

Native Vegetation Clearing Permit Application - Supporting Document

Munda Feeder Undergrounding – Port Hedland

24/08/2021

DISCLAIMER

The information contained in this report is confidential, and is intended for the stated purpose only. This document or its contents must not be made available to external personnel or entities without the prior written approval of Horizon Power Management.

Contents

Disclaimer.....	2
1. INTRODUCTION	4
2. LOCATION	4
3. VEGETATION	5
4. ASSESSMENT AGAINST CLEARING PRINCIPLES.....	5
ATTACHMENT 1 – FIGURES.....	9
ATTACHMENT 2 PHOTOGRAPH LOG	10

1. INTRODUCTION

Horizon Power is the utility provider for regional Australia including the East Pilbara consisting of Port Hedland, Wedgefield and South Hedland. The East Pilbara network consists of approximately 793 kilometres (km) of overhead and underground power lines.

The Pilbara region is subject to significant weather events including tropical cyclones. During times of cyclonic winds the power supply network is at a high risk of outages due to short circuiting of conductors (overhead wires) and fallen or damaged power poles. Following severe weather events, the reinstatement of supply may also be hampered by associated swampy or flooded conditions. Horizon Power is in the progress of gradually undergrounding overhead assets to mitigate this issue.

This native vegetation clearing permit is to facilitate the undergrounding of the Munda Feeder in Port Hedland. Horizon Power is seeking approval to clear approximately 7.71 hectares (ha).

In 2011 Horizon Power successfully obtained a clearing permit (CPS 4348/1) which covered a large part of Wedgefield and includes a small section of the new application area (area along Wallwork Rd). Horizon Power met all of its obligations in relation to CPS 4348/1.

2. LOCATION

The application area covers multiple lots and is listed in Table 1: Land Details.

Lot	Certificate of Title	Land Owner
Lot 6131 on Deposited Plan (DP) 214105	Volume LR2124, Folio 147	Crown land – road
Lot 6133 on DP 214106	Volume LR3124, Folio 149	Crown land – road
Lot 304 on DP 43181	Volume LR3135, Folio 325	Unallocated Crown land
Polygon Number 11424434	Not applicable	Unallocated Crown land
Polygon Number 1278453	Not applicable	Unallocated Crown land
Lot 580 on Deposited Plan 409062	Volume LR3168, Folio 783	Crown land – road

Horizon Power is undertaking these works through the exercise of powers conferred by sections 28 and 49 of the Energy Operators (Powers) Act 1979 and as such do not require land owner permission. The above parties have been informed of the through a Notice of Entry.

3. VEGETATION

Based on pre-European vegetation mapping of Western Australia (Beard *et al* 2013) the application area is covered by two vegetation associations:

- Abydos Plain 647: Hummock grassland with scattered shrubs or mallee *Triodia* spp. *Acacia* spp., *Grevillea* spp. *Eucalyptus* spp (647); and
- Abydos Plain 127: Tidal mud flat (127)

The Native Vegetation Clearing Permit Application area has been broken down into 4 locations (refer *FIGURE 1:*) which can be described as follows;

Location A – Vegetation in this area has been significantly impacted in the past likely due to clearing for construction of roads, rail and the visitor / information pull over site located in vicinity. Washed out piles of cracker dust and road base etc are also present. The area in general is in poor condition.

Location B – Vegetation appears in good health and recent clearing not apparent.

Location C – Vegetation associations appear to have been subject to low levels of clearing in the past most likely in association with the development of roads and access tracks in the area. The ground coverage appears good although species diversity is lacking.

Location D - The vegetation along the entire route and alignment of Location D was cleared in 2018 for the installation of the National Broadband Network. The cleared section can be seen on the aerial imagery. Recent site photos confirm that the vegetation along this route has come back well. The vegetation appears to be in good health with good ground coverage and species diversity.

A photograph log showing the proposed alignment and vegetation is provided in Attachment.

4. ASSESSMENT AGAINST CLEARING PRINCIPLES

An assessment of the required clearing (up to 3.5 Ha) within the proposed clearing envelope with respect to DWER's *Ten Clearing Principles* was undertaken (Table 1).

This assessment concluded the proposed clearing associated with the project is unlikely to be at variance with the Ten Clearing Principles.

Table 2: Assessment of proposed clearing against DWER's Ten Clearing Principles

Principle (Native Vegetation should not be cleared if-)	Assessment	Outcome
(a) it comprises a high level of biological diversity	The survey area is situated within the Pilbara bioregion and Roebourne sub-region (PIL04, Roebourne) as described by Interim Biogeographic Regionalisation of Australia (IBRA). The application area contains vegetation representative of the wider region and is not considered to comprise significant or greater biological diversity than the broader surrounding area.	The proposed clearing is unlikely to be at variance to this principle.
(b) it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia	Vegetation along the new underground line is not required to be maintained and cleared on an ongoing basis (unlike overhead lines) and is expected to regenerate with no long term impact to fauna habitat. In particular, the hummock grassland areas have demonstrated an ability to rapidly regenerate as proven along Wallwork Rd which was cleared by NBN approximately 3 years ago. Photo 9 indicates how well the vegetation has regenerated and species diversity is evident. A search of the Department of Biodiversity Conservation and Attractions (DBCA) threatened and priority fauna database 1 reptile, 1 mammal and 11 migratory bird species.	The proposed clearing is unlikely to be at variance to this principle.
(c) it includes, or is necessary for the continued existence of, rare flora	A search of the DBCA WA Herbarium and Threatened and Priority Flora databases, identified no threatened flora species pursuant to the <i>EPBC Act 1999</i> and/or gazetted as Threatened/Declared Rare Flora pursuant to the <i>Biodiversity Conservation Act 2016</i> in the application area.	The proposed clearing is unlikely to be at variance to this principle.
(d) it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community	There are no threatened or priority ecological communities in proximity to the application area.	The proposed clearing is unlikely to be at variance to this principle.
(e) it is significant as a remnant of native vegetation in an area that has been extensively cleared	The vegetation types recorded in the area are widespread throughout the Pilbara region and have not been extensively cleared. The application area is not considered to be remnant native vegetation.	The proposed clearing is unlikely to be at variance to this principle.

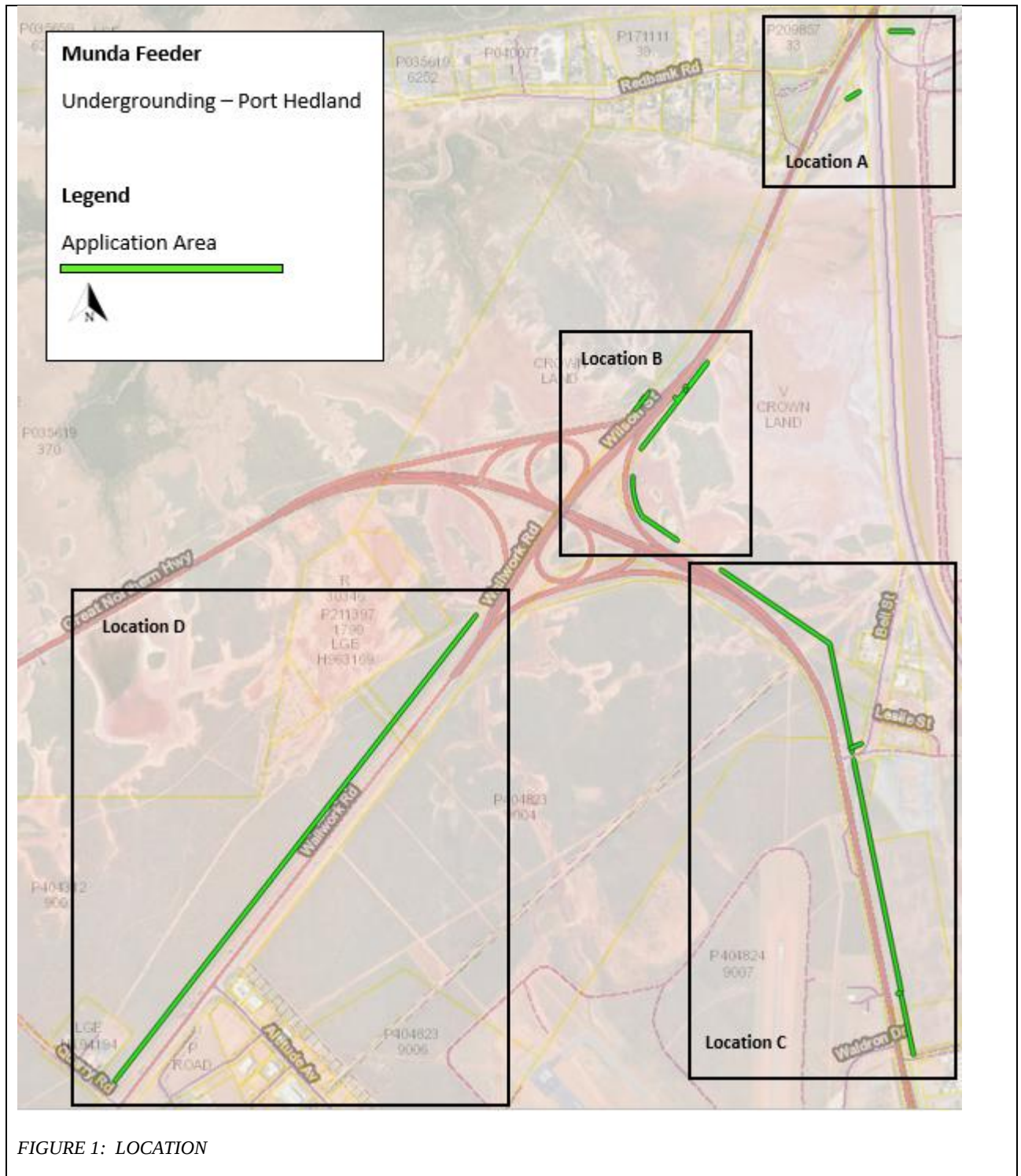
(f) it is growing in, or in association with, an environment associated with a watercourse or wetland	One section of the underground line is considered a tidal mud flat. This area will be horizontal bored.	The proposed clearing is unlikely to be at variance to this principle.
(g) the clearing of the vegetation is likely to cause appreciable land degradation	Underground line: Vegetation cleared during the installation of the underground line will be allowed to regenerate. The trench will be 0.5 m wide. A wider disturbance footprint has been included to account for machinery movements. The surrounding vegetation is moderately dense and natural recolonization of the small linear disturbance is expected to occur over a short period of time. As the vegetation will re-establish there is not expected to be any land degradation issues.	The proposed clearing is unlikely to be at variance to this principle.
(h) the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area	The application area is not identified within or in close proximity to a Conservation Area.	The proposed clearing is unlikely to be at variance to this principle.
(i) the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water	The Pilbara Coastline Potential Acid Sulfate Soil Risk Map Dataset (DWER-053) indicates that part of the tidal mud flat areas are located in an area of potential high risk for acid sulfate soils. The risk of exposure and subsequent oxidation of potential acid sulfate soils along this section of line is considered to have been mitigated through the use of a horizontal boring installation technique. Surface soils will not be disturbed as would otherwise occur with traditional open trenching methods. There is considered to be no complete exposure pathway for the exposure of acid sulfate soils as a result of the project. In the unlikely event that horizontal boring is not able to be undertaken for any reason, open trenching will be used. In this instance soils will be managed as actual acid sulfate and management measures will be implemented (e.g. ensuring trenches are closed within specified time). No impact to the beds of watercourses or riparian vegetation of the tidal flat area is expected when using a horizontal boring method. In the unlikely event that horizontal boring is not able to be undertaken for any reason, open trenching will be used. No modification of surface water flows will occur. Given appropriate management measures are undertaken during the project, the proposed clearing is unlikely to cause deterioration in the	The proposed clearing is unlikely to be at variance to this principle.

	quality of surface or underground water. It is noted that under the <i>Energy Operators (Powers) Act 1979</i> Section 49 (C) Horizon Power has the authority to make or alter watercourses drainage and establish a supply system through any such land including 'shore of the sea or any stream or water'.	
(j) the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.	The clearing area is adjacent to a road and is not expected to result in an increased flood risk. The clearing of the underground section of the line will be narrow and linear in nature. The surrounding vegetation is considered to be moderate to good health and sufficiently dense that recolonization of the line by surrounding vegetation is expected to occur over a short period of time. The line will not be actively rehabilitated due to its use as a service corridor and small extent.	The proposed clearing is unlikely to be at variance to this principle.

REFERENCES

Beard, J. S., Beeston, G.R., Harvey, J.M., Hopkins, A. J. M. and Shepherd, D. P. 2013. The vegetation of Western Australia at the 1:3,000,000 scale. Explanatory memoir. Second edition. Conservation Science Western Australia 9: 1-152

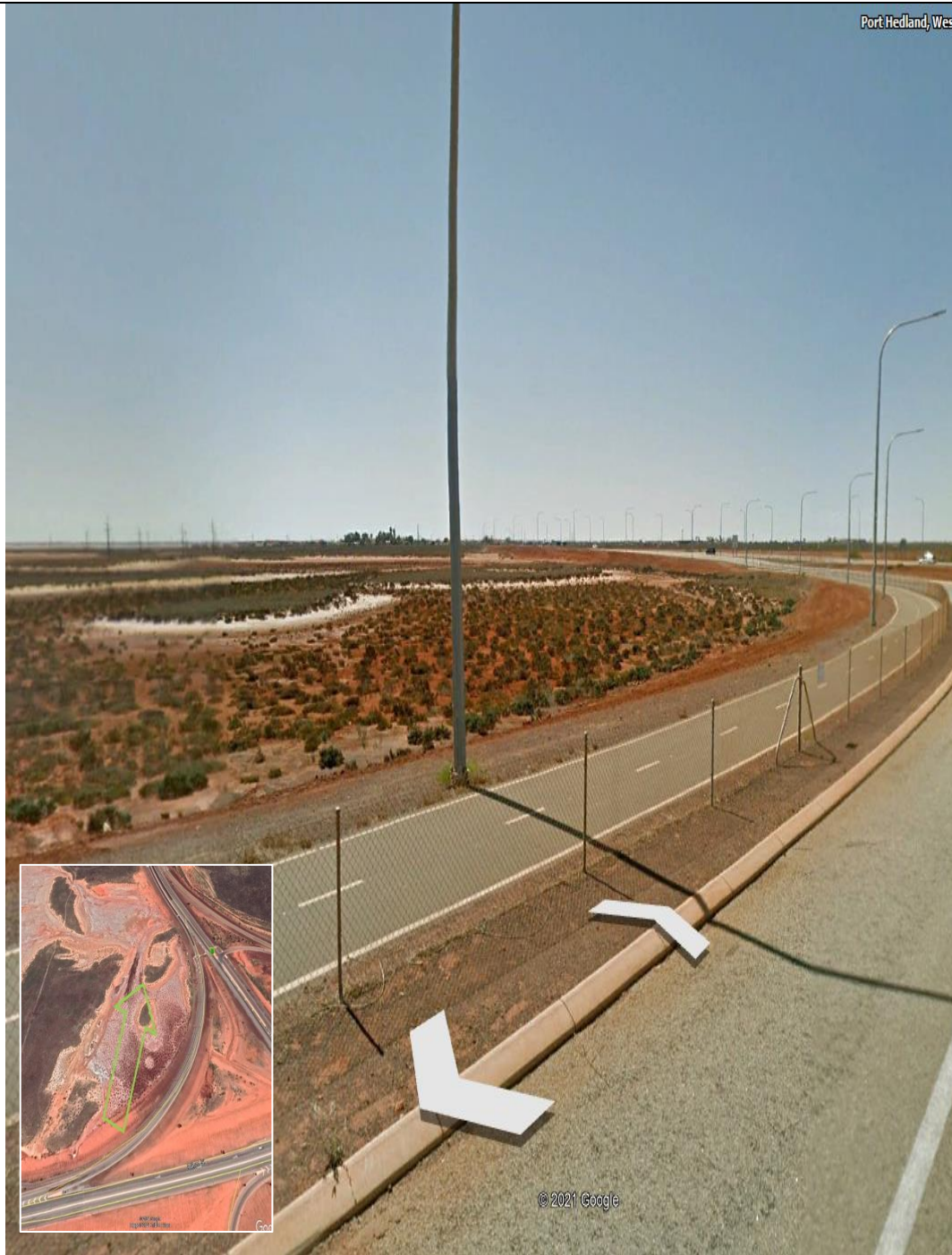
ATTACHMENT 1 – FIGURES



ATTACHMENT 2 PHOTOGRAPH LOG



Photograph 1: Location A – East side of Wilson Street facing North East. Lat: -20.6823° Long 116.7315°



Photograph 2: Location B – East side of Wilson Street facing North East. Lat: -20.3564° Long 118.6244°



Photograph 3: Location C: Great Northern Highway facing North West. Lat -20.36213° Long 118.63036°.



Photograph 4: Location C: Great Northern Highway facing South. Lat -20.3686° Long 118.6320°.



Photograph 5: Location C: Great Northern Highway facing East. Lat -20.36858° Long 118.6321°.



Photograph 6: Location D: Wallwork Road facing North East. Lat -20.37429° Long 118.608°.



Photograph 7: Location D: Wallwork Road facing North East. Lat -20.37007° Long 118.6118°.



Photograph 8: Location D: Wallwork Road facing North East. Lat -20.3641° Long 118.6167°.