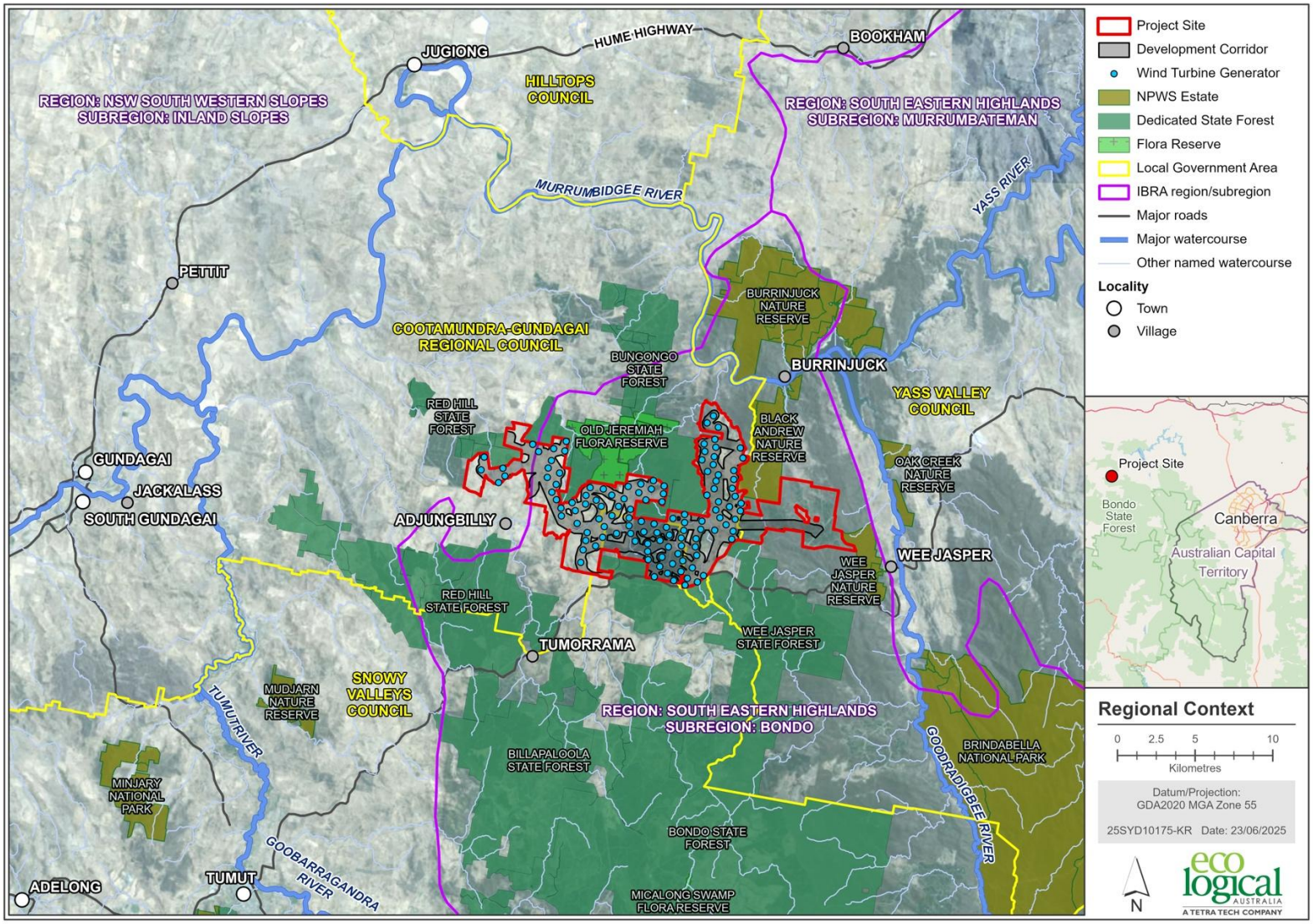

Figure 2.1 Regional Context

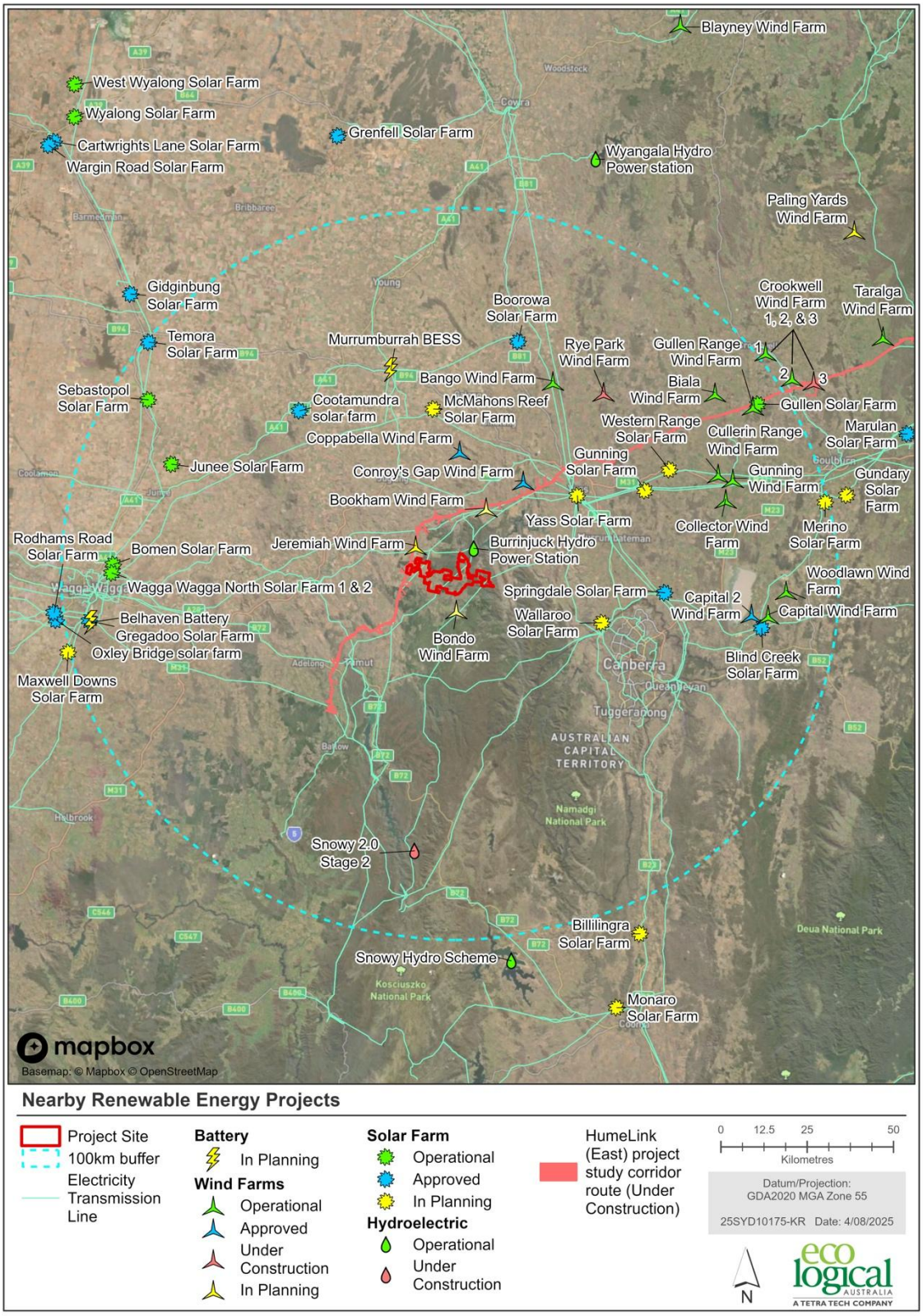

Figure 2.2 Nearby renewable energy projects

3 Stakeholder mapping and engagement

3.1 Stakeholder identification

Social impact assessment involves the participation and collaboration of people who have an interest in or those who are affected by a project. As Burdge (2004) outlines, stakeholders may be affected groups or individuals that:

- live, work, or recreate near the project
- have an interest in the proposed action or change
- use or value a resource associated with the project
- are affected by the project e.g., may be required to relocate because of the project.

A stakeholder identification process has been undertaken by Squadron Energy to identify those people, including any potentially vulnerable or marginalised groups that the project may impact. The key stakeholder groups identified are shown below, with a more comprehensive list provided in Appendix 2.

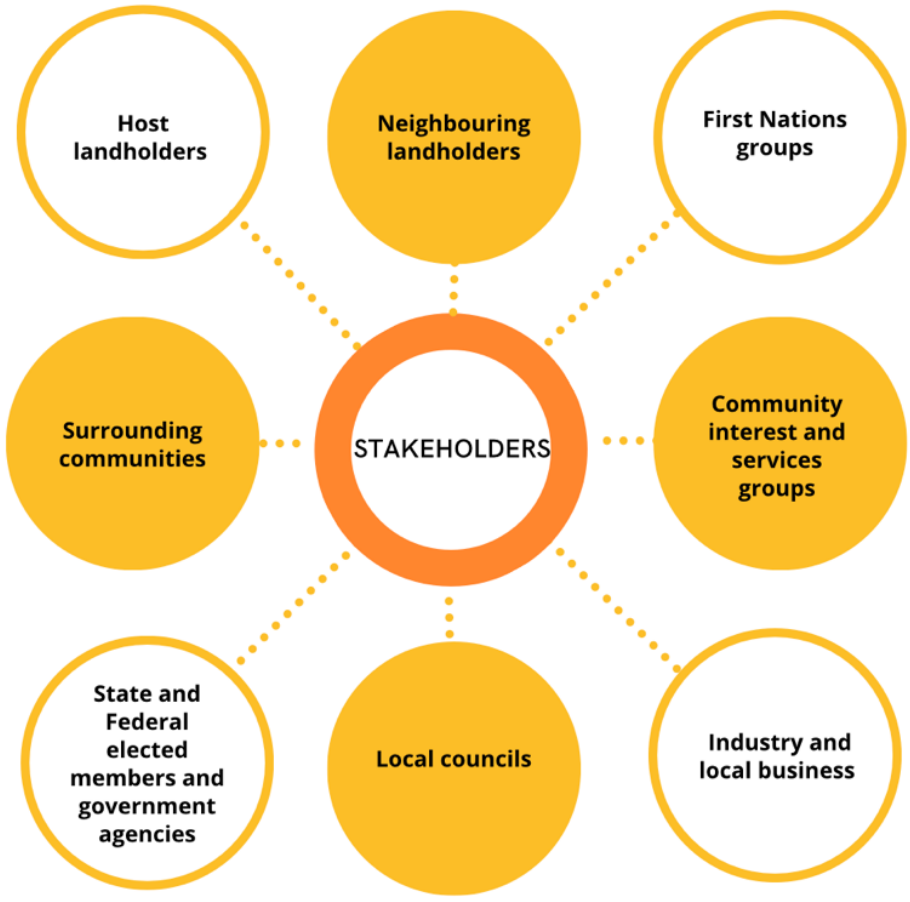

Figure 3.1 Stakeholder group identification

3.2 Stakeholder engagement

Squadron Energy has been engaging with a broad range of stakeholders since 2021. The Project team has completed a variety of engagement activities with associated landowners, surrounding neighbours, First Nations stakeholders, Council and relevant State and Federal Government members and agencies. There have been more than 460 stakeholder interactions as of 30 June 2025.

Squadron Energy has also developed a Stakeholder Engagement Plan (Squadron Energy, May 2025) that documents the communications and consultation framework, and activities Squadron Energy will undertake throughout the Project's approvals process. Consultation undertaken during the scoping phase has provided valuable early input into the understanding of stakeholder needs and concerns. A detailed summary of engagement activities and outcomes is included in Chapter 5 of the Scoping Report. For this Preliminary SIA, outcomes from the most recent engagements, including a community drop-in day and survey, are included below.

Table 3.1 Engagement to date

Engagement tool	Audience	Description	Distribution and reach
Phone calls, email and letters, meetings, SMS	Associated landholders	The Project team have been meeting with associated landholders for over 18 months comprising of face-to-face meetings, phone calls and emails.	There are currently 25 associated landholders within 5 km of the Project Site.
Phone calls, email and letters, meetings,	Neighbouring landholders	The Project team have been meeting with neighbouring landholders for over 18 months comprising of face-to-face meetings, phone calls and emails.	There are currently 50 non-associated landholders within 5 km of the Project Site.
Phone calls, email and letters and drop-in community information sessions	all interested stakeholders	The Project held a community drop-in session to provide the public with an informal avenue to discuss Project information or allow interested stakeholders to peruse information developed on poster boards around the room. The drop in sessions also provide the community with the opportunity to ask the project team questions regarding the project.	27 May 2025 at the Adjungbilly Community Hall between 2 pm and 7 pm. Attendance of approximately 45 people.
Meetings	Relevant councils	The Project team met with the relevant councils to provide a Project briefing and discuss concerns and expectations of the Project moving forward.	Meeting with Snowy Valleys Council in May 2025, meeting with Yass Valley Council in July 2025 and meeting with Cootamundra-Gundagai Council in May 2025.
Meetings, phone calls,	First Nations stakeholders	The Project team met with First Nations stakeholders to discus potential heritage values, opportunities for First	Meeting with Brungle Tumut Local Aboriginal Land Council (LALC) in March 2025

Engagement tool	Audience	Description	Distribution and reach
email and letters		Nations involvement in surveys, skills training and job opportunities	
Phone calls and email and letters	Local businesses and community groups	Discussions with local businesses and community groups regarding community sponsorships and opportunities during construction and operations.	Enquiries through Project website, newsletters and Project updates through Project mailing list.
SIA scoping survey	all interested stakeholders	The survey was used to inform the SIA scoping and provide insights into how people value the area they reside in.	Available via post, at the drop-in session and online. The survey was promoted via the projects website and community newsletter. The survey received 38 responses as of 4 August 2025, including 29 completed and 9 partially completed responses, with 35 submitted online and 3 as hard copies.

3.2.1 Survey: Scoping phase

The community survey provided valuable qualitative insights into how residents and stakeholders perceive the proposed STWF. A total of 38 responses were received (29 complete and 9 partially complete). Given the small sample size, the results are qualitative in nature and are not considered statistically representative of the broader community. Feedback highlighted a predominance of concerns relating to community cohesion, rural values, and visual and environmental impacts. Many respondents expressed strong attachment to the area's peace, self-reliance, and rural lifestyle, noting that the project could divide the community and fundamentally change the local landscape.

Additional concerns centred on noise, mental wellbeing, bushfire and emergency access, and the cumulative effects of multiple projects in the region. While a small number of responses acknowledged potential economic benefits, these were often considered short-term or insufficient relative to the perceived social and environmental impacts.

The summary of feedback is provided in Table 3.2. These survey insights informed the prioritisation of scoped social impacts in Chapter 4 and the core themes for EIS-phase assessment in Chapter 6, ensuring that community perspectives directly shape the SIA focus and proposed mitigation approach.

Table 3.2 Summary of feedback from the survey

Theme	Respondents (n=38)	Summary
Community cohesion and relationships	20	Respondents described tension and division within the community, particularly between host landholders and neighbours who are not

Theme	Respondents (n=38)	Summary
		receiving direct benefits. Several noted concerns about long-term impacts on trust, relationships, and community cohesion. *"Projects like this divide neighbours. Some benefit, but others are left to live with the impacts."*
Community values	19	Respondents consistently articulated strong personal value for the region's peace, rural character, and self-reliance. *"We live here for the peace and quiet. A wind farm will completely change the landscape and our way of life."*
Visual impacts	16	Many survey respondents expressed strong opposition to the visual impact of the wind farms, particularly due to turbine height, density, shadow flicker, and night lighting. Many described a sense of landscape loss. *"The turbines will dominate our views and change the rural character forever."*
Environmental concerns	16	Concerns about potential impacts on local wildlife (e.g. bats, eagles, superb parrot) and waterways such as Adjungbilly Creek, including sedimentation. Comments reflected strong environmental stewardship values. *"We are deeply concerned about the loss of wildlife and the impact on local creeks."*
Noise impacts	12	Noise, including low-frequency or infrasound, was a recurring concern. While decibel thresholds were acknowledged, some respondents feared sleep disturbance and reduced rural amenity. *"I'm afraid of constant noise and the low hum at night."*
Mental health and wellbeing	11	Respondents reported stress, anxiety, and a sense of loss of control about the proposed changes. *"The idea of turbines surrounding our home makes me anxious and impacts our sense of security in the area."*
Emergency response and accessibility	10	Concerns about bushfire risk, impacts on aerial firefighting, and evacuation safety. A minority noted that upgraded roads could assist emergency response. *"I worry about fire risk and whether fire crews could reach us quickly."*
Economic benefits and employment opportunities	8	A small number of respondents acknowledged short-term construction jobs and local procurement. Some expressed scepticism about the scale and distribution of these benefits. *"Any jobs will be short-term. Once construction is over, we are left with the turbines, not the benefits."*
Cumulative impacts	5	Several respondents referenced cumulative effects from Saddletop, Bondo, and Jeremiah wind farms, including long construction periods and landscape change. *"With multiple wind farms, our small community will face 10+ years of construction and permanent change."*

Theme	Respondents (n=38)	Summary
Microclimate and agricultural	5	A few respondents speculated that turbine operation could affect microclimates, stock behaviour, or crop productivity. *"I worry the turbines could affect our farm and livestock.".*
Perceived fairness and engagement practices	5	Some respondents expressed dissatisfaction with engagement processes, citing perceived bias and lack of transparency. *"The consultation feels one-sided. We want open discussions, not just drop-in sessions."*
Tourism and amenity-based business impacts	4	A small number of responses mentioned potential negative effects on tourism or Airbnb-style enterprises due to loss of visual and amenity appeal. *"Tourism will suffer if the area loses its natural beauty and tranquillity."*
Support for community initiatives	2	While a few respondents acknowledged community benefit funds, others described them as tokenistic and insufficient. *"Community funds are nice but don't make up for what we lose.*
Alternative energy preferences	1	One respondent referenced personal energy self-sufficiency and alternative technologies such as rooftop solar or hydro, indicating limited interest in other energy options compared to the proposed wind farm.

3.2.2 Community information session

A community information session was held on the 27 May 2025 with 40-50 people in attendance. The session was conducted as an informal drop-in format to provide project updates, answer questions, and record community feedback.

The session provided an opportunity for residents, landholders, and stakeholders to discuss the project with Squadron Energy. Attendees raised a range of questions and concerns, which have been summarised in Table 3.3.

Feedback from the community information session closely mirrors the themes identified in the community survey, with strong emphasis on visual impacts, environmental stewardship, cumulative effects, and community cohesion. This alignment reinforces the importance of these issues to local residents and will guide the EIS-phase SIA in prioritising:

- Community cohesion and trust
- Rural amenity and wellbeing
- Cumulative and construction-related impacts
- Perceptions of fairness and engagement effectiveness

Insights from both the survey and the session will directly inform the assessment of social impacts, development of mitigation strategies, and design of benefit-sharing approaches for the EIS.

Table 3.3 Summary of feedback from the community information session (27 May 2025)

Theme	Discussion
Engagement and transparency	Attendees expressed concern about late engagement and a preference for group discussions to ensure transparency. Some residents noted perceived division in the community, with requests for inclusive and open engagement.
Community benefits	Some attendees felt benefit commitments were unclear or insufficient. Squadron explained NSW 2024 Benefit Sharing Guidelines and noted that VPAs with Council would formalise community fund arrangements. Louise Halsey from the Community Foundation Snowy Valleys Region visited to discuss collaborating to maximise outcomes for the community, which has led to additional meetings to continue the conversation. The village of Brungle is nearby, which has a large First Nations population. The Project team visited the NSW health service in Brungle and reached out to Brungle Public School to talk about the Project, impacts and opportunities for collaboration. Squadron Energy's relationship and involvement in Brungle has resulted in a local artist from Brungle being commissioned by Squadron Energy to create the artwork for their Reconciliation Action Plan.
Visual and landscape impacts	Residents raised strong concerns about turbine height, density, and visual prominence. Some questioned the accuracy of visualisations.
Environmental and biodiversity concerns	Questions focused on black cockatoos, bats, and local wildlife, along with run-off and sedimentation during construction. Attendees emphasised environmental stewardship values and the need to protect local creeks and habitat.
Microclimate and rainfall	A question was raised about turbine effects on microclimate and rainfall. Squadron advised there is no evidence of material impact in domestic or international studies.
Decommissioning and lease terms	Attendees asked who is responsible for decommissioning if the developer defaults and raised questions about long leases and turbine guarantees.
Construction and cumulative impacts	Concerns were raised about industrialisation of the landscape, traffic, noise, and dust during construction, and cumulative effects with nearby projects including HumeLink, Bondo, and Jeremiah wind farms.
Fire risk and emergency response	Residents expressed concern about turbine fire risk and helicopter firefighting limitations. Squadron noted that turbines can be remotely shut down and access roads may support firefighting.
Perceived conflicts of interest	Questions were raised about the independence of consultants paid by the developer. Squadron clarified that specialist studies are conducted independently as part of the regulated EIS process.

4 Scoping of likely social impacts

The scoping of likely social impacts resulting from the proposed STWF has been guided by the SIA Guideline (2025) and informed by:

- the social baseline for the local and regional community
- community engagement activities, including stakeholder inputs received through the survey (38 responses) and community drop-in session (27 May 2025)
- the potential interaction between project activities and the social locality.

The scoped likely social impacts are presented in Table 4.1.

To assess the potential impacts, a preliminary social risk significance assessment was carried out to determine the unmitigated significance of potential social impacts. Consistent with the SIA Guideline, the scoping considered:

- the population likely to be affected, including different community subgroups
- the timing of potential social impacts across project phases (construction, operation, decommissioning)
- the characteristics of each impact (extent, duration, scale, and community sensitivity)
- the likelihood and magnitude of each social impact to inform unmitigated significance ratings

This integrated scoping process prioritises impacts that require detailed EIS-phase assessment and supports the development of:

- targeted mitigation measures
- community engagement strategies
- benefit-sharing initiatives.

The proximity of STWF to other proposed renewable energy developments presents potential cumulative social impacts. These will be assessed in the EIS phase in collaboration with relevant technical studies.

Table 4.1 presents the scoped social impacts, showing for each:

- theme / Social Impact
- potentially affected groups
- unmitigated significance rating (per SIA Guideline)
- rationale based on survey and engagement findings.

Table 4.1 Scoped social impacts

Theme	Id	Impact to people	Timing	Significance type	Stakeholder group	Social impact ranking (without mitigation[1])			Social impact categories	Potential vulnerabilities or opportunities	Level of assessment in SIA
						L	M	S			
Visual impacts	S01	Perceived loss of rural landscape character and visual amenity from turbine height, density, shadow flicker, and night lighting.	Operations	Negative	host landholders, neighbouring landholders and surrounding communities	B	3	High	Surroundings	**Vulnerability**: ageing populations and those living in an area for a long period of time may be more affected by visual changes as they impact their familiar environment and sense of place.	Detailed, requiring broader consultation and targeted research
Visual impacts	S02	Cumulative visual fatigue and erosion of rural identity from combined impacts of STWF and nearby wind farms	Operations	Negative	surrounding communities local councils	B	3	High	Surroundings	**Opportunity:** explore visual mitigation and community amenity initiatives **Vulnerability:** residents with long-standing ties to the area may perceive greater change or loss.	Detailed, requiring broader consultation and targeted research.
Noise impacts	S03	Operational noise, including low-frequency and infrasound, may cause annoyance, sleep	Operations	Negative	host and neighbouring landholders	C	3	Medium	Health and wellbeing	**Vulnerability**: health impacts may be exacerbated for older residents, young children,	Standard, requiring targeted engagement with those directly impacted.

[1] *L = Likelihood (A: Almost Certain, B: Likely, C: Possible, D: Unlikely, E: Very Unlikely); M = Magnitude (1: Minimal, 2: Minor, 3: Moderate, 4: Major, 5: Transformational); S = Significance rating (L: Low, M: Medium, H: High, VH: Very High).*

Theme	Id	Impact to people	Timing	Significance type	Stakeholder group	Social impact ranking (without mitigation[1])			Social impact categories	Potential vulnerabilities or opportunities	Level of assessment in SIA
						L	M	S			
		disturbance and reduce wellbeing.								or those with respiratory conditions	
Construction amenity impacts	S04	Temporary loss of amenity from construction dust, vibration, and noise, affecting comfort and daily routines.	Construction	Negative	host landholders, neighbouring landholders and surrounding communities	C	3	Medium	Health and Wellbeing	**Vulnerability**: older residents and families may be more affected by temporary disruptions.	Standard, requiring targeted engagement with those directly impacted.
Economic participation and equity	S05	Local job creation and procurement opportunities during construction may enhance economic security and options for local residents, businesses, and First Nations communities.	Construction	Positive	First Nations people and organisations; surrounding communities, local industry and business	B	2	Medium	Livelihoods	**Opportunity**: leverage local procurement to engage small and First Nations businesses, supporting regional economic participation and benefit sharing.	Standard, requiring targeted engagement with those directly impacted.
Economic participation and equity	S06	Workforce training, skills development, and employment initiatives during construction may improve economic security and social participation for local residents and First Nations people.	Construction	Positive	First Nations people and organisations; surrounding communities, local industry and business	C	3	Medium	Livelihoods	**Opportunity:** training programs to create pathways to employment for First Nations and vulnerable community members.	Standard, requiring targeted consultation and secondary data analysis.
Economic participation and equity	S07	Perceived inequitable distribution of project benefits between host and non-host community	Construction/ operations	Negative	host and neighbouring landholders surrounding	C	3	Medium	Community	**Vulnerability:** concerns about inequitable distribution of benefits may lead to community dissatisfaction, especially	Standard, requiring targeted consultation and secondary data analysis.

Theme	Id	Impact to people	Timing	Significance type	Stakeholder group	Social impact ranking (without mitigation[1])			Social impact categories	Potential vulnerabilities or opportunities	Level of assessment in SIA
						L	M	S			
		members, potentially reducing social cohesion.			community, local councils					among lower-income households. **Opportunity**: Strengthen community benefit sharing.	
Economic participation and equity	**S08**	Temporary reduced availability and affordability of short- and long-term accommodation due to workforce demand, especially during peak tourism or event periods, potentially displacing local workers, residents or visitors.	Construction	Negative	local businesses, local councils, surrounding communities	B	4	High	Accessibility	**Vulnerability:** limited affordable housing options may exacerbate housing stability issues for lower-income households, leading to increased demand for local resources.	Detailed, requiring targeted consultation and secondary data analysis.
Economic participation and equity	**S09**	Perceived decline in visitor appeal or amenity-based business opportunities (e.g., Airbnbs) due to visual landscape changes and cumulative development.	Construction / Operations	Negative	local businesses, local councils	C	3	Medium	Livelihoods	**Vulnerability**: Tourism-reliant operators are more sensitive to amenity changes. Opportunity: Local benefit-sharing could target tourism promotion or community infrastructure.	Standard, requiring secondary data review and stakeholder interviews
Community cohesion and decision-making	**S10**	Perceived lack of transparency or influence in project decision-making may reduce trust and engagement	Construction/ operations	Negative	community interest and service groups, surrounding communities	C	3	Medium	Community	**Opportunity:** high rates of volunteering can be harnessed to support community initiatives, promoting social	Standard, requiring targeted consultation and secondary data analysis.

Theme	Id	Impact to people	Timing	Significance type	Stakeholder group	Social impact ranking (without mitigation[1])			Social impact categories	Potential vulnerabilities or opportunities	Level of assessment in SIA
						L	M	S			
										cohesion and engagement among vulnerable groups.	
Cultural heritage	S11	First Nations community members may experience distress if changes to Country are perceived as diminishing cultural values, continuity, and identity.	Construction	Negative	First Nations people and groups	C	3	Medium	Culture	**Vulnerability:** changes to land use may threaten the cultural practices and identity of First Nations communities, requiring targeted support and engagement.	Standard, requiring targeted consultation and secondary data analysis.
Mental health and wellbeing	S12	Stress, anxiety, or reduced sense of wellbeing caused by noise, visual change, and cumulative project activity.	Construction/ operations	Negative	Host landholders; Neighbouring landholders; Surrounding communities	C	3	Medium	Health and wellbeing	**Vulnerability:** Long-term residents and those with strong place attachment more prone to social fatigue. **Opportunity**: Early engagement and clear communication can reduce uncertainty.	Standard, requiring targeted engagement and integration with other impact themes
Emergency response and accessibility	S13	Improved access roads may enhance convenience and emergency response for local residents, especially in isolated or rural areas.	Construction/ operations	Positive	host and neighbouring landholders, emergency services.	C	3	Medium	Accessibility	**Opportunity:** enhanced road infrastructure can improve access to services for isolated residents and vulnerable populations, including those with limited mobility.	Standard, requiring targeted consultation and secondary data analysis.

Theme	Id	Impact to people	Timing	Significance type	Stakeholder group	Social impact ranking (without mitigation[1])			Social impact categories	Potential vulnerabilities or opportunities	Level of assessment in SIA
						L	M	S			
Emergency response and accessibility	S14	Increased construction may cause travel delays, road safety risks and disruption to daily activities.	Construction	Negative	host and neighbouring landholders, emergency services.	c	3	Medium	Accessibility	**Vulnerability:** increased traffic may pose challenges for older residents or those with disabilities who rely on safe access to services.	Standard, requiring targeted consultation and secondary data analysis.
Emergency response and accessibility	S15	Turbine placement may reduce effectiveness of aerial firefighting, increasing perceived bushfire risk.	Operations	Negative	host and neighbouring landholders, emergency services.	C	3	Medium	Accessibility	**Vulnerability:** residents in fire-prone areas, particularly those with limited mobility or in isolated locations, may face increased risk during emergencies.	Standard, requiring targeted consultation and secondary data analysis.
Environmental impacts	S16	Distress over potential harm to wildlife and ecosystems, including threatened species (e.g., black cockatoos, bats, superb parrots).	Construction/ operations	Negative	community interest groups, surrounding communities, local councils, state governments	C	3	Medium	Surroundings	**Vulnerability:** changes to local ecosystems and biodiversity may disproportionately affect First Nation communities with connections to Country, as well as residents and interest groups who value the area's natural landscapes and biodiversity for recreation and amenity.	Standard, requiring targeted consultation and secondary data analysis.
Environmental impacts	S17	Perceived contradiction between renewable energy goals and the use of high-	Construction	Negative	community interest groups,	C	3	Medium	Surroundings	**Vulnerability:** individuals with strong environmental values	Standard, informed by EIS materials and targeted

Theme	Id	Impact to people	Timing	Significance type	Stakeholder group	Social impact ranking (without mitigation[1])			Social impact categories	Potential vulnerabilities or opportunities	Level of assessment in SIA
						L	M	S			
		carbon materials (e.g. concrete, steel) may lead to scepticism about the project's sustainability credentials.			surrounding communities					may perceive wind infrastructure as inconsistent with sustainability goals, particularly in communities with low existing industry or perceived natural character.	engagement on environmental values/perceptions.
Alternative energy preferences	S18	Frustration from community members who prefer alternative energy sources (e.g. solar, hydro).	Construction/ operations	Negative	industry, surrounding communities, Local councils	C	2	Low	Livelihoods	**Vulnerability:** preferences for alternative energy sources, including self-sufficiency (e.g., rooftop solar or hydro), may create social friction or feelings of opposition toward wind energy projects, particularly among residents who perceive wind farms as inconsistent with their local values or preferred energy solutions.	Minor, informed by secondary research.

5 SIA research methodologies and engagement

5.1 Research and approach to SIA during the EIS phase

The scoping phase has identified several likely social impacts of the Project, which will primarily require a 'standard' or 'detailed' level of assessment during the EIS. Technical specialists will carry out several detailed studies and investigations, including (but not limited to) water, biodiversity, noise and traffic. The independent SIA consultant will work closely with the technical teams to assess indirect or cross-cutting impacts affecting people, such as health and wellbeing, perceptions of risk, and land use changes.

The SIA will also use a range of qualitative and quantitative research methods to inform the assessment, verify community sentiment, and support the design of appropriate mitigation and benefit-sharing measures. The SIA research methods are further defined in Table 5.1.

Table 5.1 Research methods for SIA

Research methods	Description
Interviews and surveys	Informed by qualitative research principles (Bradshaw and Stratford, 2005), semi-structured interviews and online surveys will be used to explore social values, lived experiences, concerns, and potential project benefits. Targeted sampling will target those likely to be most affected by the project, including residents near turbine locations, First Nations stakeholders, and local service providers such as health clinics, community organisations, schools and emergency services. Responses will help to identify both actual and perceived social impacts.
Exploratory research	Exploratory methods will include social media and news media scans, analysis of submissions from similar wind energy projects, and early community commentary. This helps build a picture of potential issues, response patterns, and areas of community concern or opportunity.
Desktop analysis based on specialist studies	Where relevant, the SIA will draw on other EIS chapters (e.g. noise, visual, traffic, ecology) to understand the likely scale and reach of impacts. Social interpretations—such as how people might perceive visual changes or be affected by road disruptions—will be made based on this data. Cumulative impacts will be considered, including interaction with the nearby Squadron Energy proposed wind farms and Bondo Wind Farm.

5.2 Participatory engagement approach

A participatory and impartial engagement approach will be used to inform the SIA. This builds on Squadron Energy's broader stakeholder engagement program and aligns with the Project's Stakeholder Engagement Plan (May 2025), which commits to best practice principles of openness, inclusiveness, responsiveness, and accountability.

The SIA engagement program will be respectful, inclusive, and meaningful, with a particular focus on those most likely to be affected by the project. It will use multiple engagement methods, as shown in

Table 5.2, to ensure a diversity of perspectives are captured and to reduce consultation fatigue through integration with broader project engagement.

Table 5.2 SIA Engagement Approach

Engagement technique	Level of participation	Description	Targeted stakeholders	Engagement lead
Semi-structured interviews	Consulting to collect information and insights	Used to explore impacts, wellbeing concerns, perceptions of fairness, and local values. Enables stakeholders to describe their experiences in their own words.	Host and nearby neighbours, First Nations stakeholders, community service providers, tourism operators, local business owners, local government officers.	SIA Consultant/Squadron Energy
Drop-in community information sessions, contact points (e.g. phone, email)	Sharing information	Supports transparency and gives all community members access to information and avenues to raise concerns or suggestions.	Wider community	Squadron Energy
Fact sheets/newsletters	Sharing information	Used to share project updates, describe the role of the SIA, and promote opportunities to participate.	Wider community	Squadron Energy
Online surveys	Consulting to collect information and insights	Offers a structured opportunity to collect broader community views and understand social values, concerns, and preferred outcomes.	Wider community, host and nearby neighbours, interest groups	SIA Consultant/Squadron Energy
Targeted outreach to First Nations stakeholders	Consulting to collect information and insights	Supports culturally appropriate engagement consistent with relevant First Nations protocols. May include one-on-one yarning sessions and facilitated discussions.	First Nations stakeholders	Squadron Energy First Nations engagement team

Further, in response to some of the community feedback the Project team has received to date, Squadron Energy will be offering alternative methods of engagement to the local community such as workshops that involve active two-way engagement and / or the potential to form a Community Consultative Committee (CCC). These and other potential engagement methodologies are being investigated for suitability for this community.

6 EIS phase

This SIA scoping report documents the process and outcomes of the scoping phase of the Social Impact Assessment undertaken by AAP Consulting Pty Ltd for STWF. Specifically, it has:

- demonstrated an understanding of the project's social locality
- considered the characteristics of the communities within the social locality (the social baseline)
- identified likely social impacts for different groups in the social locality and the level of assessment required for the EIS assessment phase.

Based on the scoping findings and early engagement, the EIS-phase SIA will focus on the following core social themes:

Community Cohesion and Decision-making: the assessment will examine how the project may influence relationships within and between communities, including the potential for division due to differing opinions on wind energy. It will also consider perceptions of procedural fairness, transparency, and trust in the engagement process. Strategies will focus on strengthening engagement, supporting inclusive decision-making, and building shared community outcomes.

Way of Life and Rural Amenity: changes to the visual landscape, noise levels, dust, vibration, and traffic during construction and operation may affect people's use and enjoyment of rural areas. The SIA will investigate how these amenity changes are perceived and experienced, particularly by those with strong place attachment or longstanding residency in the area.

Health and Wellbeing: the potential for stress, sleep disturbance, or reduced quality of life due to construction and operational impacts (e.g. noise, dust, visual changes) will be explored. Particular attention will be given to residents with pre-existing health conditions or limited access to health services. The SIA will also consider cumulative stress or fatigue arising from multiple concurrent developments, drawing on feedback from targeted engagement with nearby residents, perceptions captured through surveys and interviews, and a review of the timing and overlap of regional infrastructure projects. This approach will allow the assessment to understand both the perceived and potential cumulative effects on community wellbeing.

Livelihoods and Economic Participation: while the project may provide employment and local procurement opportunities during construction; the SIA will assess concerns about equitable access to these benefits. Potential adverse effects such as workforce-related pressure on accommodation or disruption to land-based industries (e.g. livestock, aerial firefighting, tourism) will also be explored.

Cultural Heritage and First Nations Engagement: there is potential for disconnection from Country and intangible cultural heritage due to physical changes to landscape and access. The SIA will adopt a culturally sensitive approach, aligning with protocols for engagement with First Nations stakeholders, and explore opportunities to strengthen cultural recognition, participation, and benefit-sharing.

Accessibility and Transport: the SIA will assess how temporary or long-term changes to road networks and traffic volumes may impact access to services, especially for isolated residents or those with

mobility constraints. Opportunities associated with improved road infrastructure will also be considered.

Surroundings and Environmental Values: beyond direct biodiversity impacts, the SIA will explore how changes to the natural environment (e.g. habitat loss, species disruption) may affect the way people value and connect with their surroundings. This includes perceived contradictions between sustainability goals and the use of high-carbon construction materials (e.g. concrete, steel).

Cumulative Impacts: the proximity of other proposed large-scale renewable energy developments, including (but not limited to) the Bondo Wind Farm, Bookham Wind Farm, Jeremiah Wind Farm, McMahons Reef Solar Farm, and Bango Wind Farm introduces potential for cumulative visual, social, and accommodation-related impacts. These will be addressed across relevant SIA themes with reference to EIS technical studies.

Insights from the community survey, summarised in Table 3.2, have directly informed the prioritisation of these social themes for the EIS phase, ensuring that the assessment reflects the issues most important to local residents and stakeholders.

During the EIS phase, the SIA will:

- update the social baseline to reflect new census data and engagement insights
- validate and refine the defined area of social influence
- apply qualitative and quantitative research methods, including targeted interviews and surveys
- coordinate with technical specialists to interpret indirect social impacts
- integrate feedback from engagement activities to inform mitigation, benefit-sharing, and monitoring strategies.

By addressing identified vulnerabilities, harnessing local opportunities, and incorporating community feedback from the survey, the EIS-phase SIA will support the design of a socially responsible and contextually informed project that reflects the values, concerns, and priorities raised through early engagement.

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Appendix 1: Community baseline data

The STWF is located on Wiradjuri Country in the South East region of New South Wales, approximately 30 km north-east of Tumut. The project spans parts of the Cootamundra-Gundagai Regional Council, Yass Valley Council, and Snowy Valleys Council areas. It is set within a productive agricultural landscape near the villages of Adjungbilly, Tumorrama, and Wee Jasper. These small rural communities represent the nearest population centres to the proposed infrastructure and are likely to be most directly affected by construction and operational phases of the project.

The table below provides high-level demographic and housing indicators for these surrounding localities, based on 2021 ABS Census data. Note that Couragago was not included due to its extremely low resident population recorded in the latest Census.

Table 7.1 Surrounding suburbs and localities (nearby neighbours)

Category	Indicator	Adjungbilly	Tumorrama	Wee Jasper
People 	Total population	101	20	127
	Gender distribution	Male: 59.4% Female: 40.6%	Male: 58.3% Female: 41.7%	Male: 54.3% Female: 45.7%
	Median age	41	43	54
Families and households 	Total families	20	7	29
	Average number of children per family (for families with children)	2	2	1.6
	Total private dwellings	47	7	63
	Average number of people per household	2.8	2.7	2.1
	Median weekly household income	$2,312	$2,250	$825
	Median monthly mortgage repayments	$625	$1,287	$1,950
	Median weekly rent	$150	$0	$225
	Average number of motor vehicles per dwelling	2.8	3.4	2.1

Table 7.2 Surrounding LGA's (regional community)

Category	Indicator	Snowy Valleys LGA	Cootamundra-Gundagai Regional LGA	Yass Valley LGA	Rest of NSW	Comparative discussion
People						
	Total population	14,891	11,403	17,281	2,829,637	The surrounding LGAs have small populations, typical of rural and regional areas, which may affect service availability and community resilience.
	Gender distribution	Male: 50.4% Female: 49.6%	Male: 49.7% Female: 50.3%	Male: 49.2% Female: 50.8%	Male: 49.2% Female: 50.8%	Gender distribution is relatively balanced across all areas, reflecting typical demographic trends. The distribution in the LGAs aligns closely with that of the rest of NSW.
	Median age	45	49	43	43	Cootamundra-Gundagai has a notably older population (49), which may increase demand for aged care and health services. Yass Valley has the youngest median age (43), equal to the NSW average.
	Indigenous population	6.3	6.4%	3.2%	6.6%	All three LGAs have similar or slightly lower Indigenous representation compared to the rest of NSW.
	Country of birth (Australia)	82.4%	84.2%	84.1%	81.3%	The local LGAs show higher Australian-born populations than the NSW average, indicating relatively less cultural diversity.
Households and families						
	Social marital status (count of persons aged 15 years and over)	Registered: 47.9% De Facto: 13.5% Not Married: 38.6%	Registered: 49.8% De Facto: 11.1% Not Married: 39.2%	Registered: 54.1% De Facto: 12.4% Not Married: 33.5%	Registered: 46.2% De Facto: 12.3% Not Married: 41.5%	Higher percentages of registered marriages in local areas compared to the rest of NSW.
	Total families	3,963	3,026	4,813	755,789	
	Average number of children per family (for families with children)	1.9	1.9	1.9	1.8	Family sizes are comparable across all areas.

Category	Indicator	Snowy Valleys LGA	Cootamundra-Gundagai Regional LGA	Yass Valley LGA	Rest of NSW	Comparative discussion
	Couple families without children	46.4%	50.2%	40.8%	43.5%	Higher proportions of couple families without children in Snowy Valley and Cootamundra-Gundagai may reflect ageing populations or changing family patterns.
	One parent families	15.8%	14.6%	11.5%	17.1%	Lower prevalence of one-parent families in the LGAs compared to the NSW average.
Employment and income						
	Labour force participation	56.3%	49.7%	66.8% in the labour force	56.0% in the labour force	Yass Valley has a stronger labour market, while Cootamundra-Gundagai shows lower participation, possibly reflecting ageing or fewer job opportunities.
	Median weekly household income	$1,306	$1,132	$2,289	$1,434	Yass Valley significantly exceeds the state and regional averages, suggesting higher earning capacity or commuting to higher-paid jobs.
	Median personal income	$685	$627	$1,050	$722	Yass Valley also leads in personal income, while other LGAs lag behind the NSW average.
	Worked full-time Worked part-time	57.9% 31.2%	56.5%% 32.3%	61.4% 29.8%	54.5% 33.7%	High full-time employment rates suggest job stability; Yass Valley shows the highest full-time share.
	Unemployment rate	4.2%	4.0%	2.7%	4.6%	All LGAs have lower unemployment rates than NSW overall, indicating generally favourable job conditions.
	Provided unpaid assistance to someone with a disability %	12.3%	13.7%	14.0%	13.1%	Comparable levels of unpaid assistance reflect community care responsibilities in all areas.
	Did voluntary work last 12 months %	19.9%	20.5%	22.2%	15.5%	Higher levels of volunteering in local LGAs suggest strong community networks and civic engagement.
	Industry of employment, top responses	Beef Cattle Farming (Specialised) 4.9%, Log sawmilling 4.0%, Supermarket and Grocery Stores	Aged Care Residential Services 4.1%. Supermarket and Grocery Stores 4%.	Central Government Administration 7.6%, Defence 3.4%, State Government Administration	Hospitals (except Psychiatric Hospitals) 4.4%, Other Social Assistance Services 3.1%, Aged Care	Industries reflect rural settings: agriculture and health dominate. Yass Valley leans more to government and professional services.

Category	Indicator	Snowy Valleys LGA	Cootamundra-Gundagai Regional LGA	Yass Valley LGA	Rest of NSW	Comparative discussion
		3.4%. Corrugated Paperboard and Paperboard Container Manufacturing 3.1%, Other Social Assistance Services 3.1%.	Meat Processing 3.9%. Sheep Farming (specialised) 3.2% Beef Cattle Farming (Specialised) 2.6%	2.9%, Sheep Farming (specialised) 2.6%, Primary Education 2.6%	Residential Services 2.9%, Supermarket and Grocery Stores 2.7%, Primary Education 2.5%	
	Average number of motor vehicles per dwelling	2	1.9	2.4	1.9	Higher rates of vehicle ownership in rural areas reflect limited public transport and longer travel distances.
Housing and mobility						
	Median rent	$230	$218	$350	$330	Rent is more affordable in Snowy Valleys and Cootamundra-Gundagai than in Yass Valley or across NSW.
	Renter households Paying >30% Income	24.7%	28.3%	26.2%	36.0%	All LGAs show less rent stress compared to the NSW average, suggesting better affordability.
	Owner with mortgage households paying >30% of income	9.6%	7.9%	10.8%	12.7%	Mortgage stress is also lower in LGAs than NSW overall, supporting a picture of relative housing affordability.
	Median mortgage repayments	$1,300	$1,170	$2,167	$1,733	Higher repayments in Yass Valley may reflect property value or income differences.
Education						
	Educational attainment (Tertiary)	12.2%	10.9%	19.1%	19.1%	Tertiary attainment is lower in Snowy Valleys and Cootamundra-Gundagai than in NSW or Yass Valley.
	Not stated (Education)	29.6%	30.1%	15.6%	23.4%	High rates of 'not stated' may obscure education profiles, particularly in the smaller LGAs.

Category	Indicator	Snowy Valleys LGA	Cootamundra-Gundagai Regional LGA	Yass Valley LGA	Rest of NSW	Comparative discussion
	Level of highest education attainment: Year 9 or below	11.4%	12.6%	6.4%	9.5%	Higher instances of low education attainment in Snowy Valleys and Cootamundra-Gundagai suggests long-term disadvantage or limited access.
Health						
	No long-term health condition(s)	52.8%	50.8%	56.1%	53.6%	Yass Valley residents report better overall health, possibly linked to younger median age. Slightly higher arthritis rates in Cootamundra-Gundagai may reflect older population base. Asthma rates are generally comparable across all areas. Mental health conditions are slightly lower than the NSW average across the LGAs.
	Arthritis	12.4%	14.2%	11.2%	11.6%	
	Asthma	10.5%	10.3%	9.6%	9.6%	
	Mental health condition	8.3%	10.1%	10.0%	10.6%	

Appendix 2: Stakeholder identification

Stakeholder Group	Stakeholders
Host landholders	• Landholders with the potential to host WTGs and/or project infrastructure (27 associated)
Neighbouring landholders	• There are 75 dwellings within 5 km of the Project Site, including 25 associated and 50 non-associated.
Communities within the Social Locality	• Adjungbilly • Gobarralong • Darbalara • Bongongo • Gundagai • Tumut • Tumorrama

Government – State	• Department of Finance, Services, and Innovation – Telco Authority
	• Department of Climate Change, Energy, the Environment and Water (DCCEEW) including:
	  ○ Conservation Programs, Heritage & Regulation Group (CPHR)
	  ○ Energy Corporation
	  ○ Water Group
	• Department of Planning, Housing and Infrastructure (DPHI) including Crown Lands

Government – State	• Department of Finance, Services, and Innovation – Telco Authority
	• Department of Climate Change, Energy, the Environment and Water (DCCEEW) including:
	  ○ – Conservation Programs, Heritage & Regulation Group (CPHR)
	  ○ – Energy Corporation
	  ○ – Water Group
	• Department of Planning, Housing and Infrastructure (DPHI) including Crown Lands
	• Department of Primary Industries – Agriculture and Fisheries (DPI)
	• Environment Protection Authority (EPA)
	• Fire and Rescue NSW
	• Heritage NSW
	• NSW Rural Fire Service
	• Regional NSW – Mining, Exploration and Geoscience (MEG)
	• Transport for NSW
	• TransGrid / Lumea
	• NSW Energy Sector Board

Stakeholder Group	Stakeholders
Government - Federal	• Airservices Australia • Bureau of Meteorology (BOM) • Civil Aviation Safety Authority (CASA) • Department of Agriculture, Water and Environment (DAWE) • Department of Defence • Department of Climate Change, Energy, the Environment and Water (DCCEEW) • Australian Energy Market Operator (AEMO)
Local Council	• Cootamundra Gundagai Regional Council • Snowy Valleys Council • Yass Valley Council
Government - elected representatives	• Federal Member for Riverina, Hon Michael McCormack MP • Federal Member for Eden Monaro, Hon Kristy McBain MP • NSW Member for Cootamundra Steph Cooke, MP • NSW Member for Eden Monaro, Kristy McBain MP
Community interest groups and community services	• Adjungbilly Cooperative Wild Dog and Fox Management • Adjungbilly Hall – run by Bongongo Parents and Citizen's Association (P&C) • Country Women's Association, Gundagai Branch • Tumut Show Society • Landcare • Holy Advent Church Tumorrama • Rural Women's Day • Flourish Australia, Tumut (Community mental health services)
Schools	• Bongongo Public School • Puggles Mobile Preschool • Jugiong Public School • Gundagai Public School • St Patricks Catholic Primary school • Gundagai South Public School • Gundagai High School • Brungle Public School • Tumut Public School • Tumut High School • McAuley Catholic Central School • Snowy Valley School • Franklin Public School
First Nations groups	• NSW Aboriginal Land Council • Brungle Tumut Local Aboriginal Land Council • Onerwal Local Aboriginal Land Council • Murra Bidgee Mullangari Aboriginal Corporation • Corrroboree Aboriginal Corporation • Gunjee Wong Cultural Heritage Aboriginal Corporation • Merrigarn Indigenous Corporation • Ngunnawal Heritage Aboriginal Corporation

Stakeholder Group	Stakeholders

Industry, local business and media	• Tumut and Adelong Times
	• Gundagai Independent
	• Gundagai Business Network
	• Tumut business network
	• Local businesses (mostly in Gundagai and Tumut) including:
	  ○ Accommodation, retail, food and beverage and entertainment providers; medical services, fuel/vehicle maintenance services; as well as a range of business geared to servicing large civil construction projects.
	  ○ Gundagai Visitor Information Centre
	  ○ Coolac Store
	  ○ Eulonga Quarries
	  ○ Visy, Tumut

Other Stakeholders	• The Junction air strip • Southern Cross Forests, Tumut • Adjungbilly Rural Fire Brigade • SES Southern Zone • Any other Squadron Energy or regional renewable projects relevant to cumulative assessment