

#### **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

#### **ADVICE NOTE**

#### Allocation of offset site

In relation to condition 7 of this Permit, 5 hectares of Lot 350 on Deposited Plan 417644, Mount Barker, will be attributed to the offset for this project. The nominated 5-hectare area contains high quality foraging habitat for Carnaby's cockatoo (*Zanda latirostris*), and is part of a significant remnant in an extensively cleared landscape that is to be conserved in perpetuity.

#### PERMIT DETAILS

Area Permit Number: CPS 9906/2

File Number: DWERVT1114

Duration of Permit: From 1 May 2025 to 1 May 2038

#### PERMIT HOLDER

Shire of Plantagenet

#### LAND ON WHICH CLEARING IS TO BE DONE

Lot 7546 on Deposited Plan 186612, Mount Barker

### **AUTHORISED ACTIVITY**

The permit holder must not clear more than 1.23 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

#### **CONDITIONS**

# 1. Period during which clearing is authorised

The permit holder must not clear any native vegetation after 1 May 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. Fauna management – western ringtail possums and south-western brush-tailed phascogale

- (a) In relation to the area cross-hatched yellow in Figure 1 of Schedule 1, the permit holder must engage a *fauna specialist* to inspect that area immediately prior to, and for the duration of clearing activities, for the presence of *Pseudocheirus occidentalis* (western ringtail possum(s)) and *Phascogale tapoatafa* (southwestern brush-tailed phascogales).
- (b) Clearing activities must cease in any area where fauna referred to in condition 4(a) are identified until either:
  - (i) the western ringtail possum(s) and/or south-western brush-tailed phascogale individual(s) has moved on from that area to adjoining *suitable habitat*; or
  - (ii) the western ringtail possum(s) individua(s) has been removed by a *western* ringtail possum specialist and/or the south-western brush-tailed phascogale individual(s) has been removed by a fauna specialist.
- (c) Any western ringtail possum(s) individual removed in accordance with condition 4(b)(ii) must be relocated by a *western ringtail possum specialist* to a *suitable habitat*.
- (d) Any south-western brush-tailed phascogale individuals removed in accordance with condition 7(b)(ii) of this permit must be allowed to disperse into adjacent vegetation or must be relocated by a *fauna specialist* to *suitable habitat*.
- (e) Within two (2) months of fauna being identified under condition 4(a), the permit holder must provide the following records to the *CEO*:
  - (i) the number of individuals identified;
  - (ii) the date each individual was identified;
  - (iii) the location where each individual was identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
  - (iv) the number of individuals removed and relocated;
  - (v) the relevant qualifications of the *western ringtail possum* and *south-western* brush-tailed phascogale specialist undertaking removal and relocation;

- (vi) the date each individual was removed;
- (vii) the method of removal;
- (viii) the date each individual was relocated;
- (ix) the location where each individual was relocated to, recorded using a GPS unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings or decimal degrees; and
- (x) details pertaining to the circumstances of any death of, or injury sustained by, an individual.

# 5. Fauna management – black cockatoo habitat

(a) Prior to undertaking any clearing authorised under this permit within the combined areas cross-hatched yellow on Figure 1 of Schedule 1, the permit holder must engage a *fauna specialist* to inspect the *black cockatoo habitat trees* listed in Table 1 below (ID 1 and 4) and identified to contain suitable black cockatoo breeding hollows, for *evidence* of current or past breeding use by *black cockatoo species*.

Table 1: Habitat tree containing the suitable black cockatoo hollow.

ID	Species	Easting	Northing		
1	Corymbia calophylla	-34.66517293	117.6991561		
4	Corymbia calophylla	-34.6658119	117.6990853		

- (b) Where a *black cockatoo habitat tree* with no *evidence* of current or past use by *black cockatoo species* is identified in accordance with condition 5(a), that tree must only be cleared immediately after the inspection.
- (c) Where a tree hollow shows *evidence* of current or past breeding use by *black cockatoo species*, and clearing of that tree cannot be avoided, that tree must be monitored by a *fauna specialist* to determine when it is no longer in use for that breeding season.
- (d) Any *black cockatoo breeding tree* with *evidence* of current breeding use by *black cockatoo species* must not be cleared whilst it is in use for that breeding season as determined by the *fauna specialist* under condition 5(c).
- (e) Within two months of clearing authorised under this permit within the combined areas cross-hatched yellow on Figure 1 of Schedule 1, the permit holder must provide the results of the fauna inspection in a report to the *CEO*.
- (f) The fauna inspection report must include the following;
  - (i) the location of the *black cockatoo habitat tree(s)* recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
  - (ii) the name and amount of each fauna species identified;
  - (iii) whether the *black cockatoo habitat tree/s* identified show current or past use by black cockatoo species;
  - (iv) the methodology, used to survey the permit area;

- (v) a photo of the black cockatoo habitat tree(s) identified; and
- (vi) a description of the black cockatoo habitat tree(s) identified, including the:
  - (A) species of black cockatoo habitat tree(s); and
  - (B) condition of the *black cockatoo habitat tree(s)*.

# 6. Fauna Management - Black cockatoo hollows

- (a) Within 12 months of the commencement of clearing, the permit holder must install at least five (5) artificial black cockatoo nest hollow(s) within the area cross-hatched red on Figure 2 of Schedule 1, in consultation with the Department of Biodiversity, Conservation and Attractions.
- (b) The artificial hollows required by condition 6(a) of this permit must:
  - (i) be installed prior to commencement of the next black cockatoo breeding season following clearing of the related black cockatoo breeding tree(s).
  - (ii) be designed and placed in accordance with the specifications detailed in Schedule 2; and
  - (iii) be monitored and maintained in accordance with the specifications detailed in Schedule 2, for a period of at least ten (10) years.
- (c) Within two months of installing the artificial hollows required by condition 6(a) of this permit, the permit holder must provide the following information in a report to the CEO:
  - the location of the artificial hollows recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees

### 7. Offset – Lot 350 on Deposited Plan 417644

Within 24 months of the commencement of clearing authorised under this permit and no later than 1 May 2027, the permit holder must provide to the *CEO* a copy of the executed change in purpose of Lot 350 on Deposited Plan 417644 from 'rubbish disposal site' to 'conservation' for the area cross hatched red in Figure 2 of Schedule 1.

#### 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 2.

Table 2: 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;					
	activities generally	(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					

No.	Relevant matter	Spec	ifications
			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;
		(g)	actions taken to manage and mitigate impacts in accordance with condition 4; and
		(h)	actions taken to change vesting of Lot 350 in accordance with condition 7.
2.	In relation to black cockatoo fauna management	(i)	the time(s) and date(s) of inspection(s) of the suitable <i>black cockatoo habitat tree</i> by the <i>fauna specialist</i> ;
	pursuant to conditions 5 and 6	(j)	a description of the inspection methodology employed by the <i>fauna specialist</i> ;
		(k)	the species name of any fauna determined by the <i>fauna specialist</i> to be occupying the suitable <i>black cockatoo habitat tree</i> ;
		(1)	where the suitable <i>black cockatoo habitat tree</i> are determined by the <i>fauna specialist</i> to be occupied by <i>black cockatoo species</i> :
			(i) the time and date that it was determined to be no longer occupied; and
			(ii) a description of the evidence by which it was determined to be no longer occupied; and
		(m)	the time and date that the suitable <i>black</i> cockatoo habitat tree was cleared.
		(n)	a copy of the fauna specialist report;
		(0)	the location where artificial black cockatoo hollows were installed, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings;
		(p)	the date when each artificial nesting hollow was monitored and maintained; and
		(q)	a description of the monitoring and maintenance activities undertaken.

# 9. Reporting

- (i) The permit holder must provide to the *CEO*, on or before 23 January each calendar year, a written report containing:
  - (i) the records required to be kept under condition 8; and
  - (ii) records of activities done by the permit holder under this permit between 1 January and 31 December of the preceding calendar year.
- (b) If no clearing authorised under this permit has been undertaken, a written report confirming that no clearing under this permit has been undertaken, must be provided to the CEO on or before 23 January of each calendar year.
- (c) The permit holder must provide to the CEO, no later than 90 calendar days prior to the expiry date of the permit, a written report of records required under condition 8, where these records have not already been provided under condition 9(a).

# **DEFINITIONS**

In this permit, the terms in Table 3 have the meanings defined.

**Table 3: Definitions** 

Term	Definition
black cockatoo habitat trees	means trees that have a diameter, measured at 130 centimetres from the base of the tree, of 50 centimetres or greater (or 30 centimetres or greater for <i>Eucalyptus salmonophloia</i> or <i>Eucalyptus wandoo</i> ) that contain hollows suitable for breeding by black cockatoo species.
	means one or more of the following species: (a) Zanda latirostris (Carnaby's cockatoo);
black cockatoo species	(b) Zanda baudinii (Baudin's cockatoo); and/or
	(c) Calyptorhynchus banksii naso (forest red-tailed black cockatoo).
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.
fauna specialist	means a person who holds a tertiary qualification specialising in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the <i>CEO</i> as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the <i>Biodiversity Conservation Act 2016</i> .
fill	means material used to increase the ground level, or to fill a depression.
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.

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.						
suitable habitat (western ringtail possum)	means habitat known to support western ringtail possums ( <i>Pseudocheirus occidentalis</i> ) within the known current distribution of the species, typically characterised by abundant foliage, presence of suitable nesting structures such as tree hollows, as well as high canopy cover and continuity. Known habitat includes peppermint ( <i>Agonis flexuosa</i> ) dominated woodlands, jarrah ( <i>Eucalyptus marginata</i> ) and marri ( <i>Corymbia calophylla</i> ) forests, riparian vegetation with a canopy of Bullich ( <i>Eucalyptus megacarpa</i> ) or flooded gum ( <i>Eucalyptus rudis</i> ), karri ( <i>Eucalyptus diversicolor</i> ) forests, sheoak ( <i>Allocasuarina fraseriana</i> ) dominated woodlands, and other stands of myrtaceous trees growing near swamps, watercourses or floodplains.						
suitable habitat (south-	Suitable habitat for southwestern brush-tailed phascogale is typically						
western brush-tailed	characterised by dry sclerophyll forests and open woodlands that contain						
phascogale)	hollow-bearing trees but a sparse ground cover.						
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.						
western ringtail possum specialist	means a <i>fauna specialist</i> who holds a tertiary qualification specialising in environmental science or equivalent, has a minimum of two years of work experience in western ringtail possum ( <i>Pseudocheirus occidentalis</i> ) identification, surveys of western ringtail possums and capture and handling of western ringtail possums, and holds a valid fauna licence issued under the <i>Biodiversity Conservation Act 2016</i> .						

# **END OF CONDITIONS**

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Caitlin Conway MANAGER

NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

18 November 2025

# **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.

The boundary of the area subject to conditions is shown in the map below (Figure 2).

CPS 9906/2, 18 November 2025

Page 8 of 10

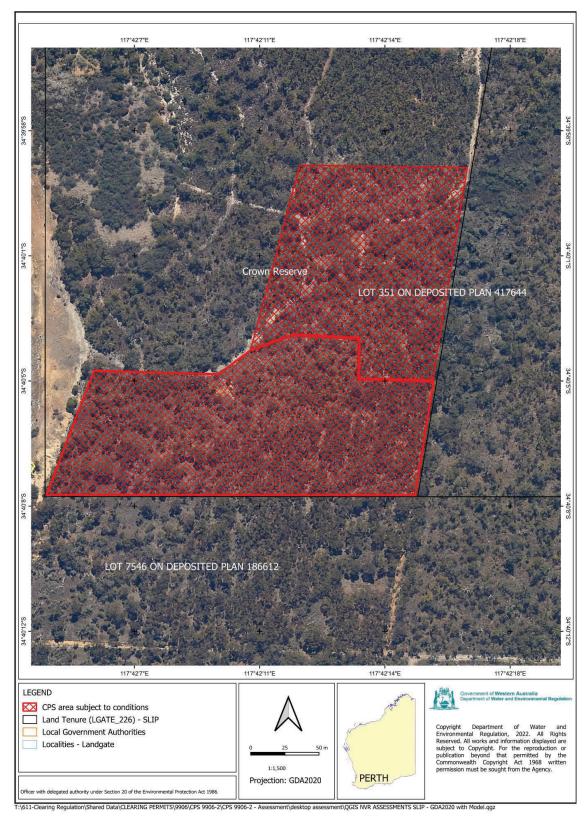


Figure 2: Map of the boundary of the area within which artificial hollows should be installed and offset is required, indicated by the area cross-hatched red.

# **SCHEDULE 2**

Installation of artificial black cockatoo nesting hollows



# **Clearing Permit Decision Report**

# Application details and outcome

#### 1.1. Permit application details

Permit number: CPS 9906/2

Permit type: Area permit

**Applicant name:** Shire of Plantagenet

**Application received:** 16 July 2025

**Application area:** 1.23 hectares of native vegetation (total area)

Purpose of clearing: Expansion of waste management facility

Method of clearing: Mechanical

**Property:** Lot 7546 on Deposited Plan 186612

Location (LGA area/s): Shire of Plantagenet

Localities (suburb/s): Mount Barker

### 1.2. Description of clearing activities

The applicant applied to amend CPS 9906/1 to increase the approved clearing area by an additional 0.53 hectares, resulting in a total clearing area of 1.23 hectares (comprising the original 0.69 hectares plus the proposed 0.53 hectares). The proposed amendment area is situated along the southern and western boundaries of the initial development footprint, which includes the landfill cell and the proposed future leachate pond (GHD, 2025). The 0.53-hectare amendment area is illustrated in Section 1.5.

The need for additional clearing emerged during the progression from concept design to detailed design, as well as due to specific site conditions that were not fully understood at the time of the original clearing application submitted in 2022, which followed the ecological survey conducted in 2021 (GHD, 2025).

The proposed expansion involves the development of additional landfill cells located to the west of the existing public transfer station and current landfill footprint, and to the south of the existing liquid waste facility. This expansion will be supported by the staged capping of completed landfill areas and the construction of appropriately designed leachate and stormwater management infrastructure (GHD, 2025).

No clearing has occurred to date under CPS 9906/1 (Shire of Plantagenet, 2025).

### 1.3. Decision on application

Decision: Granted

**Decision date:** 18 November 2025

**Decision area:** 1.23 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 (department) 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 F.1), the clearing 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 considered that the need for additional clearing has arisen due to the progression of the project from the concept design stage at the time of the original clearing permit application to the current detailed design phase. As the design advanced, it became evident that the originally approved disturbance footprint is insufficient to accommodate the infrastructure requirements outlined in the Works Approval. This is particularly relevant to the dimensions of the leachate containment pond and the stormwater diversion drains located along the toe of the landfill cells. It was advised that these elements are essential for effective environmental impact management and mitigation. Expanding the clearing area at this stage will help avoid the need for further clearing during later stages of construction and operation (GHD, 2022).

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

- the loss of native vegetation that is suitable habitat for the following five (5) conservation significant fauna species;
  - Carnaby's cockatoo (Zanda latirostris),
  - Baudin's cockatoo (Zanda calyptorhynchus),
  - forest red-tailed black cockatoo (Calyptorhynchus banksii naso),
  - south-western brush-tailed phascogale (Phascogale tapoatafa wambenger) and
  - western ringtail possum (*Pseudocheirus occidentalis*)
- the loss of native vegetation that is significant as a remnant of native vegetation in an area that has been extensively cleared (23.58% vegetation remaining); and
- potential land degradation in the form of waterlogging and subsurface acidification.

After reviewing the available information and the applicant's proposed minimisation and mitigation measures (refer to Section 3.1), the Delegated Officer concluded that while the proposed clearing may pose long-term risks to environmental values, these risks can be sufficiently minimised and managed to reduce the likelihood of unacceptable impacts. The applicant has suitably demonstrated avoidance and minimisation measures and has agreed to an offset to counterbalance the significant residual impacts of the clearing on black cockatoo roosting habitat and extensively cleared remnant vegetation (see Section 4).

The Delegated Officer decided to grant the amendment to the 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,
- management conditions for western ringtail possums and south-western brush tailed phascogale,
- management of black cockatoo habitat.
- offsetting black cockatoo hollows through the installation of five artificial hollows, and
- biodiversity offsets.

The Delegated Officer determined that the proposed amendment to include an additional area of clearing is not likely to lead to an unacceptable risk to environmental values.

# 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.

# 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 510 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)
- Conservation and Land Management Act 1984 (WA) (CALM Act)
- Country Areas Water Supply Act 1947 (WA) (CAWS Act)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)
- Planning and Development Act 2005 (WA) (P&D Act)
- Soil and Land Conservation Act 1945 (WA)

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 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.

In addition to the avoidance and mitigation measures previously outlined and documented in the CPS 9906/1 Decision Report, the applicant has provided further consideration of alternatives aimed at avoiding or minimising the need for additional clearing to support the proposed works (GHD, 2025). These include:

- The leachate containment pond has been designed to retain a buffer of well-established jarrah vegetation, which will be actively avoided during construction to reduce potential impacts on black cockatoo habitat;
- Where possible, previously cleared or disturbed areas have been utilised to minimise the extent of new clearing; and
- GHD explored alternative designs for the leachate containment pond that would fit within the currently approved disturbance footprint. However, modelling indicated that such a design would only provide sufficient storage capacity for approximately three to five years. Beyond this period, the pond would risk overtopping, or an additional pond requiring further clearing would need to be constructed. The revised design and increased pond size will ensure adequate leachate storage capacity to service the landfill through to closure.

The vegetation clearing approved under CPS 9601/1 required an offset to counterbalance the following significant residual impacts:

- The loss of 0.66 hectares of native vegetation that provides low-quality foraging and roosting habitat for all three black cockatoo species.
- The loss of 0.69 hectares of native vegetation that is significant as a remnant within an extensively cleared landscape.

After consideration of avoidance and mitigation measures, it was determined that an offset is necessary to counterbalance the following additional significant residual impacts present from clearing of the additional 0.53 hectares proposed under this amendment;

- the loss of 0.51 hectares of native vegetation that is considered to be low quality roosting habitat for all three black cockatoo species; and
- the loss of 0.53 hectares of native vegetation that is significant as a remnant within an extensively cleared landscape (local area < 30%).

In accordance with the Government of Western Australia's *Environmental Offsets Policy* and *Environmental Offsets Guidelines*, these significant residual impacts have been addressed through the conditioning of environmental offset requirements on the permit. The nature and suitability of the offset required under this amendment are summarised in Section 4.

# 3.2. Assessment of impacts on environmental values

CPS 9906/1 was granted to the Shire on 7 April 2025, authorising the clearing of 0.69 hectares of native vegetation to enable the expansion of the waste management facility. A review of the current environmental information for the area approved under CPS 9906/1 confirms that the assessment against the clearing principles remains unchanged from the original clearing permit decision report for CPS 9906/1. The assessment below is focused on the 0.53 hectares of additional area that is included in the amendment application.

In assessing the amendment 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 that the proposed clearing of the additional 0.53 hectares of vegetation included in this amendment application presents an additional risk to biological values (fauna), significant remnant vegetation, and impacts associated with clearing riparian 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) & (b)

#### <u>Assessment</u>

A site inspection was conducted by a GHD environmental scientist on 20 June 2025 (GHD, 2025) to assess the vegetation type and condition within the proposed amendment area. As part of the inspection, the area was also evaluated for its suitability as black cockatoo habitat. No potential black cockatoo habitat trees (i.e. those with a diameter at breast height greater than 500 mm) were identified within the proposed clearing amendment area. As such, the amendment area is unlikely to contain significant breeding habitat for black cockatoo species.

The vegetation within the amendment clearing area comprises approximately 0.51 hectares of *Eucalyptus occidentalis* open forest and 0.02 hectares of *Melaleuca cuticularis* vegetation, both classified as being in a 'Degraded' condition (Keighery, 1994). The remainder of the area consists of previously cleared land in a 'Completely Degraded' (Keighery, 1994) state. While *Eucalyptus occidentalis* open forest is considered suitable roosting habitat for black cockatoos, no trees with evidence of roosting activities were recorded within the proposed clearing footprint (GHD, 2025). Photographs of the additional area are available under Appendix E.

Although the black cockatoo roosting habitat quality is considered low, the clearing is proposed within a landscape that has already experienced extensive vegetation loss. In such contexts, the removal of even marginal habitat can contribute to cumulative impacts and may result in a significant residual effect on black cockatoo populations, particularly in terms of habitat connectivity and availability of roosting sites.

Black cockatoo flocks typically rotate between different night roosts, often remaining at a site for several weeks or until local food resources are depleted. While they show some fidelity to preferred roosting sites—returning to them in most years to access high-quality feeding areas—not all roosts are used annually (DAWE, 2022). Food resources within the range of breeding and roosting sites are critical for sustaining populations. Consequently, foraging habitat is assessed in relation to known breeding and night roosting locations, particularly within 12 kilometres of the impact area (DAWE, 2022). It is therefore essential to ensure the protection of suitable roosting sites within the 12-kilometre radius of available foraging habitat.

Data from the Great Cocky Count (DBCA, 2019) indicate that there is a roosting site approximately 4.5 kilometres to the northwest of the survey area. Based on the available databases, it is noted that high quality foraging habitat (*Corymbia calophylla* (marri) and *Eucalyptus marginata* (jarrah)) is available for black cockatoo species within the 0.69 hectares of the area granted under CPS 9906/1 and within the surrounding areas. Therefore, there is potential for black cockatoos to utilise the tall trees within the application area for roosting while foraging on the surrounding vegetation. Subsequently, an offset has been provided to mitigate impacts to black cockatoo roosting habitat.

In terms of the suitability of the vegetation as foraging habitat for black cockatoos, according to the Muir's survey method by Bio Diverse Solutions (2021), no foraging species for black cockatoos were identified within the *Eucalyptus occidentalis* [Eucocc] Open Forest vegetation description and the survey do not identify this vegetation type to provide foraging habitat for the black cockatoo birds.

Table 1: Extract of the potential black cockatoo habitat present within the survey area.

Habitat Type	Description	Area(ha)	Percentage (%) of all mapped Cockatoo Habitat
Foraging and Roosting Habitat	Corcal Eucmar Woodland vegetation unit. Potential foraging and roosting habitat.	0.049	7.53
Roosting Habitat	Eucocc Open Forest (non-foraging species). Potential roosting habitat	0.606	92.51
	Totals	0.655	100

The vegetation proposed for clearing also includes potential habitat for two conservation-significant mammal species: the Western Ringtail Possum (WRP) (*Pseudocheirus occidentalis*) and the southwestern brush-tailed phascogale (*Phascogale tapoatafa wambenger*).

WRP known habitat includes peppermint (*Agonis flexuosa*) dominated woodlands, jarrah (*Eucalyptus marginata*) and marri (*Corymbia calophylla*) forests, riparian vegetation with a canopy of Bullich (*Eucalyptus megacarpa*) or flooded gum (*Eucalyptus rudis*), karri (*Eucalyptus diversicolor*) forests, sheoak (*Allocasuarina fraseriana*) dominated woodlands, and other stands of myrtaceous trees growing near swamps, watercourses or floodplains (DPaW, 2017). While *Eucalyptus occidentalis* is not a primary foraging species for the Western Ringtail Possum, this species is known to utilise a variety of Eucalyptus species for movement and shelter (DPaw, 2017). Based on the survey of the previously approved 0.69-hectare clearing area, woodland connectivity was limited, and the overall quality of the vegetation was assessed as low. No dreys or faecal material indicative of this species were detected. Although the proposed additional clearing area was not included in the survey, it is immediately adjacent to the surveyed site and supports the same vegetation type. Therefore, it is reasonable to conclude that the additional area is also unlikely to provide significant habitat for the WRP species. However, this species may utilise the application area for dispersal throughout the landscape.

The southwestern brush-tailed phascogale typically inhabits sclerophyll forests and open woodlands with a well-developed understorey and the presence of hollow-bearing trees, which are critical for nesting and shelter (DEC, 2012). The trees in which phascogale activities were identified were marri and jarrah trees. Although suitable habitat for this species has been identified within the area already approved under CPS 9906/1, the additional area proposed for clearing is unlikely to provide core habitat due to its degraded condition, lack of key habitat features and the absence of marri and jarrah trees. However, similar to the WRP, the phascogale may use the area for dispersal or as a movement corridor, particularly if it contributes to broader habitat connectivity.

Clearing in a slow, progressive and directional manner towards adjacent vegetation is likely to reduce impacts to any individuals of WRP and southwestern brush-tailed phascogale that are present within the application area during clearing. A condition requiring inspection and translocation of this species prior to clearing will also mitigate impacts to individuals present during clearing activities.

### Conclusion

Based on the above assessment, given the extent of clearing in the local area (Appendix A) the loss of suitable roosting habitat from clearing of the proposed amendment area is likely to have a significant residual impact on black cockatoo species. While clearing of the proposed amendment area is unlikely to have a significant residual impact on WRP and southwestern brush-tailed phascogale, individuals of these species may still use vegetation within the application area.

It is considered that the impacts of the proposed clearing on fauna can, in part, be managed by fauna management conditions on the clearing permit. Significant residual impacts to black cockatoo species must be offset for an environmentally acceptable outcome.

# Conditions

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

- Fauna management western ringtail possums and South-western brush-tailed phascogale
- Fauna management black cockatoo habitat
- Offset -conservation of high-quality black cockatoo roosting habitat in perpetuity

#### 3.2.2. Significant remnant vegetation - Clearing Principles (e)

#### Assessment

GHD's supporting information (GHD, 2025) for this amendment application describes the vegetation within the amendment application area as 0.51 hectares of *Eucalyptus occidentalis* open forest and 0.02 hectares of *Melaleuca cuticularis* vegetation in degraded to completely degraded (Keighery, 1994) condition.

The mapped vegetation types retain approximately 67.10 per cent of the original extent (Government of Western Australia, 2019). Spatial data indicates the local area (20-kilometre radius from the centre of the area proposed to be cleared) retains approximately 23.58 per cent of the original native vegetation cover.

The extent of the mapped vegetation is inconsistent with the national objectives and targets for biodiversity conservation in Australia. Assessment of the vegetation as significant for fauna has been determined under section 3.2.1 above.

#### Conclusion

Based on the above assessment, the proposed clearing of the amendment area will result in the loss of an additional 0.53 hectares of native vegetation to that already included within CPS 9601/1 that is significant as a remnant within an extensively cleared landscape (local area < 30%).

For the reasons set out above, it is considered that the impacts of the proposed clearing on the extent of vegetation in an extensively cleared area cannot be managed and will have a significant residual impact that requires offsetting.

#### Conditions

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

Offset - conservation of significant remnant of vegetation in an extensively cleared landscape, in perpetuity.
 An offset condition was already included within CPS 9906/1: this condition has been amended to reflect the increased offset requirement (refer to Section 4)

### 3.3. Relevant planning instruments and other matters

The Shire of Plantagenet is proposing to expand the Mount Barker Waste Management Facility to include additional landfill cells to the west of the current public transfer station and existing landfill footprint, and south of the current liquid waste facility. The primary intent of the landfill expansion is to maximise the operational life of the landfill for an additional 29 years. The proposed expansion works are being supported through the staged capping of the completed landfill areas and the construction of stormwater management infrastructure. Previous clearing for the Mount Barker Waste Management Facility was authorised under clearing permit CPS 4256/1.

DWER advised that the area permitted to be cleared is in proximity to active and historical asbestos disposal areas. It was recommended that an appropriate health and safety management plan is used should any asbestos be encountered during the clearing (DWER, 2022).

A Works Approval (<u>W6937N/2024/1</u>) has been granted for this project by the Department on 30 January 2025 and is valid until 29 January 2030. As part of the Works Approval the applicant is required to develop and adhere to a Construction Environmental Management Plan to manage stormwater and other emissions.

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 for the additional clearing area

#### Offset required under CPS 9906/1

As a condition of the clearing of 0.69 hectares of vegetation permitted CPS 9906/1, the permit holder was required to change the purpose of a 3.04 hectare area of native vegetation within Lot 350 on Deposited Plan 417644, Mount Barker from "rubbish disposal site" to "conservation". As the offset required to counterbalance the significiant residual impacts of this clearing was only 2.82 hectares, only 2.82 hectares was attributed to an offset for CPS 9906/1, with the remaining 0.22 hectares to be banked for future use by the applicant. Complementary measures were also required to be implemented, including requiring a fauna specialist to inspect black cockatoo habitat trees prior to clearing and installing artificial nesting hollows within the offset area.

#### Amendment proposal

The Shire of Plantagenet is proposing to clear an additional area of 0.53 hectares of native vegetation within Lot 7546 on Deposited Plan 186612 (Crown Reserve 23969), Mount Barker, for the purpose of expansion of a waste management facility.

The vegetation proposed to be cleared consists of 0.51 hectares of *Eucalyptus occidentalis* open forest and 0.02 hectares of *Melaleuca cuticularis* vegetation. Both the above listed vegetation types are in in a Degraded (Keighery, 1994) condition.

### Residual impacts from clearing of amendment area

The following significant residual impacts will persist once clearing is undertaken;

- the additional loss of 0.51 hectares of native vegetation identified as low-quality roosting habitat for all three black cockatoo species.
- the additional loss of 0.53 hectares of native vegetation considered significant due to its status as a remnant within a highly cleared landscape (local vegetation extent <30%).

#### Proposed offset for amendment area

To offset the additional residual impacts of the clearing of the 0.53 hectare amendment area, the applicant proposed to expand the previously approved offset area under CPS 9906/1 within Lot 350 on Deposited Plan 417644, Mount Barker.

Lot 350 on Deposited Plan 417644, Mount Barker occurs adjacent to the proposed clearing site within Lot 7546 on Deposited Plan 186612 and is part of the greater Crown Reserve 23969. Lot 350 was previously part of Crown Reserve 10003, a Class A reserve managed by DBCA for conservation. Pursuant to section 6 of the *Reserves Act* 2023, Lot 350 was excised from Crown Reserve 10003 and vested as a "Rubbish Disposal Site". Section 6 of the *Reserves Act* 2023 was proclaimed and commenced on 27 March 2024. Whilst it is understood that the formal excision and transfer of Lot 350 is ongoing, the Shire has advised that the property is vested in the Shire from the point that the management order for Crown Reserve 23969 was lodged with DPLH in April 2024. The current vesting of the reserve is 'rubbish disposal'.

#### Offset adequacy

Based on the department's offset calculations for the amendment area, the offset that is required to counterbalance the significant residual impacts of the proposed clearing is:

- 2.18 hectares of native vegetation that provides roosting habitat for black cockatoo species; and
- 1.33 hectares of native vegetation that is significant as a remnant within an extensively cleared landscape.

To counterbalance the residual impacts of the clearing of the amendment area, Shire of Plantagenet proposed an offset area of 2.18 hectares of native vegetation immediately to the north of the existing offset site for CPS 9906/1, within Lot 350 on Deposited Plan 417644, Mount Barker. Based on the previous site visit undertaken by GHD as part of the previous clearing permit CPS 9906/1, and photographs provided by the Shire of Plantagenet, the 2.18 hectares area proposed for the offset is representative of the following:

- Corymbia calophylla and Eucalyptus marginata woodland
- Eucalyptus occidentalis woodland.

Evidence of the values present within the proposed offset site was submitted in the form of photographs (see below).



It is considered that this additional offset area contains suitable environmental values to counterbalance the impacts of clearing of the amendment area.

### **Summary**

In addition to the 3.04 hectares required to be secured for conservation under CPS 9906/1, the Shire proposes to secure a further 2.18 hectare area for conservation, by changing its purpose from "rubbish disposal site" to "conservation" to offset the significant residual impacts resulting from clearing of the amendment area. In total, the Shire will secure approximately 5 hectares of native vegetation for conservation under CPS 9906/2, with a 0.22 hectare area banked for future use.

It is considered that the Shire's offset proposal for the clearing of 1.23 hectares in total is adequate to counterbalance the significant residual impacts listed above and is consistent with the WA Environmental Offsets Policy (2011) and the WA Environmental Offset Guidelines (2014). The justification for the values used in the offset calculation for the 0.53 hectare amendment area is provided in Appendix D of this report and the justification for the values used in the offset calculation for the 0.69 hectares of the original area is provided in Appendix D of the decision report CPS 9906/1.

End

# Appendix A. Site characteristics

# A.1. Site characteristics

The information provided below describes the key characteristics of the additional area of 0.53 hectares proposed to be included in the clearing permit application and is based on the best information available to the department 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. Site characteristics of the 0.69 hectare area of the original clearing footprint are available within the decision report CPS 9906/1.

Characteristic	Details
Local context	The additional area proposed to be cleared is 0.53 hectares of native vegetation in the extensive land use zone of Western Australia. It is adjacent to the O'Neill Road waste management facility and cleared farmland areas.
	Spatial data indicates the local area (20-kilometre radius from the centre of the area proposed to be cleared) retains approximately 23.58 per cent of the original native vegetation cover.
Ecological linkage	The application area is not attached to any formal ecological linkages. The closest ecological linkage is the south coastal ecological linkage approximately one kilometre south of the application area.
	The proposed clearing is will not sever any ecological linkages.
Conservation areas	DBCA nature reserve (R10003) is approximately 330 meters from the application area. During the application process the reserve was altered. Pursuant to section 6 of the <i>Reserves Act 2023</i> , Lot 350 was excised from Crown Reserve 10003 and vested as a "Rubbish Disposal Site". Section 6 of the <i>Reserves Act 2023</i> was proclaimed and commenced on 27 March 2024.
Vegetation description	GHD (2025) indicate the vegetation within the additional clearing area consists of two different vegetation units including:
	<ul> <li>Eucalyptus occidentalis [Eucocc] open forest: Eucalyptus occidentalis dense forest, over Hakea prostrata, Agonis flexuosa, *Chamaecytisus palmensis Scrub, over Acacia extensa, *Paraserianthes lophantha and *Watsonia meriana Low Scrub A and B, over Xanthorrhoea gracilis and Pimelea ciliata open Dwarf Scrub C and D, over Machaerina juncea, Cyathochaeta avenacea and Desmocladus asper Very Open Tall and Low Sedges, over *Sonchus oleraceus, *Arctotheca calendula and *Hypochaeris radiata Herbs, over *Ehrharta longiflora and *Bromus diandrus Tall Grass, over *Lolium rigidum, *Briza maxima and *Briza minor Low Gras.</li> </ul>
	<ul> <li>Melaleuca cuticularis [Melcut] wetland: Melaleuca cuticularis open low scrub A over Cyathochaeta avenacea very open tall sedges, over Isolepis marginata and *Cyperus tenellus very open low sedges, over *Watsonia meriana, *Raphanus raphanistrum and Stylidium spathulatum Herbs, over *Bromus diandrus very open tall grass, over *Briza minor and Neurachne alopecuroidea very open low grass.</li> </ul>
	Vegetation mapping identifies the application area as the Nirrikup (3) IBRA Bioregion described as a medium jarrah forrest, pre-European vegetation stats state that the vegetation is described as Mainly jarrah ( <i>Eucalyptus marginata</i> ) and marri ( <i>Corymbia calophylla</i> ).
	The mapped vegetation types retain approximately 67.10 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	GHD (2025) indicate the vegetation within the additional clearing area is in degraded (Keighery, 1994) condition.
	The full Keighery (1994) condition rating scale is provided in Appendix C. Representative photos are available in Appendix E.

Details							
The climate experienced in the application area is Mediterranean, characterised by hot and dry summers and cool and wet winters. According to the Bureau of Meteorology (2021), an average of 726 millimetres of rainfall is recorded annually from the Mount Barker – BOM rainfall station (no. 009581), which is the closest weather station in operation. The majority of this rainfall is received between the months of June to August (BoM 2022).							
The soil type across the application area is mapped as the Caldyanup Subsystem (254KeCA): Plains with drainage floors and low rises. Yellow solonetzic soils.							
The degradation	risk factors mapped over the application area are detailed below:						
	Caldyanup Subsystem: 254KeCA						
Wind erosion	M1: 10-30% of map unit has a high to extreme wind erosion risk						
Water erosion	L2: 3-10% of map unit has a high to extreme water erosion risk						
Salinity risk	M2: 30-50% of map unit has a moderate to high salinity risk or is presently saline						
Phosphorous export	M1: 10-30% of map unit has a high to extreme phosphorus export risk						
Waterlogging	H2: >70% of map unit has a moderate to very high waterlogging risk						
Subsurface acidification	H2: >70% of map unit has a high subsurface acidification risk or is presently acid						
Flooding	L2: 3-10% of the map unit has a moderate to high flood risk						
	sessment and aerial imagery indicated a drainage line intersect a small plication area to the south.						
The application area is within the Warren-Denmark hydrological zone, Denmark Coast basin and Wilson Inlet Hay River hydrographic catchment.							
No water protection areas exist over the application area.							
The salinity of the application area is mapped at 3000-7000 total dissolved solids milligrams per litre.							
recorded within the	ailable databases, 83 conservation significant flora species have been ne local area (20-kilometre buffer). Comprising four Priority 1, 18 Priority 2, Priority 4 and 17 threatened flora taxa.						
desktop analysis	TEC) and priority (PEC) ecological community was identified in the 10 km, 'Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal of Western Australia (Kwongkan)'.						
No ecological communities are mapped within the application area.							
According to available databases, 33 conservation significant fauna species have recorded within the local area comprising of two Priority 2, one Priority 3, six Priority 4, s endangered, seven vulnerable, two critically endangered, five migratory, and conservations dependent. fauna taxa. Based on the distance from the application area habitat requirements and vegetation type, the following species may have transient has within the application area:							
Baudin's cockat							
_	s cockatoo						
	d tailed black cockatoo						
<ul><li>South-western Brush tailed phascogale</li><li>Western ringtail possum</li></ul>							
	The climate expedry summers and average of 726 or rainfall station (not this rainfall is recorded with drainal station)  The soil type acrop Plains with drainal station  The degradation  Wind erosion  Water erosion  Salinity risk  Phosphorous export  Waterlogging  Subsurface acidification  Flooding  The desktop assisted as section of the application abasin and Wilson No water protection. The salinity of the per litre.  According to avarecorded within the 23 Priority 3, 21 Forestic Province.  No ecological corded within the endangered, seconservations de habitat requirement within the application of the application of the application of the per litre.  According to avarecorded within the endangered, seconservations de habitat requirement within the application of						

# 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	1,673,614.25	69.74			
Vegetation complex								
Narrikup (3)	2,390,591.54	1,604,101.56	67.10	1,299,263.74	81.00			
Local area								
10km radius	127,897.82	30,158.54	23.58	-	-			

<sup>\*</sup>Government of Western Australia (2019a)

# A.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features?	Suitable vegetation type?	Distance of closest record to application area (km)	of known records	Are surveys adequate to identify?
Baudin's cockatoo (Zanda baudinii)	EN	Υ	Y	2.75	57	Υ
Carnaby's cockatoo (Zanda latirostris)	EN	Y	Y	2.24	71	Υ
Forest red-tailed black cockatoo (Calyptorhynchus banksii naso)	VU	Y	Y	4.58	159	Υ
Muir's corella (Cacatua pastinator pastinator)	CD	Y	Y	4.58	1	Υ
South-western brush-tailed phascogale, wambenger ( <i>Phascogale tapoatafa wambenger</i> )	CD	Y	Y	6.33	7	Υ
Western ringtail possum, ngwayir (Pseudocheirus occidentalis)	CR	Y	Y	2.88	26	Υ

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

# A.4. Ecological community analysis table

Community name	Conservation status	Suitable habitat features?	Suitable vegetation type?	Suitable soil type?	Distance of closest record to application area (km	of known records	Are surveys adequate to identify?
Eucalypt woodlands of the Western Australian Wheatbelt	P3	Y	Y	Y	12.04	93	N

<sup>\*\*</sup>Government of Western Australia (2019b)

Community name	Conservation status	Suitable habitat features?	Suitable vegetation type?	Suitable soil type?	Distance of closest record to application area (km	of known records	Are surveys adequate to identify?
Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia	P3	Υ	Υ	Y	12.99	24	N
South Coast Porongurup Range Karri Forest	P1	N	N	N	12.02	1	N
Wet ironstone heath community (Albany District) (all/or portion in EPBC listed Kwongkan community)	P1	N	N	Unknow n	18.13	1	N

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

# Appendix B. Assessment against the clearing principles

The following assessment addresses the cumulative impacts associated with the clearing of a total area of 1.23 hectares, which includes both the originally approved clearing footprint and the additional area proposed under the amendment.

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 area proposed to be cleared contains foraging habitat and roosting habitat for the black cockatoo species and the south western brushtailed phascogale. The Application area does not contain habitat that is likely to represent any priority ecological communities or significant habitat for conservation significant flora species.	At variance (as per CPS 9906/1)	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 area proposed to be cleared contain foraging habitat and roosting habitat for Carnaby's cockatoo, Baudin's cockatoo, and Forest redtailed black cockatoo, in addition to suitable habitat for the brushtailed phascogales and the Western ringtail possum.	At variance (as per CPS 9906/1)	Yes Refer to Section 3.2.1, above and Decision report (CPS 9906/1)
Principle (c): "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."  Assessment: The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act.	Not likely to be at variance (as per CPS 9906/1)	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 area proposed to be cleared does not contain species that can indicate a threatened ecological community.	Not likely to be at variance (as per CPS 9906/1)	No
Environmental value: significant remnant vegetation and conservation areas		

Assessment against the clearing principles	Variance level	Is further consideration required?
<u>Principle (e):</u> "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."	At variance (as per CPS	Yes Refer to Section
<u>Assessment:</u> The extent of the mapped vegetation 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.	9906/1)	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."	Not likely to be at variance	No
<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 the nearby conservation area.	(as per CPS 9906/1)	
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."	At variance	Yes
Assessment: One minor drainage system bisects the application area from with a small portion of the application area being mapped as <i>Melaleuca cuticularis</i> It is unlikely for this to impact on- or off-site hydrology and water quality [Melcut] Wetland. The proposed clearing may impact on- or off-site hydrology and water quality. Management measures are proposed by the applicant.	(as per CPS 9906/1)	Refer to Section 3.2.3 of the Decision report (CPS 9906/1)
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 are moderately susceptible to wind erosion and salinity risk and are highly susceptible to waterlogging, subsurface acidification. Noting the small extent of the application area, the condition of the vegetation, the proposed clearing id unlikely to have an appreciable impact on land degradation.	Not likely to be at variance (as per CPS 9906/1)	Yes  Refer to Section 3.2.3, of Decision report (CPS 9906/1)
<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."	Not likely to be at variance	No
<u>Assessment:</u> Given the application area intersects only a small drainage line, the proposed clearing is not likely to impact surface or ground water quality however the impacts are likely to be short term.	(as per CPS 9906/1)	
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."	Not at variance (as per CPS	No
<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.	9906/1)	

# 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. Offset calculator value justification for the amendment area only/

Black Cockatoo habitat – This calculation reflects only the additional impact area resulting from the proposed amendment to the original application footprint, and does not include the previously approved clearing area.

Calculation	Score (Area)	Rationale	
Conservation significance			
Description	0.51 ha roosting habitat for Carnaby's, Baudin's and Forest red- tailed black cockatoo	The application area is located within the known distribution of Carnaby's, Baudin's and forest Red-tailed cockatoo habitat with suitable foraging and roosting habitat identified within the application area.	
Type of environmental value	Species (flora/fauna)	Carnaby's, Baudin's and Forest red-tailed black cockatoo	
Conservation significance of environmental value	Rare/threatened species - endangered	Carnaby's black cockatoo is listed as endangered under the BC Act (state) and EPBC Act (federal).	
Landscape-level value impacted	yes/no	No - low quality roosting habitat smaller than 1 ha and fragmented with large areas of surrounding habitat in better quality.	
Significant impact			
Description	Application to clear 0.51 hectares of native vegetation which is 'low quality' roosting habitat for black cockatoo	Application to clear 0.51 hectares of native vegetation which is 'low quality' roosting habitat for black cockatoo.	
Significant impact (hectares) / Type of feature	0.51	Black Cockatoo roosting habitat within the application area. The vegetation is mapped as <i>Eucalyptus occidentalis</i> open forest	

Quality (scale) / Number	5.00	Considered Low quality - less than 1ha vegetation in Degraded to Completely Degraded condition Known roost sites 5 km away- Known breeding sites 28 km away.
Offset		
Description	Land swap with DBCA managed reserve with High quality foraging habitat	Land is located to the east of the O'Neill Road Waste Management Facility, within 19 ha of land currently in the process of being acquired from the DBCA managed reserve (Reserve 10003) during a land swap with the Shire.
Proposed offset (area in hectares)	2.18	The total area of rehabilitation required to counterbalance the significant residual impacts of the proposed clearing on BC foraging habitat by 100%.
Current quality of offset site / Start number (of type of feature)	8.00	The fauna habitat types identified over the area based on photographs and the site visit undertaken by GHD:  A mosaic of the following Habitat types which are consistent with the clearing impact area and considered suitable as Black Cockatoo roosting habitat:  • Corymbia calophylla and Eucalyptus marginata woodland  • Eucalyptus occidentalis woodland.
Future quality WITHOUT offset (scale) / Future number WITHOUT offset	8.00	Quality will remain the same as the area is already conservation managed DBCA reserve
Future quality WITH offset (scale) / Future number WITH offset	8.00	Very Good maintain as per DBCA reserve and improved by regular removal of windblown waste from the adjacent landfill site
Time until ecological benefit (years)	2.00	2 year - expected length of time to secure offset site
Confidence in offset result (%)	0.95	High confidence expected as area will be retained by the Shire and ultimately form part of a strategic offset area for the Shire.
Duration of offset implementation (maximum 20 years)	20.00	The maximum duration of 20 years is applied as the area will ultimately form part of a strategic offset area for the Shire.
Time until offset site secured (years)	2.00	It is expected that the transfer of the land will occur within 2 year.
Risk of future loss WITHOUT offset (%)	20.0%	The offset area within Lot 350 on Deposited Plan 417644 (Crown Reserve 23969) is currently vested as a Rubbish Disposal Site and adjacent to the existing Mount Barker Waste Facility. The offset area was previously part of Crown Reserve 10003 which was vested in Conservation, but has been excised pursuant to section 6 of the Reserves Act 2023. Therefore, there is currently a moderate risk of loss.
Risk of future loss WITH offset (%)	5.0%	The Shire intend to change the vesting of the offset area within Lot 350 on Deposited Plan 417644 (Crown Reserve 23969) to Conservation and manage the area for conservation long-term, which will reduce the risk of loss.
Offset ratio (Conservation area only)	N/A	
Landscape level values of offset?	N/A	

Remnant vegetation - This calculation reflects only the additional impact area resulting from the proposed amendment to the original application footprint, and does not include the previously approved clearing area.

Calculation	Score (Area)	Rationale
Conservation		
Description	Significant remnant vegetation within an area that has been extensively cleared	The proposed clearing will impact on significant remnant native vegetation within an area that has been extensively cleared.
Type of environmental value	Vegetation/habitat	Significant remnant vegetation within an area that has been extensively cleared.
Conservation significance of environmental value	Terrestrial native vegetation complex - <30% extent remaining in the bioregion	The local area (10-kilometre radius from the application area) retains approximately 23.58 percent of its original vegetation extent.
Landscape-level value impacted	yes/no	The impact is to an area of the mapped vegetation complex in hectares.
Significant impact		
Description	Application to clear 0.69 hectares of native vegetation which is significant as a remnant of native vegetation in an extensively cleared local area	0.53 hectares of native vegetation that is significant as a remnant within an area that has been extensively cleared is proposed to be cleared for expansion of the Mount Barker Waste Management facility.
Significant impact (hectares) / Type of feature	0.53	Given the local area falls below the national targets for biodiversity conservation and the application area provides significant roosting habitat for black cockatoo species, the entire application area (0.53 hectares) is considered to be significant as a remnant within an extensively cleared local area.
Quality (scale) / Number	3.00	Based on the available information provided by GHD (2025) and photographs (GHD, 2022), the application area is in Degraded to Completely Degraded (Keighery, 1994) condition. However, the vegetation within the proposed clearing area also contains habitat for black cockatoo species.
Offset		
Description	Change in vesting and conservation in perpetuity of native vegetation that is significant as a remnant within an extensively cleared landscape	The Shire has proposed to alter the vesting of an offset area within Lot 350 on Deposited Plan 417644 (Crown Reserve 23969) to Conservation in perpetuity, which contains significant remnant vegetation in the extensively cleared local area.
Proposed offset (area in hectares)	1.73	The area required to be conserved in perpetuity to counterbalance the significant residual impacts to native vegetation that is significant as a remnant within an extensively cleared landscape by 100%.

Current quality of offset site / Start number (of type of feature)	8.00	A mosaic of the following Habitat types which are consistent with the clearing impact area was identified within the offset site.  • Corymbia calophylla and Eucalyptus marginata woodland  • Eucalyptus occidentalis woodland.
Future quality WITHOUT offset (scale) / Future number WITHOUT offset	8.00	Quality will remain the same as the area is already conservation managed DBCA reserve
Future quality WITH offset (scale) / Future number WITH offset	8.00	Very Good maintain as per DBCA reserve and improved by regular removal of windblown waste from the adjacent landfill site
Time until ecological benefit (years)	1.00	As the proposed offset relates to conserving an existing area of native vegetation in perpetuity, the minimum of one year for this field is applied.
Confidence in offset result (%)	0.95	There is a high level of confidence that the offset will be achieved, and that conservation of the offset site (in perpetuity) would successfully mitigate the future risk of loss of the site and maintain its current quality.
Duration of offset implementation (maximum 20 years)	20.00	The offset area within Lot 350 on Deposited Plan 417644 (Crown Reserve 23969) will be vested in Conservation in perpetuity. Therefore, the maximum duration of 20 years is applied.
Time until offset site secured (years)	2.00	It is assumed that the change in vesting to Conservation of the offset area within Lot 350 on Deposited Plan 417644 (Crown Reserve 23969) will occur within two years, noting the excision of this area from Reserve 10003 is being finalised.
Risk of future loss WITHOUT offset (%)	20.0%	The offset area within Lot 350 on Deposited Plan 417644 (Crown Reserve 23969) is currently vested as a Rubbish Disposal Site and adjacent to the existing Mount Barker Waste Facility. The offset area was previously part of Crown Reserve 10003 which was vested in Conservation, but has been excised pursuant to section 6 of the Reserves Act 2023. Therefore, there is currently a moderate risk of loss.
Risk of future loss WITH offset (%)	5.0%	The Shire intend to change the vesting of the offset area within Lot 350 on Deposited Plan 417644 (Crown Reserve 23969) to Conservation and manage the area for conservation long-term, which will reduce the risk of loss.
Offset ratio (Conservation area only)	N/A	
Landscape level values of offset?	N/A	

Appendix E. Biological survey information excerpts and photographs of the vegetation (GHD, 2025)



Figure 2: Vegetation types within the additional area proposed for clearing.



Figure 3: Vegetation condition within the additional area proposed for clearing.

# Photographs of the additional area proposed for clearing.



Photo 3 Canony at the north-west corner of the amended development area. No hollows observed.



Photo 4 South-west corner of the proposed leachate containment pond. No Jarrah or Marri trees



Photo 7 South-east corner of the proposed leachate containment pond, looking west. Weede



Photo 8 Sediment basin at the western boundary, looking south towards a groundwater bord



Photo 10 Southern tip of the amendment area, looking west. No Jarrah or Marri vegetation observed



Photo 9 Southern boundary of sediment pond. Vegetation consists of paperbarks

# 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)
- 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)

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