

PROTECTED

Roy Hill Stockpile 3 Connection Construction Environmental Management Plan

February 2024



HORIZON
POWER

Contents

1	Introduction	3
1.1	Project Context and Scope	3
1.2	Scope and purpose	3
2	Description of the Activity	5
2.1	Activity Overview	5
2.2	Clearing of Native Vegetation	5
3	Management Measures	6

1 Introduction

1.1 Project Context and Scope

Regional Power Corporation, trading as (T/A) Horizon Power, is a Western Australian (WA) Government Trading Enterprise (GTE) and the state's regional and remote energy provider. Horizon Power operates under the *Electricity Corporations Act 2005* and is governed by a Board of Directors accountable to the Minister for Energy.

A customer has requested a 27-megawatt load for the Roy Hill Stockpile Project (the Project), located in Port Hedland, Western Australia (WA) (Figure 1). Similar to the existing supplies at the Port, Horizon Power proposes to supply the new load from the Hedland Distribution Terminal yard via the Southwest Creek substation, with a combination of overhead, underground and trenched transmission lines at 33kV and 66Kv. The Project will require the clearing of native vegetation.

The Development Envelope (DE) is approximately 100.75 ha and is located adjacent to existing infrastructure, Figure 1. The Project will require the clearing of no more than 4.55 ha within the 100.75 ha DE. This area to be cleared presents the worst-case scenario of the maximum areas to be cleared.

1.2 Scope and purpose

This Construction Environmental Management Plan (CEMP) has been developed to outline environmental management measures to be implemented by Horizon Power and its contractors during the construction of the Project. This includes, but is not limited to, measures to manage dust, erosion and spread of weeds during clearing of native vegetation.

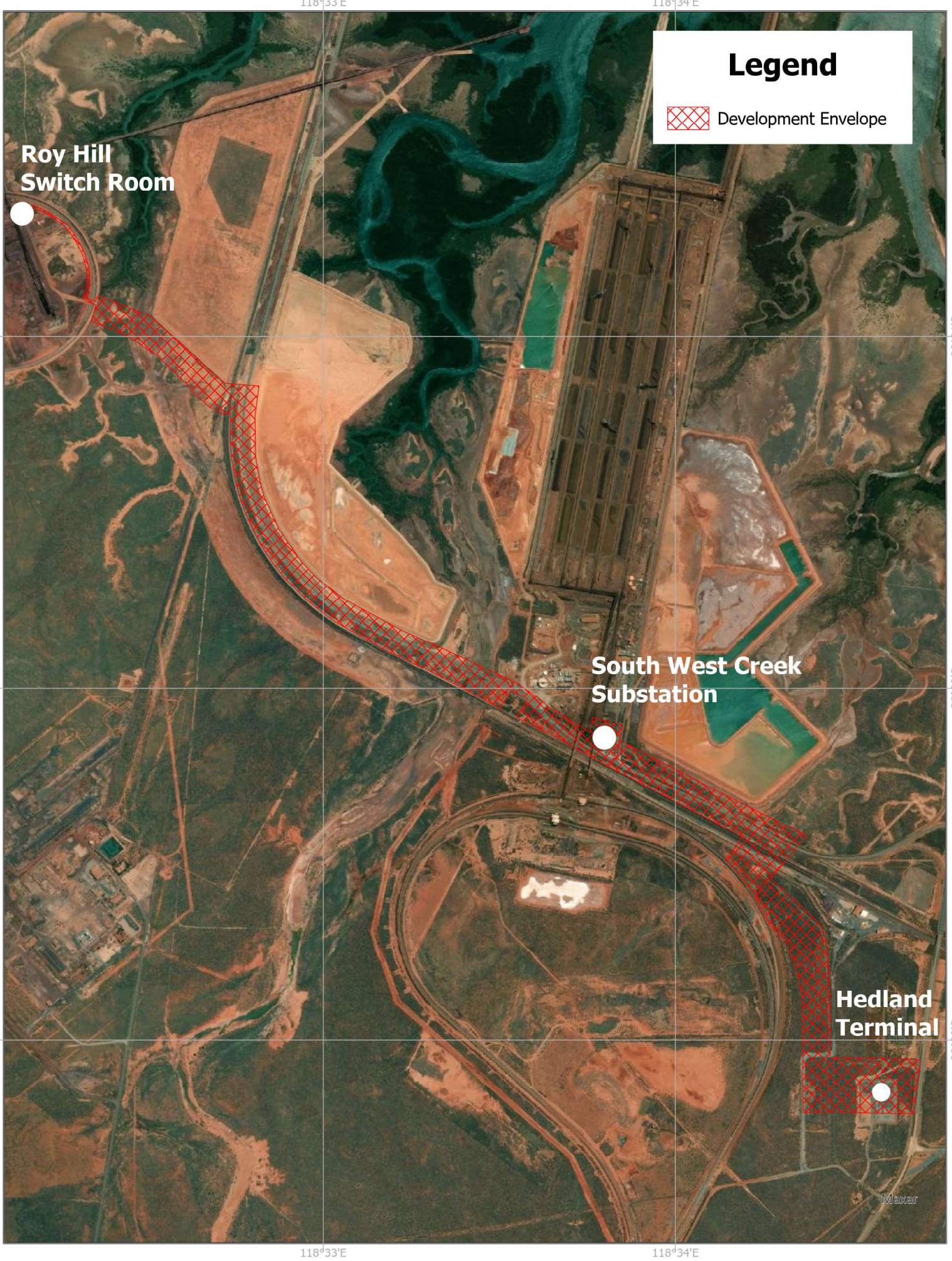


Figure 1 | Development Envelope



0 0.25 0.5 1
 Kilometers
 Scale: 1:25,000

△ For reference only

Last updated on 6/02/2024 by H188085



2 Description of the Activity

2.1 Activity Overview

Horizon Power proposes to supply the new load from the Hedland Distribution Terminal yard via the Southwest Creek substation, with a combination of overhead, underground and trenched 33kV and 66Kv transmission lines. The majority of the project will be underground trenched, with an approximately 1 km section of overhead powerline constructed from the South West Creek substation parallel to Utah Road before crossing underground at Utah Road and continuing south via trenching.

In addition to the transmission lines, infrastructure required for the Project is expected to be as follows:

- South West Creek Substation expansion
- Approximately, eight steel poles and pole pads for the overhead transmission line
- Winching sites for the overhead transmission line installation
- A stringing corridor for the overhead transmission line
- Stay wires to provide stability to the poles for the overhead transmission line
- Two Steel H structures or monopole transition structures – these structures would cover a maximum area of 11 m width by 11 m height. These structures serve as overhead to underground transition structures for high voltage cables and one will be required at either end of the overhead transmission line.
- A laydown area
- Jointing bay
- Trenches.

Construction is expected to commence in mid-2025.

2.2 Clearing of Native Vegetation

The proposed clearing will occur within the DE (shown in Figure 1). No more than 4.55 ha of clearing is proposed. This area includes both temporary and permanent mechanical clearing, as described in Table 1. Clearing of native vegetation within the DE will only be undertaken as specified by the Clearing Permit, including the extent and method of clearing to be undertaken and any specific management measures outlined in the permit conditions. The areas shown in Table 1 present the worst-case scenario of the maximum areas to be cleared.

Clearing of native vegetation will primarily be undertaken by mechanical methods. Some clearing may occur within the Development Envelope as incidental clearing through vehicle and machinery movements.

Table 1 Estimated clearing required for the Project

Clearing type	Infrastructure requiring clearing	Area (ha)	Comments
Permanent clearing	Pole pads	0.44	
	Trenching	1.65	The trenching in the southern portion of the project will be along an existing Horizon Power access track, however this track is overgrown. The overgrown vegetation is included in the clearing calculations. No more than 1.65 ha is expected to remain permanently cleared for access and maintenance purposes once the project is completed. The remaining 0.55 ha cleared for trenching activities will be allowed to regrow and is listed below as temporary clearing.
	Access track along poles section	0.26	
Total permanent clearing			2.35 ha
	Stringing	0.44	

PROTECTED

Temporary clearing	Winch	0.66	
	Joint bay	0.55	
	Trenching – non-permanent clearing	0.55	
Total temporary clearing			2.2 ha
Total area			4.55 ha

3 Management Measures

The management measures listed in Table 2 will be implemented during construction of this Project. Clearing of native vegetation will occur as per the conditions in the NVCP issued by DWER.

Table 2 Management measures to be implemented during construction

Aspect	Management Measure
Extent of Clearing	<ul style="list-style-type: none"> – No clearing is permitted outside the DE (Figure 1). – Clearing will be minimised where possible through placement of assets and access tracks in existing cleared locations where possible. – The clearing locations are to be demarcated prior to clearing activities. – Clearing areas are to be checked by an Environmental Specialist or Site Supervisor prior to clearing to ensure no more than 4.55 ha of clearing is undertaken for the Project. – A pre-clearing toolbox will be held so all staff are aware of their responsibilities under the permit.
Flora and vegetation	<ul style="list-style-type: none"> – Areas that are degraded, sparsely vegetated and/or previously cleared will be used preferentially for winch, laydown areas and access tracks. – Trees and tall shrubs will be avoided in the selection of access routes and laydown areas, where possible. – Temporarily cleared areas will be restored, as follows: <ul style="list-style-type: none"> • Topsoil (i.e. the top 10 mm of soil) will be stockpiled separately to other excavated materials within the designated laydown and winch areas • On completion of works, excavated materials will be placed back into the cleared laydown and winch areas. Topsoil will then be respread over the surface • Recontouring and removal of compaction (e.g. ripping or scarification) of soil within the laydown and winch areas will be undertaken. – Where possible, pre-existing access tracks will be used and vehicles and machinery will exit the DE along the same route used for access. – Movement of vehicles and machinery will be in convoy along access tracks/ routes and will not go into adjacent vegetation. – A 10 m buffer avoidance area has been placed around the Priority flora that have been mapped by Phoenix (2023)¹ in the DE, as shown in Figure 2. Clearing for transmission line infrastructure will not be undertaken within these 10 m buffers around the Priority flora. – The intertidal mudflat habitat mapped by Phoenix (2023)¹ within the DE is intersected by a corridor of cleared land. The trenched transmission line will traverse this cleared area and there will be no clearing of the intertidal mudflat habitat for the Project (Figure 2).
Fauna	<ul style="list-style-type: none"> – Clearing of native vegetation will be undertaken in a slow, progressive manner in one direction to allow fauna to move away from the clearing area. – Construction personnel will not touch, feed or otherwise directly interact with fauna. – Vehicle and machinery speeds within the DE will be restricted to reduce the likelihood of fauna strike.

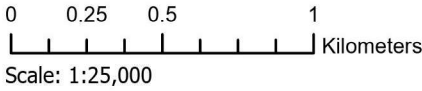
¹ Phoenix Environmental Sciences (Phoenix), 2023. Targeted and basic vertebrate fauna survey and Detailed flora assessment for the Roy Hill Stockpile Project. Prepared for Horizon Power. September 2023.

PROTECTED

Aspect	Management Measure
Weeds	<ul style="list-style-type: none"> – The Contractor will ensure that no weed-affected soil, mulch, fill or other material is brought into the DE. – All vehicles and machinery will arrive clean on site. – Movement of vehicles and machinery will be restricted to the DE or established tracks and roads.
Erosion and soils	<ul style="list-style-type: none"> – Standard construction measures regarding erosion and sediment control will be implemented during construction works. – Stockpiles will be maintained at 1m height or less – Vegetative material will be removed from cleared locations and stockpiled for respread once clearing is complete – Designated access tracks will be applied to prevent additional disturbance. – Works will be undertaken systematically to minimise re-run and compaction of access tracks.
Dust	<ul style="list-style-type: none"> – Standard construction dust control and mitigation measures will be implemented during clearing. This may include the use of a water trucks, or similar. – Ground disturbance and clearing of vegetation will be restricted during high winds if dust cannot be adequately controlled. – Reduced vehicle speed limits will be applied in areas of unconsolidated soil. – Use of defined routes for machinery/ vehicles travelling on unsealed roads.
Noise	<ul style="list-style-type: none"> – The contractor will comply with the Environmental Protection (Noise) Regulations 1997 – Complaints regarding noise will be recorded and investigated by Horizon Power.
Waste	<ul style="list-style-type: none"> – Rubbish will be disposed of in appropriate containers and all waste will be removed from the site.
Hydrocarbons and chemicals	<ul style="list-style-type: none"> – Hydrocarbons and chemicals will be appropriately managed on site to prevent spills, including maintaining equipment in good working order in accordance with manufacturers specifications. – No refuelling will be undertaken within 50 m of a waterway, drain or drainage line. – Hydrocarbons will be appropriately stored at least 50 m away from drainage lines and stored in an appropriate bunded container. – Refuelling will be undertaken on hardstand or using catch trays only. Uncontrolled refuelling is not permitted. – Chemicals will be appropriately stored.
Heritage	<ul style="list-style-type: none"> – Should aboriginal cultural heritage materials be uncovered during construction works, works are to stop immediately within 20 m of the find. The Contractor is to contact the Horizon Project Manager and an incident will be raised. The area will be cordoned off and no access permitted to the area by people until the incident is investigated and resolved.



Figure 2 | Avoidance Area



△ For reference only

Last updated on 6/02/2024 by H188085

