



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 8582/3
File Number: DWERVT3058
Duration of Permit: From 5 June 2021 to 5 June 2038

ADVICE NOTE

The funds referred to in condition 5 of this permit are intended for contributing towards the purchase of 30.61 hectares of native vegetation with habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and Forest Red-tailed black cockatoo (*Calyptorhynchus banksii naso*).

PERMIT HOLDER

Holcim (Australia) Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 3 on Plan 14769, Martin.

AUTHORISED ACTIVITY

The permit holder must not clear more than 10.7 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 5 June 2028.

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

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

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

3. Weed and dieback management

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

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

4. Directional clearing

The permit holder shall conduct clearing in a slow progressive manner from one direction to the other (e.g. east to west) to allow fauna to move into adjacent native vegetation ahead of the clearing activity.

5. Offsets – monetary contributions to the Offsets Fund

Prior to undertaking any clearing authorised under this permit, the permit holder must provide documentary evidence to the *CEO* that funding of \$159,172 has been transferred to the Department of Water and Environmental Regulation for the purpose of establishing or maintaining native vegetation as an environmental offset for the clearing activities authorised under this permit.

6. Records that must be kept

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

Table 1: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	<ol style="list-style-type: none">(a) the species composition, structure, and density of the cleared area;(b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;(c) the date that the area was cleared;(d) the size of the area cleared (in hectares);(e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2;(f) actions taken to minimise the risk of the introduction and spread of weeds and dieback in accordance with condition 3; and(g) direction of the clearing undertaken in accordance with condition 4.

7. Reporting

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

DEFINITIONS

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

Table 2: Definitions

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .
clearing	has the meaning given under section 3(1) of the EP Act.
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.
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 <i>Biosecurity and Agriculture Management Act 2007</i> ; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS



Jessica Burton
A/MANAGER
NATIVE VEGETATION REGULATION

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

30 May 2023

SCHEDULE 1

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

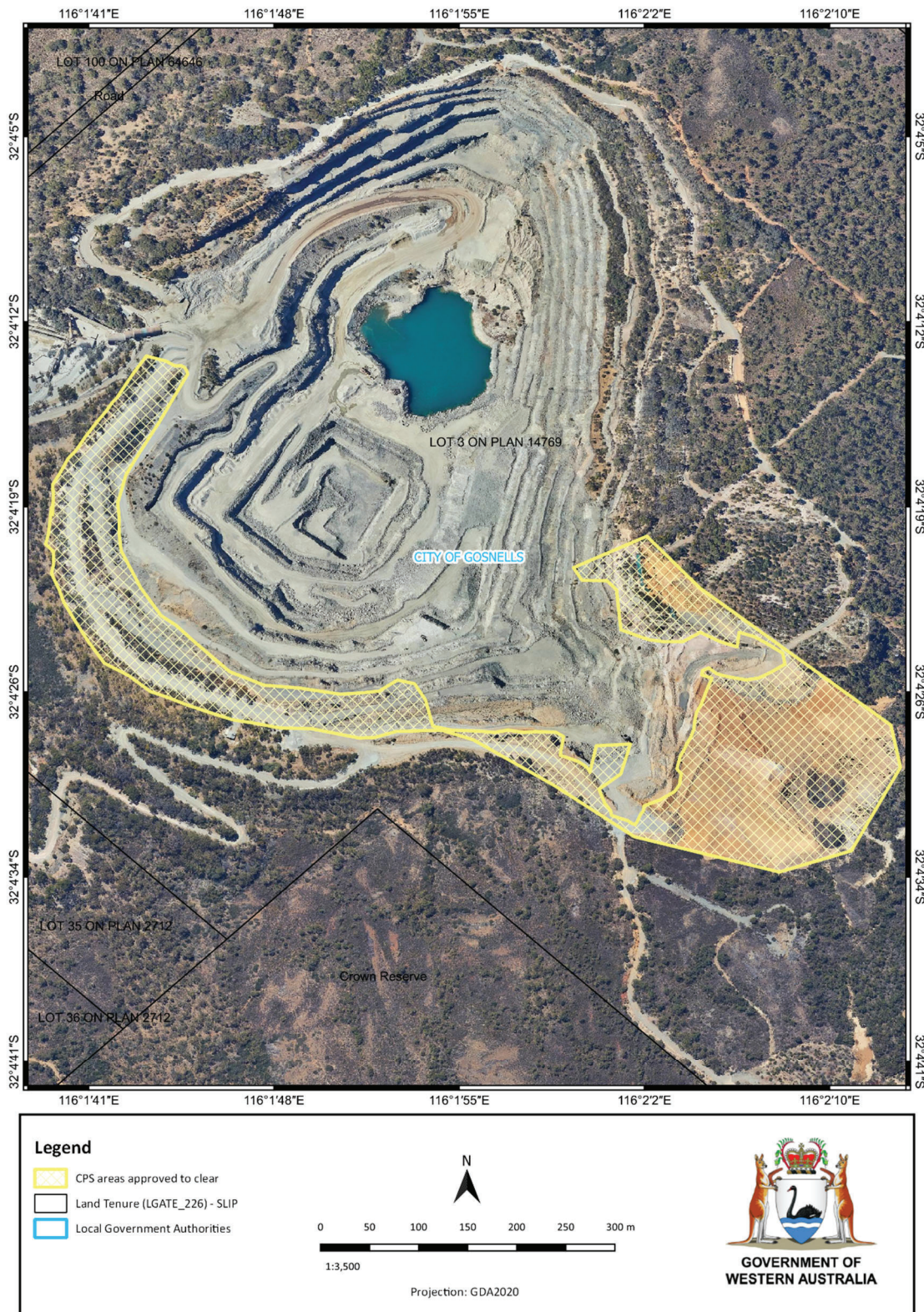


Figure 1: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 8582/3
Permit type:	Area permit
Applicant name:	Holcim (Australia) Pty Ltd
Application received:	5 April 2023
Application area:	10.7 hectares (ha)
Purpose of clearing:	Extractive Industry
Method of clearing:	Mechanical removal
Property:	Lot 3 on Plan 14769
Location (LGA area/s):	City of Gosnells
Localities (suburb/s):	Martin

1.2. Description of clearing activities

The application is to amend Clearing Permit CPS 8582/2 which was granted on 30 March 2022. Clearing Permit CPS 8582/2 authorises the clearing of 10.7 hectares of native vegetation for the purpose of extractive industry.

This amendment is to amend condition 1 to enable the clearing to occur beyond 4 June 2023. The applicant advised 5.17 hectares of clearing has been undertaken to date.

1.3. Decision on application

Decision:	Granted
Decision date:	30 May 2023
Decision area:	Up to 10.7 hectares of native vegetation, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit amendment application was made in accordance with section 51KA(1) of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Water and Environmental Regulation (DWER) on 5 April 2023. DWER advertised the application for public comment for a period of 21 days, and no submissions were received.

In undertaking the assessment, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets, the findings of a habitat assessment, the clearing principles set out in Schedule 5 of the EP Act, and any other matters considered relevant to the assessment.

The assessment against the clearing principles have not changed significantly since the assessment for CPS 8582/2. The Delegated Officer has determined that the proposed amendment to CPS 8582/2 is not likely to lead to an unacceptable risk to environmental values.

1.5. Site map



Figure 1 Map of the application area

The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit.

2 Legislative context

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

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

- the precautionary principle
- the principle of intergenerational equity
- the 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)

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

As this amendment is administrative in nature and relates only to extending the duration of the permit, the avoidance and mitigation measures implemented by the Permit Holder are unchanged and can be found in the Decision Report prepared for Clearing Permit CPS 8582/1. 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.

After consideration of the avoidance and mitigation measures, it was determined that an offset to counterbalance the significant residual impacts to significant foraging habitat for *Calyptorhynchus baudinii* (Baudin's Black-Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo) and *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo) was necessary. In accordance with the Government of Western Australia's Environmental Offsets Policy and Environmental Offsets Guidelines, this significant residual impact has been addressed through the conditioning of environmental offset requirements on the permit. The nature and suitability of the offset provided are summarised in the Decision Report prepared for Clearing Permit CPS 8582/1.

3.2. Assessment of impacts on environmental values

A review of current environmental information (Appendix A) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 8582/1. Upon assessment of the proposed amendment the Delegated Officer had regard for recent environmental values of conservation significant flora and fauna.

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

Assessment

A review of current environmental information indicates that the environmental values present within the permit area remain largely unchanged from the previous assessments.

In CPS 8582/1 a fauna assessment was conducted by Bamford Consulting Ecologists (Bamford, 2017) within the Quarry area, which encompasses the application area. The assessment included a desktop review, site inspection and targeted fauna surveys. The targeted fauna surveys focussed on species of conservation significance, particularly three species of black cockatoos *Calyptorhynchus baudinii* (Baudin's Black-Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo) and *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo).

Calyptorhynchus baudinii (Baudin's Black-Cockatoo)

Baudin's Black-Cockatoo is an endangered species that rely on Jarrah forests that are within the Warren, Northern and Southern Jarrah Forest IBRA sub-regions. They breed in densely forested areas of the Southern Jarrah Forest bioregion, and after breeding, they migrate in a north-easterly direction in search of food (DBCA, 2017a). Baudin's black cockatoo mainly feeds on the seeds of marri and nest in mature trees such as Marri, Karri, Jarrah and Wandoo in the lower southwest of Western Australia (DEC, 2008).

Calyptorhynchus latirostris (Carnaby's Black-Cockatoo)

Carnaby's Black-Cockatoo is an endangered species that occurs in uncleared and remnant areas of woodland, shrubland and kwongan heath dominated by proteaceous species. Suitable breeding areas include semiarid and subhumid interior eucalyptus woodlands, dominated by Salmon Gum (*Eucalyptus salmonphloia*) or Wandoo (*Eucalyptus wandoo*). Breeding occurs in the Avon Wheatbelt, while the Swan Coastal Plain is recognised as an important foraging area for this species (DBCA, 2017b).

Calyptorhynchus banksii naso (Forest Red-tailed Black-Cockatoo)

Forest Red-tailed Black-Cockatoos is listed as vulnerable under the *Biodiversity Conservation Act 2016* (WA) (BC Act). This species is known to inhabit Jarrah, Marri and Karri forests within the 600mm average rainfall isohyet. Remnant patches of Marri trees within the Northern and Southern Jarrah Forest IBRA sub-region forms critical breeding habitat for this species. Jarrah and Marri seeds predominately make up the Forest Red-tailed Black Cockatoo's diet (DBCA, 2017c).

Previous survey report (Bamford, 2017) identifies that the application area consists of Marri and Jarrah species. Approximately 4.34 hectares of the application area was considered moderate foraging material for black cockatoos. Carnaby's cockatoo generally forages within six kilometres of a night roost site and, while nesting, within a 12 kilometres radius of their nest site (Commonwealth of Australia, 2012). There are 71 roost sites within 12 kilometres radius of the application area, with the closest areas located approximately 2.06 km and 2.60 km and 2.69 km from the application area. Due to the presence of Jarrah and Marri within the application area, and the foraging value it provides, and the decline of black cockatoo populations, it is considered that the proposed clearing may have an impact to significant foraging and roosting habitat for black cockatoos.

A survey conducted by (Astron Environmental Services, 2013) which covered the entire application area of CPS 8582/3 included a physical inspection of potential habitat trees did not identify any hollows suitable for black cockatoo breeding. Therefore, it is unlikely the proposed clearing will have a significant impact to significant breeding habitat for black cockatoos.

It is acknowledged that the previous assessments for CPS 8582/1 and CPS 8582/2 identified that the application area may provide suitable habitat for conservation significant fauna particularly black cockatoos. The assessment of impacts to these species is considered largely unchanged give there has been no changes in the known distribution, documented ecology, or conservation status of these species since the previous assessment of the permit, and that habitat values within the permit area remain largely unchanged.

Further, the existing permit identified the environmental impacts to black cockatoos from the clearing and included an offset condition to counterbalance the significant impacts. This offset condition is considered to suitably counterbalance the environmental impacts from the remaining area to be cleared.

Conclusion

Given the above, the Delegated Officer determined that the assessment of impacts to fauna species remains unchanged from the previous assessment of the permit and that the existing fauna management conditions on the permit are still adequate to mitigate any potential impacts to conservation significant fauna.

Conditions

No further fauna management conditions required.

3.2.2. Biological values (flora) - Clearing Principles (c)

Assessment

A recent desktop assessment identified 11 additional conservation significant flora species within the local area (10km radius from the centre of the application area), of which two species have potential to occur within the application area based off their preferred vegetation type.

- *Morelotia australiensis*
- *Thysanotus cymosus*

Morelotia australiensis is listed as threatened under the *Biodiversity Conservation Act 2016*. This species is associated with Marri and Jarrah vegetation (Western Australian Herbarium, 1998), and is found within grey sand over clay, that favours winter wet, swampy depressions, drainage lines or rises surrounding swamps (Southern Tetraria, 2008). This species was not identified during the flora survey (AECOM, 2017) and due to most of the clearing already being complete it is unlikely the remaining clearing will have a significant impact to this species on a local or regional scale.

Thysanotus cymosus is listed as a Priority 3 species under the *Biodiversity Conservation Act 2016*. This species is associated with Marri and Jarrah vegetation and is found within yellow, grey sand (Western Australian herbarium, 1998). This species was not identified during the flora survey (AECOM, 2017) and due to most of the clearing already being complete it is unlikely the remaining clearing will have a significant impact to this species on a local or regional scale.

The remaining environmental impacts for threatened flora remains largely unchanged from Decision report CPS 8582/1.

Conclusion

For the reasons set out above, it is considered that the proposed clearing is not likely to have significant impact on conservation significant flora on a local or regional scale. As assessed in Decision Report CPS 8582/1, it is recognised that the proposed clearing may pose a risk to the adjacent vegetation where priority flora may occur. Hygiene management practices will likely ameliorate this risk.

Conditions

As per CPS 8582/1 to address the above impacts, weed and dieback hygiene management measures will be required as a condition on the clearing permit.

3.3. Relevant planning instruments and other matters

The assessment against planning instruments and other matters is unchanged and can be found in the Decision Report prepared for CPS 8582/1.

4 Suitability of offsets

Clearing permit CPS 8582/2 conditions the Permit Holder to provide documentary evidence of the monetary contribution to the CEO, prior to undertaking any clearing authorised under the permit. This monetary contribution has been transferred to the Department.

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The proposed clearing area is part of an expansive tract of native vegetation. It is surrounded by woodland and heath communities. Spatial data indicates the local area (10 km radius of the proposed clearing area) retains approximately 41.6% of the original native vegetation cover.
Ecological linkage	There are no mapped ecological linkages within the application area. The closest mapped record is the Perth Regional Ecological Linkage (Object ID: 34) recorded approximately 600 metres east of the application area.
Conservation areas	Gosnells Quarry is surrounded by neighbouring intact remnant vegetation, much of which is associated with Banyowla Regional Park. The application area is approximately 80 metres from Banyowla Regional Park at its closest point.
Vegetation description	<p>Vegetation surveys (AECOM, 2017) indicate the vegetation within the proposed clearing area consists of two heath communities, three forest/woodland communities and planted/rehabilitated vegetation.</p> <p>This is consistent with the Heddle et al. (1980) mapped vegetation complexes:</p> <ul style="list-style-type: none"> • Darling Scarp complex, which is described as a wide range of vegetation from bare rock and lichen-fields through shrublands to woodlands of Marri (<i>Corymbia calophylla</i>), Wandoo (<i>Eucalyptus wandoo</i>), Butter-bark (<i>E. laeliae</i>), Rock Sheoak (<i>Allocasuarina huegeliana</i>) and Mountain Marri (<i>C. haematoxylon</i>); and • Dwellingup complex, which is described as predominantly consisting of open forest of Jarrah-Marri (<i>Eucalyptus marginata</i>-<i>Corymbia calophylla</i>).
Vegetation condition	Vegetation surveys (AECOM, 2017) indicate the vegetation within the proposed clearing area is in Excellent to Completely Degraded (Keighery, 1994) condition. The full Keighery condition rating scale is provided in Appendix E.
Climate and landform	<p>The Perth region has a warm Mediterranean climate, characterised by hot dry summers and cool to mild wet winters. Gosnells City has experienced an average annual rainfall of 825 mm since 1961, with the majority of rainfall occurring between May and August (BoM, 2015).</p> <p>The Quarry is located on the eastern edge of the Darling Scarp. The surface geology of the entire Quarry area consists of igneous felsic intrusives, which are described as undifferentiated felsic intrusive rocks, including monzogranite, granodiorite, granite, tonalite, quartz monzonite, syenogranite, diorite, monzodiorite, and pegmatite. Locally metamorphosed, foliated gneissic, local abundant mafic and ultramafic inclusions (Geological Survey of Western Australia and Geoscience, 2008).</p>
Soil description	<p>The soil is mapped as:</p> <ul style="list-style-type: none"> • Darling Scarp 1 Phase: Gentle to moderate upper slopes (5-30%). Variable moderately well to well drained duplex and gradational soils. Common rock outcrop. • Dwellingup 2 Phase: Very gently to gently undulating terrain (<10%) with well drained, shallow to moderately deep gravelly brownish sands, pale brown sands and earthy sands overlying lateritic duricrust. • Mambup 1 Phase: Gently undulating ridge crests and benches with slopes <20%. Shallow to moderately deep duplex and gradational soils prevail. • Myara 1 Phase: Gentle to steep valley sideslopes (5-35%) and narrow incised valley floors. Variable well drained duplex and gradational soils. Common rock outcrop. <i>E. wandoo</i>, <i>E. accedens</i> and <i>E. marginata</i> on sandy gravels and <i>Acacia</i> spp. On shallow soils.

Characteristic	Details
Land degradation risk	The application area partially intersects areas with a high risk of wind erosion, water erosion, subsurface acidification, and phosphorous export.
Waterbodies	The desktop assessment and aerial imagery indicated that one minor, non-perennial watercourse transect a section of the eastern aspect of the application area.
Hydrogeography	The application area falls within the Western Darling Range hydrological zone of Western Australia. The application area is not subject to an area protected under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act), Country Water Supply Act 1917 or a Public Drinking water source area. The groundwater salinity level (Total Dissolved Solids) is mapped as 500-1000 milligrams per litre.
Flora	The desktop assessment identified 101 conservation significant flora taxa within the local area (10km radius from the centre of the application area) which comprises of 24 threatened flora and 77 priority flora taxa. The nearest record is <i>Calothamnus graniticus subsp. leptophyllus</i> located approximately 38 metres from the application area.
Ecological communities	There are no mapped threatened ecological communities (TEC) within the application area. The closest mapped TEC is the Central Northern Darling Scarp Granite Shrubland Community recorded approximately 200 metres east of the application area.
Fauna	The desktop assessment identified 32 conservation significant fauna species within the local area. The closest record is of <i>Calyptorhynchus banksii naso</i> and <i>Calyptorhynchus baudinii</i> recorded approximately 315 metres from the application area. The application area is mapped as Forest-red tailed black cockatoo, Carnaby's cockatoo and Baudin's cockatoo known distribution area.

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u> The area proposed to be cleared does not contain locally significant flora, ecological communities or higher diversity compared to the local area. However, it contains suitable habitat for conservation significant fauna.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8582/1)</p>	<p>Yes</p> <p>Refer to Section 3.2.1, above.</p>
<p><u>Principle (b):</u> "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."</p> <p><u>Assessment:</u> The area proposed to be cleared contains significant habitat for conservation significant fauna.</p>	<p>Not likely to be at variance</p>	<p>Yes</p> <p>Refer to Section 3.2.2, above.</p>
<p><u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</p> <p><u>Assessment:</u> The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act.</p>	<p>Not likely to be at variance</p>	<p>Yes</p> <p>Refer to Section 3.2.1, above.</p>

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (d):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared does not contain species that indicate a threatened ecological community.</p>	<p>Not likely to be at variance</p> <p><i>As per CPS 8582/1.</i></p>	<p>No</p>
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The extent of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.</p>	<p>Not likely to be at variance</p> <p><i>As per CPS 8582/1</i></p>	<p>No</p>
<p><u>Principle (h):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.”</i></p> <p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area, the proposed clearing may have an impact on the environmental values of nearby conservation areas, however the weed and dieback management condition in CPS 8582/1 is still likely to mitigate the environmental impact.</p>	<p>Not likely to be at variance</p> <p><i>As per CPS 8582/1.</i></p>	<p>No</p>
Environmental value: land and water resources		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>As identified in CPS 8582/1, one minor, non-perennial watercourse transects a section of the eastern aspect of the application area, however no vegetation associated with a watercourse was identified in the surveys. Proposed clearing is not likely to impact vegetation associated with this watercourse.</p>	<p>Not likely to be at variance</p> <p><i>As per CPS 8582/1.</i></p>	<p>No</p>
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u></p> <p>The mapped soils are highly susceptible to wind erosion, water erosion, subsurface acidification, and nutrient export. Noting the extent of the application area remaining to be cleared, and the mitigation measures that will be implemented by the applicant, the proposed clearing is not likely to have an appreciable impact on land degradation.</p>	<p>Not likely to be at variance</p>	<p>No</p>
<p><u>Principle (i):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.”</i></p> <p><u>Assessment:</u></p>	<p>Not likely to be at variance</p> <p><i>As per CPS 8582/1.</i></p>	<p>No</p>

Assessment against the clearing principles	Variance level	Is further consideration required?
Given no water courses / wetlands / Public Drinking Water Sources Areas are recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality.		
<p><u>Principle (j)</u>: “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</p> <p><u>Assessment</u>:</p> <p>The surveyed soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding.</p>	<p>Not likely to be at variance</p> <p>As per CPS 8582/1.</p>	No

Appendix C. Vegetation condition rating scale

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

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

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

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

Appendix D. Offset calculator value justification

The offset calculator value justification is unchanged from Decision Report CPS 8582/1.

Appendix E. Sources of information

E.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- 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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