NEOEN

GOYDER NORTH WIND FARM

PROJECT DESCRIPTION

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Acronyms and Terms

Acronym / Term	Definition
BESS	Battery Energy Storage System
CIS	Capacity Investment Scheme
CEMP	Construction Environmental Management Plan
CFS	Country Fire Service
DCCEEW	Department for Climate Change, Energy, the Environment and Water
DEW	South Australian Department of Environment and Water
Development Envelope	A 'buffered' version of the Disturbance Footprint that represents the outer spatial extents within which the Disturbance Footprint will occur. Design is well developed and optimised to minimise cut and fill, avoid known sites of significance or value, and to minimise the disturbance footprint. The Development Envelope is an extra measure to enable final adjustments to the Disturbance Footprint in alignment with the Mitigation Hierarchy to avoid or minimise impacts on environmental values, cultural heritage or any other potential constraints that emerge during design finalisation and construction. Further detail on the basis of the Development Envelope is provided in 1.2.
Disturbance Footprint	The area where permanent and temporary infrastructure is proposed and the maximum area of vegetation clearance and/or earthworks to allow for construction of the GNWF.
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
FPRMMR	First Peoples of the River Murray and Mallee Region #2
GNREF	Goyder North Renewable Energy Facility
GNWF	Goyder North Wind Farm
GRZ	Goyder Renewables Zone
ha	Hectare
ICOMOS	International Council on Monuments and Sites
INTG	Iron-grass Natural Temperate Grassland
km	Kilometre
kV	Kilovolt
m	Metre
MNES	Matter of National Environmental Significance
MV cable	Medium voltage cable
MW	Megawatt
MWh	Megawatt hour

Acronym / Term	Definition
NNAC	Ngadjuri Nation Aboriginal Corporation
NV Act	*Native Vegetation Act 1991* (SA)
OEMP	Operational Environmental Management Plan
OTL	Overhead Transmission Line
PBTL	Pygmy Blue-tongue Lizard
PEC	Project EnergyConnect
Permanent Disturbance	Disturbance required for infrastructure that will remain within the project area for the lifetime of the project.
PDI Act	*Planning, Development and Infrastructure Act 2016* (SA)
PPA	Power Purchase Agreement
Project Area	The spatial bounds within which the disturbance footprint for the GNWF may occur.
SA	South Australia
SEB	Significant Environmental Benefit
SPV	Special Purpose Vehicle
TEC	Threatened Ecological Community
Temporary Disturbance	Disturbance required for infrastructure that is only required during the construction phase of the development, but that will be decommissioned upon completion of construction.
WTG	Wind Turbine Generator

1. Project Overview

Neoen is developing the **Goyder North Renewable Energy Facility (GNREF)** as a part of its wider **Goyder Renewables Zone (GRZ)** concept. The GRZ (Figure 1) represents one of the most ambitious renewable energy developments proposed in South Australia and is ideally located to complement Project EnergyConnect (PEC), a large transmission line interconnector between South Australia (SA) and New South Wales (NSW) currently under construction by ElectraNet (in SA) and TransGrid (in NSW).

For context, the GRZ comprises the Goyder South Hybrid Renewables Energy Project which was granted Development Approval in 2021. Goyder South Stage 1 consists of 412 megawatts (MW) of wind generation and achieved EPBC Approval in 2022. Construction of Goyder South Stage 1 commenced in 2022 and is scheduled to be completed in 2025.

The GNREF will harness the high value wind resources in the Goyder region, located north of Burra and south-east of Hallett in the Goyder Regional Council area. The Goyder North site is characterised by world-class wind conditions and complementary land uses (comprising primarily of marginal grazing land located on the edge of Goyder's Line). These superior wind resources, combined with an optimised footprint per turbine, deliver higher efficiency of energy produced per hectare cleared than most comparable proposals.

The broader GNREF was granted *Planning Approval under the Planning, Development and Infrastructure Act 2016* (SA) (PDI Act) in October 2024, following a public State Commission Assessment Panel hearing. The approval was for up to 135 Wind Turbine Generators (WTG), approximately 1000 MW of wind generation and up to 900 MW / 3600 megawatt hours (MWh) of Battery Energy Storage Systems (BESS). Since October 2024, the GNREF has been refined into the Goyder North Wind Farm (GNWF), now accommodating up to 99 turbines with a total nameplate capacity of approximately 600 MW planned for construction, and an allowance for a 225 MW / 900 MWh BESS (refer Figure 2). Note that the former project name at the time of EPBC Referral in 2024 was "Goyder North Renewable Energy Facility (GNREF) Stage 1" however the project is now referred to as Goyder North Wind Farm and will be referred to as such throughout this document. The GNWF represents the Action that is currently undergoing the following key approvals processes:

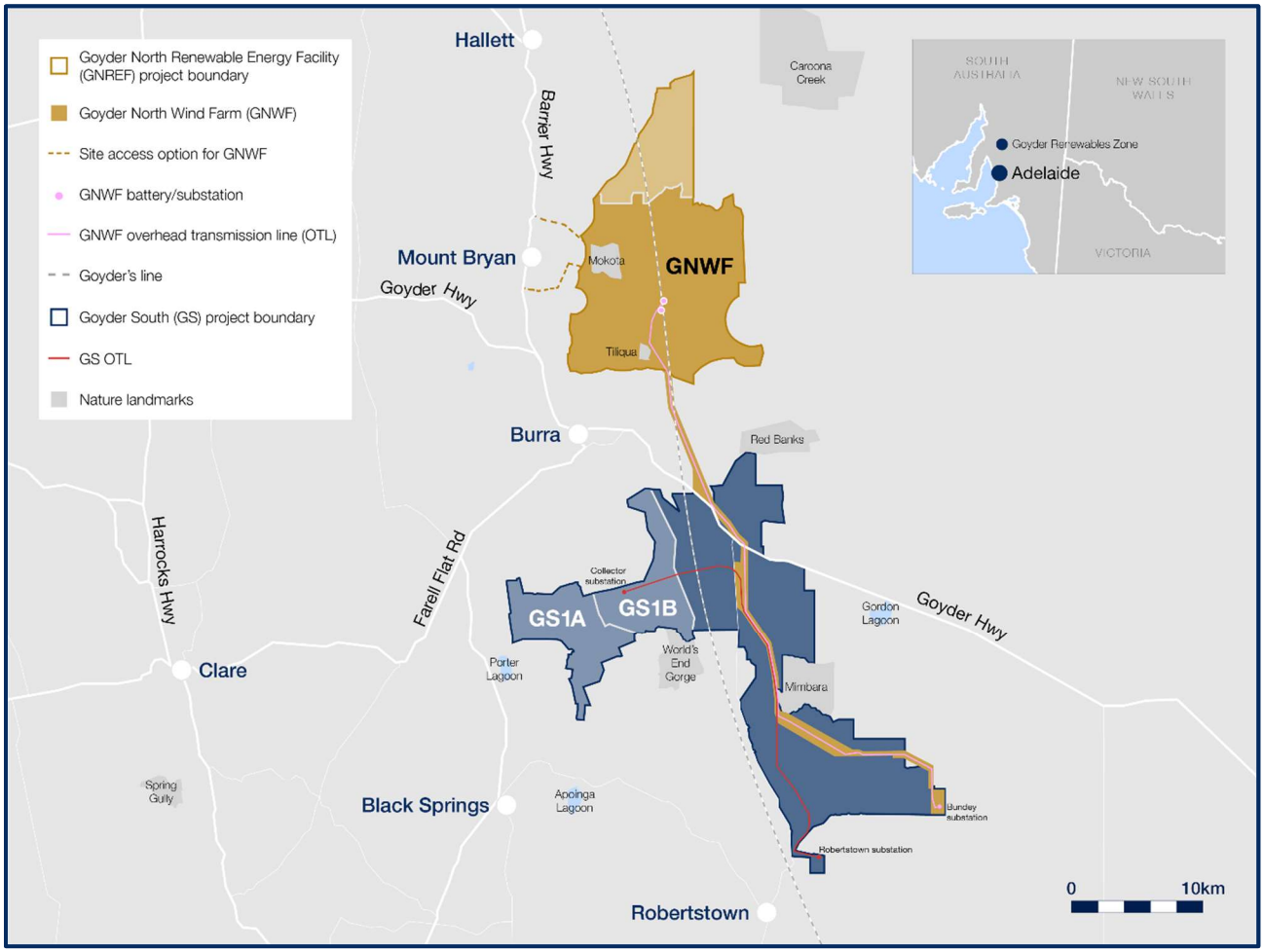
- A referral under *the Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was submitted in mid-2024. In November 2024, Neoen was provided a Notification of Referral Decision specifying that the Project was considered a controlled action, with relevant controlling provisions being listed threatened species and communities (under sections 18 and 18A of the EPBC Act). DCCEEW evaluated the project as being assessed by Preliminary Documentation, under the EPBC Act. As such, a Request for Additional Information Required for Assessment on Preliminary Documentation was issued on 5 December 2024 by DCCEEW to Neoen. This documentation has been prepared to support that assessment.
- Assessment by the Native Vegetation Assessment Panel under the *Native Vegetation Act 2016* (SA) (NV Act) following submission of the Native Vegetation Clearance Application in March 2025.
- Assessment for authorisation under Sections 21 and 23 of the *Aboriginal Heritage Act 1988* (SA), which is administered by the Minister for Aboriginal Affairs. Applications are reviewed

by Aboriginal Affairs and Reconciliation within the South Australian Department of the Premier and Cabinet.

GNWF has been selected as a priority project by DCCEEW through the EPBC referral process based on its integration of renewables into the grid, with selection criteria encompassing environment, heritage, regional economic importance and community engagement. This Priority Project listing means that the Project is subject to receive additional support and facilitation through the regulatory and environmental processes[1].

Goyder North Wind Farm has been awarded a Capacity Investment Scheme contract with DCCEEW, one of only two wind farms to do so in South Australia[2].

Figure 1: Goyder Renewables Zone (GRZ) concept



[1] (Department for Climate Change, Energy, the Environment and Water, 2025)
[2] This contract forms part of the commitments made between the state and Federal governments in their Renewable Energy Transformation Agreement. This Federal, but state supported, scheme aims to help deliver the 82% renewable energy by 2030 target, support the transition from ageing coal power and put downward pressure on electricity prices.

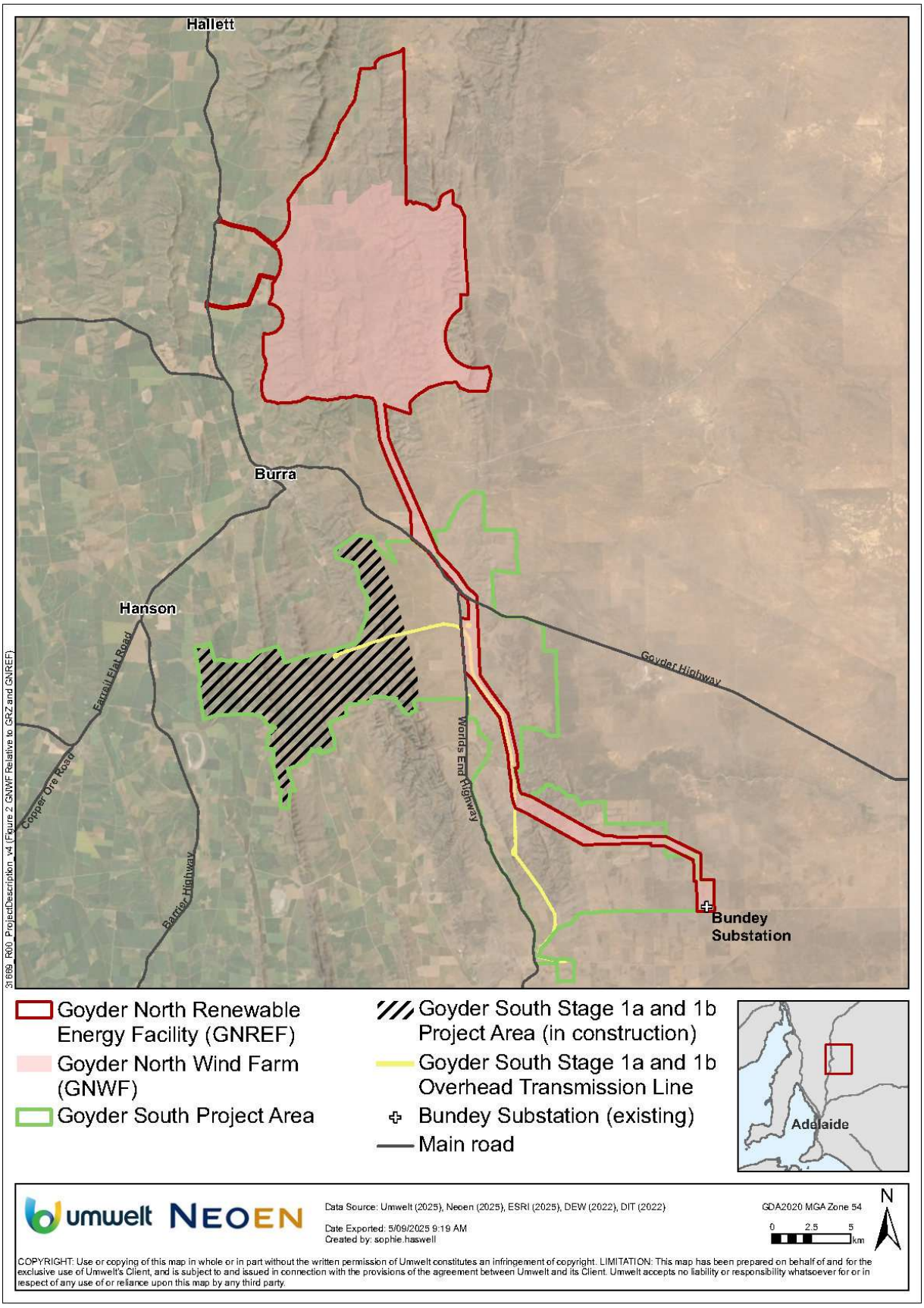


Figure 2: GNWF relative to GRZ and GNREF

1.1 The Project

Whilst Planning Consent was granted for the broader GNREF (up to 135 turbines at approximately 1000 MW) in 2024, the design has since been refined to the GNWF to accommodate up to 99 turbines.

The Project (representing the Action) comprises up to 99 WTGs, a BESS of around 225 MW / 900 MWh, approximately 48 kilometre (km) of Overhead Transmission Line (OTL) that connects into a proposed extension at Bundey Substation, expansion of Bundey Substation, a collector substation and a Designated Network Asset substation within the Wind Farm, access tracks and underground cabling located at the wind farm, meteorological masts for ongoing wind collection data, operation and maintenance compounds, and construction compounds and facilities. GNWF capacity will be approximately 600 MW, with the exact capacity dependent on the supplier and final size of the turbines (up to 99).

GNWF will connect to the grid via a proposed extension at ElectraNet's Bundey Substation, which has been built for the SA-NSW PEC interconnector, via an approximately 48km overhead transmission line (OTL). This OTL extends south from the collector substation within the wind farm and continues southeast towards Bundey.

The main access to the site will be via the Barrier Highway onto Belcunda Road, then north along Lines Road before turning east onto Gum Hill Road along the southern boundary of Mokota CP. Up to 90% of traffic will be directed through this route to minimise potential for indirect impacts, such as dust deposition. White Hill Road will also be utilised as a minor access road to the site. Neoen have also endeavoured to incorporate the use of existing roads / farm tracks for construction throughout the Project Area wherever possible to reduce the need for additional clearance. Road or track widening, and some vegetation management will be required in some locations.

Depending on the approvals process, it is proposed that construction of GNWF would commence early 2026. Given the scale of wind energy generation associated with the GNWF, it is possible that the Project will be developed and/or constructed in two stages, with each stage potentially having its own legal entity, construction contracts and financing packages. The exact size and timing of stages will be defined through the final Project development and approvals processes, and will be informed by the size and timing of Power Purchase Agreements (PPAs) dictated by customer electricity demand, as well as the construction contractors capability and capacity, and tendering negotiations. The GNWF may be built in its entirety, or split into stages comprising:

- Stage 1: Approximately 48 WTGs, proposed to commence construction from Q2 2026
- Stage 2: The remaining WTGs (constituting a total of up to 99) to begin construction in a 2–5 year timeframe

GNWF was submitted as a Split Referral from the broader GNREF that was originally granted Planning Consent in 2024, based on the following factors:

- Construction timeframes: GNWF is proposed to commence construction in Q2 2026. There is no current plan to develop further stages. If further stages were to be progressed in the future they would be subject to their own approval processes and stakeholder engagement.
- Independence: GNWF is a standalone Project proposed to be constructed either as a whole or in one or two stages, and will proceed entirely independently of any subsequent stages.

- Unique financing and ownership structure: Typically, Neoen has financed its projects under traditional non-recourse project financing with individual Special Purpose Vehicles (SPV). Neoen is well progressed with customer negotiations for a PPA associated with GNWF. Discussions with potential lenders for GNWF have commenced with debt likely to be raised shortly after commencement of construction. No customer or lender discussions have commenced for any subsequent stages of the project and GNWF will have a unique financing and ownership structure, different from any subsequent Project Stages if they were to eventuate.

Neoen is also developing a separate and independent Goyder BESS Project adjacent to the Bundey Substation. This is also a standalone project, for which investment decision will be made independently of the investment decision for GNWF. The Goyder BESS is proposed to occur within a small portion of the GNWF Project Area adjacent the GNWF substation expansion and connection point. Goyder BESS will have a unique financing and ownership structure and will be awarded as a discrete and independent construction contract. ElectraNet will be responsible for constructing the non-contestable scope for this Project and if both GNWF and Goyder BESS proceed, the non-contestable technical connection scope component will be designed accordingly.

1.2 Project Definitions

Project Area

The **Project Area** comprises approximately 17,700 hectares (ha) of rural land located within South Australia's Mid North Region, 5.5 km northeast of Burra. It extends approximately 11 km to the north, towards Hallett and spans up to 14.5 km east to west at its southern end. The western-most boundary is also positioned approximately 4.4 km east of Mount Bryan. The area lies entirely within the Regional Council of Goyder and comprises mainly freehold farmland, five Crown land parcels, and local road reserves. Land use is predominantly dryland cropping and grazing, with some remnant vegetation across varied, but mostly hilly, terrain.

The Project Area encompasses all project infrastructure, including the OTL corridor, Bundey Substation extension and the entire Council reserve along the site access roads.

Disturbance Footprints and Development Envelope

The **Disturbance Footprint** represents the total on-ground disturbed area that Neoen is seeking approval for. The disturbance footprint covers up to 537 ha within the Project Area, incorporating all wind farm infrastructure, including the wind farm substation, the overhead transmission line and Bundey Substation extension. It is the maximum extent of disturbance that will take place as part of the proposed Action.

The Disturbance Footprint has been informed by a well-developed design which is optimised to minimise cut and fill, avoid known areas of significance or value, and to minimise the disturbance. Throughout the design phase, Neoen have continued to refine the disturbance footprint to avoid and minimise impacts to areas of ecological and heritage value, inputting multiple years of survey data for significant ecological species so that impacts to these species can be avoided and minimised as much as possible. A series of constructability and design optimisation workshops held during late 2024 and early 2025 saw adoption of the following key measures to further minimise the footprint, totalling a reduction in approximately 60 ha:

- Removal of the stringing corridor for the bulk of the OTL;
- Increasing OTL tower heights to avoid vegetation management throughout the life of the asset;
- Alignment of the underground cabling with the access roads and overlapping of the cable laying areas with the temporary road construction footprint to minimise the total footprint and fragmentation.

Further design optimisations conducted in August 2025 generated an additional 30% reduction in disturbance of Lomandra grasslands (Class and Class C), relocation of a turbine to achieve a minimum offset distance from Mokota Conservation Park of 450m, and removal of the stringing corridor for the remainder of the OTL. These changes generated a further footprint saving of approximately 10 ha of native vegetation disturbance.

Further details of how the mitigation hierarchy has been applied throughout design development phase is provided in Section 5.

Neoen have identified Disturbance Footprints as either **Permanent Disturbance** or **Temporary Disturbance**. Permanent Disturbance represents the area which will not be rehabilitated following construction and are elements required for the life of the Project, requiring either land acquisition and or agreements which will likely result in changes to existing land use. Permanent Disturbance represents 308 ha of the proposed Disturbance Footprint.

Within all areas of Temporary Disturbance, Neoen is committed to initiating restoration works, including the spreading of topsoil, as early as practical after clearance has occurred and, as a worst case, within three years of disturbance. Neoen is not seeking offset obligation reductions for the planned rehabilitation of Temporary Disturbance. This is a precautionary measure, to ensure that the entire potential impact, including indirect impacts, is captured within the various environmental offsets (for NV and EPBC). This approach goes above and beyond what is typically required of proponents and ensures that a net environmental gain is achieved through offsets by accounting for all disturbed area. Given that 229 ha of the proposed disturbance (from a total of 537 ha), equivalent to 43% of the Disturbance Footprint, is temporary, this is a significant cost to Neoen, and a significant commitment to ensure a net environmental gain regarding offsetting.

The worst-case or upper limit permanent and temporary disturbance footprints associated with the key Project elements are summarised in Section 2: Project Components.

Neoen has also proposed to adopt a **Development Envelope**, which is a ‘buffered’ version of the Disturbance Footprint, that represents the outer spatial extents within which the Disturbance Footprint will occur. Despite the design being well developed and optimised to minimise cut and fill, avoid known areas of significance or value, and minimise the disturbance footprint, the Development Envelope is an extra measure to enable final adjustments to the Disturbance Footprint in alignment with the Mitigation Hierarchy to avoid or minimise impacts on environmental values, cultural heritage, or any other potential constraints that emerge during design finalisation and construction.

The Development Envelope is approximately 200 m wide, extending approximately 100m either side of the centreline of the proposed infrastructure within the Disturbance Footprint and represents an area with increased confidence regarding ecological species relative to the broader Project Area. Several exclusion areas have been adopted within the Development Envelope to be avoided based on high ecological or heritage value. There are cultural heritage sites where uncertainty remains.

These are currently being resolved in consultation with the Ngadjuri Nation Aboriginal Corporation through:

1. Verifying whether these sites are considered sites of value, and
2. Determining appropriate exclusion zones to apply to the Development Envelope once finalised.

Any micro-siting that occurs during design finalisation and construction to avoid ecological, heritage or other constraints following approval will not exceed the total impacts represented by the upper limit of the Disturbance Footprint.

The Development Envelope will be narrower than 200m in several areas, including:

- Along site access roads where the Development Envelope aligns with the entire Council reserve area along these roads (i.e. the Project Area)
- Adjacent to Mokota Conservation Park, Tiliqua Nature Reserve and Mimbara Conservation Park where the Development Envelope avoids these protected areas
- Next to Crown land parcels that the Project will not impact
- Near known Aboriginal heritage sites, where a 200 m buffer has been applied to maintain distance from areas of value (e.g. around Wandillah Creek and Stone Creek)

In some sections, the Development Envelope exceeds 200 m to provide space for road modifications and additional room to manoeuvre around Lomandra grasslands to facilitate optimal placement that minimises the Disturbance Footprint.

1.3 Project Drivers and Benefits

Australia has committed to reducing greenhouse gas emissions to below 43% of 2005 levels by 2030, with plans to achieve net zero by 2050[3]. South Australia's aspiration is to achieve 100% net renewables by 2027[4]. Investment in renewable energy through projects such as GNWF demonstrates Neoen's commitment to decarbonising the country and state's energy sector.

The Project benefits include:

- Generation of clean energy.
- Support of South Australia's renewable energy targets.
- Enhanced reliability of generation from the potential inclusion of a BESS.
- Supporting agriculture by providing diversified revenue to farmers involved in the Project over its lifespan.
- A community benefit fund of up approximately $500,000 annually (based on $70,000 / 100 MW of wind and $12,000 / 100 MW of BESS annually) established for local projects and initiatives throughout the Project lifespan, indexed at CPI from December 2023.

[3] (Department for Climate Change, Energy, the Environment and Water, 2024)
[4] (The Government of South Australia, 2024)

- Employment opportunities – both direct and indirect.
- Use of local materials and skills wherever possible.

The Project is expected to provide a range of economic benefits to the Mid North region, including an investment of approximately $2.2B AUD of capital expenditure for the GNWF. It is also expected to create approximately 500 direct jobs during construction and 15 jobs during the 30 years of operation. These numbers are informed by data from the near completely constructed Goyder South Wind Farm.

Neoen submitted the GNWF (excluding the BESS component) to the Capacity Investment Scheme (CIS) tender process run by the Department for Climate Change, Energy, the Environment and Water (DCCEEW) in February 2024. After being shortlisted and submitting a financial bid, Neoen was successfully awarded a CIS contract. This contract includes a number of commitments associated with the project, specifically in relation to First Nations and community benefits.

Neoen is committed to improving the condition of the ecological landscape and protecting heritage values through application of the mitigation hierarchy. Neoen is also committed to securing on-ground offsets for all stages of NVC offset requirements, in addition to EPBC INTG and PBTL offset requirements. Throughout the Project, Neoen has and continues to closely engage with key stakeholders, members of the local community, the Regional Council of Goyder, South Australian Government Agencies, local conservation groups, and the local Landscape Board.

2. Project Components

Project components are summarised in Table 1 and illustrated in Figure 4. Table 1 summarises the upper limit estimates for project Disturbance Footprints, including both temporary and permanent areas, as well as non-native vegetation such as crops and existing tracks or roads. These are intended to provide flexibility for any innovation in component design between now and the time of detailed design, followed by construction.

Table 1: GNWF Project Components

Project Component	Description	Approx. Disturbance Footprint Total
Wind Turbine Generators, hardstands and wind farm access roads.	Maximum number – 99 Minimum swept height – approx. 20 m Maximum swept height – approx. 240 m Maximum blade length – approx. 95 m Maximum rotor diameter – approx.190 m Maximum rotation speed – approx. 9-10 revolutions per minute (rpm) Footings may be either a mass concrete footing (raft style), piled type rock anchors, or a combination of both at approximately 30 m in diameter. Incorporates roads to each Wind Turbine Generator (WTG) including turnarounds. The Disturbance Footprint for the WTGs includes internal wind farm roads, which are needed for WTG construction and operation for the life of the asset, based on typical 5.5m	378 ha This includes access roads and 5 m temporary civil construction disturbance buffer that overlaps with a high proportion of the medium voltage cable (MV cable) temporary disturbance footprint, located either side of the road.

Project Component	Description	Approx. Disturbance Footprint Total
	trafficable road width in straight sections, in addition to approx. 1m road shoulder allowance and additional allowance for drainage and cut and fill. The total permanent access road width (including batters and drainage) is based on 3D modelling of the site incorporating existing terrain and cut and fill requirements, and is therefore site specific as represented in the spatial data. Further detail is provided in Section 2.6 below. The Disturbance Footprint for WTG also includes 5 m of temporary disturbance allowance for road construction at the outer extent of the permanent road footprint (noting that the permanent road width includes drainage and batters).	
Battery Energy Storage System	Approximate capacity of 225 MW / 900 MWh. A fenced compound of approximately 5 ha within the wind farm area. This area also serves as a central construction laydown area initially to avoid additional clearance. The construction sequence would therefore stagger construction of the BESS to occur following the main use of the central temporary laydown.	6 ha Including access road.
Transmission lines	275 or 330 kilovolt (kV) multi-circuit overhead line connecting the wind farm substation to the Bundey Substation, approximately 48 km in length. Transmission lines would also connect the battery to the wind farm substation (approximately 400m). Transmission towers would be up to 65 m high with a permanent footprint of approximately 27 x 27 m, spaced approximately 300-500 m apart. A 50 x 50 m temporary construction area has been allowed for at each tower location to be used for the installation of the towers. To minimise ecological impacts, the OTL will employ practises of non-conventional conductor stringing negating the need for a stringing corridor. Some OTL tower heights will be increased (or optimally placed through detailed design phase) to achieve sufficient clearance from vegetation to negate the need for the Inner and Outer Maintenance Zones for the life of the project. Access tracks to each transmission tower are required for construction and operational access. Design for tracks are based on a width of 6m, with the Disturbance Footprint relating to the slope across each track. Where possible, these tracks have utilised public roads, farmers' tracks, or access tracks installed for the Goyder South transmission line.	63 ha Including access tracks, brake and winch sites, helicopter landing pads and temporary tower pads.

Project Component	Description	Approx. Disturbance Footprint Total
	Temporary Brake and Winch sites are required for stringing of the line. This includes two 45 x 45 m pads and two 10 x 60 m stringing corridors at each turn >30 degrees, or at a minimum of every 5.5km. Disturbance Footprint totals include brake and winch sites, tower pads and the stringing corridor. Construction facilities for the transmission lines are itemised separately under Construction Compounds and Facilities below.	
Electrical substations and operation and maintenance facilities	Two fenced compounds of approximately 150 x 150 m and 80 x 180 m containing the collector substation and DNA substation within the wind farm. An extension of the Bundey Substation of approximately 220 x 440 m. Including substation and ancillary equipment. Operation and maintenance facilities are assumed at a footprint of 70 x 50 m within the footprint of each compound.	7 ha (WF) Including access road. 10 ha (Bundey) Including access road.
Construction Compounds and Facilities	Approximately 38 ha of footprint for construction facilities: • 150 x 150 m construction compounds x 3 • 150 x 150 m laydown area x 1 • 100 x 100 m laydown areas x 3 • 100 x 100 m site security facility x 1 • 150 x 150 m batch plants x 4 • 200 x 50 m stockpile areas x 16 Approximately 7 ha of footprint for OTL construction facilities: • 300 x 150 m OTL compound x 1 • 150 x 150 m OTL batch plant x 1	45 ha (WF and OTL)
Underground cabling	Underground cabling for transmission (33-66 kV) and communications (fibre). MV cable has been preferentially placed adjacent to roads, within the 5 m civil construction buffer either side of the road. Up to four MV circuits can be placed within the civil disturbance footprint for the access roads (two on either side of the road). For cases where there are more than four circuits, an additional 2 m per circuit has been added to the Disturbance Footprint where they are aligned with the access roads. Where it is not practical for cables to run adjacent to roads, an approximately 7 m-wide corridor will be disturbed for up to 3 circuits, with an additional 2 m for each circuit thereafter.	20 ha Additional to that which overlaps with the 5 m civil construction footprint.

Project Component	Description	Approx. Disturbance Footprint Total
Meteorological Masts	Up to 15 meteorological masts (9 temporary and 6 permanent) to calibrate wind speed across the site. Masts will be guyed lattice structures up to 140 m in height with a central foundation and 9 guy wires anchored at a radius of around 120 m.	1 ha
Site Access	Primary access route from Barrier Highway, utilising existing roads. Two access roads are included – White Hill Road and Belcunda Road. Site access roads will require widening in some locations and trimming of taller vegetation (limited to amenity vegetation only) to accommodate the transport of heavy machinery and large infrastructure components. The Disturbance Footprint includes areas at several intersection upgrade locations along the Barrier Highway to allow for upgrades and blade sweep. This represents the estimated area where vegetation clearing and/or trimming may be required for equipment transport to site. An 11 m-wide corridor has been allowed for, noting that this includes the existing 7 m-wide road. Neoen is currently refining this road design in consultation with Council. Finished road width likely to be less than 11 m allowance. The Project Area also includes land allocated for blade sweep (i.e. the area that wind turbine blades may occupy when turning corners during transport, which is not directly impacted but still required for safe manoeuvring).	7 ha
TOTAL	Permanent Disturbance Footprint	308 ha
	Temporary Disturbance Footprint	229 ha
	Disturbance Footprint incorporating all components	537 ha

2.1 Wind Turbine Components

The project is comprised of up to 99 WTGs, each with a maximum tip height of 240 m. The final sizing will depend on the specific wind resource characteristics of each portion of the site and the requirements of individual power purchasers and may be less than these maximums. Neoen are seeking approval for turbines with an approximate blade length of 95 m and approximate rotor diameter of 190 m. The turbine tower base diameter is expected to be around 6 m. Footings may be either a mass concrete footing (raft style), piled type rock anchors, or a combination of both. These will be approximately 30 m in diameter. The footprint of each WTG will depend on the unique topographical conditions at each WTG location and is best represented in the spatial layer based on 3D civil design. Indicatively, the permanent footprint is typically approximately 0.4 ha per turbine, with a temporary footprint of just over 0.4 ha. Hardstand areas at the base of each turbine will be approximately 78 x 48 m. Laydown and crane boom areas at the base of each turbine (both

temporary infrastructure pads) would be approximately 90 x 20 m and 140 x 17 m, respectively. These are required during the construction phase for laydown of components and materials as well as providing adequate space for the cranes to operate safely.

2.2 Battery Energy Storage System

Neoen is proposing to build one BESS with a total capacity around 225 MW / 900 MWh to be located nearby to the collector substation and connected via an overhead transmission line. The BESS would comprise of a fenced compound located approximately 400 m southwest of the collector substation with an approximate footprint of 6 ha.

Construction of the BESS would be scheduled to occur following the main use of the central temporary laydown, as the BESS site is designed to double up as a central construction laydown area in the first stage of construction to minimise clearance.

2.3 Overhead Transmission Line

The proposed Action requires an electrical connection to the grid through construction of an OTL. This will allow the export of electricity from the wind turbines, transmitting approximately 600 MW for GNWF. A multi-circuit 275 kV or 330 kV OTL of approximately 48 km in length will transfer the energy from the collector substation at the wind farm to the proposed substation extension at Bundey, an ElectraNet substation which was constructed as part of PEC.

Transmission towers will be up to 65 m in height with a permanent footprint of approximately 27 x 27 m, and a temporary clearance footprint of approximately 50 x 50 m. They will be spaced approximately 300-500 m apart.

Construction of the OTL will employ practises of non-conventional conductor stringing to minimise ecological impacts through areas containing habitat for MNES or high-quality native vegetation. This negates the need for a stringing corridor along the OTL length. Non-conventional conductor stringing methods include:

- Laying out the conductor using light vehicles, with manual guidance via guide wires and brake-and-winch equipment;
- Aerial stringing, either using drones or helicopters; and
- String shooting – a method where a pilot line is rapidly deployed across spans using devices such as compressed air guns, which is then used to pull the main conductor into place.

Some tower heights will be increased or towers optimally placed during detailed design to achieve sufficient clearance from vegetation. By analysing the vegetation regulation guidelines for maintaining vegetation below OTLs and assessing the type of vegetation present beneath sections of the line, it was concluded that these approaches remove the need for vegetation maintenance below the line. This can be achieved optimising tower placement, height, and hence conductor sag to maintain the required clearance between conductors and vegetation.

Access tracks are required for construction and operational access to each transmission tower. Tracks to OTL towers have been designed to have an approximate width of 6 m, with the disturbance footprint relating to the slope across each track. Where possible, these have utilised existing tracks including public roads, farmers tracks, or access tracks installed for the Goyder South transmission

line. Design assumptions have, where possible, incorporated topographical constraints, known landholder constraints and avoided MNES. The footprint is based on concept design tower placement and access tracks to be further optimised for civil and ecological outcomes in further design phases.

2.4 Collector Substation

The proposed Action includes one Collector Substation located centrally within the wind farm area. The footprint of the substation has been developed to encompass the substation itself, along with the switchyard, control room(s), switchroom(s), and maintenance shed(s). The substation itself would be comprised of two fenced compounds of 150 x 150 m and 80 x 180 m (the latter within a broader 120 x 180 m construction footprint) adjacent to each other. Additional land near this substation has been included within the Disturbance Footprint to accommodate operations and maintenance facilities and temporary construction-phase facilities. The operations and maintenance facilities will be approximately 70 x 50 m and will include buildings (office, staff amenities etc.), car park areas, workshops, and laydown areas. Supporting services would be small scale and involve standard electricity supply, waste connection (where available) or water tanks and wastewater disposal.

2.5 Bundey Substation Extension

The transmission line will connect to the existing ElectraNet Bundey Substation via a proposed substation extension. The Action will involve construction of a substation extension comprising a footprint of 220 x 440 m on the northern extent of the existing ElectraNet Substation.

2.6 Access Roads

Access roads are required to provide access to wind turbines and substations during all project phases, including construction, operation and maintenance, and decommissioning, with the most intensive use occurring during the construction phase. Access roads to the OTL towers will be primarily required during the construction phase, with their design tailored to meet ongoing operational and maintenance needs for the remainder of the project life.

Design of all access tracks has utilised existing tracks and roads as much as possible, following approximately 40km of existing routes across the wind farm and the OTL.

The permanent access road footprint comprises the trafficable road surface, road shoulder features and associated drainage. Cut and fill requirements are also included as permanent disturbance for assessment purposes; however, in many locations these areas will be allowed to naturally rehabilitate. Where reasonable, safe and beneficial, Neoen may support stabilisation and revegetation of batters through measures such as seed spraying.

The proposed permanent road disturbance is best represented in the project shapefile. For the purposes of this assessment, however, a typical permanent road cross-section on a straight section may be assumed to be approximately 10 - 12.5 m wide (excluding cut and fill), based on the following indicative allowances:

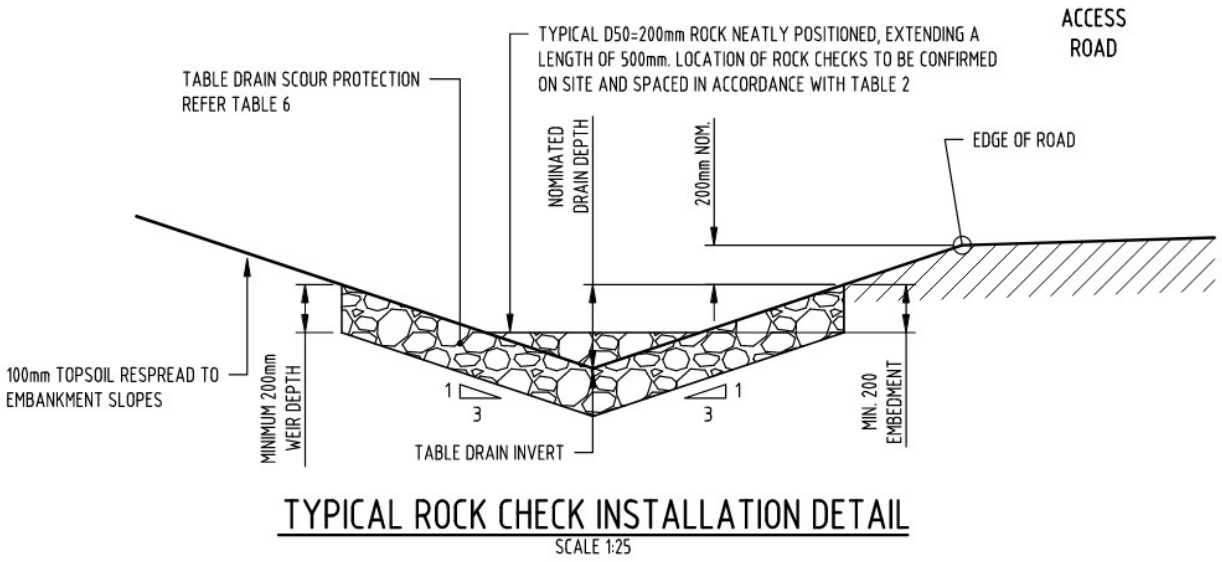
- A 5.5m-wide trafficable road surface

- 1m of road shoulder allowance
- drainage features, typically two approximately 3-m wide drains, noting that in many locations drainage may only be required on one side of the road.

Where the proposed road width exceeds the typical cross-section, the additional footprint reflects site-specific factors, primarily topography and cut and fill requirements. The Disturbance Footprint has been derived from a three-dimensional road design model, which incorporates these factors and shows how road width varies along the full alignment. Roads are designed to accommodate local hydrological conditions and achieve acceptable gradients and horizontal and vertical curvature to allow the transport of over-mass and over-dimension turbine and electrical components. A typical access road fall-protection detail is provided in Attachment 1, showing a road constructed perpendicular to slope as an example.

Access roads to access each transmission tower along the OTL have not been progressed to 3D design maturity yet and are instead based on a surface width of 6 m, with the total Disturbance Footprint correlated with the slope across each track. Wherever possible, these tracks have utilised public roads, farmers' tracks, or access tracks installed for the Goyder South transmission line to minimise any further disturbance.

Drainage adjacent to access roads is designed to suit local gradients and site conditions, with final details to be confirmed during the detailed design phase. For conceptual understanding, Figure 3 illustrates typical drainage arrangements. In steep sections, such as where gradients exceed 8%, fully rock-lined channels will likely be proposed. In lower-gradient areas, which is expected to characterise most of the access road network, drainage generally comprises grass-lined channels with rock check structures spaced at varying intervals. Minor sedimentation may occur following rainfall, partially infilling rock voids. Where necessary, targeted infill of rock voids with ballast or smaller material may be applied post-construction to improve surface continuity, provided drainage requirements are met.



TYPICAL ROCK CHECK INSTALLATION DETAIL
SCALE 1:25

TABLE 6 - TABLE DRAIN SCOUR PROTECTION TREATMENT	
DRAIN GRADE %	TREATMENT
>8%	FULLY ROCK LINED OR CONCRETE CANVAS OR APPROVED EQUIVALENT WHERE NOTED
6% - 8%	GRASS LINED AND ROCK CHECKS AT 5m SPACING
4% - 6%	GRASSED LINED AND ROCK CHECKS AT 10m SPACING
2% - 4%	GRASS LINED AND ROCK CHECKS AT 20m SPACING
<2%	GRASS LINED

NOTE:
1. WHERE SECTIONS OF DRAIN ARE LOCATED IN SOILS WITH DISPERSIVE PROPERTIES, CONSIDERATION IS TO BE GIVEN TO TREATMENT OPTIONS SUCH AS CHEMICAL AMELIORATION, CAPPING OR REPLACING WITH MIN. 100mm OF NON DISPERSIVE MATERIALS AND/OR FULLY ROCK LINED AS IDENTIFIED AND DETERMINED BY THE DESIGN ENGINEER

Figure 3: Typical Drain Lining Detail

Across the Wind Farm, access road construction will require a wider clearance than the final operational road width. In addition to the permanent road footprint, a 5 m temporary disturbance is allowed at either external batter edge or the edge of the permanent Disturbance Footprint to facilitate road construction. This temporary corridor has been minimised where possible and, in most locations, is aligned to overlap with the underground MV cable, further reducing the overall Disturbance Footprint.

Temporary cleared areas will be rehabilitated following construction. The roads, including batters and drainage, will be retained to meet operational, maintenance, and decommissioning requirements for the life of the project. Operational and maintenance requirements for OTL access tracks are typically lower than for WTG access roads. Landholders and the South Australian Country Fire Service will be consulted to ensure access is suitable for ongoing requirements, including fire-fighting equipment.

2.7 Underground Cabling

Underground medium voltage cables are required to connect the wind turbines to the collector substations for transmission and communications (fibre). These cables will operate at an approximate capacity of 33kV-66kV, depending on the final design of the turbine components and layout. MV cables are generally located adjacent (within 5 m) to the access tracks to overlap with the temporary construction footprint and minimise the Disturbance Footprint. Underground cabling trench width is approximately 0.5 m per circuit, with a depth of approximately 1.2 m (0.9 m coverage on top).

Through concept design, Neoen have adopted a strategy of minimising ground disturbance by preferentially placing MV cable adjacent to roads, within the 5 m civil construction buffer either side of the road. Up to four MV circuits can be placed within the civil disturbance footprint for the access roads (two on either side of the road). For cases where there are more than four circuits, an additional 2 m per cable has been added to the disturbance footprint when the cables are aligned with access roads.

In some situations, it is not practical for cables to follow the roads, and hence cabling is likely to occur outside of the roadways. Where it is not practical for cables to run adjacent to roads, a 7 m wide corridor will be disturbed for up to three cables, with an additional 2 m for each cable thereafter. MV cables that are decoupled from roads will be designed to take the most direct and practical route.

All Disturbance Footprint associated with cable trenching and laying (including that which overlaps with the temporary civil construction buffer) will constitute temporary disturbance and will be rehabilitated after installation.

2.8 Temporary Construction Facilities

Temporary construction facilities will be installed for the construction phase of the wind farm and will be decommissioned after construction is complete. Where practicable, these areas will be rehabilitated.

One of the central construction facilities is designed to be utilised during construction phase of the Wind Farm, and later be used as the proposed BESS site, minimising the overall Disturbance Footprint.

Neoen will ensure that contractors are aware of their statutory obligations, including approval conditions, as well as stakeholder commitments to protect features of identified significance. Neoen would ensure that construction contractors prepare all the necessary documentation for construction facilities including management plans, undertake the works needed to ensure that impacts are minimised, and rehabilitate sites to their original land use or as agreed with landholders following construction.

Through the design and early construction phases, Neoen will continue efforts to minimise the footprint required for temporary infrastructure. This infrastructure will likely comprise of the following:

- Construction vehicle and workforce vehicle parking
- Concrete batching plants, crushing facilities and gravel pits
- Construction laydown and stockpiles

- Site office and staff amenities
- Laydown areas at the base of each turbine

2.9 Meteorological Masts

Up to fifteen (15) meteorological masts will likely be installed during the construction phase for monitoring and calibration of wind speeds across the site. It is estimated that nine of these masts will be located in positions where turbines will be installed later in construction, with the remaining six masts remaining in their location for the duration of the Project as part of the operational protocols. The masts will be installed using guyed lattice structures of up to 140 m in height. Exact locations are still to be determined, as they are dependent on the turbine supplier's testing regime, but Neoen is committed to ensuring that any MNES and ecological features of high value are avoided in their siting.

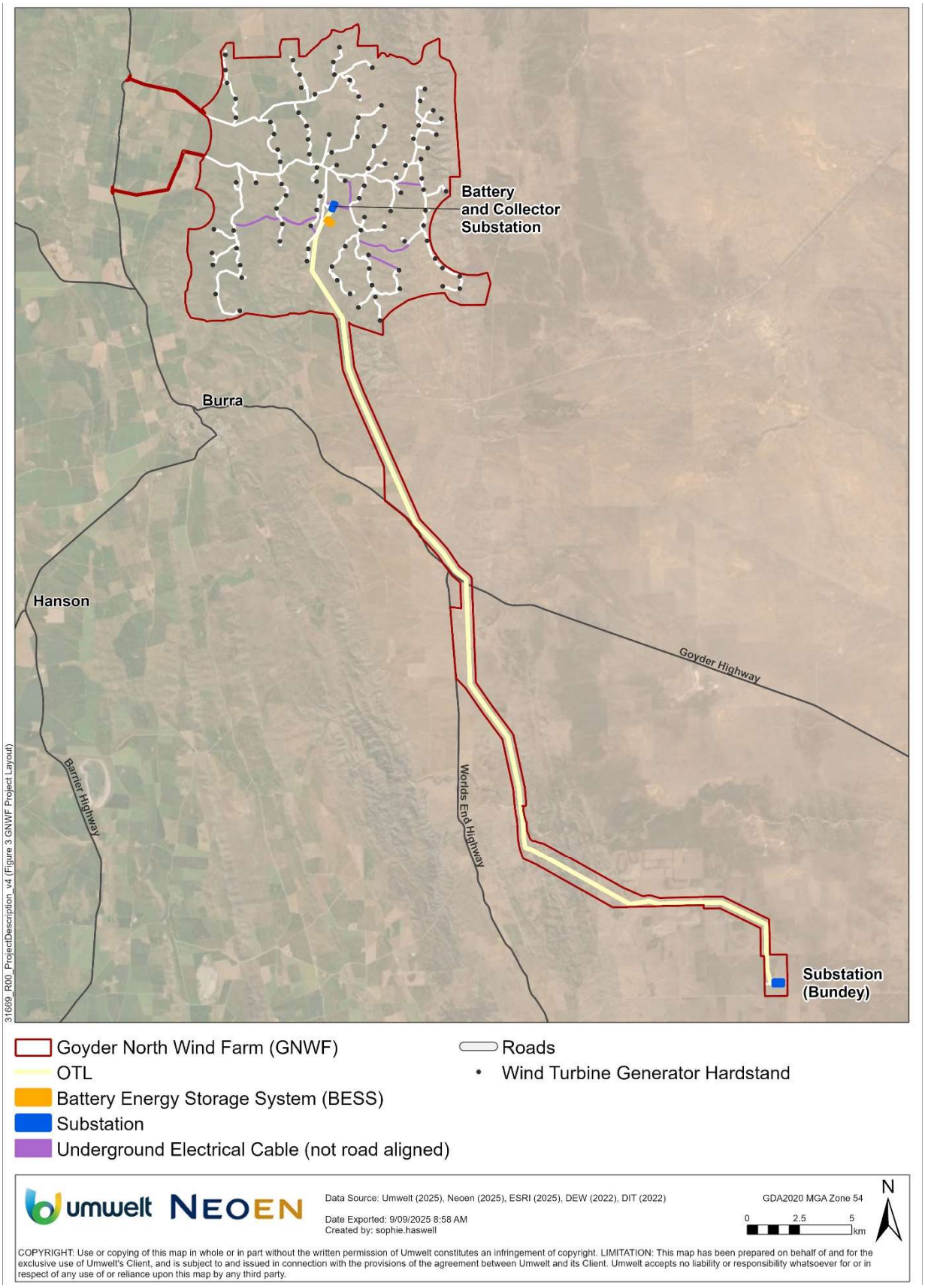


Figure 4: GNWF Project Layout

3. Project Phases

3.1 Pre-construction

Pre-construction activities are generally limited to site studies including ongoing wind measurement, geotechnical investigations and surveys. These activities are excluded from the proposed Action.

3.2 Site Establishment

Site establishment activities are those that precede formal commencement of construction and are used to facilitate the deployment of the construction workforce and their ability to access the site.

While the nature of clearance associated with these works is more extensive than pre-construction activities, these works are only proposed in areas that are:

- Developed with low risk of encountering MNES (i.e. developed and pre-cleared or cropped areas), and
- Pre-surveyed (by appropriately qualified ecological consultants).

3.3 Construction

Construction timing for the Project will be determined once approval is granted, and the procurement process is complete. Given the scale of wind energy generation associated with the GNWF, it is possible that the Project will be developed and/or constructed in two stages, with each stage potentially having its own legal entity, construction contracts and financing packages. The exact size and timing of stages will be defined through the final Project development and approvals processes, and will be informed by the size and timing of PPAs dictated by customer electricity demand. as well as the construction contractors' capability and capacity, and tendering negotiations. The GNWF may be built in its entirety, or split into two stages comprising:

- Stage 1: Approximately 48 WTGs, proposed to commence construction from Q2 2026
- Stage 2: The remaining WTGs (constituting a total of up to 99) to begin construction in a 2–5 year timeframe

The construction phase will be the busiest and most labour-intensive phase of the project, requiring the largest workforce of approximately 450-500 personnel and highest traffic use. To ensure the workforce can be accommodated in the region without overwhelming housing supply and negatively impacting on local tourism and other industries, Neoen are working with the local Council to develop an accommodation camp in proximity to Burra that will still enable flow on benefits for local businesses. This option aligns with the Council's longer term aspirations for expanding tourism accommodation in the future.

A summary of the anticipated construction works associated with the GNWF Project and indicative timing (for entire GNWF Project, or stage 1 construction) is provided in Table 2. Should the Project be constructed in two stages, the indicative timeframe would likely be extended by approximately 1-2 years depending on start date.

Table 2: Construction activities and indicative timeframes (for full GNWF or Stage 1 works)

Activity	Indicative Timeframes
Site establishment and preliminary works	**Q2 2026 to Q3 2026**
Detailed design and construction	Q2 2026 to Q3 2027
Approvals and licensing	Q4 2025 to Q1 2026
Geotechnical assessment	Campaign 1: February to March 2025 Campaign 2: October to November 2025
Procurement	Q2 2025 to Q4 2027
Mobilisation on site and site office establishment	**Q2 2026 to Q3 2026**
Bench preparation	Q2 2026 to Q3 2026
Site office and facilities established	Q2 2026 to Q3 2026
Construction compound established	Q2 2026 to Q3 2026
Batching plant, installation, test and commission	Q2 2026 to Q4 2026
Upgrade site entry points	Q2 2026 to Q2 2027
Civil works	**Q3 2026 for 24-36 months** **Completion in Quarter 4 2027 and Quarter 1 2028**
Transport route roads and intersection upgrades	Q2 2026 to Q2 2027
Earthworks for establishment of access roads and WTG hardstands	Q2 2026 to Q4 2027
Excavations for the foundations and construction of WTG foundations (hardstands and footings)	Q2 2026 to Q4 2027
Installation of electrical and communications cabling and equipment.	Q2 2026 to Q2 2028
Arrival of WTG components to the Project Site and installation of WTGs.	Q3 2027 to Q3 2028
Construction Commencement, Completion, testing and Commissioning of Project	Q3 2026 to Q4 2028

Pre-construction micro-siting

Pre-construction micro-siting will be undertaken prior to the commencement of ground-disturbing works, such as, but not limited to, clearing and grubbing, vegetation clearance, earthworks, excavation and trenching.

Commissioning

Once construction is completed, commissioning will begin. Commissioning generally includes all activities after all WTG components are installed and takes approximately two days per turbine. Commissioning tests will usually involve standard electrical tests for the electrical infrastructure as well as the turbine, and inspection of routine civil engineering quality records. Commissioning also incorporates the testing of how turbines interact with the electricity grid. This includes demonstrating that the Project meets the technical requirements that are agreed to with the Australian Energy Market Operator.

3.4 Operation

Proposed operational activities are summarised in Table 3.

Table 3: Proposed Operation Details for GNWF

Project Stage / Location	Description
Wind Farm	**Wind Farm has a warranted lifespan of 25 – 30 years. This may be extended depending on performance at the end of the warranted lifespan.**
Permanent on-site operations and maintenance of the wind farm, substations, and BESS.	Ongoing, regular for life of the wind farm.
Routine inspection and maintenance by operational personnel travelling from the Operations and Maintenance Compound / Site Office.	Ongoing, regular for life of the wind farm.
Replacement of project assets and equipment as required.	Occasional, as required through life of the wind farm.
Environmental auditing	Ongoing, regular for life of the wind farm.
Rehabilitation works (for Temporary Disturbance areas during construction)	During and post-construction, as required. Expected to occur throughout construction and the first 3-5 years of operations. Note that this timeframe is highly dependent on annual rainfall and seasonal conditions.
Overhead transmission line	**The OTL will have a design life of 40-50 years and will be operated by ElectraNet as a Designated Network Asset. Upon decommissioning of the Wind**

	Farm, ElectraNet may choose to integrate the OTL into the wider South Australian electricity network.
Routine inspection and ongoing maintenance of the OTL.	Ongoing, regular for the life of the OTL.
Prescribed maintenance activities along the OTL corridor.	Include activities such as weed control along the OTL access tracks, as required. Ongoing vegetation maintenance beneath the OTL is not expected to be required as the design of OTL has deliberately incorporated the implementation of additional height transmission towers (i.e. ~65 m) to enable sufficient clearance between conductors and vegetation. OTLs are expected to comply with the Electricity (Principles of Vegetation Clearance) Regulations 2021 (SA).

The Full-Time Employees (FTEs) expected during the operational phase will be significantly lower than during construction. Table 4 provides indicative lower and upper estimates for Stage 1 and combined Stage 1 and 2 project scenarios. This includes operational staff required for both the wind farm, OTL and substations. Numbers in Table 4 represent annual averages, noting that there may be occasional short-term increases during planned activities such as scheduled high-voltage outages and retrofit works. From time to time, major component replacements may also be required; these are managed promptly and safely with minimal disruption. Most operational work will occur on weekdays.

Table 4: Estimated Full-Time Employees during the GNWF Operational Phase

Project Scenario	FTE per day		Vehicles per day	
	Lower estimate	Upper Estimate	Lower estimate	Upper Estimate
Stage 1	9	13	5	7
Stages 1 & 2	13	18	7	10

3.5 Decommissioning

Neoen acknowledges that decommissioning / development of a wind farm site is an important consideration from the project outset. At the end of the wind farm's life, Neoen will assess the feasibility of renewing the facility and understand that repowering the site may involve obtaining subsequent approvals to do so if there are unknowns regarding the impact to MNES.

Alternatively, if the site is decommissioned, Neoen commit to obtaining the necessary state approvals, completing further survey work to inform a decommissioning plan, if required, and

keeping the community informed of any plans. Should there be any expected impacts to protected matters during decommissioning, Neoen would obtain the necessary permits/approvals to do so. A site decommissioning plan would also be prepared to ensure that all sites are remediated and rehabilitated to original condition (or better) post-removal of elements. The plan would detail how roads and foundation pads would be covered and revegetated, allowing land to return to its former use. The decommissioning plan would also cover the removal of above-ground buildings, foundations and equipment, rehabilitation of disturbed land and recycling of all recyclable materials, including batteries.

To avoid additional soil disturbance, decommissioning does not typically include the removal of infrastructure located more than 0.6 m below ground level. This is common industry practice as the infrastructure remaining underground would not cause harm to the environment or disrupt agricultural activities, whereas attempting to remove all infrastructure would necessitate far greater amounts of ground-disturbing works. Other infrastructure may also remain in place when the project ceases to operate, such as access tracks, if requested by the landowners.

Table 5: Proposed Decommissioning Details for GNWF

Project Stage / Component	Description
Expected Duration of Decommissioning	12-24 months
Expected Decommissioning Activities (Authorised Activities)	• Removal of above ground infrastructure and below ground infrastructure to less than 0.6 m below ground level. • Rehabilitation of impacted areas

4. Site Context

4.1 Locality

The Project is proposed to be located in a region identified as the Northern Ranges portion of the SA Murray-Darling Basin and wholly located within the Regional Council of Goyder. This is more specifically an area that represents the northern portion of the Eastern Mount Lofty Ranges. This area is generally described as a transitional zone between cropping and pastoral country.

The Project is located within the Mid North Region and the SA Murray-Darling Basin Natural Resource Management Area. It is noted that the Project is not located within a prescribed water resources area.

The Project's OTL will extend from the centre of the wind farm Project site to the south-east for approximately 48 km to ElectraNet's Bundey Substation.

The land use is predominantly agricultural, consisting mostly of grazing and some limited cropping, depending on recent and predicted rainfall patterns. Some areas of remnant vegetation which represent habitat for fauna species persist within the Project Area.

Land use zones in and around the Project are shown in Figure 5. The Project is almost entirely based in rural zoned areas, aside from a portion of the OTL route and the connection point at Bundey substation where it is zoned as Rural Intensive Enterprise.

From a transport and access perspective, the region is serviced by the Barrier Highway and the Burra-Morgan Highway (Goyder Highway). These major transport corridors link to the Port of Adelaide from which the proposed turbine and battery components would be transported. Studies are currently underway to determine the preferred route from Port Adelaide to the arterial site access roads on the Barrier Highway. Equipment and parts required to build the wind farm would enter the site via the Barrier Highway and then via two arterial site access roads that extend east to the wind farm site. These site access roads will utilise existing roads or tracks with reinstatement or upgrade as required.

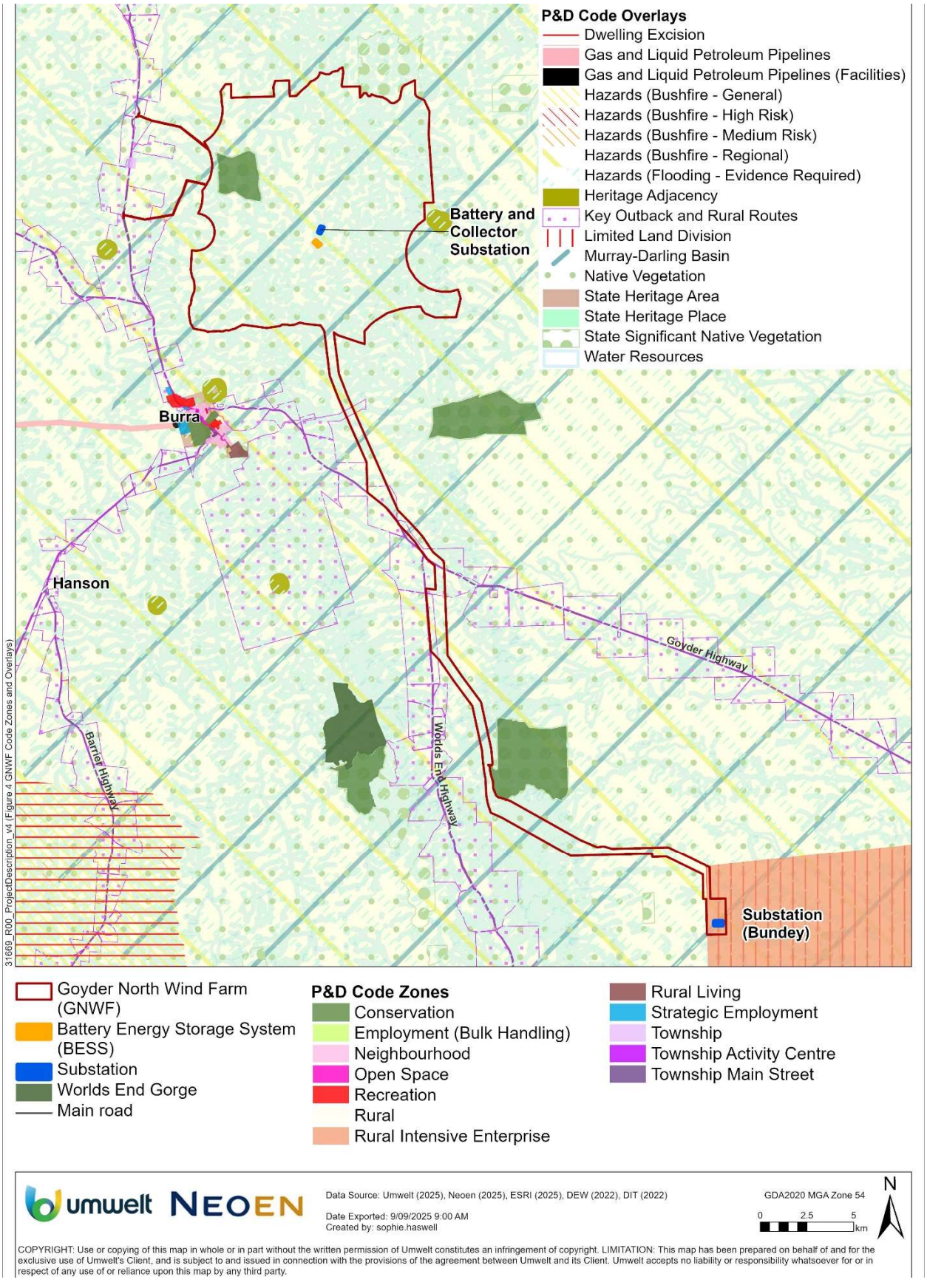


Figure 5: GNWF Code Zones and Overlays

4.2 Climate & Topography

The region has a Mediterranean climate in which hot dry summers are followed by cool, relatively wet winters. The Millennium Drought however, which began in 1995 and continued across much of Australia until late 2009, severely affected the region. Climate change modelling suggests that the region will become even hotter and drier which would see an increase in drought periods which may affect water resources and biodiversity in the region. Long-term rainfall monitoring at Burra indicates a steady trend in average rainfall with June, July and August receiving the bulk of rainfall and significantly drier periods from November to March inclusive. Over the last three years the conditions have been milder, but the 2024/2025 summer season was warmer and drier.

The Project Area and surrounds are dominated by ridges, plains, and undulating hills. The highest ridge is situated on the western edge of the Project Area, spanning the entire length of the site (north to south), with the elevation lowering towards the east of the site. The general region is open, low hills with occasional rocky outcrops that fall away to low foot slopes and drainage channels at regular intervals. Vegetation cover is dominated by grasses and patches of remnant woodlands.

4.3 Conservation Parks and Protected Areas

A number of conservation and native vegetation protection areas are located within 5km of the Project Area. These are illustrated relative to the location of the proposed Project components in Figure 6 and include:

- 11 Heritage Agreements and two Significant Environmental Benefit (SEB) offset areas
- Tiliqua Nature Reserve
- Caroona Creek Conservation Park
- Mokota Conservation Park
- Red Banks Conservation Park
- Mimbara Conservation Park

Figure 6 also highlights the location of the Burra National Heritage Area, along with the 3km setback applied from this site.

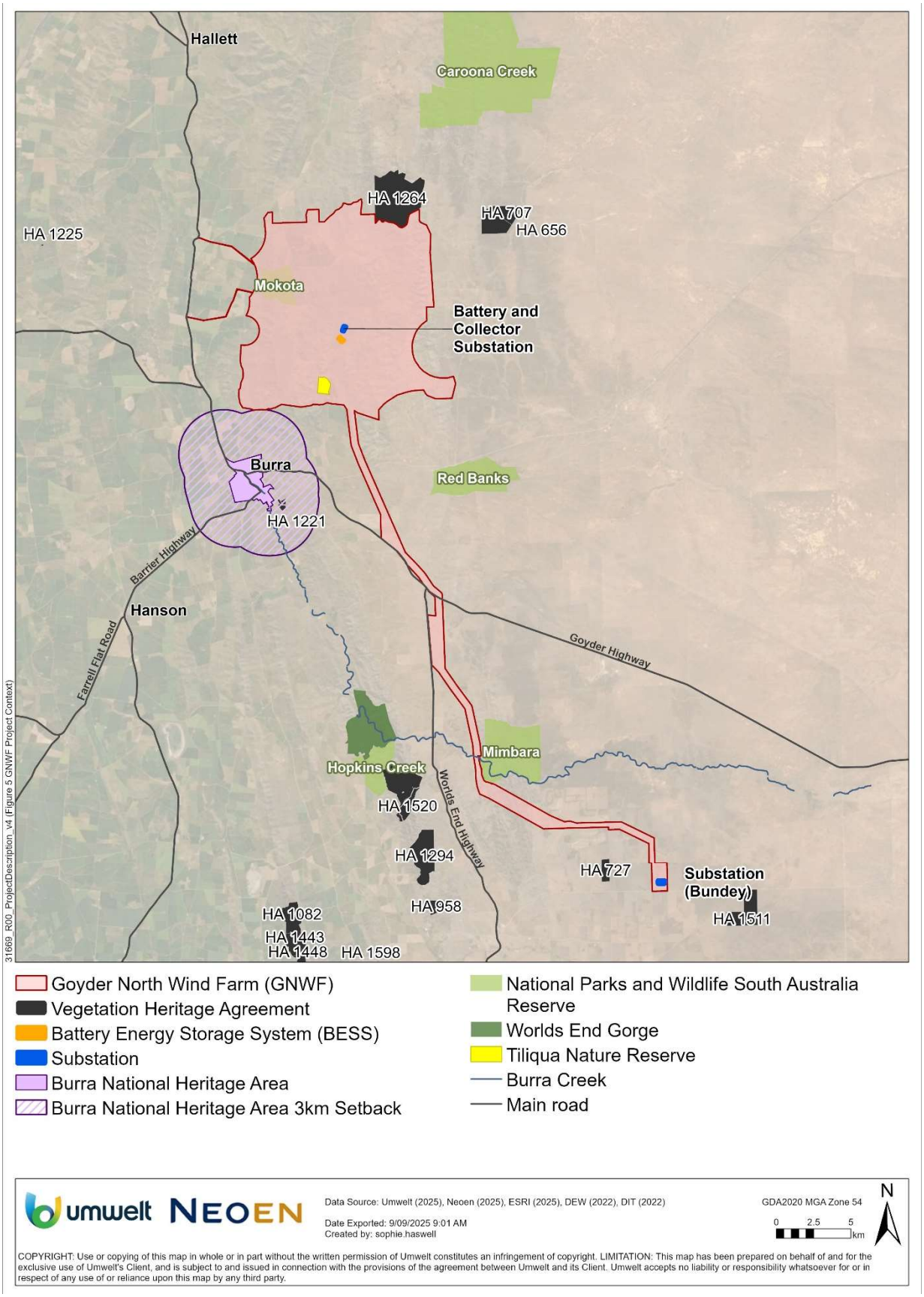


Figure 6: GNWF Project Context

4.4 Cultural Heritage

4.4.1 Aboriginal Heritage

The proposed Project Area is recognised as being within the claimed traditional lands of the Ngadjuri Nation and the First People of the River Murray and Mallee Region (FPRMMR#2).

The Ngadjuri Nation are known to have lived a rich ceremonial life and to have been bound by complex social and marriage laws. The word Ngadjuri translates to 'we people', while Ngadjuri people are also known as the 'hills people' and 'peppermint gum people'[5]. There are remnants of 'peppermint box', also known as Eucalyptus Odorata, throughout Ngadjuri country.

In July 2023, the Federal Court made a determination in relation to the Ngadjuri Nation Native Title Claim, with the Ngadjuri People receiving a second native title consent determination covering some 15,000 square kilometres of land in the Mid North of South Australia. Most of the Project is within the bounds of this determination area, although native title has been determined to not exist in much of the Project Area. Neoen have developed a good relationship with the Ngadjuri people over the last ten years of working together in the region.

The members of FPRMMR#2 do not go under one label, though ethnographic records point to several previous groups along the Murray River (Murrundi) and Mallee within the native title claim area. It is believed that Murrundi is a living body, formed during Creation, and the FPRMMR#2 are part of its existence. The freshwater that flows through Murrundi is the lifeblood of these Aboriginal Nations[6]. Neoen have been engaging with the FPRMMR#2 since early 2024 to seek their input on the Project Area which falls within their claimed lands.

Notwithstanding determination status or the extinguishment of active native title, Neoen is engaging with both NNAC and FPRMMR#2 as Traditional Owners and undertaking comprehensive heritage surveys and benefit-sharing.

4.4.2 Historic Heritage

The proposed Project Area is located in a region that has played an important role in the development of South Australia, with its significant pastoral and mining history. The importance of the pastoral and mining history of the region is reflected in the many towns, areas and structures of European heritage interest and their inclusion on National, State and local heritage registers.

Mining activity in the region commenced in the mid-1840s and continued until the mid-to-late 1870s. With a decline in mining, the region re-focused on agricultural activities and services to support farming families. The prosperity of the 1870s and early 1880s came to an end with a series of droughts in the mid-1880s and a drop in world prices for wool, wheat and copper. The numerous ruins of farms and farm buildings in and around the Project site attest to the resulting population decline in the region.

In more recent times, the name 'Burra' has become globally synonymous with heritage management and protection. The Australian International Council on Monuments and Sites (Australian ICOMOS) Charter for the Conservation of Places of Cultural Significance is known as 'The Burra Charter' and

[5] (Hannaford & Thompson, 2016)
[6] (Department for Environment and Water, 2025)

was first adopted at an international conference held in Burra in 1979. The principles of the Burra Charter are incorporated into legislation in Australia and around the world[7].

[7] Goyder North Renewable Energy Facility: Heritage Impact Assessment (Biosis, 2023)

5. Project Evolution

Neoen is committed to meaningful and ongoing application of the Mitigation Hierarchy (Avoid, Mitigate, Offset) throughout project design and construction phases.

Umwelt (on behalf of Neoen) have undertaken extensive ecological investigations across the Project Area over the last three years to understand potential impacts of the Project on the environment. Throughout the planning phase, Neoen have continually refined the design, and continue to do so, particularly the location and layout of infrastructure as much as practicable, to avoid and/or minimise impacts on the environment.

The initial layout for GNWF was developed based on early setback targets and avoiding identified constraints (landholder, ecological, heritage, physical and topographical) and exclusion areas. As investigations and understanding of the site has developed, environmental, social, Aboriginal and Historic Heritage considerations continue to iteratively inform the design process. Neoen are continuing to work with various stakeholders and experts to continue to understand and minimise impacts to receptors resulting from the proposed Action.

In summary, the proposed locations of project infrastructure have been determined through an iterative approach with consideration of environmental, social and cultural values, including:

- Locations of Commonwealth and State threatened and protected species and communities;
- Locations of any known heritage sites, sites of cultural significance and sensitive environmental landforms (waterways);
- Locations of existing agricultural infrastructure, including access tracks; and
- Surrounding topography and hydrology, to avoid areas prone to flooding or washout and to minimise the visual impacts to receptors from the proposed infrastructure.

To minimise the Disturbance Footprint, Neoen have progressed design to a higher level of detail for the process of approvals than has been done in past projects, resulting in significant footprint optimisation as well as increased certainty in the proposed level of clearance. Although the absolute amount of clearance proposed may appear high, the hectares of disturbance per turbine footprint is comparatively low compared to many other similar projects proposed in the region, making it a relatively efficient wind farm.

5.1 Ecological Considerations

Early ecological assessments informed the preliminary design of the proposed Action in 2022. Throughout the early stages of layout design, Neoen then undertook a risk assessment of each turbine location with ecological consultants EBS (now Umwelt). This risk map was used to identify which turbines posed the greatest risk for impacting nationally listed Threatened Ecological Communities (TECs) and threatened species habitat. The current layout has been revised several times to further avoid and minimise impacts to MNES.

Extensive detail to demonstrate how Neoen have applied the mitigation hierarchy throughout the project development phase is provided in the Preliminary Documentation. Specific examples where Neoen has applied avoidance of impacts through the design process to date, include:

- Reducing the number of WTGs impacting Iron-grass Natural Temperate Grassland (INTG) areas from forty-one to only three encroaching on the edge of INTG areas over several design iterations;
- Removing all WTGs occurring in higher quality INTG areas;
- Refining hardstand orientation to avoid higher density Pygmy Blue-tongue Lizard (PBTL) populations following targeted PBTL surveys in early 2024;
- Re-routing of the OTL and access routes to avoid higher quality mallee vegetation and MNES (1.4 ha reduction).
- Committing to employ non-conventional stringing methods for the transmission line to avoid the need for a stringing corridor (approximately 37 ha reduction).
- Increasing OTL tower height through sections to reduce the need for on-going trimming and maintenance of vegetation below the line (10 ha reduction).
- Siting of BESS, substations and operation, maintenance and construction compounds to avoid visual impacts and higher quality native vegetation.
- Aligning roads and cable alignments to minimise the Disturbance Footprint and reduce fragmentation of habitat (18 ha reduction).
- Further design optimisation in August 2025 to achieve an additional 30% reduction of impacts to Lomandra grasslands (including Class B and C).
- Implementation of a minimum 600 m setback from identified wedge-tailed eagle nests.
- Removal of Gum Hill Road as a potential arterial access road due to the presence of Acacia Spilleriana (Spiller's Wattle) (3 ha reduction and elimination of impact to TEC).
- Utilising approximately 40km of existing roads and tracks, in particular for site access, and tracks where practical to do so to minimise unnecessary ecological disturbance.
- Consultation with experts from the PBTL Recovery Team and key stakeholders to ensure the proposed turbine configuration east of Tiliqua Nature Reserve will not negatively impact on the species being targeted for conservation at the site.
- Revised WTG and laydown area placement as well as implementation of buffers from Conservation Parks to minimise impacts to other species, with specification of additional measures (including speed limits and dust control) for species protection, outlined in the Construction Environment Management Plan.

Neoen is committed to continuing to refine the project design throughout the EPBC Act assessment and *Native Vegetation Act 1991* (SA) (NV Act) approval processes. Further options will be explored in the coming months, including through detailed design and construction planning, to further reduce the upper limit estimate of disturbance and impacts as summarised in this EPBC Referral submission. The Disturbance Footprint and impact assessment determined through this submission captures the upper limit of impacts anticipated as a result of the Action.

Neoen is also continuing to adopt the learnings and success of the Goyder South project to inform GNWF. These findings will be incorporated into the construction, operation and environmental management plans, including species specific management plans, to further avoid and mitigate impacts to sensitive or high value receptors wherever practicable. A 200 m Development Envelope has also been adopted to provide flexibility in detailed design and construction phases that can accommodate construction constraints or opportunities to minimise impacts to flora, fauna and cultural heritage values, where practicable to do so.

Environmental Offset Opportunities

Neoen has a strong track record in the state for above and beyond biodiversity initiatives. Through the process of both developing and constructing the Goyder South Wind Farm, Neoen have developed strong working relationships with the community, local Council and the Ngadjuri Traditional Owners. As a result of these relationships, Neoen transferred 1,000 ha of the iconic Worlds End Gorge to the Government of South Australia, representing a momentous collaboration between the Ngadjuri Nation, the former landowners, Neoen, the Regional Council of Goyder and South Australia's Department for Environment and Water. This land not only forms part of Neoen's offset management strategy and native vegetation offset for the Goyder South Wind Farm, which will help protect several threatened species of flora and fauna such as the PBTL and the Flinders Ranges worm-lizard (FRWL), but also acts as a legacy for the community and demonstrates Neoen's commitment to meaningful on-ground offsets.

Neoen takes pride in the opportunity that the GNWF Project presents to leave behind legacy conservation outcomes and are committed to improving the condition of the ecological landscape through application of the mitigation hierarchy and a commitment to on-ground offsets for all stages of NVC offset requirements, in addition to EPBC INTG and PBTL offset requirements.

Neoen have already acquired a Significant Environmental Benefit (SEB) offset area to be converted from degraded agricultural land to land conserved under Heritage Agreement in perpetuity. The site will likely meet most of the Project's Native Vegetation offsetting requirements under the *Native Vegetation Act (1991)* for GNWF Stage 1. Neoen is currently exploring the option for Traditional Owners to potentially own this offset land and for Neoen to support capacity building in governance and caring for country for the purposes of ecological restoration. Further on-ground SEB offsets are currently being developed to fulfil the remaining GNWF Project requirements, so as not to burden the SEB Offset fund.

Neoen have worked closely with DCCEEW and species recovery experts to develop an EPBC Offset Strategy outlining Neoen's approach to meet EPBC INTG and PBTL offset requirements. On-ground options have been identified and are being actively developed, along with potential for further research, such as extension to the PBTL Research Project funded by the Goyder South Project to better understand and support PBTLs, with a focus on how they persist in proximity to wind farms.

Neoen are also committing to rehabilitate all temporarily disturbed areas above and beyond offset requirements, accounting for approximately 42% of the total footprint, with targeted rehabilitation measures proposed for INTG Restoration. Neoen is not seeking an offset obligation reduction (that could have reduced the NV SEB offset obligations in the order of $1-2 million) demonstrating a strong commitment to a net positive outcome.

5.2 Burra Heritage Considerations

Biosis was engaged by Neoen towards the end of 2022 to assess the heritage impacts of the GNREF on the Heritage Listed Cornish Mining Sites (Burra). Throughout the planning approval process, Neoen continued to engage with the Regional Council of Goyder regarding their ambitions to gain World Heritage Status for Burra. Further engagement with the Council's World Heritage Advisor and Swanbury-Penglase (author of Burra's Cultural Heritage Management Plan) resulted in a shared opinion that the layout would have a largely negative impact on the views from Burra and the Mining

Site as a result of turbine crowding. It was determined that producing a less 'cluttered' layout could reduce the impact on the views that one might see from the higher points of the Cornish Mining Site.

Through various iterations of the GNWF design, eight WTGs were removed to decrease the visual amenity impacts of the project. The removal of these eight WTGs that were set upon the ridge closest to the Barrier Highway and Burra Township has consequently reduced the anticipated visual impact from the Cornish Mining Site, as shown in the photomontages in Figure 7.

Neoen engaged Biosis in 2024 to undertake a Heritage Impact Assessment which drew on the GNREF Visual Impact Assessment. This assessment determined that the action will have an indirect impact on the National Heritage Listing values due to the assessment that the Project will have a moderate indirect visual impact. The distant rural setting would be altered to the north-east by the proposed works as they represent a new element in the currently empty horizon. However, altering of the distant views to the north-east from the mine site would not impact the understanding of the revolutionary mining technology.

Figure 7: Comparison of views from the Burra Mine Haulage Enginehouse Chimney

Image (a) shows the view from the Haulage Enginehouse Chimney based on the initial layout (including the 8 turbines that have been removed). Image (b) shows the view with these turbines removed and the reduced visual impact.

6. Impact Assessment and Management

Activities associated with the proposed Action that may have a direct or indirect impact on ecological receptors include vegetation clearance, earthworks, excavation, trenching, construction of access roads, construction of WTG sites, piling for foundations, assembly and installation of OTL towers, stringing of OTL cables, construction and installation of the substation compound and associated infrastructure within it, and construction compounds.

Construction works may cause levels of noise, vibration and dust, and may cause an increase in weed species abundance and coverage, as well as stormwater runoff and associated soil erosion, all of which may have a direct or indirect impact on ecological receptors.

Operation of the proposed Action, particularly the WTGs, is likely to cause shadow flicker, noise, including infrasound (low frequency sound) and low-frequency vibration, and may result in bird and/or bat strike. There is also a visual effect from installation and operation of the proposed WTGs.

Neoen have undertaken an extensive number of technical investigations during the planning phase to identify potential impacts of the Action on receptors and have adjusted the design, particularly the location and layout of infrastructure, as much as possible and practicable to avoid and minimise any potential impacts. Neoen are committed to further design refinement through the detailed design process to further avoid, minimise and manage impacts to sensitive and high value receptors.

Further, the construction contractor will be required to implement a Construction Environmental Management Plan (CEMP) which identifies the potential impacts of construction works and the management and mitigation measures that will be used to avoid, minimise and mitigate these impacts during construction. Neoen have developed this document which contains a number of commitments and mitigations to avoid, minimise and mitigate impacts. An Operational Environmental Management Plan (OEMP) will also be implemented. This plan will identify the potential impacts of operation and the management and mitigation measures that will be implemented to avoid, minimise and mitigate the identified potential impacts to the environment during operation. Neoen will work with the Contractor through procurement and to develop these plans.

During construction, the Contractor must ensure that each operative is trained to use the machinery and materials on site efficiently to avoid environmental nuisance including noise, air pollution, impacts on water quality, spread of waste materials and land contamination.

Noise and Vibration Control

Noise impacts were a major consideration for the placement of infrastructure including WTGs, the BESS and the collector substation. An Environmental Noise Assessment[8] for the wind farm was carried out in late 2023, followed by an assessment of the BESS noise[9] in early 2024. These assessments predict the noise associated with the proposed infrastructure to ensure that acoustic amenity of the surrounding receivers is not adversely affected by the project.

Construction works are likely to cause levels of noise and vibrations which may impact on nearby sensitive receptors including residential dwellings and/or wildlife. A Construction Noise and Vibration Management Plan will be prepared prior to construction commencing.

[8] Goyder North Wind Farm Environmental Noise Assessment (Echo Acoustic Consulting, 2023)
[9] Goyder North Renewable Energy Facility – BESS Environmental Noise Assessment (Echo Acoustic Consulting, 2024)

Water Quality Protection

Neoen acknowledges the importance of protecting the quality of water resources, particularly surface water that feeds into the Burra Creek system. The project is not located within a prescribed water resources area but will still avoid and/or minimise environmental impacts associated with the construction phase of the project. A hydrology assessment[10] has been completed for the site and this information has been used in design development to inform the layout and will be used to assess and manage the impacts of the Project.

Should batching plants be required, Neoen and the selected contractor will prepare the following:

- A detailed layout plan that specifies the plans and equipment used on site;
- A site-specific stormwater management plan approach that contains potentially contaminated water on site and diverts clean stormwater runoff to natural drainage lines; and
- A CEMP.

In addition to the above, Neoen will require all stormwater management for all elements of the project (permanent and temporary) to consider the following as part of the detailed design process:

- Stormwater is to be diverted and controlled via appropriately designed drains, culverts, channels, and segregation bunds.
- General surface water quality management shall utilise techniques including earth bunding, surface drainage swales, detention ponds and sediment control mechanisms to ensure that contaminated surface water does not enter natural systems.
- The specific treatment requirements for storm water will be outlined in the final stormwater management plans.

Each construction site will be reviewed as part of the micro-siting process to ensure that siting is optimal from an environmental protection and safety perspective. The site will then be designed in detail to accommodate the required infrastructure and environmental management systems including stormwater management, waste management and vehicle access.

Neoen are currently investigating a suitable water supply for the project. There is a potential for bore water to be used, or alternatively water will be transported into the project via water tanks.

Air Quality Control

Air quality control is an important consideration in relation to site establishment and setup, topsoil stripping and vegetation removal, water provision and management, aggregate storage and stockpiles, temporary storage of chemicals, spoil and equipment, and concrete mixing. Dust from construction could impact the surrounding environment including residential areas, native vegetation, water bodies and wildlife.

An Air Quality Management Plan will be provided as a supplement to the CEMP and OEMP. This will outline all reasonable and practical measures to minimise air quality impacts which must be complied with during construction.

[10] Goyder North Wind Farm Flood Modelling (WGA, 2023)

Erosion and Sediment Control

The development of Erosion and Sediment Control processes would aim to minimise erosion within works areas and haul routes and minimise sediment laden stormwater leaving the site. Preparation of plans detailing these techniques will take place prior to construction and will be applied during construction, operation and decommissioning of the Project.

A Soil, Erosion, and Sedimentation Management Plan (as part of the CEMP) would detail the planned processes to prevent potential impacts such as soil erosion by water and potentially wind, damage to topsoil and subsoil, contamination of watercourses, and loss of vegetation. Methods of impact mitigation may include:

- Handling soil in the right conditions of weather and soil moisture and using machinery in an appropriate way;
- Using tracked equipment where possible to reduce compaction;
- Avoiding stripping topsoil for reuse too deeply so that subsoil becomes incorporated, which could reduce soil fertility;
- Avoiding removal of topsoil from below the spread of trees;
- Locating stockpiles away from watercourses;
- Use of sediment curtains, cofferdams or similar to prevent suspended sediment movement during construction within water or areas likely to be inundated.

Other methods of impact control / mitigation will be covered in the Soil, Erosion, and Sedimentation Management Plan, which will be developed prior to construction commencement.

Weed, Pest and Disease Control

Throughout construction, weeds will be monitored and controlled on site to prevent any outbreaks of new weed species or spread of existing weeds. Methods of ensuring that raw materials brought into the construction site are free of weeds, pests and disease will be covered in a Vegetation and Fauna Management Plan as part of the CEMP and OEMP. Additionally, construction traffic will follow weed or disease hygiene procedures, ensuring that vehicles and equipment are cleaned as required.

Materials, Fuels and Waste Management

Suitable waste management will be required to ensure that there is no release of unsuitable substances to the terrestrial environment. Prior to construction, a Waste and Wastewater Management Plan will be prepared as a supplement to the CEMP and OEMP. In addition, a Materials, Fuels and Site Waste Management Plan will be established which will identify the materials and storage requirements for all chemicals used on site or transported to site.

Protection of Sites of Cultural and National Heritage Significance

Prior to layout finalisation, a qualified archaeologist will undertake a survey of the project area. The results of this survey will be considered as part of the micro-siting process and avoided where possible. An Archaeological and Cultural Heritage Management Plan will also be provided as part of the CEMP and OEMP, which will demonstrate how the contractor will prevent damage to sites or artefacts of Indigenous or European Heritage.

Visual amenity was also an important consideration regarding the impacts to Burra Heritage. The Heritage Impact Assessment details further information on the process of impact reduction. Impacts to visual amenity have also been addressed in the Landscape and Visual Impact Assessment which was completed in April 2024.

Fire Management

Fire prevention, mitigation and management will be the subject of further design activities, however, in the development application for planning approval, Neoen committed to the following:

- Ensure that the construction of all equipment is undertaken to industry standards and requirements;
- Preparation of a Bushfire and Emergency Services Plan for all elements of the project, including strategies such as pausing or braking of turbines, adoption of preventative strategies, notification procedures and direct communication channels between Neoen's control room and local CFS;
- Fuel load management (noting that dust management requires some vegetation be maintained); and
- Incorporation of access tracks appropriate for firefighting according to CFS specifications.

Transport Management

As the maturity of the development progresses, Neoen will begin to develop a Transport Management Plan in conjunction with the Contractor.

Investigations are currently underway to determine the preferred transport route from Port Adelaide to the Barrier Highway site access point.

Neoen have undertaken swept blade studies which confirm the pinch points of transporting blades of a conservative 90 m length from Port Adelaide to site. Other components will also be assessed through this study, though it is expected that the sizing will be similar to the components used for Goyder South Stage 1 Project.

The main access to the site will be via the Barrier Highway onto Belcunda Road, then north along Lines Road before turning east onto Gum Hill Road along the southern boundary of Mokota Conservation Park. Up to 90% of traffic will be directed through this route to minimise potential for indirect impacts, such as dust deposition. White Hill Road will also be utilised as a minor access road to the site. Neoen have also endeavoured to incorporate the use of existing roads / farm tracks for construction throughout the Project Area where possible to reduce the need for additional clearance

Lighting

Lighting is required for safety and security during night-time operations, particularly during the construction phase. Lighting will be situated where possible to minimise impact to any sensitive receivers and wildlife. Lighting controls will be outlined within the CEMP and OEMP.

6.1 Stakeholder Engagement

First Nations

Neoen has worked with the NNAC for close to a decade, including through the Hornsdale and Goyder South projects. NNAC's input was instrumental in infrastructure placement for Goyder South, helping shape the current layout which is under construction. This collaborative relationship has continued through the development of GNWF. Engagement has focused on two key areas:

1. Avoidance and preservation of cultural heritage values, and
2. Delivery of broad benefit-sharing, including commitments to Aboriginal training and employment.

Neoen has maintained regular dialogue with NNAC to share project updates, discuss project design, and ensure culturally informed decision-making. An initial ethnographic site survey has shaped the preliminary layout of GNWF infrastructure, identifying culturally sensitive areas to avoid or minimise impacts, recognising the broader cultural significance of the region, and guiding Neoen in respecting key topographic features. Neoen has commenced on-country workshops with NNAC to develop a Cultural Heritage Management Plan (CHMP), secure Native Title consents and refine benefit-sharing outcomes. A physical archaeological survey, governed by an agreed Heritage Survey Framework, is scheduled for September – October 2025 to support further design development.

In addition, Neoen has initiated engagement with the FPRMMR#2, whose native title claim overlaps part of the OTL route and Bundey Substation. A physical ethnographic survey has been completed to inform preliminary layout and design, and the first of several planned on-country workshops has been held to share project information, support cultural heritage protection and develop the Cultural Heritage Management Plan, as well as to explore benefit-sharing opportunities. A physical archaeological survey, also governed by the Heritage Survey Framework, is being scheduled to support continued design refinement.

Community

Neoen are an end-to-end developer who take a long-term approach – bringing projects from development, through to construction and into operations, ensuring high quality projects that are well-integrated and make a contribution to the community across their 30+ year lifetime. Consequently, it is vital that it creates long-term partnerships with the communities.

Several key methods of engagement were implemented as a part of the Goyder South project and have been retained for the development of the GNREF, including:

- Ongoing employment of a Community Liaison Officer that connects community members and landholders with the project manager throughout development, construction and operation;
- Establishment of a Community Office that is staffed by the Community Liaison Officer which provides a local base for engagement with stakeholders;
- Neighbour engagement with a large portion of the community that live within 6km of the proposed development; and
- Hosting a community information day to gauge community sentiment, incorporate feedback into the final layout and address any questions the community had regarding the project.

Goyder Community Benefit Scheme

Neoen had also committed to implementing a significant Community Benefit Scheme to be distributed for the benefit of the broader community in the region for the duration of the project's operational lifespan. While the project is undergoing staged development, the annual funding available under the scheme will be incrementally increased as each successive stage is built which will amount to:

1. $70,000 per 100 MW of wind generation constructed; and
2. $12,000 per 100 MW of battery storage constructed.

Neighbour Benefit Scheme

Neoen commits to providing annual payments to qualifying neighbours with a residential dwelling within 6 km of a constructed wind turbine, which is occupied on a full-time or near full-time basis. Annual payments will be made to qualifying neighbours for the duration of the Project's operational lifespan. The annual entitlement per dwelling will be set on the basis of distance from turbines and the number of turbines.

Council and Agency Consultation

Neoen has maintained a positive and ongoing relationship with the Goyder Regional Council during the development of the Goyder South and Goyder North Projects. Specific engagement topics with the Council include:

- Turbine setback from the Burra Town Centre: The planning system policy indicates that a 2.9 km setback from the Burra boundary is appropriate, however, following discussions, Neoen increased the setback from the town centre from an initial 4 km to almost 6 km to minimise any visual impact of the project on the township.
- Burra World Heritage Bid: Neoen is supportive of the Council's interest in seeking World Heirtage Listing and is committed to working with them to preserve the unique Heritage values of the areas.
- Accommodation Camp: Neoen are working with Goyder Council to develop an Accommodation Camp that would meet the needs of construction as well as align with the long term aspirations for expanding tourism accommodation in the region.
- Local Advisory Committee who administer the Community Benefit Fund: Neoen consulted with the Goyder Council to establish the committee and help inform representation.

Ecological Conservation Groups, Species Experts and Government Agencies

Neoen has been consulting closely with local conservation groups and key Government Agencies, including DCCEEW and the South Australian Department of Environment and Water (DEW), to ensure the latest and best species information is used to inform application of the mitigation hierarchy and on-ground offset development, and that the best outcomes are achieved. Neoen has also been engaging closely with Recovery Team experts to inform management and offsets of PBTL, as well as the Northern and Yorke Landscape Board to leverage their experience and expertise in managing PBTL and INTG among other species.

7. References

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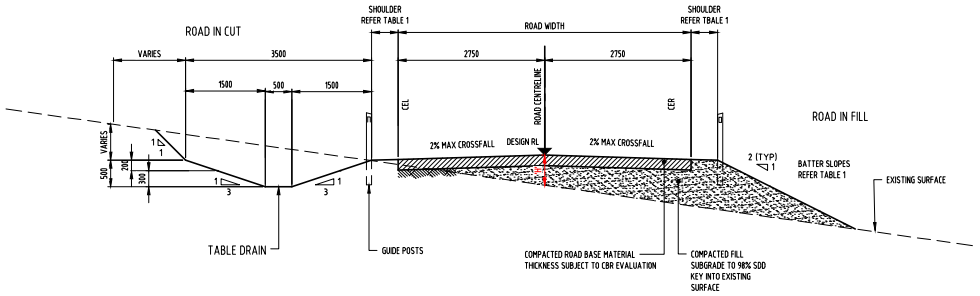
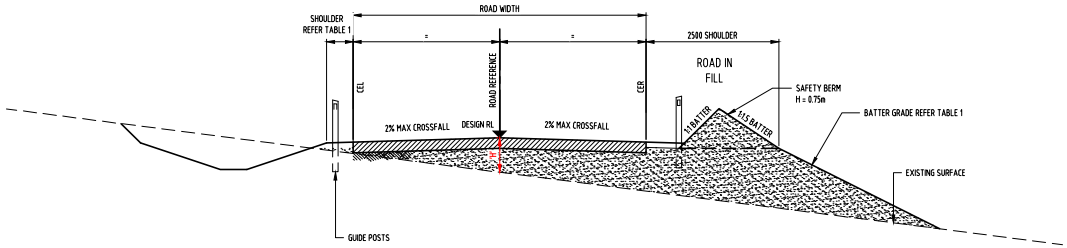
8. Attachments

Attachment 1: Example of a Typical Road Profile Detail





TYP. ACCESS ROAD FALL PROTECTION DETAIL
SCALE 1:50

TABLE 1 - WGA 3D MODELLING ASSUMPTIONS - WINDFARM ACCESS ROADS

PARAMETERS	FILL/CUT HEIGHT 'H'	BATTER SLOPE	ROAD WIDTH (mm)	ROAD SHOULDER WIDTH (mm)	DRAIN WIDTH (mm)	NOTES FOR DETAIL DESIGN
FILL	<3	1:3 (DESIRABLE) 1:2 (TYP) 1:1.5 (MIN)	5500	500	-	SHALLOW FILL FLATTEN TO 1 IN 3
FILL	>3	1:3 (DESIRABLE) 1:2 (TYP) 1:1.5 (MIN)	5500	500	-	WIDEN SHOULDER UP TO 2500
CUT	ALL	1:1 (TYP)	5500	500	2000	SHALLOW CUT LAY BATTER BACK TO 1 IN 2 OR FLATTER

TABLE 1B - WGA 3D MODELLING ASSUMPTIONS - WINDFARM ACCESS ROADS

ITEM	DESIRABLE	ABSOLUTE	COMMENTS	NOTES FOR DETAIL DESIGN
ROAD CROSSFALL	2% MAX.			
LONGITUDINAL GRADE	15% MAX.	18% MAX.	15% MAX. LONGITUDINAL GRADE FOR ANY TRANSFORMER TRANSPORT ROUTE.	
VERTICAL CURVE	600m MIN	550m MIN		
HORIZONTAL CURVE	150m MIN.	80m MIN.		REFER TABLE 2 FOR GUIDANCE ON POTENTIAL CURVE WIDENING REQUIREMENTS

TABLE 2 - HORIZONTAL RADIUS REQUIREMENTS

RADIUS	BEND ANGLE	ROAD GRADIENT	MIN TRACK WIDTH
80m-100m	0-45	ANY	5.5m
	45-90	<12%	7.0m
		>12%	8.0m
100m-130m	0-45	ANY	5.5m
	45-90	<12%	6.5m
		>12%	7.5m
100m-150m	0-45	ANY	5.5m
	45-90	<12%	5.5m
		>12%	6.5m
>150m	ANY	ANY	5.5m

When sheet printed full size, the scale bar is 100mm.

0 50 100mm

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	DRAFT	ENG.	CHKD
A	20.12.23	FOR INFORMATION	TF	RB	
B	04.04.24	FOR INFORMATION	TF	RB	
C	05.09.24	FOR INFORMATION	JS	RB	
D	06.12.24	FOR INFORMATION	TF	RB	

WGA

GOYDER NORTH
NEOEN PRELIMINARY DESIGN

DETAILS SHEET 3

A1

DOCUMENT NUMBER
Project Number Sheet No. Rev.

Design TF Drawn TF

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