GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 10600/2
Permit Holder:	Shire of Serpentine Jarrahdale
Duration of Permit:	From 18 October 2024 to 31 December 2033

ADVICE NOTE

Monetary contribution to the Offsets Fund

The monetary contribution to the Offsets Fund referred to in condition 7 of this permit is intended to contribute towards the purchase and conservation, in perpetuity, of *native vegetation* that provides significant foraging habitat for forest red-tailed black cockatoo *(Calyptorhynchus banksii naso*) and native vegetation that is representative of significant remnant vegetation in an extensively cleared area.

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 road upgrades

2. Land on which clearing is to be done

Abernethy Road reserve (PIN 11614507 and PIN 11756240), Oakford

Bishop Road reserve (PIN 11610737), Cardup, Mundijong

Elwood Loop road reserve (PIN 12016446), Oakford

Gossage Road reserve (PIN 11610399, PIN 11610405 and PIN 11698924), Cardup, Oldbury

Kargotich Road reserve (PIN 11610400, PIN 11610404, PIN 11610735, PIN 11614455, PIN 11614453, PIN 11614454 and PIN 11753959), Cardup, Oldbury

Kargotich Road reserve (PIN 117556996 and PIN 12079976), Oakford

Lucca Lane road reserve (PIN 12080038), Oakford

Mckenna Drive road reserve (PIN 1353571), Cardup

Orton Road reserve (PIN 11753954, PIN 11753955 and PIN 1282238), Oldbury, Oakford and Cardup

Lot 208 on Deposited Plan 202681, Oakford

Lot 218 on Deposited Plan 202681, Oakford

Lot 503 on Deposited Plan 426630, Oakford

Lot 505 on Deposited Plan 426631, Oakford

Lot 9501 on Deposited Plan 428712, Oakford

3. Clearing authorised

The permit holder must not clear more than 3.31 hectares of *native vegetation* within the combined areas cross-hatched yellow in Figures 1, Figure 2 and Figure 3 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.

6. Fauna management- directional clearing

The permit holder must:

(a) conduct clearing activities in a slow, progressive manner towards adjacent *native vegetation*; and

(b) allow reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the clearing activity.

7. Offset- monetary contributions to the Offsets Fund

Prior to undertaking any clearing authorised under this permit, and no later than 18 October 2026, the permit holder must provide documentary evidence to the *CEO* that funding of $399,614.70 has been transferred to the Department of Water and Environmental Regulation for the purpose of acquisition, establishing or maintaining *native vegetation* as an environmental offset for the *clearing* activities authorised under this permit

PART III - RECORD KEEPING AND REPORTING

8. 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	(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 2020 (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); and (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.

9. Reporting

The permit holder must provide to the *CEO* the records required under condition 8 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 *Environmental Protection Act 1986*.
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.
fill	means material used to increase the ground level, or to fill a depression.
dieback	means the effect of *Phytophthora* species on native vegetation.
department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.

Term	Definition
EP Act	*Environmental Protection Act 1986* (WA)
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.
weeds	means any plant – (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; 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

Jessica Burton
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
Of the Environmental Protection Act 1986

22 October 2026

Schedule 1

The boundary of the area authorised to be cleared is shown in the maps below (Figure 1, Figure 2 and Figure 3).

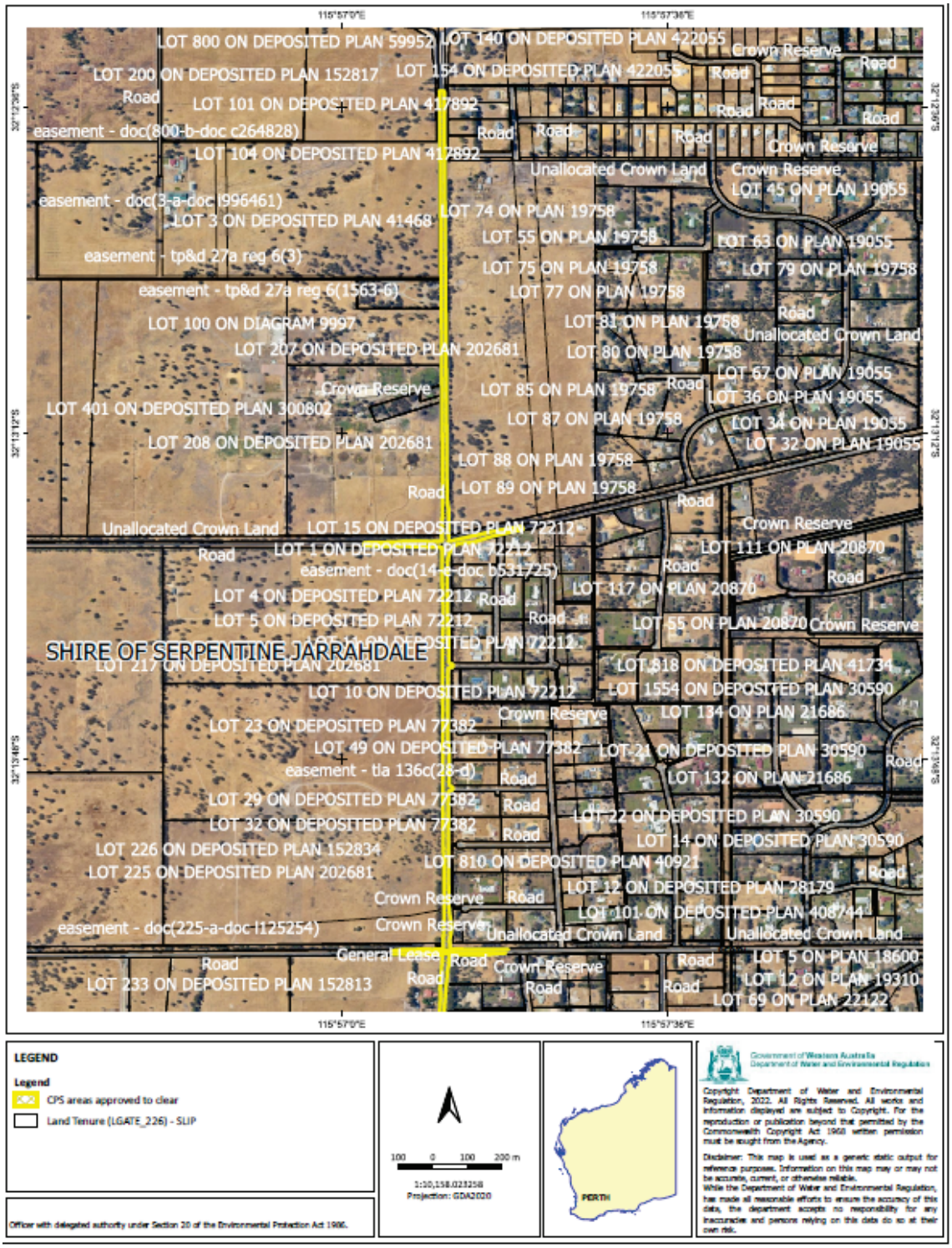


Figure 1: Map of the boundary of the area within which clearing may occur

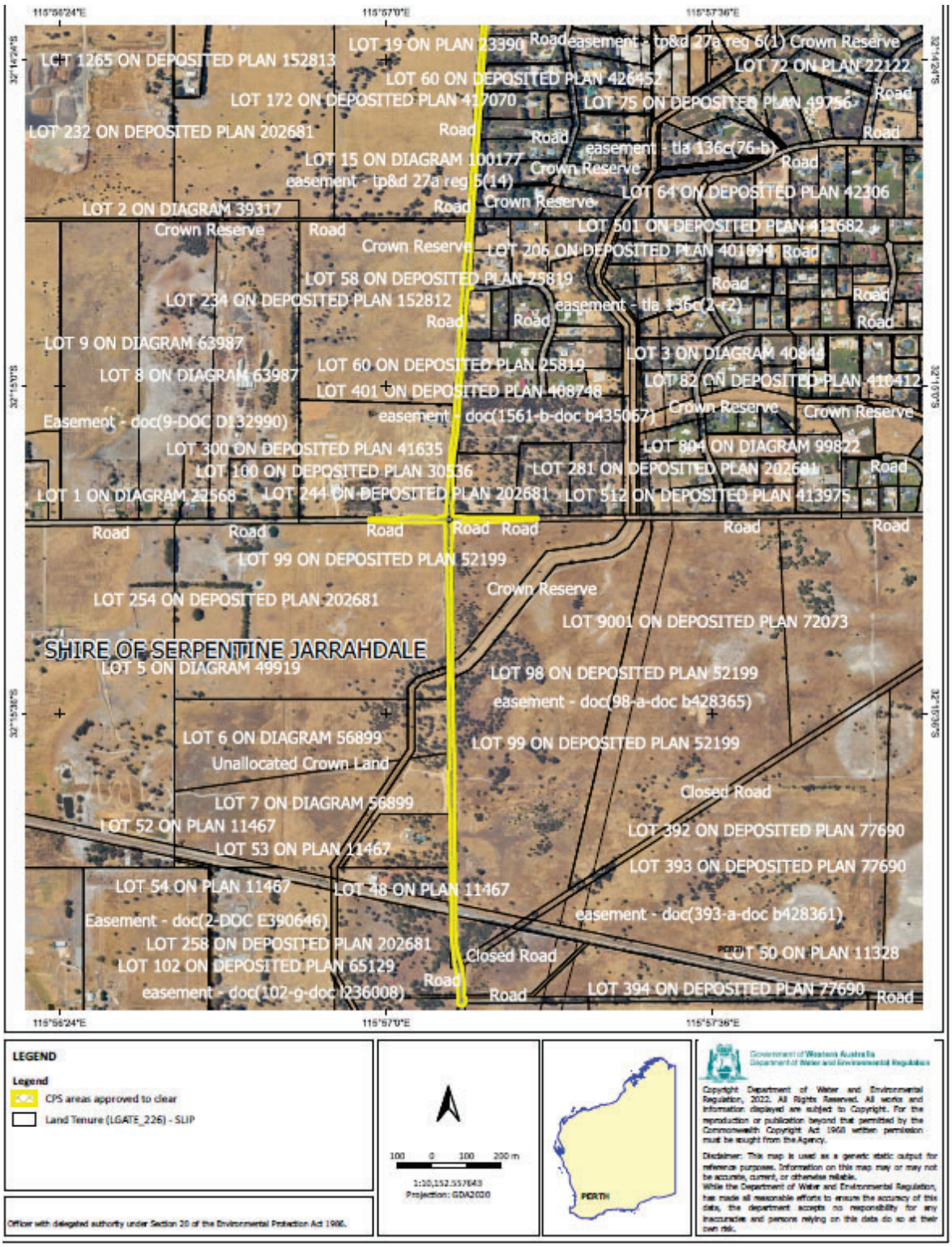


Figure 2: Map of the boundary of the area within which clearing may occur

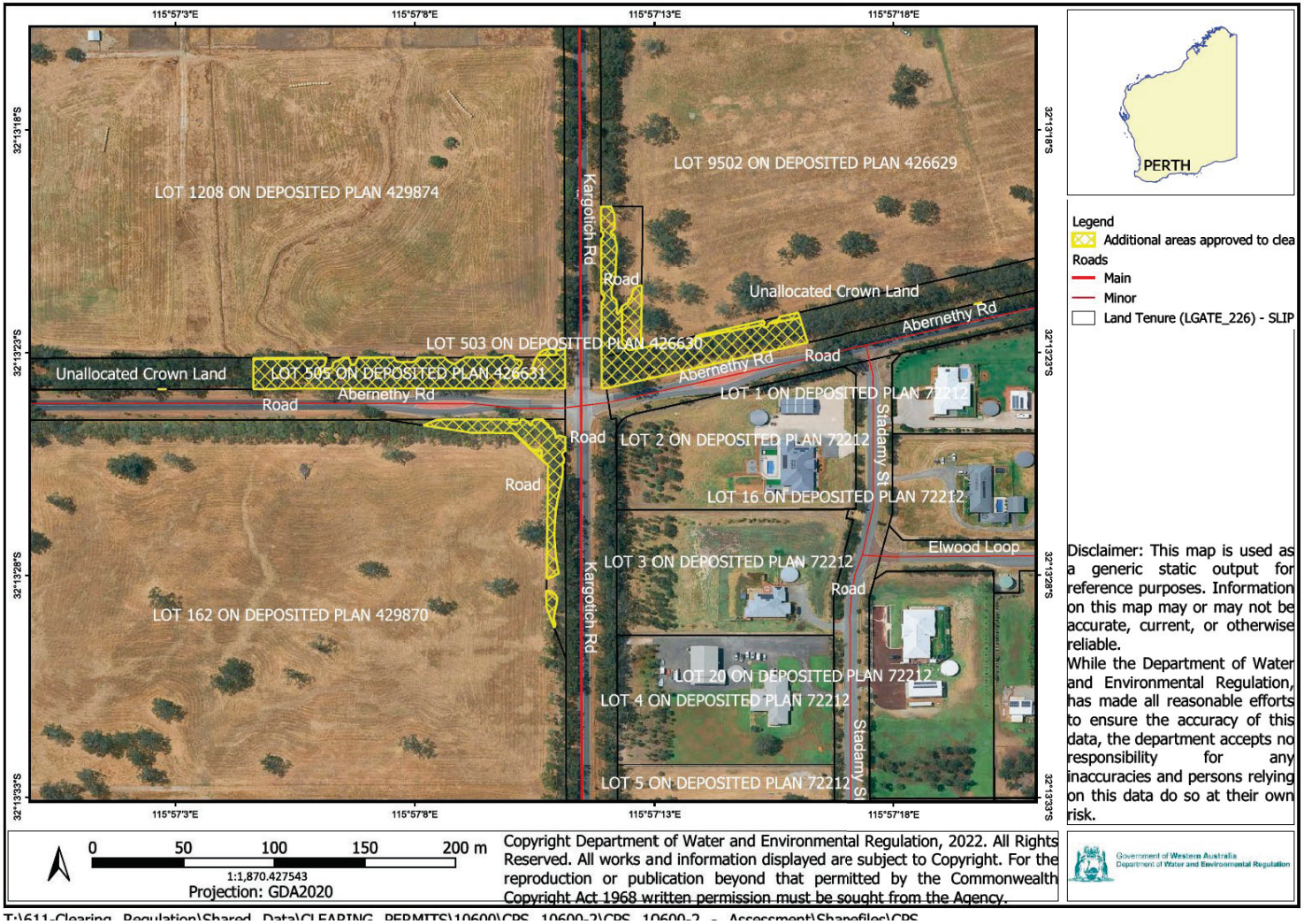


Figure 3. Map of the boundary of the area in which clearing may occur

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10600/2
Permit type:	Purpose permit
Applicant name:	Shire of Serpentine- Jarrahdale
Application received:	9 September 2025
Application area:	3.31 hectares of native vegetation
Purpose of clearing:	Road upgrades
Method of clearing:	Mechanical
Property:	Abernethy Road reserve (PIN 11614507 and PIN 11756240) Bishop Road reserve (PIN 11610737) Elwood Road reserve (PIN 12016446) Gossage Road reserve (PIN 11610399, PIN 11610405 and PIN 11698924) Kargotich Road reserve (PIN 11610400, PIN 11610404, PIN 11610735, PIN 11614455, PIN 11614453, PIN 11614454, PIN 11753959, PIN 11756996 and PIN 12079976) Lucca Lane Road reserve (PIN 12080038) Mckenna Drive Road reserve (PIN 1353571) Orton Road reserve (PIN 11753954, PIN 11753955 and PIN 1282238) Lot 208 on Deposited Plan 202681 Lot 218 on Deposited Plan 202681 Lot 503 on Deposited Plan 426630 Lot 505 on Deposited Plan 426631 Lot 9501 on Deposited Plan 428712
Location (LGA area/s):	Shire of Serpentine- Jarrahdale
Localities (suburb/s):	Oakford, Cardup, Mundijong and Oldbury

1.2. Description of clearing activities

This amendment is to extend the permit duration and to increase the approved clearing area footprint by 0.82 hectares to facilitate the Abernethy Road intersection upgrades (Coterra, 2025) (see Figure 1, Section 1.5). CPS 10600/1 allowed for the Kargotich Road upgrades to increase driver safety due to the increased traffic and safety concerns to support current and future use of the road (Coterra, 2023).

The Shire advised that, as a result of additional avoidance and minimisation measures, a total of 0.96 hectares of native vegetation has been cleared since the commencement of CPS 10600/1 in September 2024, despite 3.31 hectares being authorised for clearing. No further clearing for the Kargotich road upgrades is proposed. The Shire subsequently requested that the revised clearing footprint be incorporated within the area already approved under the permit.

1.3. Decision on application

Decision:	Granted
Decision date:	22 October 2026
Decision area:	3.31 hectares of native vegetation, as depicted in Section 1.5, below.

1.4. Reasons for decision

On the 24 September 2024, the Department of Water and Environmental Regulation (DWER) determined to grant the Shire of Serpentine-Jarrahdale's (the Shire) Clearing Permit CPS 10600/1 for the clearing of 3.31 hectares of native vegetation within multiple road reserves within Oakford, Cardup, Mundijong and Oldbury, for the purpose of road upgrades.

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

In making this decision, the Delegated Officer had regard for:

- avoidance, minimisation and mitigation actions implemented by the applicant,
- the site characteristics (see Appendix B),
- the findings of biological surveys (see Appendix E),
- 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), and
- the necessity of clearing being the proposed works form part of a state government funded project to improve road safety and allow for current and future traffic volumes along this section of Abernethy Road and Kargotich Road.

The assessment of the additional clearing area identified that the proposed clearing will result in:

- the loss of approximately 0.82 hectares of native vegetation that is significant foraging habitat for forest red-tailed black cockatoo (FRTBC),
- the loss of approximately 0.82 hectares of native vegetation that is a significant remnant in an extensively cleared landscape, and
- the potential introduction and spread of weeds and dieback 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 avoidance, minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined that the potential impacts of the proposed clearing, including fauna strike 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.

The Delegated Officer determined the existing management measures and conditions imposed under CPS 10600/1 remain appropriate to manage the environmental impacts associated with the amended clearing. The Delegated Officer decided to grant an amended clearing permit.

1.5. Site maps



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

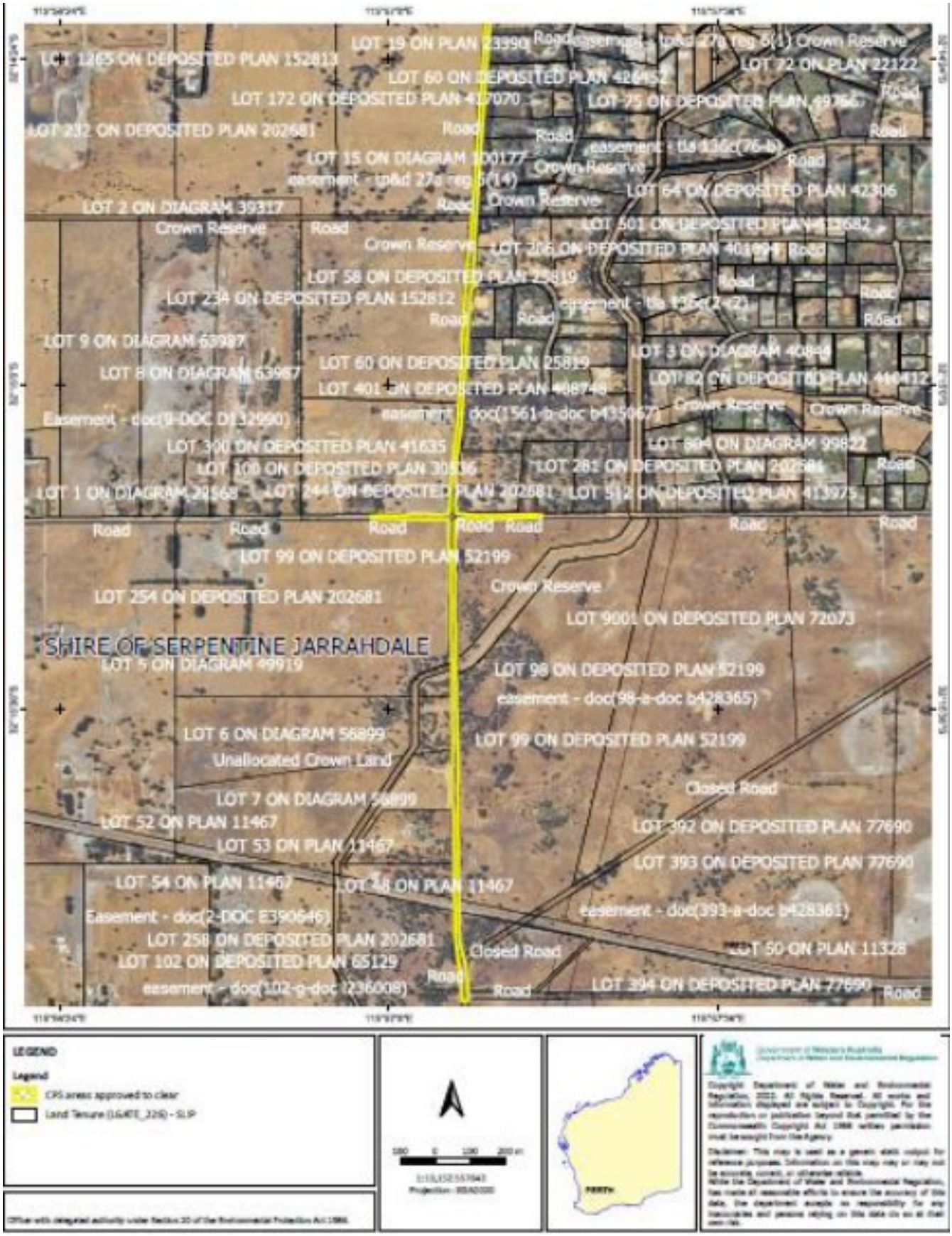


Figure 2. Map of the application area. The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

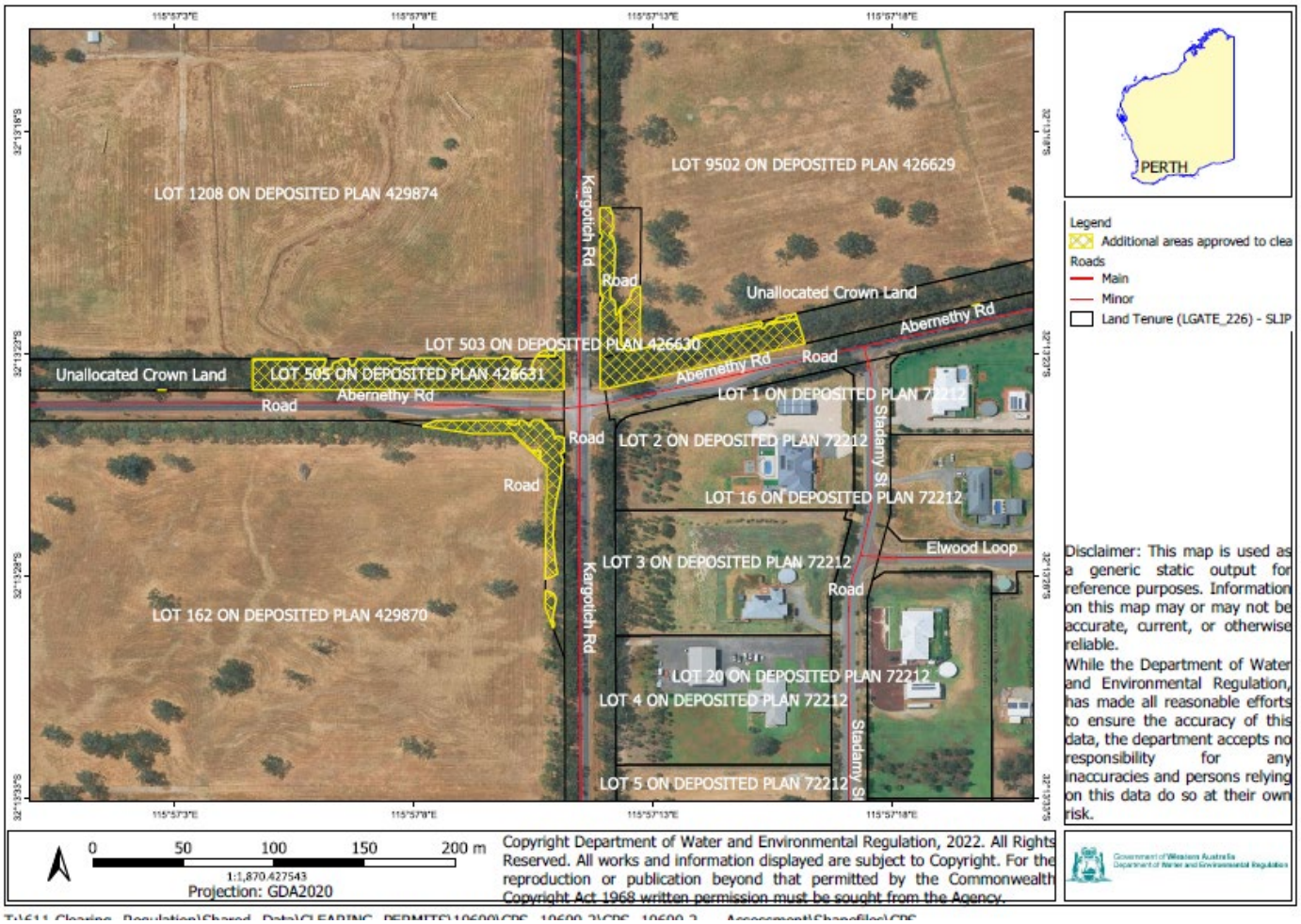


Figure 3. Map of the additional application area. The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

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 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)
- *Environmental Offsets Guidelines* (August 2014)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)

- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2016)

3 Detailed assessment of application

3.1. Avoidance, minimisation and mitigation measures

The applicant advised the following additional avoidance, minimisation and mitigation measures since the assessment of Clearing Permit CPS 10600/1 (Coterra, 2025):

- The proposed roundabout and upgrades to Kargotich Road more broadly have been proposed as a means of addressing the substantial recent and future urban development and increased road use in the Byford and Mundijong areas. Kargotich Road is an important access route that links newly developed residential areas and existing infrastructure within the Perth Metropolitan Region, and serves as a major connectivity link with the West Mundijong Industrial Area. The north-south link of Kargotich Road provides access to Rowley Road in the north, Thomas Road mid-way and Mundijong Road in the south, while Abernethy Road serves as an east-west connection between Byford and Mundijong and the Kwinana Freeway, which in turn provides access to the Perth CBD and significant industrial areas such as Kwinana,
- Works will be undertaken in warmer and drier months between 2025 and 2026 to minimise the unnecessary topsoil disturbances and water runoff into adjacent retained vegetation,
- Ensure knowledge of the environmental values within and adjacent to the proposed clearing area, and the importance of minimising construction related impacts,
- Adequately implement measures to protect the environment, including the use of dust minimisation strategies,
- Comply with local, state and federal environmental legislation.

The Shire has advised that, through the implementation of additional avoidance and minimisation measures, a total of 0.96 hectares of native vegetation has been cleared under Clearing Permit CPS 10600/1. The proposed amendment under CPS 10600/2 would incorporate an additional 0.82 hectares of native vegetation, resulting in a total clearing extent of 1.78 hectares for the road upgrade works.

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.

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.

A review of current environmental information (Appendix B) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 10600/1. The proposed additional clearing area footprint is not expected to result in significant impacts beyond those previously assessed. This assessment is focussed on the 0.82 hectares of additional area that is included in the amendment application.

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

Assessment

Noting the findings of the Black Cockatoo Assessment (Bamford, 2023) and Site Assessment (Coterra, 2025), the site characteristics (Appendix B), and the habitat preferences of the significant fauna species recorded within the local area (10 kilometre radius of the application area), the proposed additional clearing area is considered to contain suitable foraging habitat for FRTBC.

Critical habitat for FRTBC is defined as all marri, karri and jarrah forests, woodlands and remnants in the south west of Western Australia receiving more than 600 millimetres of annual average rainfall (DEC, 2008). The application area has a mean annual rainfall of approximately 880-890 millimetres (BoM, 2024). While the proposed additional clearing area is not a remnant of marri, karri, or jarrah forest, it contains 0.82 hectares of primary foraging habitat for this species in the form closed dense stands of sheoak (*Allocasuarina fraseriana*) in a Degraded (Keighery, 1994) condition (Coterra, 2025). Photographs of the additional area is available under Appendix E.

Evidence of FRTBC foraging in the form of chewed sheoak nuts was identified within the application area, as well as a flock of approximately six individuals foraging in trees within 200 metres of the application area (Bamford, 2023). The Black Cockatoo Assessment noted that the quality of the foraging habitat to FRTBC was moderate, which considered the vegetation composition, condition and structure, the context of the site, and species density (with consideration of foraging evidence) (Bamford, 2023).

The vegetation within the amendment clearing area comprises of approximately 0.82 hectares of sheoak (*Allocasuarina fraseriana*) stands in a Degraded (Keighery, 1994) condition.

Noting the above, the vegetation within the amended application area is considered to represent significant foraging habitat for FRTBC. This is also noting that the application area occurs within 12 kilometres of two potential FRTBC breeding sites, and multiple roost sites, and the foraging habitat present may support roosting birds and breeding effort.

Conclusion
Based on the above assessment, the increase in the proposed additional clearing will result in the loss of 0.82 hectares of significant foraging habitat for FRTBC.

The Shire has implemented further avoidance and minimisation measures, resulting in the additional clearing being incorporated into the original clearing extent authorised under the clearing permit CPS 10600/1. As such, it is not considered to constitute an additional significant residual impact (SRI).

The assessment of impacts to fauna undertaken for CPS 10600/1 therefore remains applicable to CPS 10600/2.

Conditions
No additional fauna management conditions are required. The existing conditions on clearing permit CPS 10600/1 are considered adequate to manage potential impacts to fauna associated with the additional clearing footprint.

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).

Noting that the current vegetation extent for the mapped vegetation complex, the Beermullah Complex, falls below the 30 per cent threshold (see Appendix B.2), the application area represents native vegetation significant as a remnant within an extensively cleared landscape.

However, the Environmental Protection Authority (EPA) recognises the Perth Metropolitan Region as a constrained area, within which a minimum 10 per cent representation threshold for ecological communities is recommended (EPA, 2008). The current vegetation extent for the Swan Coastal Plain IBRA Bioregion and the local area are both above the 10 per cent threshold for constrained areas (see Appendix B.2). However, the current vegetation extent for the Beermullah Complex is below this threshold (with 6.83 per cent pre-European extent remaining) (see Appendix B.2).

Noting that the proposed additional clearing area includes vegetation that comprises significant foraging habitat for FRTBC, it is considered to be a significant remnant within an extensively cleared area.

Conclusion
Based on the above assessment, the increase in the proposed additional clearing footprint will result in the loss of 0.82 hectares of native vegetation, which is considered significant as a remnant in an area that has been extensively cleared. However, the Shire has implemented further avoidance and minimisation measures, resulting in the additional clearing being incorporated into the original clearing permit CPS 10600/1. As such, it is not considered to constitute a SRI.

The assessment of impacts to significant remnant vegetation undertaken for CPS 10600/1 therefore remains applicable to CPS 10600/2.

Conditions

No additional management conditions are required. The existing conditions on clearing permit CPS 10600/1 are considered adequate to manage potential impacts to remnant vegetation associated with the additional clearing footprint.

3.3. Relevant planning instruments and other matters

The assessment against planning instruments and other matters remain unchanged and can be found in the Clearing Permit Decision Report CPS 10600/1 (DWER, 2024).

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

4 Suitability of offsets

The significant residual impacts associated with the clearing authorised under CPS 10600/1 and the suitability of the environmental offsets required to counterbalance these impacts were assessed in the Clearing Permit Decision Report for CPS 10600/1 (DWER, 2024).

Under CPS 10600/1, a monetary offset of 21.73 hectares was conditioned on the clearing permit to offset the SRI's to 2.88 hectares of FRTBC foraging habitat and 3.31 hectares of extensively cleared Beermullah Vegetation Complex.

Proposal
The Shire is proposing to clear within an additional area that contains 0.82 hectares of native vegetation within multiple road reserves and Lots within Oakford, Cardup, Mundijong and Oldbury.

The vegetation proposed to be cleared consists of 0.82 hectares of sheoak (*Allocasuarina fraseriana*) stands in a Degraded (Keighery, 1994) condition.

The additional 0.82 hectare area added to the footprint of the clearing proposed under this amendment is not considered to materially alter the significant residual impacts identified under CPS 10600/1. Accordingly, the existing environmental offset requirements conditioned on CPS 10600/1 remain applicable and no additional environmental offsets are required as a result of this amendment

Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
Additional information provided by the applicant in response to a request for further information on the 16 January 2026.	See Section 4.
On 31 July 2026, the Shire provided updated shapefiles of the reduced additional application area	See Section 1.5.
On 10 September 2026, the Shire requested that the additional clearing area offset be incorporated through the offset that has been conditioned and approved under CPS 10600/1.	See Section 3.1

Appendix B. Site characteristics

B.1. Site characteristics

The information provided below describes the key characteristics of the application area 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	The application area comprises of 3.31 hectares of roadside remnant native vegetation in the intensive land use zone of Western Australia. It is surrounded by agricultural land, occasional patches of remnant vegetation and residential dwellings within an extensively cleared landscape. The local area (10-kilometre radius from the centre of the application area) retains approximately 39.4 per cent of the original native vegetation cover. This has changed since the assessment of CPS 10600/1 due to a new updated dataset to calculate remnant vegetation within the Swan Coastal Plain.

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td>Ecological linkage</td><td>The application area intersects Perth Regional Linkages 67, 68.</td></tr>
<tr><td>Conservation areas</td><td>The nearest conservation area is Jandakot Regional Park which is located approximately 208 metres west of the application area.</td></tr>
<tr><td>Vegetation description</td><td>One Vegetation and Substrate Association (VSA) was recorded within the proposed additional clearing area during a Site Assessment (Coterra, 2025):
VSA 1: Sheoak Stands: Closed dense stands of sheoak (Allocasuarina fraseriana) with no midstory and understorey consisting of invasive grasses and weeds.
The broadscale vegetation complex mapped over the application area is:
Beermullah Complex: Mixture of low open forest of Casuarina obesa (Swamp Sheoak) and open woodland of Corymbia calophylla (Marri) - Eucalyptus wandoo (Wandoo) - Eucalyptus marginata (Jarrah). Minor components include closed scrub of Melaleuca species and occurrence of Actinostrobus pyramidalis (Swamp Cypress). (Heddle et al, 1980).
The mapped vegetation type retains approximately 6.83 per cent of the original extent (Government of Western Australia, 2019).</td></tr>
<tr><td>Vegetation condition</td><td>A Site Assessment (Coterra, 2025) of the proposed additional clearing area indicates the vegetation is in Degraded (Keighery, 1994) condition.

The full Keighery (1994) condition rating scale is provided in Appendix D.

Representative photos are available in Appendix E.</td></tr>
<tr><td>Climate and landform</td><td>The region experiences a Mediterranean climate with cool winters and hot summers with a mean annual rainfall of 850-900 mm.</td></tr>
<tr><td>Soil description</td><td>The soil within the application area is mapped as the following subsystems (DPIRD, 2024):
<table>
<tr><th>Subsystem</th><th>Description</th></tr>
<tr><td>212Bs_B4</td><td>Closed depressions and poorly defined stream channels with moderately deep, poorly to very poorly drained bleached sands with an iron-organic pan, or clay subsoil. Surfaces are dark grey sand or sandy loam.</td></tr>
<tr><td>213Pj_B1</td><td>Extremely low to very low relief dunes, undulating sandplain and discrete sand rises with deep bleached grey sands sometimes with a pale-yellow B horizon or a weak iron-organic hardpan at depths generally greater than 2 m; banksia dominant.</td></tr>
<tr><td>213Pj_P1d</td><td>Flat to very gently undulating plain with deep acidic mottled yellow duplex (or ‘effective duplex’) soils. Shallow pale sand to sandy loam over clay; imperfect to poorly drained and moderately susceptible to salinity.</td></tr>
<tr><td>213Pj_P2a</td><td>Flat to very gently undulating plain, poorly drained. Deep alkaline mottled yellow duplex soils which generally consist of shallow pale sand to sandy loam with a</td></tr>
</table></td></tr>
</table>

Characteristic	Details	
		silcrete hardpan at 50-100 cm depth generally.
	213Pj_P5	Poorly drained flats, commonly with gilgai microrelief and with deep black grey to olive-brown cracking clays with subsoils becoming alkaline.
	213Pj_P7	Seasonally inundated swamps and depressions with very poorly drained variable acidic mottled yellow and grey sandy duplex and effective duplex soils.
	213Pj_P8	Broad poorly drained flats and poorly defined stream channels with moderately deep to deep sands over mottled clays; acidic or less commonly alkaline grey and yellow duplex soils to uniform bleached or pale brown sands over clay.
	213Pj_P11	Shallow brown loamy soils or less commonly, very shallow sands over ironstone pavement which is a clear barrier to drainage.
Land degradation risk	The soils within the application area are mapped as having a high risk of phosphorus export and subsurface acidification (DPIRD, 2024).	
Waterbodies and hydrogeography	The application area lies within two MUW's, these being the Armadale Paluspain (UFI 15797) and an unnamed Palusplain (UFI 16021). The application area also intersects one artificial drain, being the Cardup Brook Drain and multiple other minor drains to serve to remove water for local agricultural land. The application area is located within the Serpentine Groundwater Area which is proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act). Groundwater salinity within the application area is mapped at 500 – 1000 milligrams per litre total dissolved solids.	
Flora	The desktop assessment identified that a total of 59 conservation significant flora species have been recorded within the local area, comprising of 15 threatened flora species, 43 priority flora species and one extinct flora species (Western Australian Herbarium, 1998-). None of these existing records occur within the application area, with the closest record being an occurrence of *Babingtonia urbana* approximately 60 metres from the application area. With consideration for the habitat preferences and conservation statuses of the aforementioned species, the distribution and extent of existing records, and biological survey information (Coterra, 2023; 2025), the application area is unlikely to provide significant habitat for threatened or priority flora species.	
Ecological communities	The desktop assessment identified that there are no conservation significant ecological communities within the application area. The closest mapped Threatened Ecological Community (TEC) is the *Corymbia calophylla Kingia australis* woodlands on heavy soils (floristic community type 3a as originally described in Gibson et al. 1994) which is located 0.8 kilometres east of the application area. No TEC's or PEC's have been recorded within the application area (Coterra, 2023; 2025).	
Fauna	The desktop assessment identified that a total of 45 conservation significant fauna species have been recorded within the local area including 14 threatened species, 14 priority species, 16 migratory species and one other specially protected fauna species.	

Characteristic	Details
	None of these existing records occur within the application area, with the closest being an occurrence of *Isoodon fusciventer* approximately 0.1 kilometres from the application area. FRTBC was identified foraging within the application area. With consideration for the site characteristics set out above, the habitat preferences of the aforementioned species, and biological survey information (Coterra, 2023; 2025), the additional application area is likely to provide significant habitat for conservation significant fauna species and impacts to this fauna species required further consideration (see Section 3.2.2).

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*					
Swan Coastal Plain	1500622.48	576562.37	38.42	231916.26	15.45
Vegetation complex					
Beermullah complex*	6707.27	457.97	6.83	135.11	2.01
Local area					
10km radius	44903.19	17692.10	39.4	-	-

*Government of Western Australia (2024)

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 (m)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Calyptorhynchus banksii naso (forest red-tailed black cockatoo)	VU	Y	Y	181	221	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		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The application area is in a Degraded to Completely Degraded (Keighery, 1994) condition, and is unlikely to contain conservation listed flora or ecological communities, however, it contains significant foraging habitat for FRTBC.	May be at variance *(as per CPS 10600/1)*	Yes *Refer to Section 3.2.1, above.*
Principle (b): *"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."* Assessment: The application area contains significant foraging habitat for FRTBC.	At variance *(as per CPS 10600/1)*	Yes *Refer to Section 3.2.1, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The application area is unlikely to contain habitat for threatened flora species, noting the Degraded to Completely Degraded (Keighery, 1994) condition of the application area with a weed dominated understorey (Coterra, 2023; 2025).	Not likely to be at variance *(as per CPS 10600/1)*	No
Principle (d): *"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."* Assessment: The application area does not comprise of vegetation types that are representative of any known TEC's (Coterra, 2023; 2025).	Not likely to be at variance *(as per CPS 10600/1)*	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: The extent of the mapped vegetation type is inconsistent with the national objectives and targets for biodiversity conservation in Australia.	At variance *(as per CPS 10600/1)*	Yes *Refer to Section 3.2.2, above.*
Principle (h): *"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."* Assessment: 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.	Not likely to be at variance *(as per CPS 10600/1)*	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: Given that two multiple use wetlands are mapped within the application area, and riparian vegetation types were recorded within the application area (VSA's 2 and 3) the proposed clearing will impact on vegetation growing in association with a wetland. The portions of these much larger mapped wetland occurrences that intersect the application area are highly modified, and the proposed clearing of vegetation in a Degraded to Completely Degraded (Keighery, 1994) condition,	Not likely to be at variance *(as per CPS 10600/1)*	No

Assessment against the clearing principles	Variance level	Is further consideration required?
is not expected to have a significant impact on the broader riparian habitat that occurs within these mapped wetlands.		
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soils within the application area are highly susceptible to subsurface acidification and phosphorus export. Noting the extent of proposed clearing, location of the application area, and the condition of the vegetation, the proposed clearing is not likely to result in appreciable land degradation.	Not likely to be at variance *(as per CPS 10600/1)*	No
Principle (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."* Assessment: Given the application area is within two mapped multiple use wetlands, the proposed clearing may impact on surface water quality should any lower lying areas hold water during the winter months (considered likely in the dampland area associated with VSA 2). However, noting the application area has been highly modified and is in a Degraded to Completely Degraded (Keighery, 1994) condition, it is unlikely the proposed linear clearing will have long term or significant impacts to surface or groundwater quality. The Shire has also committed to undertake clearing in spring and summer, which will reduce the risk of sedimentation. .	Not likely to be at variance *(as per CPS 10600/1)*	No
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment: Noting the mapped soils and topographic contours in the surrounding area, the application area is at low risk of flooding. Noting this, the extent of the proposed clearing across a long, linear footprint, and the condition of the vegetation, the proposed clearing is unlikely to contribute to increased incidence or intensity of flooding. The Shire has also committed to undertake clearing in spring and summer, which will reduce the risk of sedimentation.	Not at variance *(as per CPS 10600/1)*	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.

Condition	Description
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 E. Photographs of the vegetation (Coterra, 2025)



Figure 4. Additional clearing area identifying sheoak stands in Degraded (Keighery, 1994) condition (Coterra, 2025)

E.1. References

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