



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 9263/1
Permit Holder:	Electricity Networks Corporation
Duration of Permit:	From 24 July 2021 to 24 July 2026

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of installing a distribution line for a customer connection.

2. Land on which clearing is to be done

Lot 4407 on Deposited Plan 160706
Rosedale Road Reserve (PIN 11840146), Chidlow

3. Clearing authorised

The permit holder must not clear more than 0.01269 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

PART II – MANAGEMENT CONDITIONS

4. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

- (a) avoid the clearing of *native vegetation*;
- (b) minimise the amount of *native vegetation* to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

5. Weed and dieback management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known *dieback* or *weed*-affected soil, mulch, fill, or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

PART III - RECORD KEEPING AND REPORTING

6. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	<ol style="list-style-type: none">(a) the species composition, structure, and density of the cleared area;(b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;(c) the date that the area was cleared;(d) the size of the area cleared (in hectares);(e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 4; and(f) actions taken to minimise the risk of the introduction and spread of weeds and dieback in accordance with condition 5.

7. Reporting

The permit holder must provide to the *CEO* the records required under condition 6 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table have the meanings defined.

Table 2: Definitions

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
weeds	means any plant – (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS



Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

30 June 2021

Schedule 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

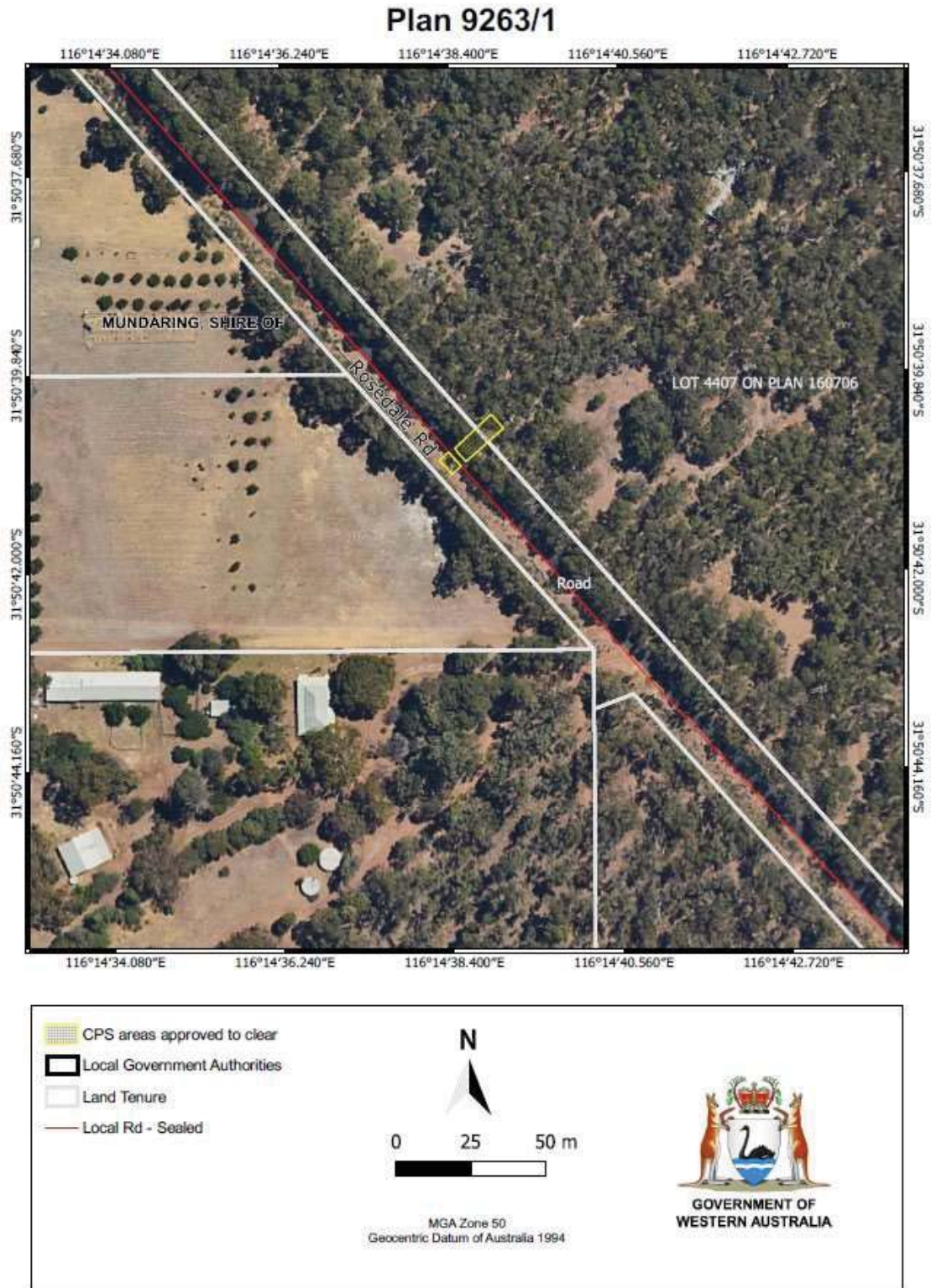


Figure 1: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 9263/1
Permit type:	Purpose permit
Applicant name:	Electricity Networks Corporation
Application received:	14 April 2021
Application area:	Up to 0.01269 hectares of native vegetation
Purpose of clearing:	Installing a distribution line for a customer connection
Method of clearing:	Mechanical
Property:	Lot 4407 on Deposited Plan 160706 and Rosedale Road Reserve (PIN 11840146)
Location (LGA area/s):	Shire of Mundaring
Localities (suburb/s):	Chidlow

1.2. Description of clearing activities

The vegetation proposed to be cleared is distributed across two separate areas, (see Figure 1, Section 1.5), separated by Rosedale Road. For the purpose of this report the two areas will be referred to as the northern and southern portion. Proposed clearing is likely to be minimal and confined to two areas of excavation containing entry and exit points for horizontal drilling. If drilling is obstructed, further clearing within the application area may occur in order to bypass or remove the obstruction. The application was originally for 0.00195 hectares. The application area was increased to 0.01269, to allow for the digging of a trench if horizontal drilling is obstructed.

In the southern portion, Western Power proposes to construct a distribution cable connection from Western Power's existing power pole on Rosedale Road, to a customer's property. Approximately 3.5 metres squared (less than 0.0004 hectares) will be impacted directly through excavation and 16 metres squared (0.0016 hectares) will be disturbed by the parking of a drill rig. It is noted this area is not completely covered in native vegetation and includes existing cleared areas.

The remaining 106.5 meters squared (0.01065 hectares) of the Site footprint may be impacted by the movement of people. Clearing will occur on Rosedale Street at the base of Pole No. S383338 (see appendix D, Figure 2) to enable underground distribution of the line using horizontal drilling.

Further disturbance will occur in a cleared area in the northern portion. Permanent infrastructure will comprise underground cables. Horizontal drilling will occur at a minimum depth of 0.75 metres. It is not expected that the proposed underground works will impact native vegetation with the exception of minor disturbance to root systems (GHD 2021).

1.3. Decision on application

Decision:	Granted
Decision date:	30 June 2021
Decision area:	0.01269 hectares of native vegetation, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix A), relevant datasets (see Appendix E.1) principles set out in Schedule 5 of the EP Act (see Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that the application is for the supply of power to a new residence approved by the Shire of Mundaring.

After consideration of the available information, the Delegated Officer determined that, given the small scale of the application footprint, and that no trees are likely to be cleared, the proposed clearing is unlikely to lead to appreciable land degradation or impacts to the habitat of conservation significant flora and fauna. Impacts to adjacent vegetation may occur through the incidental introduction of weeds and dieback.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- Avoid, minimise to reduce the impacts and extent of clearing
- Take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback.

1.5. Site map

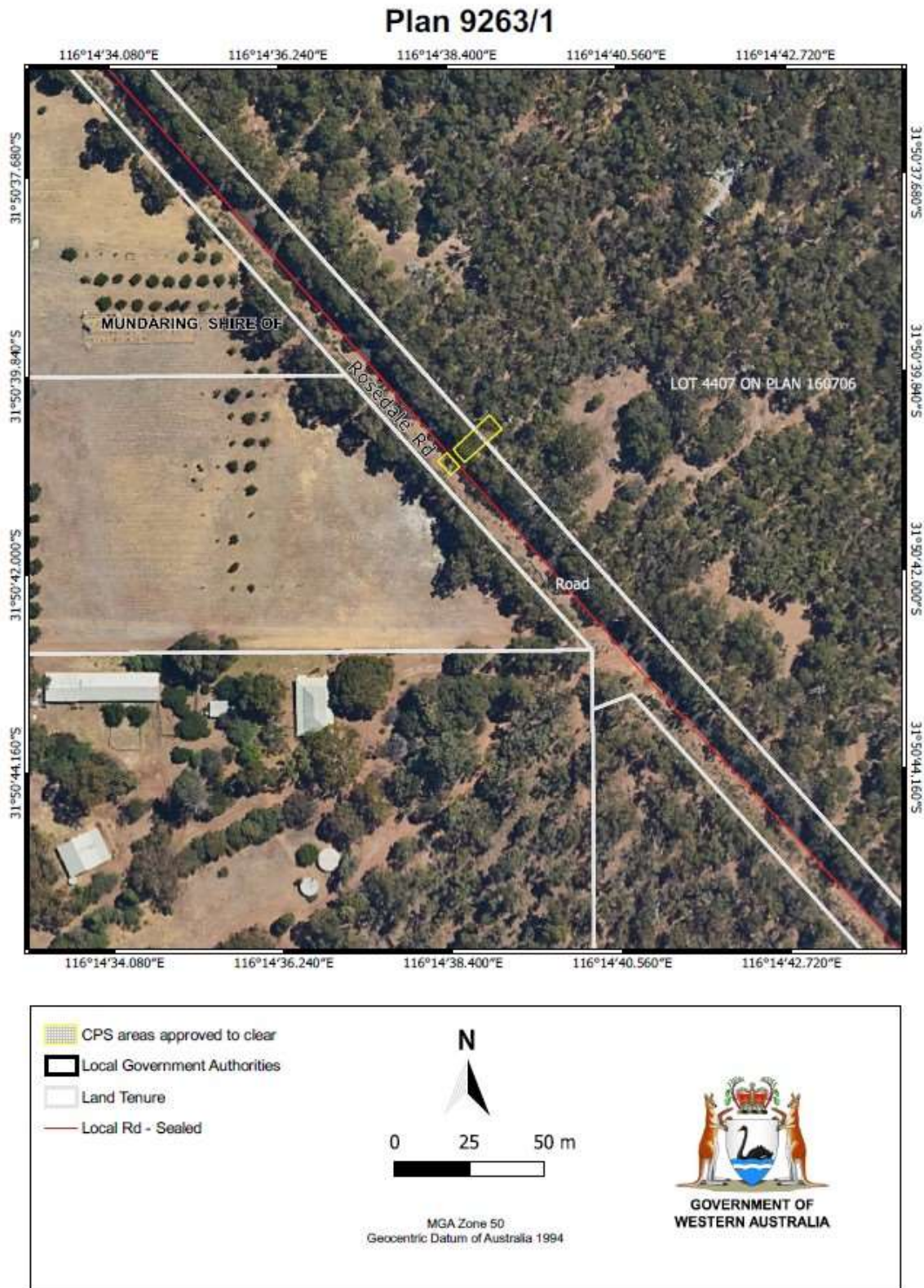


Figure 1 Map of the application area. The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Planning and Development Act 2005* (WA) (P&D Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values. The clearing area proposed is the minimum area required to adequately undertake the works. Electricity Networks Corporation will also utilise existing cleared areas (tracks, roads) where practicable, to access the site and undertake the works (GHD 2021).

Electricity Networks Corporation is also committed to implementing the following mitigation measures:

- Clearing areas will be clearly demarcated on site prior to the commencement of clearing;
- Implementation of weeds hygiene protocol during construction, including cleaning of vehicles, heavy equipment, tools and footwear prior to entry and exit from vegetated areas; and
- Limit vehicle speeds within the project footprint to minimise the risk of fauna strike (GHD 2021).

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix B) identified the impacts of the proposed clearing are limited and able to be managed with standard avoid and minimise and hygiene management conditions.

3.3. Relevant planning instruments and other matters

The Department of Water and Environmental Regulation advertised the application for 21 days on 14 April 2021. The application was originally for 0.00195 hectares. The application area was increased to 0.01269, to allow for the digging of a trench if vertical drilling is obstructed. The application was readvertised 02 June 2021, for seven days. No submissions were received in relation to this application during either advertising period.

No Aboriginal sites of significance have been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

End

Appendix A. Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to DWER at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix B.

A.1. Site characteristics

Characteristic	Details
Local context	<p>The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is adjacent to Wooroloo Reginal Park. The proposed clearing area is part of a large 15 hectare area of vegetation connecting riparian vegetation of Cooks Brook to the east of the proposed clearing.</p> <p>Spatial data indicates the local area, (10-kilometre radius from the perimeter of the proposed clearing), retains approximately 63 per cent of the original native vegetation cover.</p>
Ecological linkage	<p>The application area is part of an informal linkage between surrounding areas of remnant native vegetation, including the adjacent Wooroloo Reginal Park to the west and Leschenaultia Conservation Park. The proposed clearing is not likely to sever or reduce the functionality of this linkage.</p>
Conservation areas	<p>The boundary of Wooroloo Reginal Park, runs along the western edge of Rosedale Road. Wooroloo Reginal Park also adjoins Leschenaultia Conservation Park further to west.</p>
Vegetation description	<p>Photographs supplied by the applicant (GDH 2021) indicate the vegetation within the proposed clearing area consists of <i>Eucalyptus marginata</i> (jarrah) and <i>Corymbia calophylla</i> (marri) woodland with a degraded understory.</p> <p>This is consistent with the mapped vegetation complex by Matiske and Havel (1998) as updated by Webb <i>et al.</i> (2016):</p> <ul style="list-style-type: none"> • Murray 2: Open forest of <i>Eucalyptus marginata</i> subsp. <i>thalassica</i>-<i>Corymbia calophylla</i>-<i>Eucalyptus patens</i> and woodland of <i>Eucalyptus wandoo</i> with some <i>Eucalyptus accedens</i> on valley slopes to woodland of <i>Eucalyptus rudis</i>-<i>Melaleuca raphiophylla</i> on the valley floors in semiarid and arid zones.
Vegetation condition	<p>Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in Good (Keighery, 1994) condition.</p> <p>The full Keighery (1994) condition rating scale is provided in Appendix C.</p> <p>Representative photos are available in 0D.</p>
Climate and landform	<ul style="list-style-type: none"> • Mean annual rainfall: 1065 millimetres • Temperature (mean annual minimum): 21.7 degrees centigrade • Temperature (mean annual maximum): 23.4 degrees centigrade <p>Landform: Very gentle to moderately inclined concave side slopes.</p>
Soil description	<p>The soil is mapped as Yarragil 1 Phase, described as moderately well drained yellow duplex soils and yellow and brown massive earths and gravels.</p>
Land degradation risk (DPIRD 2017)	<p>Wind erosion: 3-10% of mapped land unit has a high risk</p> <p>Water Erosion risk: <3% of map unit has a high risk</p> <p>Subsurface acidification: 50-70% of map unit has a high to extreme risk</p> <p>Flood risk: <3% of map unit has a high risk</p> <p>Water logging: <3% of map unit has a high risk</p> <p>Phosphorus export risk: 3-10% of map unit has a high risk</p>
Waterbodies	<p>The desktop assessment and aerial imagery indicated that Cooks Brook a non-perennial minor river accrues 0.47 kilometres from of the application area.</p>

Characteristic	Details
Hydrogeography	Swan River district, RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037).
Flora	<p>There are 46 records of conservation significant flora in the local area. The nearest conservation significant flora records occurring in vegetation with similar soils and habitat as the application area include:</p> <ul style="list-style-type: none"> • <i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i> (Priority 3) • <i>Meionectes tenuifolia</i> (Priority 3) <p>The nearest record of threatened flora is for <i>Acacia aphylla</i> recorded 6.7 kilometres north east of the application area. <i>Acacia aphylla</i>; is associated with gannet outcropping (Western Australian Herbarium 1998-).</p>
Ecological communities	There are no mapped threatened or priority ecological communities in the local area.
Fauna	<p>There are 23 records of conservation significant fauna within the local area. The nearest records for a conservation significant species associated with similar habitat to the application area include:</p> <ul style="list-style-type: none"> • <i>Calyptorhynchus baudinii</i> (Baudin's cockatoo) • <i>Calyptorhynchus latirostris</i> (Carnaby's cockatoo) • <i>Phascogale tapoatafa wambenger</i> (south-western brush-tailed phascogale) • <i>Calyptorhynchus banksii naso</i> (forest red-tailed black cockatoo) <p>The nearest black cockatoo mapped breeding site is for forest red-tailed black cockatoo, approximately 5 kilometres from the application area. There are also 20 black cockatoo roosts in the local area, the nearest is 1.8 kilometres north east of the application area. The northern portion of the application is mapped as cockatoo feeding habitat.</p>

A.2. Vegetation extent

	Pre-European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA managed land
IBRA bioregion*					
Jarrah Forest	4,506,660.25	2,399,838.15	53.25	617,065.14	13.69
Vegetation complex					
Murray 2	25961.10	40,952.07	69.40	23956.38	40.39

*Government of Western Australia (2019)

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared does not contain locally significant flora, fauna, habitats, or assemblages of plants. Inspection undertaken by GHD (2021) did not identify any conservation significant values.</p>	Not at variance	No
<p><u>Principle (b):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.”</i></p> <p><u>Assessment:</u></p> <p>The proposed clearing will not include the removal of any trees. Some minor root disturbance may occur as a result of horizontal drilling (GDH 2021). Ground disturbance will also be minimal. Understorey vegetation within the application area is degraded and unlikely to provide habitat for ground dwelling fauna. Therefore, the proposed clearing is unlikely to significantly impact any breeding, roosting of foraging habitat for conservation significant fauna. .</p>	Not likely to be at variance	No
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared, is unlikely to contain habitat for threatened flora.</p>	Not at variance	No
<p><u>Principle (d):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared does not contain species that resemble a threatened ecological community.</p>	Not at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The local area retains approximately 63 percent of its native vegetation and is therefore, consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.</p>	Not at variance	No
<p><u>Principle (h):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.”</i></p> <p><u>Assessment:</u></p> <p>Although the application area is adjacent to Wooroloo Reginal Park the small scale of the proposed clearing is not likely to have an impact on the environmental values of the adjacent conservation area. Weed and dieback</p>	Not at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
management measures will mitigate against any potential risk of impacting the park.		
Environmental value: land and water resources		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>Given the proposed clearing will be limited to a maximum of 0.01269 hectares it is unlikely to impact on- or off-site hydrology and water quality of the adjacent minor nonperennial water course. No vegetation growing in association with a watercourse or wetland was observed within the application area</p>	Not at variance	No
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u></p> <p>Noting the extent of clearing will be limited to a maximum of 0.01269 hectares, the proposed clearing is not likely to have an appreciable impact on land degradation.</p>	Not at variance	No
<p><u>Principle (i):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.”</i></p> <p><u>Assessment:</u></p> <p>Given no wetlands, and/or Public Drinking Water Source Areas are recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality.</p>	Not at variance	No
<p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u></p> <p>Noting the size of the proposed clearing and with the mapped soils having a very low risk of flooding and waterlogging, the proposed clearing is not likely to result in increased flooding.</p>	Not at variance	No

Appendix C. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Representative photographs of the vegetation (GHD 2021)



Figure 2 Vegetation of surrounding the southern portion of the application area. This location will be excavated for the purpose of horizontal drilling.



Figure 3 Northern portion of the application area.

Appendix E. Sources of information

E.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

E.2. References

Department of Primary Industries and Regional Development (DPIRD) (2017). NRInfo Digital Mapping. Accessed at <https://maps.agric.wa.gov.au/nrm-info/> Accessed June 2021. Department of Primary Industries and Regional Development. Government of Western Australia.

GDH (2021) *Assessment of environmental impacts and recommendations. Supporting information for clearing permit application CPS 9263/1*, received 14 April 2021 (DWER Ref: DWERDT439461).

Government of Western Australia (2019) *2018 South West Vegetation Complex Statistics. Current as of March 2019*. WA Department of Biodiversity, Conservation and Attractions, Perth, <https://catalogue.data.wa.gov.au/dataset/dbca>

Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Mattiske, E.M. and Havel, J.J. (1998) *Vegetation Complexes of the South-west Forest Region of Western Australia*. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.

Webb, A., Kinloch, J., Keighery, G. and Pitt, G. 2016. *The Extension of Vegetation Complex Mapping to Landform boundaries within the Swan Coastal Plain Landform and Forested Region of South West Western Australia*. Department of Parks and Wildlife, Bunbury, WA.

Western Australian Herbarium (1998-). *FloraBase - the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed 28 June 2021)