

# Proposal Content Document

**Table 1:** General proposal content description

<b>Proposal title</b>	<b>Parron Wind Farm</b>
<b>Proponent name</b>	Zephyr Energy Pty Ltd
<b>Short description</b>	<p>The Proposal is for the development of a wind farm approximately 8 km to the north-west of Badgingarra, Western Australia. The Proposal is located on various lots within the Shire of Dandaragan (the Development Envelope (DE) which is approximately 8,527.4 ha in size), on freehold agricultural land currently used for pastoral grazing and cropping, adjacent to the existing Badgingarra Wind Farm. A plan showing the location and extent of the Proposal is provided in <b>Figure 1</b>.</p> <p>The Proposal consists of a maximum of 79 Wind Turbine Generators (WTG) and associated infrastructure generating up to 489.8 MW. WTG will be spaced at least 500 m from each other and will be connected to an onsite substation. The Proposal will connect into Western Power’s existing 330 kV transmission network (South West Interconnected System (SWIS)) line, which is located within and runs across the western side of the DE. The total indicative Disturbance Footprint (DF), inclusive of WTG, transmission lines, cables and substation, is approximately 491.54 ha.</p> <p>The Proposal and surrounding area is primarily utilised for low intensity agricultural uses and is largely already cleared. The Proposal has been intentionally designed to avoid disturbance to intact native vegetation. There will be minimal permanent impact to/loss of Carnaby’s black cockatoo primary native foraging habitat within the DE (0.04 ha). Some trimming of primary native foraging habitat (0.19 ha) associated with the Cowalla Road/Brand Highway intersection works to allow the transportation of WTGs is necessary.</p>

**Table 2:** Proposal content elements

<b>Proposal element</b>	<b>Location / description</b>	<b>Maximum extent, capacity or range</b>
<b>Physical elements</b>		
DE containing infrastructure: - Wind turbine hardstands for max 79 WTGs - Power supply – electrical cabling and upgrades - Substation - Switching station	Location and extent as shown in <b>Figure 1</b> .	DE: 8,527.4 ha DF: up to 491.54 ha

<ul style="list-style-type: none"> <li>- Operation and maintenance facility</li> <li>- Concrete batching plant</li> <li>- Internal site access</li> </ul>		
Vegetation clearing	Within the DF	The subject sites and surrounding area are primarily utilised for low intensity agricultural uses and are largely already cleared. The Proposal design has avoided areas of intact native vegetation and there will be minimal permanent impact to/loss of primary native foraging habitat (0.04 ha). There will be some trimming of primary native foraging habitat (0.19 ha) associated with the Cowalla Road/Brand Highway intersection works to allow the transportation of WTGs to the DE.
<b>Construction elements</b>		
<p>Temporary construction infrastructure facilities</p> <ul style="list-style-type: none"> <li>- Site offices</li> <li>- Construction camps</li> <li>- Ablutions</li> <li>- Power and water supply</li> <li>- Storage/laydown</li> <li>- Parking and access points</li> </ul>	Within the DE, final siting subject to detailed design	<p>Construction will take approximately 24 months</p> <p>Construction activities comprise:</p> <ul style="list-style-type: none"> <li>- Bulk earthworks site clearing, excavation and backfilling to form access roads and WTG hardstands, laydown areas, benches for substations, O&amp;M compound and storage areas.</li> <li>- Detailed excavation of WTG foundations and cable installation</li> </ul>
<p>Fencing</p> <ul style="list-style-type: none"> <li>- Temporary and permanent security fencing requirements</li> </ul>	Around substations and operation and maintenance facility	<ul style="list-style-type: none"> <li>- Dewatering excavations where required</li> <li>- Steel fixing and concrete pouring to foundations (using onsite batch plants)</li> <li>- Access roads and hardstand pavement placement</li> </ul>
Borrow pits	Source to be determined	<ul style="list-style-type: none"> <li>- Access road drainage installation (V drains, concrete pipe culverts and box culverts)</li> <li>- WTG component delivery, storage and erection using trucks, and various cranes</li> <li>- Substation construction (concrete foundations, slabs and bunds, underground services installation, erection of steel structures and installation of equipment, switch rooms, overhead cabling and perimeter fencing)</li> </ul>

		- Anticipated cultural heritage survey/monitoring as part of a Cultural Heritage Management Plan.
Water supply	Source to be determined subject to <i>Rights in Water and Irrigation Act 1914</i> (RiWI Act)	Water allocations necessary for constructions purposes will be subject to the RiWI Act water extraction approval process. The proponent intends to explore opportunities to temporarily purchase/lease existing water allocations rather than draw additionally from the aquifer. Provision of at least two 100,000 L water tanks available for firefighting.
<b>Operational elements</b>		
Wind energy production	Within the DF	Up to 79 wind turbine generators Up to 489.8 MW in total
Maintenance	Within the DE	- Operating and maintenance staff on site during daylight hours (no permanent onsite presence)  - Noise and environmental monitoring including bird mortality monitoring program, Carnaby's cockatoo bird strike, weed monitoring and management.
<b>Proposal elements with greenhouse gas emissions</b>		
Construction elements:		
Scope 1	<p>Land use change (clearing of 491 ha of predominantly non-native vegetation):</p> <ul style="list-style-type: none"> <li>- up to 27,300.6 t CO<sub>2</sub>-e annually for 2-year construction period</li> </ul> <p>Estimate based on emissions factors in Transport Authorities Greenhouse Group (2013) Greenhouse Gas Assessment Workbook for Road Projects.</p> <p>Combustion of fuel for construction:</p> <ul style="list-style-type: none"> <li>- up to 908.9 t CO<sub>2</sub>-e annually for 2-year construction period</li> </ul> <p>Estimate based on Australian National Greenhouse Accounts Factors (NGAF 2022).</p> <p>Combustion of fuel for vegetation removal:</p> <ul style="list-style-type: none"> <li>- up to 266.1 t CO<sub>2</sub>-e annually for 2-year construction period</li> </ul> <p>Estimate based on Australian National Greenhouse Accounts Factors (NGAF 2022).</p>	
Scope 2	Not applicable as there will be zero indirect emissions from the generation of purchased energy from a utility provider since all electrical power will be self-generated during construction.	

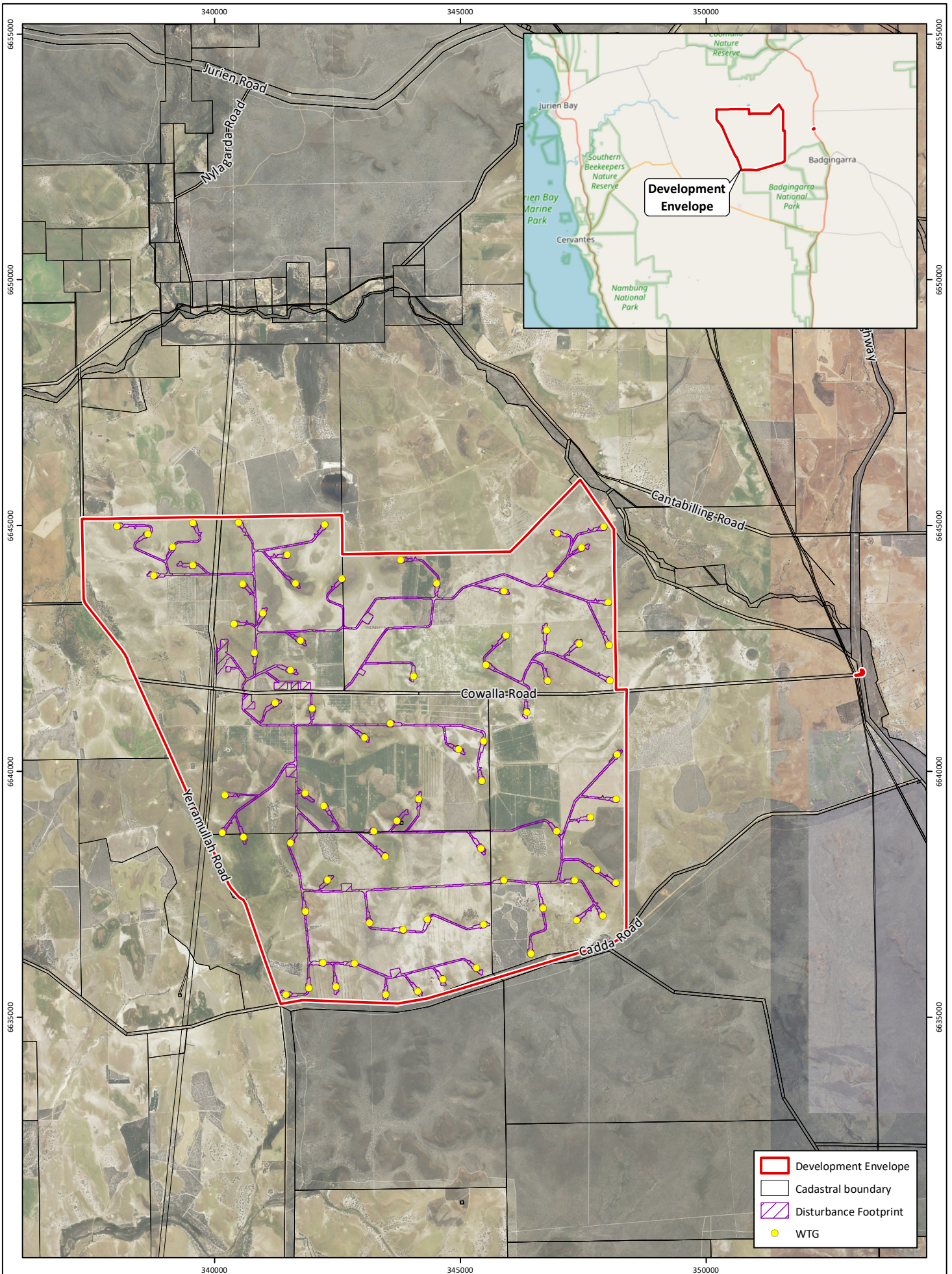
Scope 3	Scope 3 GHG emissions during construction are combined with operational emissions below.	
<b>Operational elements:</b>		
Scope 1	No significant ongoing Scope 1 emissions.	
Scope 2	No significant ongoing Scope 2 emissions.	
Scope 3	Turbine assembly (construction and operation) - up to 17,374.1 t CO2e annually for 40-year lifespan of turbines	
<b>Rehabilitation</b>		
The DE will be returned to the existing land use of farming within 24 months of the cessation of operations.		
<b>Commissioning</b>		
The Proposal has no environmental impacts specific to commissioning.		
<b>Decommissioning</b>		
The Proposal will either be repowered or decommissioned and returned to the existing land use of farming within 24 months of the cessation of operations. Likely decommissioning and remediation activities include:		
<ul style="list-style-type: none"> <li>- Removal of all turbines, plant and equipment structures above ground</li> <li>- Removal of concrete foundations to 0.5 m below ground level</li> <li>- Return to predevelopment state excluding removal of access roads and inground cables</li> <li>- Removal and clean-up</li> <li>- Decommissioning and Rehabilitation Plan maintained during the life of the developments and implemented at the end of the Wind Farms lifetime in consultation with the landowners</li> </ul>		
<b>Other elements which affect extent of effects on the environment</b>		
Proposal time*	Maximum project life	40 years At the end of life, the DE will either be repowered or decommissioned.
	Construction phase	Approximately 24 months
	Operations phase	Approximately 35 years
	Decommissioning phase	Approximately 24 months

\* Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).

## References

Department of Climate Change, Energy, the Environment and Water, (NGAF) 2022, *Australian National Greenhouse Accounts Factors*, Canberra, ACT.

Transport Authorities Greenhouse Group 2013, *Greenhouse Gas Assessment Workbook for Road Projects*.



**Figure 1: Site Location and Development Context**

**Project:** EP Act Referral  
Parron Wind Farm

**Client:** Zephyr Energy

**Plan Number:** EP23-085(12)--F113  
**Drawn:** CTH  
**Date:** 11/09/2024  
**Checked:** FIK  
**Approved:** JDH  
**Date:** 21/11/2024



0 1 2  
Kilometers  
Scale: 1:100,000@A4  
GDA2020 MGA Zone 50



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