



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 10714/1
File Number: DWERVT15813
Duration of Permit: From 3 March 2025 to 3 March 2032

PERMIT HOLDER

Shire of Perenjori

LAND ON WHICH CLEARING IS TO BE DONE

Morawa South Road reserve (PIN 10701109), Perenjori
Boundary Road reserve (PIN 10474800), Perenjori
Hill Road reserve (PIN 11663249), Perenjori

AUTHORISED ACTIVITY

The permit holder must not clear more than three (3) native trees within the area cross-hatched yellow in Figures 1 and 2 of Schedule 1.

CONDITIONS

1. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 3 March 2027.

2. 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.

3. 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.

4. Directional clearing

The permit holder must:

- (a) conduct *clearing* activities in a slow, progressive manner towards adjacent *native vegetation*; and
- (b) allow a reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the *clearing* activity.

5. Revegetation and rehabilitation

- (a) Within 12 months of undertaking clearing authorised under this permit and no later than 3 March 2027, the permit holder must undertake deliberate *planting* of at least six (6) *Eucalyptus salmonophloia* trees within the area cross-hatched red in Figure 3 of Schedule 1 by:
 - (i) ensuring only *local provenance* seeds and propagating material are used;
 - (ii) ensuring *planting* is undertaken at the *optimal time*; and
 - (iii) undertaking *weed* control and watering of *plantings* for at least two years post *planting*.
- (b) Within 24 months of *planting* the trees in accordance with condition 5(a) of this permit, the permit holder must:
 - (i) engage an *environmental specialist* to make a determination that at least six (6) *planted Eucalyptus salmonophloia* trees will survive;
 - (ii) if the determination made by the *environmental specialist* under condition 5(b)(i) is that at least six (6) *planted Eucalyptus salmonophloia* trees will not survive, the permit holder must undertake additional *planting* of *Eucalyptus salmonophloia* trees that will result in at least six (6) *Eucalyptus salmonophloia* trees persisting within the area cross-hatched red in Figure 3 of Schedule 1; and
 - (iii) where additional *planting* of *Eucalyptus salmonophloia* trees is undertaken in accordance with condition 5(b)(ii), the permit holder must repeat the activities required by conditions 5(a)(i-iv) and 5(b)(i-ii) of this permit.

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	<ul 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 GDA2020, 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 2; (f) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 3; and (g) actions taken in accordance with condition 4.
2.	In relation to <i>revegetation</i> and <i>rehabilitation</i> pursuant to condition 5	<ul style="list-style-type: none"> (a) the date(s) on which the <i>planting</i> was undertaken; (b) the locations of the trees <i>planted</i>, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA 2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees; (c) a description of the <i>planting</i> activities undertaken pursuant to condition 5(a), including <i>planted</i> species composition and density, and actions taken to implement watering and <i>weed</i> control; (d) a copy of the <i>environmental specialist's</i> monitoring report and determination; and (e) a description of any <i>remedial actions</i> undertaken pursuant to conditions 5(b)(ii)-(iii) of this permit.

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.
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.
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.
environmental specialist	means a person who holds a tertiary qualification in environmental science or equivalent, and has a minimum of 2 years work experience relevant to the type of environmental advice that an environmental specialist is required to provide under this permit, or who is approved by the CEO as a suitable environmental specialist.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
fill	means material used to increase the ground level, or to fill a depression.
local provenance	means native vegetation seeds and propagating material from natural sources within 50 kilometres and the same IBRA subregion of the area cleared.
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
optimum time	means the period from May to June for undertaking planting or seeding
planting/s/ed	means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species
remedial action/s	means for the purpose of this permit, any activity that is required to ensure successful re-establishment and survival of planted trees.
rehabilitate/ed/ing/ion	means the re-establishment of a cover of <i>local provenance</i> native vegetation in an area using methods such as natural regeneration,

Term	Definition
	direct seeding and/or <i>planting</i> , so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.
revegetate/ed/ing/ion	means actively managing an area containing native vegetation in order to improve the ecological function of the area
weeds	means any plant – <ul style="list-style-type: none"> (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



Digitally signed by Temika Mathieson
 Date: 2025.02.07 09:16:42 +08'00'

Temika Mathieson
 A/MANAGER
 NATIVE VEGETATION REGULATION

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

7 February 2025

SCHEDULE 1

The boundary of the areas authorised to be cleared are shown in the maps below (Figure 1 and 2).

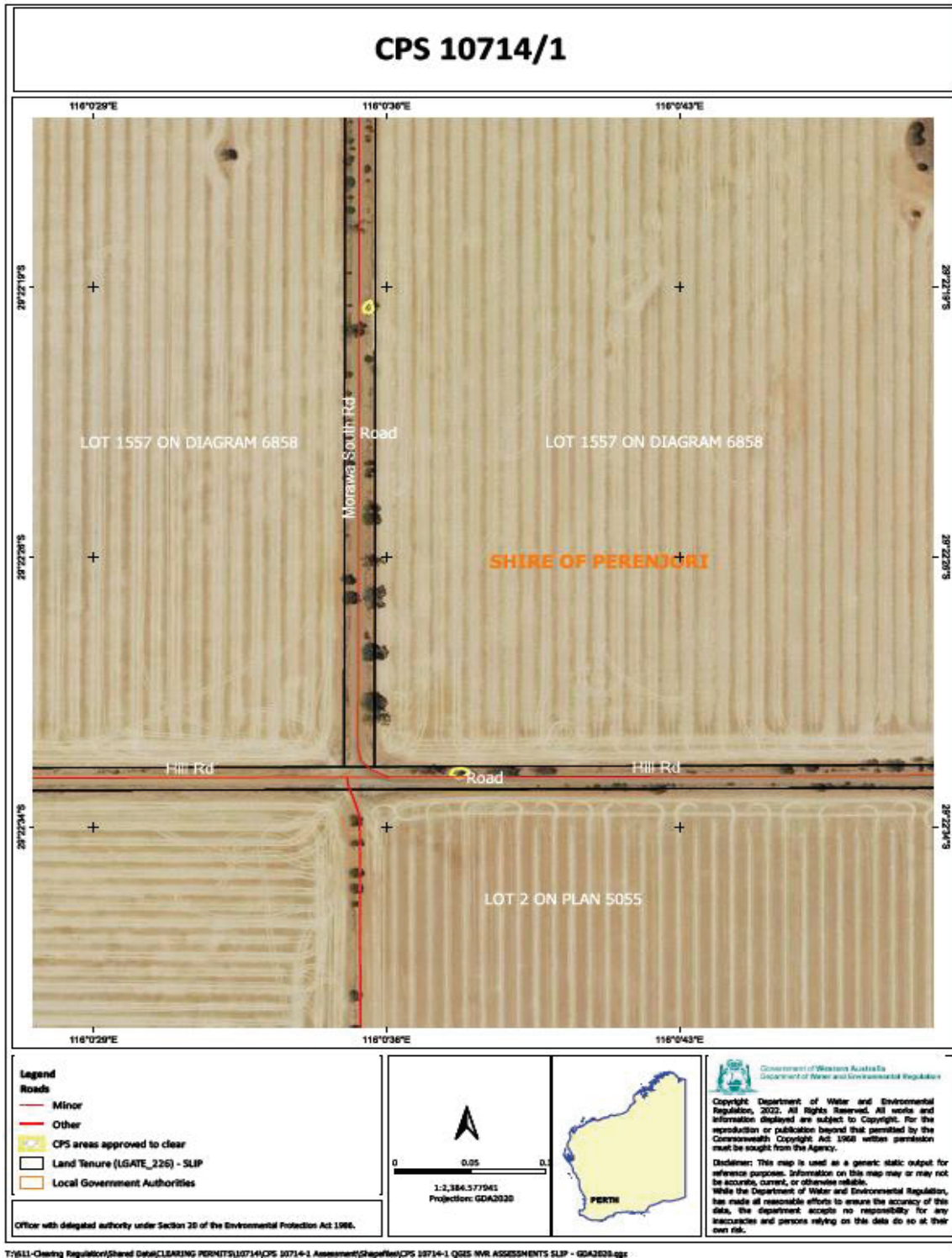


Figure 1: Map of the boundary of the areas within which clearing may occur along Morawa South Road and Hill Road, Perenjori

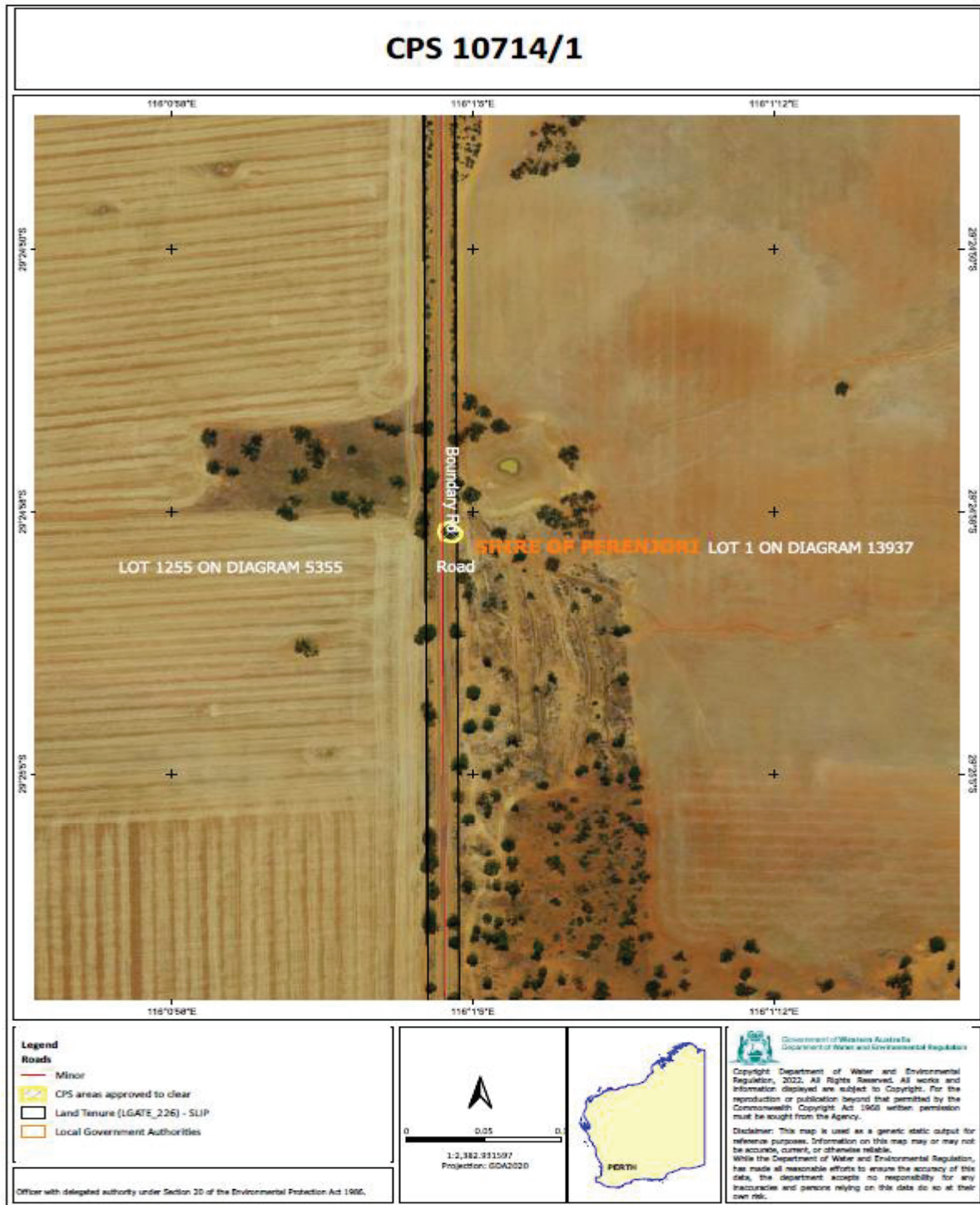


Figure 2: Map of the boundary of the area within which clearing may occur along Boundary Road, Perenjori

The boundary of the area where rehabilitation planting must occur is shown in the map below (Figure 3).

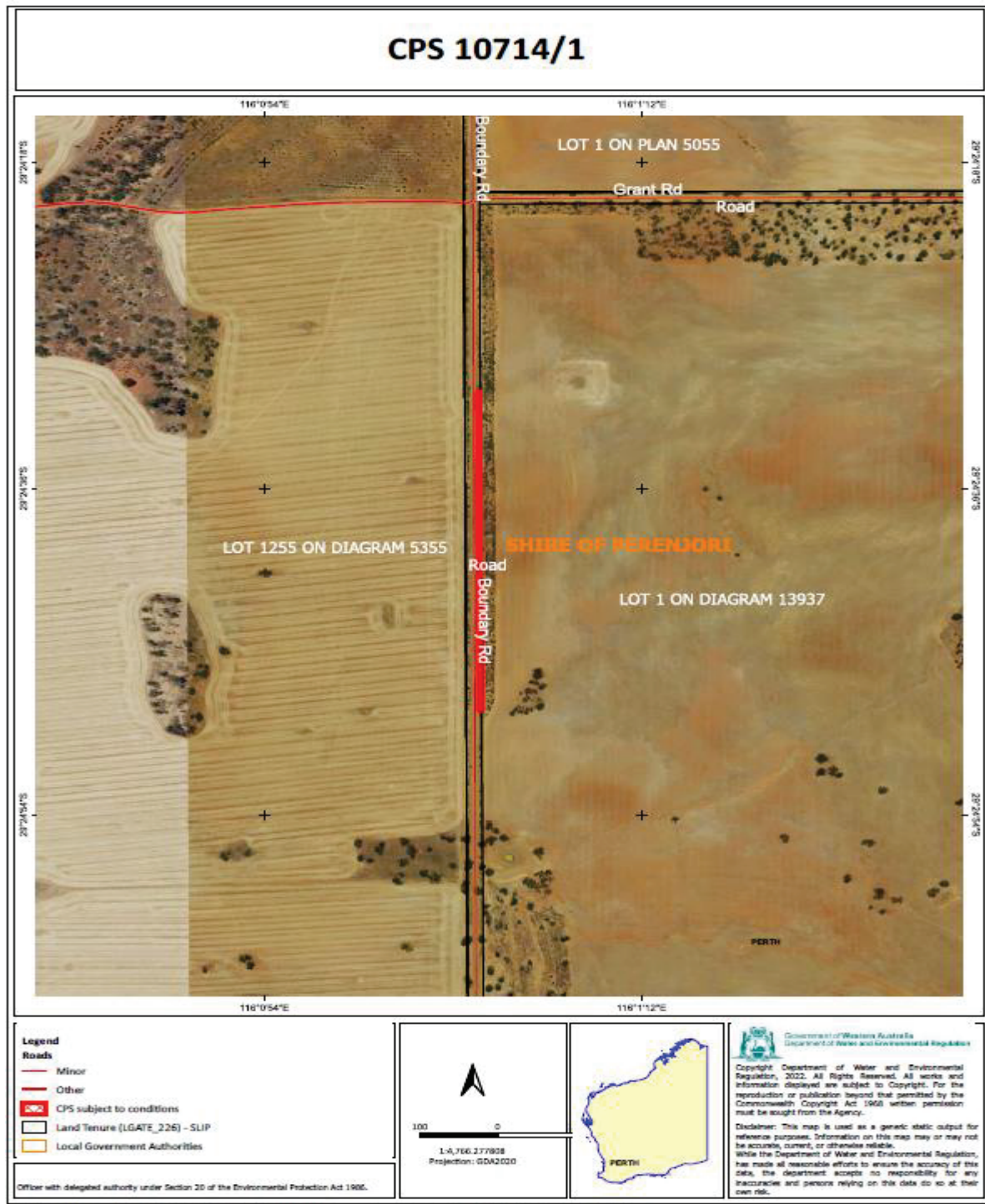


Figure 3: Map of the boundary of the area within which specific revegetation and rehabilitation conditions apply



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10714/1
Permit type:	Area permit
Applicant name:	Shire of Perenjori
Application received:	5 August 2024
Application area:	Three (3) native trees (revised)
Purpose of clearing:	Road upgrades
Method of clearing:	Mechanical
Property:	Morawa South Road reserve (PIN 11701109) Boundary Road reserve (PIN 11474800) Hill Road reserve (PIN 11663249)
Location (LGA area/s):	Shire of Perenjori
Localities (suburb/s):	Perenjori

1.2. Description of clearing activities

The Shire of Perenjori is proposing to undertake the clearing of three native trees within Morawa South Road reserve, Boundary Road reserve and Hill Road reserve, Perenjori. The proposed clearing will facilitate road upgrades for driver safety. The vegetation proposed to be cleared is distributed across three separate areas (see Figure 1, Section 1.5).

The application was revised during the assessment process, in response to the Departments request for further information correspondence. The changes included:

- reduction in the amount of clearing from 42 native trees to three native trees to avoid and minimise the clearing impacts (see Section 3.1 for further details).

1.3. Decision on application

Decision:	Granted
Decision date:	7 February 2025
Decision area:	Three (3) native trees, 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 B), relevant datasets (see Appendix F.1), the findings of a biological survey (Western Ecological, 2024), the clearing principles set out in Schedule 5 of the EP Act (see Appendix C), relevant planning instruments and any other matters considered

relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that the purpose of the clearing is to improve driver safety.

The assessment identified that the proposed clearing will result in:

- the loss of three native trees (approximately 0.03 hectares of native vegetation) that provide significant foraging habitat for Carnaby's cockatoo;
- the loss of native vegetation that is significant as a remnant of native vegetation in an area that has been extensively cleared,
- potential impacts to conservation significant fauna, if present during the clearing activities, and
- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined that some of the potential impacts of the proposed clearing, including the impacts to fauna present at the time of clearing and the potential spread of weeds and dieback, can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values through appropriate conditions on the clearing permit. However, impacts to native vegetation that is a significant remnant vegetation in an extensively cleared landscape, and significant foraging habitat for Carnaby's cockatoo remained significant even after the application of minimisation and mitigation measures, and constitutes a significant residual impact.

Having considered the environmental impacts outlined above, the applicant's implementation of the mitigation hierarchy and planning and other matters (including the consistency of the proposal with the planning framework and the public benefit of road safety), the Delegated Officer determined that the deliberate planting of a minimum of six (6) *Eucalyptus salmonophloia* trees within Boundary Road reserve (PIN 11474800), Perenjori, is sufficient to ensure a significant residual impact no longer exists to native vegetation that is a significant remnant vegetation in an extensively cleared landscape, and significant foraging habitat for Carnaby's cockatoo (see Section 3.2.1). DWER considers the rehabilitation planting aligns with the *WA Environmental Offsets Policy (2011)* and *WA Environmental Offsets Guideline (2014)*.

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,
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity, and
- undertake deliberate planting of a minimum of six (6) *Eucalyptus salmonophloia* trees within Boundary Road reserve (PIN 11474800), Perenjori, as a rehabilitation action to mitigate the loss of three (3) native trees that provide habitat value within an extensively cleared landscape.

1.5. Site maps

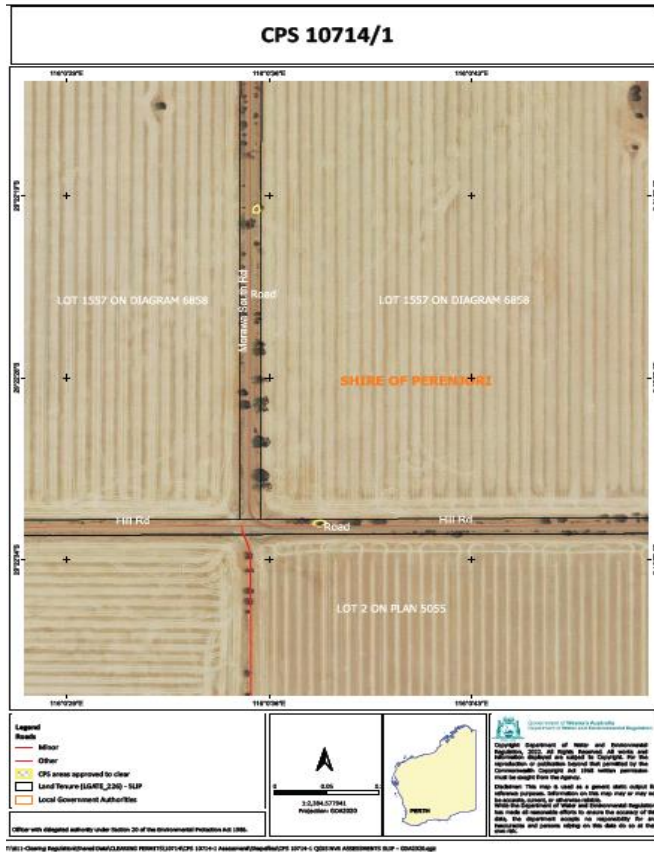


Figure 1 Map of the revised application area. The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit CPS 10714/1.

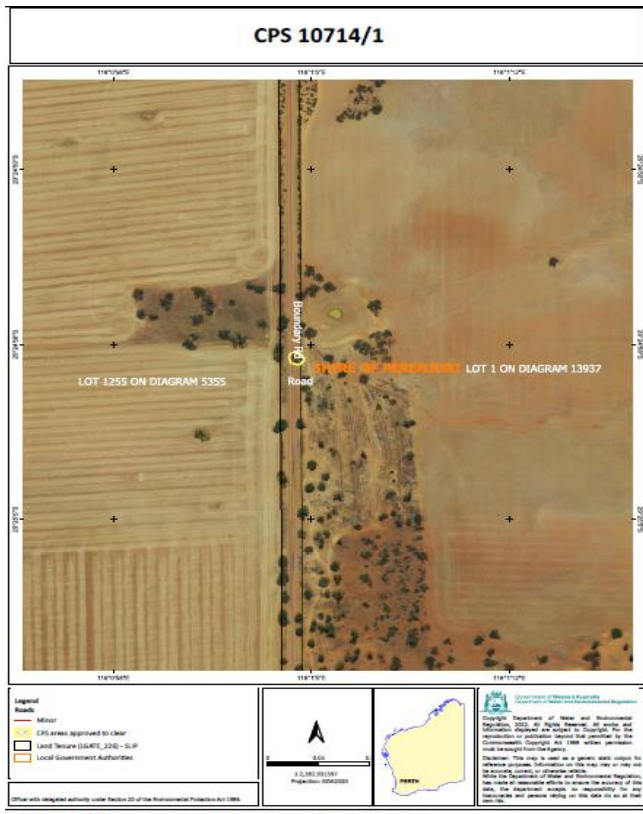


Figure 2 Map of the revised application area. The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit CPS 10714/1.

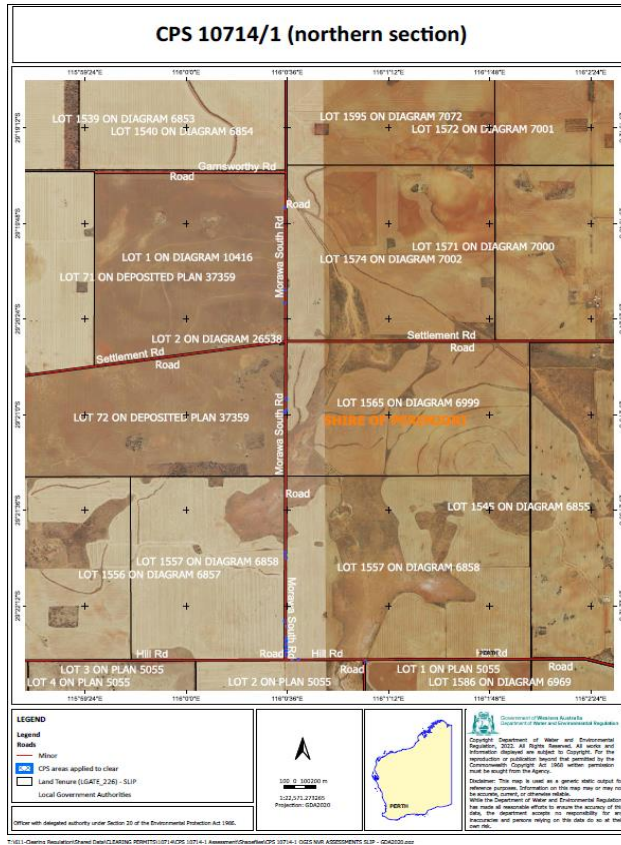


Figure 3 Map of the northern section of the original application area. The areas crosshatched blue indicate the original areas applied to be cleared.

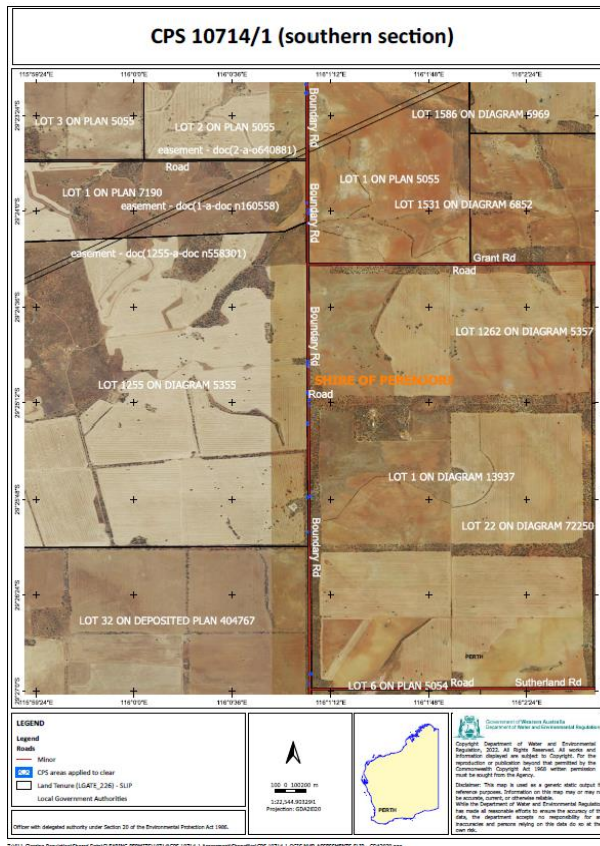


Figure 4 Map of the southern section of the original application area. The areas crosshatched blue indicate the original areas applied to be cleared.

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 polluter pays principle
- 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)

Relevant policies considered during the assessment include:

- *Environmental Offsets Policy* (2011)

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)
- Technical guidance – *Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)
- *Environmental Offsets Guidelines* (August 2014)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The proposed widening project is part of the Midwest Secondary Freight Route Network which involves increasing the existing seal widths on Boundary Road, Hill Road and Morawa South Road, from approximately seven metres to a consistent eight metres. The expansion is essential to meet modern freight transport requirements and improve safety standards while reducing road maintenance (Greenfield Technical Services, 2023).

On 21 November 2024 and 20 December 2024, DWER sent correspondence to the applicant which outlined the environmental impacts identified during the assessment of the proposed clearing and requested further implementation of the mitigation hierarchy to avoid and minimise these impacts. In response, the application area was revised from the proposed clearing of 42 native trees to three native trees (see Figures 3-4 of Section 1.5 above). The application also made a commitment to undertake an onsite rehabilitation action to mitigate the residual impacts of the proposed clearing, which included:

- A commitment to plant and maintain a minimum of six (6) *Eucalyptus salmonophloia* trees that provide foraging value to Carnaby's cockatoo within Boundary Road reserve (PIN 11474800), Perenjori, to mitigate the significant residual impact to Carnaby's cockatoo foraging habitat and native vegetation within an extensively cleared landscape.

Considering the above, the Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix B) 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 C) identified that the impacts of the proposed clearing present a risk to biological values (fauna) and significant remnant vegetation. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (fauna) - Clearing Principles (a) and (b)

Assessment

Noting the findings of the Carnaby's Cockatoo Habitat Assessment (Western Ecological, 2024), the site characteristics (Appendix B), and the habitat preferences of the conservation significant fauna species recorded in the local area (10-kilometre radius), the application area is considered to contain suitable habitat for *Zanda latirostris* (Carnaby's cockatoo).

Carnaby's cockatoos are known to nest in hollows of live and dead trees, including *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah), *Eucalyptus diversicolor* (karri), *Eucalyptus wandoo* (wandoo), *Eucalyptus gomphocephala* (tuart), *Eucalyptus rudis* (flooded gum), and other *Eucalyptus* spp. (DAWE, 2022). 'Breeding habitat' for Carnaby's cockatoos includes trees of these species that either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow, where suitable DBH for nest hollows is 500 millimetres for most tree species (DAWE, 2022). While breeding, Carnaby's cockatoos generally forage within a six-to-12-kilometre radius of their nesting site (DAWE, 2022). According to available datasets, there are two confirmed breeding sites with the closest being 950 metres west of the application area. Although *Eucalyptus salmonophloia* trees can provide breeding and roosting habitat for black cockatoos if of a suitable size, the salmon gum trees proposed to be cleared within the application area are below the DBH to develop hollows based on photographs provided by the applicant. Therefore, the vegetation proposed to be cleared is unlikely to provide any significant roosting or breeding value to Carnaby's cockatoo species at present.

Carnaby's cockatoos forage on a range of plant species, predominantly the seeds and flowers of marri, jarrah and proteaceous species (e.g., *Banksia* spp., *Hakea* spp. and *Grevillea* spp.) (DAWE, 2022). The application area contains *Eucalyptus* spp. and provides suitable foraging habitat for Carnaby's cockatoo.

The importance of foraging habitat for black cockatoos increases when it occurs within foraging distance of nesting sites (around 12 km) as it supports breeding effort (DPAW, 2013; EPA, 2019). Food resources within the range of roost sites are also important to sustain populations of black cockatoos (EPA, 2019). There are two confirmed nesting sites for Carnaby's cockatoo, within six kilometres of the application area, (the closest being 0.95 kilometres away). This indicates the foraging habitat present within the application area may support foraging by breeding and roosting birds.

Given the quality of the vegetation attributed to portions of the application area by the Carnaby's Cockatoo Habitat Assessment (Western Ecological, 2024), the proximity of the application area to known Carnaby's cockatoo breeding sites, and the cumulative loss of Carnaby's cockatoo foraging habitat in the Avon Wheatbelt region, the foraging habitat proposed for clearing is considered significant. Therefore, the proposed clearing constitutes a significant residual impact to Carnaby's cockatoo foraging habitat.

To reduce the significant residual impact arising from the loss of three native trees that provides foraging habitat for Carnaby's cockatoo, the applicant has proposed to plant and maintain a minimum of six (6) *Eucalyptus salmonophloia* trees within the road reserve to ensure the clearing will not result in a decline in foraging habitat in the extensively cleared local area. The suitability of the proposed planting as a mitigation measure has been assessed through a calculation consistent with the WA Environmental Offsets Metric Calculator to determine the planting ratio required. It was determined that the planting of minimum of six (6) *Eucalyptus salmonophloia* trees was a suitable rehabilitation action to ensure a significant residual impact does not remain following the proposed clearing. DWER considers the rehabilitation action aligns with the *WA Environmental Offsets Policy* (2011) and *WA Environmental Offsets Guideline* (2014).

Conclusion

Based on the above assessment, the proposed clearing will result in the loss of three native trees, that provide significant foraging habitat for Carnaby's cockatoo. However, this is not likely to impact on the conservation status of any species that have the potential to occur within the application area.

For the reasons set out above, it is considered that the impacts of the proposed clearing on fauna habitat can be managed through the avoidance, minimisation, mitigation and rehabilitation measures committed to by the applicant and does not constitute a significant residual impact after the implementation of management conditions as specified on the permit.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- Directional clearing, which requires slow, progressive, one directional clearing to allow terrestrial fauna to disperse ahead of the clearing activity should they occur on site at the time of clearing, and
- Undertake the planting of a minimum of six (6) *Eucalyptus salmonophloia* trees that provide foraging value to Carnaby's cockatoo within Boundary Road reserve (PIN 11474800), Perenjori.

3.2.2. Significant remnant vegetation - Clearing Principle (e)

Assessment

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The application area is located within the Avon Wheatbelt IBRA bioregion which retains approximately 18.51 per cent of its pre-European vegetation extent (Government of Western Australia, 2019). The application area is mapped within Beard vegetation association 352 which also has an extent lower than the 30 per cent threshold, both statewide and within the Avon Wheatbelt IBRA bioregion (see Appendix B.2). The vegetation extent in the local area also falls below the national targets, with approximately 15.11 per cent of pre-European vegetation extent remaining within a 10-kilometre radius of the application area. Given the above, the application area is considered to be a remnant within an extensively cleared landscape.

While it is acknowledged that the application area consists of roadside isolated *Eucalyptus spp.* in Completely Degraded to Degraded (Keighery, 1994) condition, the vegetation proposed to be cleared is likely to be significantly contributing to ecological functions and vegetation extent in the extensively cleared landscape, given the extent of historical clearing and cumulative impacts of vegetation loss in the Avon Wheatbelt IBRA bioregion.

The planting and maintenance of a minimum of six (6) *Eucalyptus salmonophloia* trees within the road reserve is also considered to reduce the significant residual impact arising from the loss of three native trees that are significant as a remnant within an extensively cleared landscape. It was determined that the planting of minimum of six (6) *Eucalyptus salmonophloia* trees was a suitable rehabilitation action to ensure a significant residual impact does not remain following the proposed clearing through, a calculation consistent with the WA Environmental Offsets Metric Calculator. DWER considers the rehabilitation action aligns with the *WA Environmental Offsets Policy* (2011) and *WA Environmental Offsets Guideline* (2014).

The application area along the Morawa South Road, Boundary Road and Hill Road has the potential to facilitate the spread of weeds and dieback into other significant remnant vegetation in the local area. A weed management condition is considered to minimise this risk, and it is not considered likely that the proposed clearing will have a significant impact of environmental values of any adjacent remnant vegetation patches.

Ecological Linkage

The application area may function as an ecological linkage for fauna to move between larger remnants of native vegetation within the local area. The ecological linkage values will not likely be severed by the proposed clearing, noting native vegetation will remain within the road reserve. Notwithstanding the above, given that native vegetation remains surrounding the application area, a weed and dieback management condition will be required to assist in mitigating impacts to surrounding vegetation and maintaining ecological linkage values.

Conclusion

Based on the above assessment, the proposed clearing will result in the loss of three native trees that are significant as a remnant in an area that has been extensively cleared. Impacts to the adjacent native vegetation and fauna that may be utilising the application area at the time of clearing can be managed through conditions imposed on the permit.

The mitigation measures provided by the applicant including the planting of native trees within the road reserve, is considered to minimise the potential impacts of the proposed clearing on remnant vegetation and ensure a significant residual impact does not remain following the rehabilitation action.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- Weed and dieback management measures will be required as a condition on the clearing permit to mitigate impacts to adjacent vegetation, and

- Undertake the planting of a minimum of six (6) *Eucalyptus salmonophloia* trees within Boundary Road reserve (PIN 11474800), Perenjori.

3.3. Relevant planning instruments and other matters

The application was advertised on DWER's website for 21 days on 16 November 2024 and no submissions were received.

The Shire advised DWER that local government approvals are not required, and that the proposed clearing is consistent with the Shire's Local Planning Scheme.

Several Aboriginal sites of significance have been mapped within the local 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. Additional information provided by applicant

Summary of comments	Consideration of comment
Additional information provided by the applicant in response to the Department's request for further information on the 21 November 2024.	Refer to Section 3.1
Additional information provided by the applicant in response to the Department's request for further information on the 20 December 2024.	Refer to Section 3.1, Appendix E
Additional shapefiles to reflect the required rehabilitation planting areas on the 9 January 2025	Refer to Section 3.1

Appendix B. Site characteristics

B.1. 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 C.

Characteristic	Details
Local context	<p>The area proposed to be cleared is three native trees located within roadside patches of native vegetation in the intensive land use zone of Western Australia. It is surrounded by agricultural land and occasional patches of intact remnant vegetation within an extensively cleared landscape.</p> <p>Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 15.11 per cent of the original native vegetation cover.</p>
Ecological linkage	The application area does not intersect any formally mapped ecological linkages. Although, given the extensively cleared local area, it is likely that the application area is contributing to the ecological function of roadside linkages.
Conservation areas	The nearest conservation area is Conservation Covenant 3413 which is located approximately 2.8 kilometres east of the application area.
Vegetation description	<p>Photographs supplied by the applicant and a Carnaby's Cockatoo Habitat Assessment (Western Ecological, 2024) indicate the vegetation within the proposed clearing area consists of <i>Eucalyptus salmonophloia</i> (salmon gum) and <i>Eucalyptus Sp.</i></p> <p>Representative photos are available in Appendix E.</p> <p>This is inconsistent with the mapped vegetation type:</p> <ul style="list-style-type: none"> Beard 352, which is described as Wattle, casuarina and tea tree <i>acacia-allocauarina-melaleuca</i> alliance (Shepherd et al, 2001) <p>The mapped vegetation type retains approximately 19.61 per cent of the original extent (Government of Western Australia, 2019).</p>
Vegetation condition	<p>Photographs supplied by the applicant indicate that the vegetation within the proposed clearing area is in a Degraded to Completely Degraded (Keighery, 1994) condition.</p> <p>The full Keighery (1994) condition rating scale is provided in Appendix D.</p> <p>Representative photos are available in Appendix E.</p>

Characteristic	Details
Climate and landform	The region experiences a Mediterranean climate with cool winters and hot summers with a mean annual rainfall of 320 millilitres. The topography of the application area ranges from 260- 310 metres Australian Height Datum (AHD).
Soil description	The soils within the application area are mapped as: <ul style="list-style-type: none"> Rockdale 2 Subsystem (271Rd_2) described as gently undulating rises with broad ridge crests and shallow open depressions; red, yellow and calcareous loamy earths with yellow deep sand.
Land degradation risk	The soils mapped within the application area are mapped as having a moderate to high risk of subsurface acidification (DPIRD, 2024).
Waterbodies and hydrogeography	The desktop assessment and aerial imagery indicated that no wetlands or waterbodies transect the application area. There are multiple waterbodies within the local area. The application area is mapped within the Gascoyne Groundwater Area proclaimed under the RIWI Act. Groundwater salinity within the application area is mapped at 7000-14000 milligrams per total dissolved solids .
Flora	The desktop assessment identified that a total of 20 conservation significant flora species have been recorded within the local area, comprising of two threatened flora species and 18 priority flora species (Western Australian Herbarium, 1998-). None of these existing records occur within the application area, with the closest record being an occurrence of <i>Verticordia chrysostachys var. pallida</i> approximately 0.47 kilometres from the application area. With consideration for the relevant datasets (see Appendix G.1), the site characteristics, the habitat preferences and conservation statuses of the aforementioned species, and the distribution and extent of existing records, the application area is unlikely to provide habitat for conservation significant flora species.
Ecological communities	The desktop assessment identified that there are no conservation significant ecological communities within the application area. The closest mapped ecological community is the Eucalypt Woodlands of the Western Australian Wheatbelt which is listed as a Priority 3 Priority Ecological Community (PEC) by the Department of Biodiversity, Conservation and Attractions in Western Australia, which is located 147 metres west of the application area. With consideration for the site characteristics and relevant datasets (see Appendix G.1), the application area is not considered likely to contain vegetation representative of a Threatened Ecological Community (TEC) or PEC.
Fauna	The desktop assessment identified that a total of four conservation significant fauna species have been recorded within the local area including three threatened species and one migratory species. None of these existing records occur within the application area, with the closest being an occurrence of <i>Zanda latirostris</i> approximately 0.95 kilometres west of the application area (DBCA, 2007-). With consideration for the site characteristics set out above, relevant datasets (see Appendix G.1), Carnaby's Cockatoo Habitat Assessment (Western Ecological, 2024), and the habitat preferences of the aforementioned species, the application area is likely to provide significant habitat for one conservation significant fauna species and impacts to this species required further consideration (see Section 3.2.1).

B.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*					
Avon Wheatbelt	9517109.95	1761187.42	18.51	174980.68	1.84
Vegetation complex					
Beard vegetation association 352*	724268.73	142012.22	19.61	12672.52	1.75
Vegetation complex within IBRA bioregion*					
Beard vegetation association 352 (Avon Wheatbelt)*	630577.61	108887.52	17.27	10191.45	1.62
Local area					
10km radius	59050.97	8926.38	15.11	-	-

*Government of Western Australia (2019)

B.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Zanda latirostris</i> (Carnaby's cockatoo)	EN	Y	Y	0.95	24	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

Appendix C. 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> The area proposed to be cleared contains habitat for Carnaby’s cockatoo.</p> <p>Noting the proposed clearing is restricted to trees over weeds, no conservation significant flora or vegetation communities will likely occur within the application area.</p>	May be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<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> The area proposed to be cleared contains significant foraging habitat for Carnaby’s cockatoo.</p>	At variance	Yes <i>Refer to Section 3.2.1, above.</i>
<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> The area proposed to be cleared is unlikely to contain flora species listed under the BC Act.</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> The area proposed to be cleared does not contain species that can indicate a TEC.</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> The extent of native vegetation in the local area is inconsistent 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>	At variance	Yes <i>Refer to Section 3.2.2, above.</i>
<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> Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.</p>	Not at variance	No
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> Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality.</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (g):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."</p> <p><u>Assessment:</u> The mapped soils are highly susceptible to subsurface acidification. Noting the extent and location of the application area and the condition of the vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation.</p>	Not likely to be at variance	No
<p><u>Principle (i):</u> "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."</p> <p><u>Assessment:</u> Given no water courses or wetlands 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> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."</p> <p><u>Assessment:</u> The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding.</p> <p>Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to contribute to waterlogging.</p>	Not at variance	No

Appendix D. 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.

Condition	Description
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 E. Photographs of the vegetation (Greenfield Technical Services, 2024)



Figure 5. Eucalyptus tree proposed to be cleared along Boundary Road (Greenfield Technical Services, 2024)

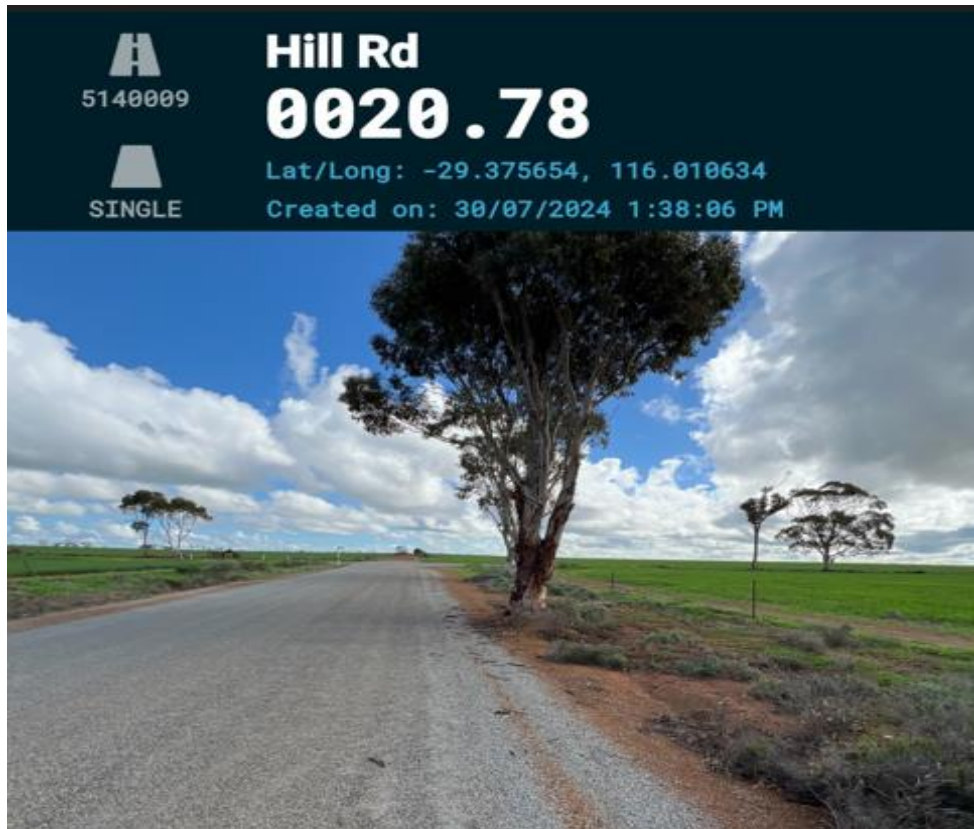


Figure 6. Eucalyptus tree proposed to be cleared along Hill Road (Greenfield Technical Services, 2024)



Figure 7. Eucalyptus tree proposed to be cleared along Morawa South Road (Greenfield Technical Services, 2024)

Appendix F. Sources of information

F.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)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- 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
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register – Offsets (DWER-078)
- 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)

F.2. References

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