GOVERNMENT OF
WESTERN AUSTRALIA

# CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

| | |
|---|---|
| **Purpose Permit number:** | CPS 10984/1 |
| **Permit Holder:** | City of Busselton |
| **Duration of Permit:** | From 18 July 2025 to 18 July 2035 |

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

## PART I – CLEARING AUTHORISED

**1. Clearing authorised (purpose)**

The permit holder is authorised to clear *native vegetation* for the purpose of road upgrades and construction.

**2. Land on which clearing is to be done**

Payne Road Reserve PIN 11471094, Chapman Hill

**3. Clearing authorised**

The permit holder must not clear more than 4 native trees within the area cross-hatched yellow in Figure 1 of Schedule 1.

**4. Period during which clearing is authorised**

The permit holder must not clear any native vegetation after 18 July 2030.

## PART II – MANAGEMENT CONDITIONS

**5. 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.

## 6. 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.

## 7. Mitigation – Planting

The permit holder must within 12 months of undertaking clearing authorised under this permit:

(a) Undertake *planting* of at least 12 *Corymbia calophylla (marri)* trees within the area cross-hatched red in Figure 1 of Schedule 1, by;
  (i) ensuring only *local provenance* propagating material is used for *planting* activities;
  (ii) ensure *planting* is undertaken at an *optimal time*;
  (iii) undertake *weed* control and watering of the planted trees for at least three years post *planting*;

(b) The permit holder must within 24 months of planting the 12 *Corymbia calophylla* (marri) trees in accordance with condition 7(a) of this permit:
  (i) engage an *environmental specialist* to make a determination that the 12 *Corymbia calophylla trees* planted under condition 7(a) will survive;
  (ii) if the determination made by the *environmental specialist* under condition 7(b)(i) is that 12 *Corymbia calophylla trees* will not survive, the permit holder must *plant* additional trees that will result in 12 *Corymbia calophylla trees* persisting within the area cross-hatched red in Figure 1 of Schedule 1; and;
  (iii) where additional *planting* of trees is undertaken in accordance with condition 7(b)(ii), the permit holder must repeat the activities required by condition 7(a) and condition 7(b) of this permit.

# PART III - RECORD KEEPING AND REPORTING

## 8. Records that must be kept

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

**Table 1: Records that must be kept**

| No. | Relevant matter | Specifications |
|---|---|---|
| 1. | In relation to the authorised clearing activities generally | (a) the species composition, structure, and density of the cleared area;<br>(b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia |

| No. | Relevant matter | Specifications |
|---|---|---|
| | | 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings;<br>(c) the date that the area was cleared;<br>(d) the size of the area cleared (in hectares);<br>(e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 5; and<br>(f) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 6. |
| 2. | In relation to mitigation *planting* pursuant to condition 7 of this Permit | (a) the date(s) the mitigation *planting* occurred; a description of the planting activities undertaken;<br>(b) the locations of the trees planted, 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;<br>(c) the total number of trees *planted*; and<br>(d) a description of the infill *planting* (if any) in accordance with the requirements of condition 7(b)(ii). |

**9. Reporting**

The permit holder must provide to the *CEO* the records required under condition 8 of this permit when requested by the *CEO*.

## DEFINITIONS

In this permit, the terms in Table 2 have the meanings defined.

**Table 2: Definitions**

| Term | Definition |
|---|---|
| CEO | Chief Executive Officer of the department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*. |
| clearing | has the meaning given under section 3(1) of the EP Act. |
| condition | a condition to which this clearing permit is subject under section 51H of the EP Act. |
| dieback | means the effect of *Phytophthora* species on native vegetation. |
| department | means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3. |
| environmental specialist | means a person who holds a tertiary qualification in environmental science or equivalent, and has a minimum of 2 years work experience |

| Term | Definition |
|---|---|
| | relevant to the type of environmental advice that an environmental specialist is required to provide under this permit, or who is approved by the CEO as a suitable environmental specialist. |
| EP Act | *Environmental Protection Act 1986* (WA) |
| fill | means material used to increase the ground level, or to fill a depression. |
| Local provenance | means native vegetation seeds and propagating material from natural sources within 50 kilometres and the same IBRA subregion of the area cleared. |
| mulch | means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation. |
| native vegetation | has the meaning given under section 3(1) and section 51A of the EP Act. |
| optimal time | Optimal time means the period from May to July for undertaking planting. |
| planted/planting | means the re-establishment of vegetation by creating soil conditions and planting seedlings of the desired species. |
| weeds | means any plant –<br>(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or<br>(b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or<br>not indigenous to the area concerned. |

**END OF CONDITIONS**

**Meenu Vitarana**
**MANAGER**
NATIVE VEGETATION REGULATION

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

24 June 2025

# Schedule 1

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

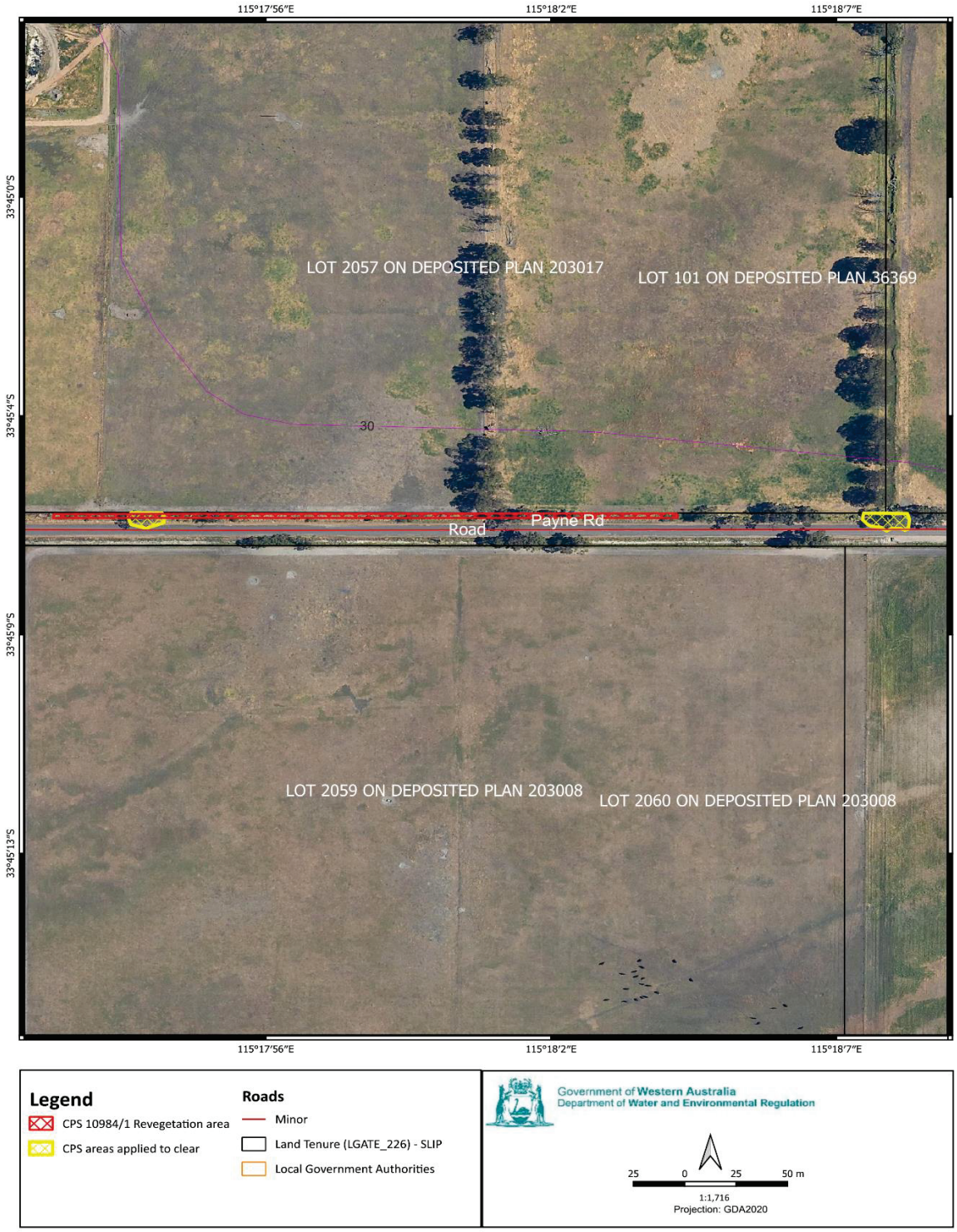


**Figure 1: Map of the boundary of the area within which clearing may occur (cross-hatched yellow) and the boundary of the area where mitigation planting is required by condition 7 of this permit (cross-hatched red).**

Government of Western Australia
Department of Water and Environmental Regulation

# Clearing Permit Decision Report

## 1 Application details and outcome

### 1.1. Permit application details

| | |
|---|---|
| **Permit number:** | CPS 10984/1 |
| **Permit type:** | Purpose permit |
| **Applicant name:** | City of Busselton |
| **Application received:** | 7 March 2025 |
| **Application area:** | 4 native trees |
| **Purpose of clearing:** | Road upgrades |
| **Method of clearing:** | Mechanical |
| **Property:** | Payne Road reserve (PIN 11471094) |
| **Location (LGA area/s):** | City of Busselton |
| **Localities (suburb/s):** | Kaloorup |

### 1.2. Description of clearing activities

The application was received from the City of Busselton (the City) for a Purpose Permit to clear four native *Corymbia calophylla* (Marri) trees. The vegetation proposed to be cleared is distributed across two separate areas (see Figure 1, Section 1.5).

The application is to selectively clear trees where road upgrades work will commence, for the reconstruction and widening of Payne Road (PIN 11471094) to maximise road safety for the community, as this portion of road has been identified as high risk area. Works involved require the clearing of vegetation in the verge to cater for widened shoulders and drainage infrastructure (City of Busselton, Accendo Australia, 2025). The understorey vegetation is completely degraded only consisting of invasive weeds (Plant ecology consulting, 2025). The area proposed to be cleared is four trees on the northern side of the road reserve.

No native understorey vegetation will be impacted as a component of the works. A summary of the trees subject to clearing is provided as follows (Accendo Australia, 2025):

- Three trees require removal to replace an existing culvert;
- one tree requires removal due to proximity to the road seal which is dangerous;
- Only one tree has a diameter at breast height (DBH) in excess of 50 cm. However, this tree has experienced storm damage with only a single branch remaining; and
- None of the trees contain any obvious hollows.

### 1.3. Decision on application

| | |
|---|---|
| **Decision:** | Granted |
| **Decision date:** | 24 June 2025 |
| **Decision area:** | 4 native trees, as depicted in Section 1.5, below. |

## 1.4. Reasons for decision

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

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix E.1.), a flora and vegetation survey (Appendix D), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (Section 3). The Delegated Officer also took into consideration that the purpose of the clearing is for the reconstruction and widening of Payne Road to maximise road safety for the community, as this portion of road has been identified as high risk area. Works involved require the clearing of vegetation in the verge to cater for widened shoulders and drainage infrastructure (Accendo Australia, 2025).

The assessment identified that the proposed clearing will result in:

- The loss of four *Corymbia calophylla* (marri) trees. Three of the four trees have a diameter at breast height (DBH) less than 50 centimetres, and the other tree has a DBH over 50 centimetres.
- the loss of native vegetation that is suitable habitat for *Zanda baudinii* (baudin's cockatoo), *Zanda latirostris* (carnaby's cockatoo) and *Calyptorhynchus banksii naso* (forest red-tailed Black cockatoo), collectively known as black cockatoos;
- loss of native vegetation within an extensively cleared landscape; and
- the potential introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values.

The planting of species suitable for black cockatoo foraging and breeding habitat will be undertaken to reduce impacts to black cockatoos. The likelihood of impact from weeds and dieback can be minimised by applying weed and dieback management measures.

After consideration of the available information, as well as the applicant's avoidance, minimisation and mitigation measures (Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to have long-term adverse impacts on conservation significant fauna or flora species and can be minimised and managed to unlikely lead to an unacceptable risk to environmental values. The applicant has suitably demonstrated avoidance and minimisation measures and committed to mitigate the environmental impacts through planting of species suitable for black cockatoo foraging and breeding habitat along the adjacent road reserve.

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

- avoid, minimise to reduce the impacts and extent of clearing. Utilisation of the minimisation methods proposed by the City of Busselton (see section 3.1).
- take hygiene steps to minimise the risk of the introduction and spread of weeds.
- undertake onsite planting of 12 marri trees within the adjacent road reserve.

## 1.5. Site map

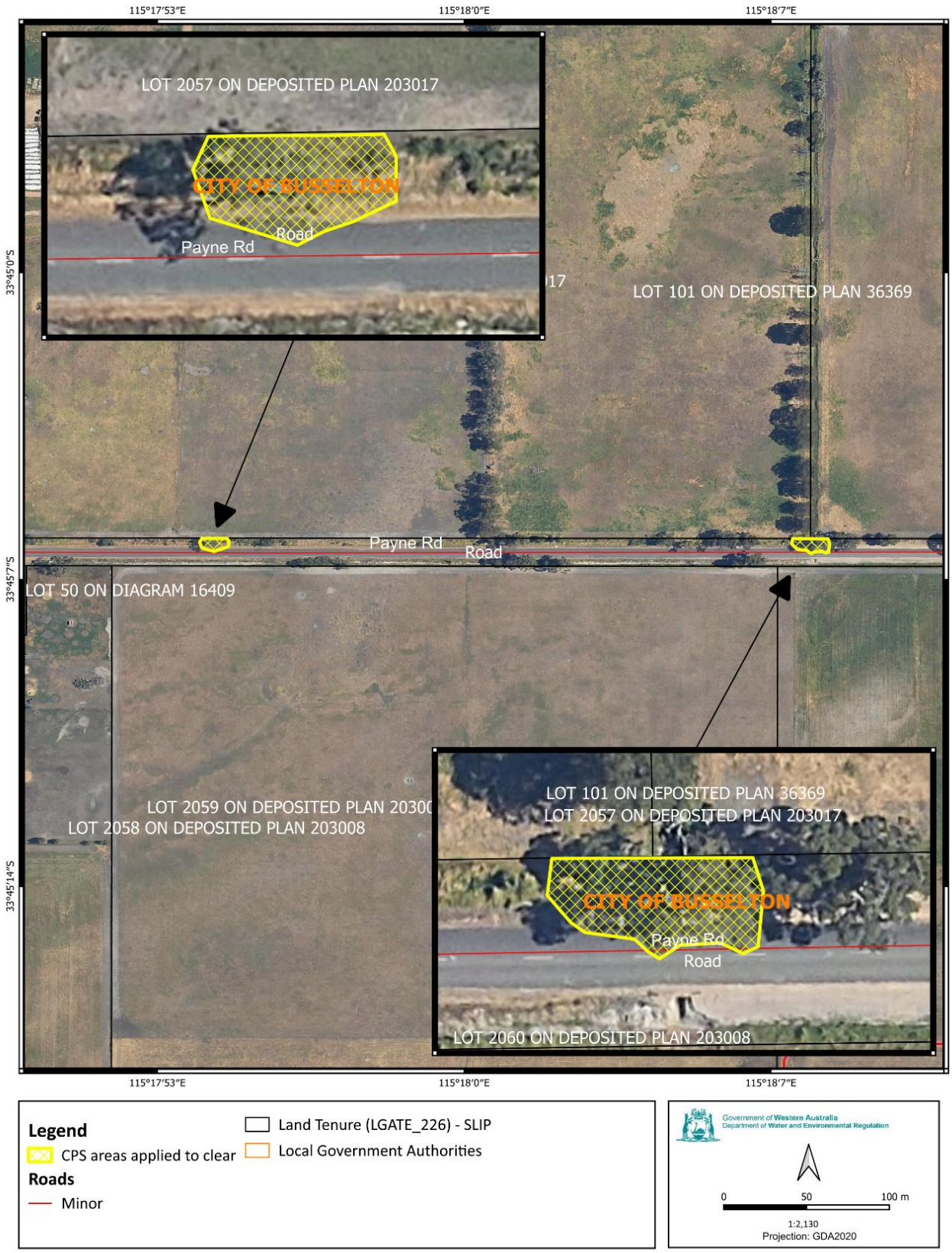


Figure 1 - Map of the application area

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

## 2 Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- Technical guidance – *Flora and Vegetation 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. The City of Busselton surveyed the roadside to determine the minimum clearing requirements, and has retained roadside vegetation as far as practicable, whilst meeting roadside safety requirements. Alternatives such as the use of bollards has been deemed not feasible (Accendo Australia, 2025).

To avoid any direct or indirect impacts to other vegetation within or adjacent to these trees, the applicant has committed to the following mitigation measures:

- prior to clearing commencing, the four trees will be clearly demarcated with flagging tape;
- no vehicular access or parking within vegetated areas in the reserve; and
- no stockpiling of cleared vegetation or storage of equipment within the reserve.
- the applicant has also committed to planting 12 *corymbia calophylla* (marri) trees within cleared portions of the road reserve. See planting area mapped below.

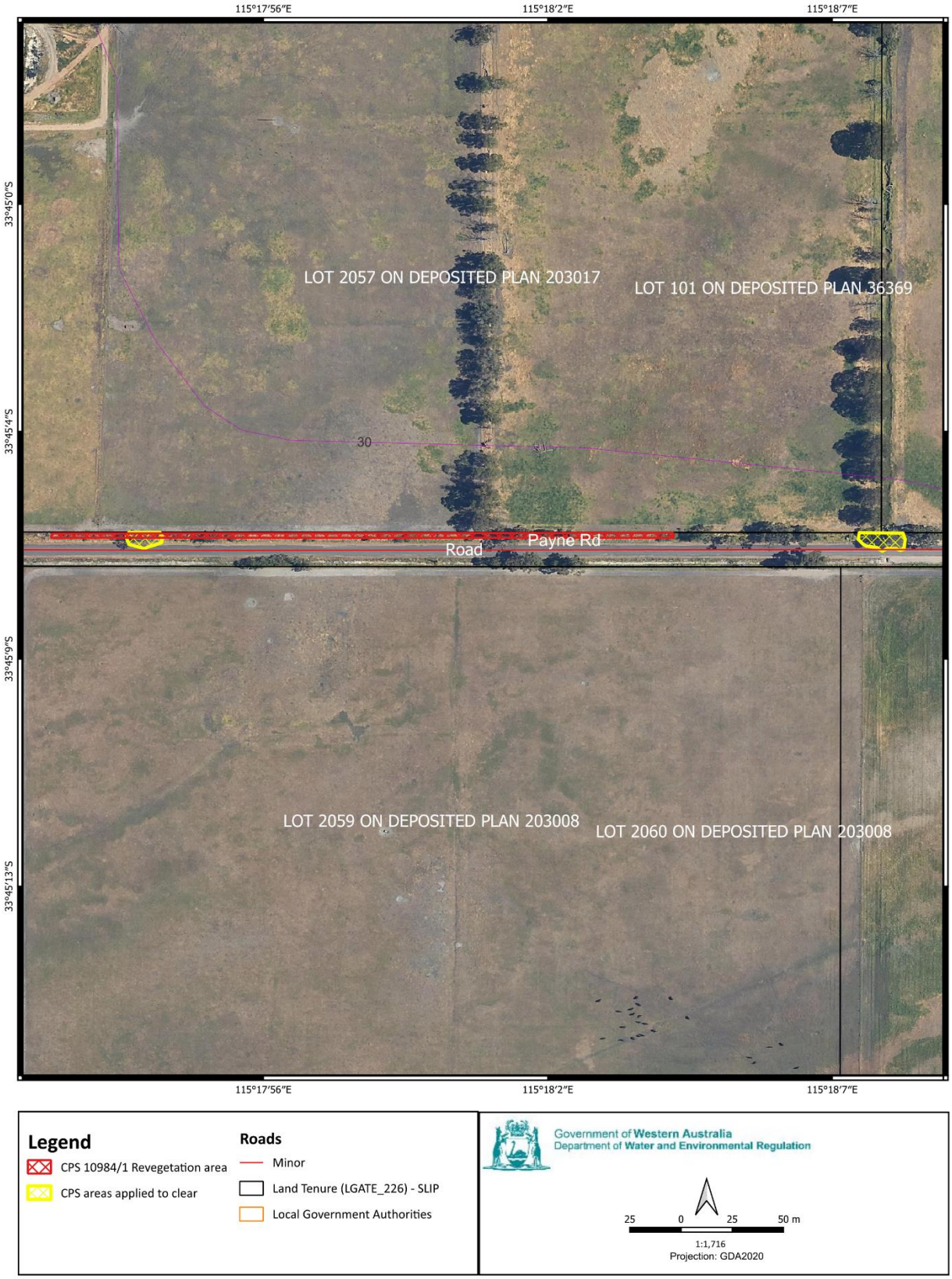


Figure 2 - Map of onsite planting area. The area cross hatched in red is the proposed revegetation area of 12 Corymbia calophylla (marri) trees.

## 3.2. Assessment of impacts on environmental values

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

The assessment against the clearing principles (Appendix B) identified that the impacts of the proposed clearing present a risk to conservation significant fauna. 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 Principle b*

***Pseudocheirus occidentalis* (western ringtail possum)**

Western ringtail possums (WRP) are listed as Critically Endangered under the BC Act and the EPBC Act. Western ringtail possum habitat comprises of long unburnt mature remnants of peppermint (*Agonis flexuosa*) woodlands with high canopy continuity and high foliage nutrients. Other habitats comprises of *Eucalyptus marginata* (jarrah)/ *Corymbia calophylla* (marri) forests and woodlands with adequate hollows, coastal heath, myrtaceous heaths and shrublands, Bullich (*Eucalyptus megacarpa*) dominated riparian zones and karri forests (DBCA, 2014).

According to the datasets, this species has been recorded 3446 times within the local area (10 kilometre from the application area), with habitat suitability being mapped 0.4 kilometres away, and the closest recording being 2.57 kilometres away from the application area. Noting the vegetation within road reserve, and adjacent to the application area is severely degraded and lacks canopy cover, it is unlikely that the application area provides significant habitat or significant ecological linkage values for western ringtail possums. The avoidance and mitigations efforts and the onsite planting of 12 *Corymbia calophylla* (marri) trees will be effective in avoiding possible impacts to the WRP habitat.

***Phascogale tapoatafa wambenger* (south-western brush-tailed phascogale)**

*Phascogale tapoatafa wambenger* (south-western brush-tailed phascogales) are known to occur in dry sclerophyll forests and open woodlands that contain hollow bearing trees, with records less common in higher rainfall areas. This species is said to occur in highest densities in Perup/Kingston area, Collie River valley, and near Margaret River and Busselton (DBCA, 2012).

According to available databases, this species has been recorded 17 times within the local area (10 kilometres from the application area), with the closest record approximately 5.7 kilometres from the application area. The species possible use of the road reserve, along with impacts to individuals present at the time remain the greatest threats. Due to the scarce amount of canopy cover around the application area, it is likely that the application area does not provide vegetation to traverse between larger remnants of native vegetation, and as such, does not provide suitable habitat for the south-western brush-tailed phascogale. The avoidance and mitigations efforts and the onsite planting of 12 *Corymbia calophylla* (marri) trees will be affective in avoiding possible impacts to the south-western brush-tailed phascogale.

**Black cockatoo species**

*Zanda latirostris* (Carnaby's black cockatoo), *Zanda baudinii* (Baudin's black cockatoo) and *Calyptorhynchus banksii naso* (forest red-tailed black cockatoo) are listed as endangered and/or vulnerable under the BC Act and EPBC Act. The application area is within the known distribution of all three black cockatoo species and is mapped as black cockatoo foraging habitat in the Swan Coastal Plain (Figure 10). While habitat requirements for the three species of black cockatoos differ, the requirements in general can be categorised as breeding habitat, foraging habitat and night roosting habitat. It must be noted that *Calyptorhynchus* sp. (white-tailed black cockatoo) have been recorded in the local area. These records were obtained when the data collector could not definitively distinguish if they spotted a Baudin's or Carnaby's cockatoo, therefore the *Calyptorhynchus* sp. (white-tailed black cockatoo) category was created to incorporate these records.

The four *Corymbia calophylla (*Marri) trees are likely to provide foraging habitat for the black cockatoo species. Black cockatoos have been recorded to feed on the seed, flower and nectar of the *Corymbia calophylla* (marri) trees (Leonie et al, 2008). Noting they do not contain hollows, the trees proposed to be cleared are not likely to provide breeding habitat (Accendo, 2025).

The City has agreed to onsite planting of 12 *Corymbia calophylla* (marri) trees within Payne Road reserve. If the planting is successful, this will mitigate impacts of the clearing for black cockatoo species. The department has

assessed the suitability of this planting actions using the WA Environmental Offsets Metric Calculator and determined that the planting of 12 marri trees is sufficient to ensure no significant residual impact remains to black cockatoo foraging habitat. The department considers that the onsite planting actions aligns with the WA Environmental Offset Policy (2011) and WA Environmental Offsets Guideline (2014).

Conclusion

Based on the above assessment, the application area includes suitable habitat for black cockatoos and is unlikely to provide significant habitat for western ringtail possum and western brush-tailed phascogales.

Conditions

To address the above impacts, planting of 12 corymba calophylla (marri) trees will be required as a condition on the clearing permit.

#### *3.2.2. Biological values – Remnant Vegetation - Clearing Principles e*

Assessment

The mapped Swan Coastal Plain vegetation 'Abba complex' retains approximately 6.54 per cent of its pre-European native vegetation extent within the bioregion (Government of Western Australia, 2019a). The extent of native vegetation remaining within the local area is 16.4 per cent. The Abba vegetation complex (30) and native vegetation remaining within the local area both retain less than 30 per cent of the original extent of native vegetation. Noting the local area and the mapped Abba vegetation complex is less than the 30 per cent threshold and the application area may function as a stepping stone ecological linkage that contains habitat for fauna, the application area is considered to be significant remanent vegetation within an extensively cleared landscape.

Conclusion

Due to the presence of suitable habitat for conservation significant fauna, the proposed clearing is impacting a significant remnant of native vegetation within an extensively cleared landscape. The assessment of the suitability of the onsite planting actions using the WA Environmental Offsets Metric Calculator, it was determined that the planting of 12 marri trees is sufficient to ensure no significant residual impact remains for clearing within an extensively cleared landscape. The department considers that the onsite planting actions aligns with the WA Environmental Offset Policy (2011) and WA Environmental Offsets Guideline (2014).

If onsite planting actions proposed by the applicant through the revegetation of at least 12 native trees are successful, the proposed clearing may not result in a significant residual impact. Additionally, weed and dieback management measures will minimise impacts to the surrounding native vegetation.

Conditions:

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

- Planting and ensuring the survival of at least 12 *Corymbia calophylla* (marri) trees within the road reserve.
- Minimise the risk of the introduction and spread of weeds and dieback with clean equipment.

### 3.3. Relevant planning instruments and other matters

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

## End

# Appendix A. Site characteristics

## A.1. Site characteristics

| Characteristic | Details |
|---|---|
| Local context | The native vegetation, comprised of four native trees proposed to be cleared, is located along Payne Road reserve within the intensive land use zone of Western Australia. The application area is a previously cleared area. The surrounding area consists of rural lots with extensive areas that have been cleared for agricultural purposes, with small patches of remnant and planted vegetation. |
| Ecological linkage | There are no ecological linkages within the application area, however the application area may function as a stepping stone ecological linkage for fauna moving between larger remnants of native vegetation within the local area. |
| Conservation areas | There are no conservation areas intersecting with the application area. The closest conservation area is located approximately 3.1 kilometres north-west of the application area, which is an area with an 'agreement to reserve in perpetuity' (Object ID – 1849) under soil and land conservation council Conservation Covenants. |
| Vegetation description | There is minimal understorey where the trees are proposed to be cleared. The vegetation within the road reserve has been severely impacted by disturbance, with presence of invasive weeds (Plant Ecology Consulting, 2024). Representative photos of the proposed clearing areas supplied by the applicant (City of Busselton, 2022b) are available in Appendix D.<br>The survey found the vegetation type within the application area is *Corymbia calophylla* woodland (Plant Ecology Consulting, 2024).<br>This is consistent with the mapped vegetation type:<br>*Corymbia calophylla* woodland, which is described as A mixture of open forest of *Corymbia calophylla* (Marri) - *Eucalyptus marginata* (Jarrah) - Banksia species and woodland of *Corymbia calophylla* (Marri) with minor occurrences of *Corymbia haematoxylon* (Mountain Marri). Woodland of *Eucalyptus rudis* (Flooded Gum) - *Melaleuca* species along creeks and on flood plains. (Shepherd et al, 2001). |
| Vegetation condition | Flora and vegetation survey (Plant Ecology Consulting, 2024) indicate the vegetation within the application area is in completely degraded (Keighery, 1994) condition, described as:<br>• original vegetation structure has been lost and now consists mostly of exotic species with or without a tree canopy.<br>The full Keighery (1994) condition rating scale is provided in Appendix C. Survey descriptions and mapping are available in Appendix D. |
| Climate and landform | The mean annual rainfall within the local area is recorded as 791 millimetres. The application area elevation is 30 metres in the north with a slight rise to 35 meters, 700 metres to the south. |
| Soil description | The soil is mapped as *Abba wet flats Phase 213Ab, Winter wet flats and slight depressions with sandy grey brown duplex (Abba) and gradational (Busselton) soils.* |
| Land degradation risk | The risk of land degradation within the application area varies between moderate to extreme risk: |

| Characteristic | Details |
|---|---|
| | Water erosion, wind erosion, flood, subsurface acidification, water repellence and phosphorus export risks are mapped as high to extreme<br>Salinity and waterlogging risks are mapped as moderate to high risk. |
| Waterbodies | The desktop assessment and aerial imagery indicated that no waterbodies intersect the application area.<br>The application area is within the Vasse-Wonnerup Wetland system. Its major rivers include the Vasse, Sabina, Ludlow, and Abba. The closest river system is the Vasse river, which only flows during the winter months, and is located 1.8km from the application area (Plant Ecology Consulting, 2024; GIS database, 2025). |
| Hydrogeography | The application area is not located within a proclaimed surface water area, however does lie within the Busselton-Capel Groundwater Area, proclaimed under the RIWI Act.<br>According to available databases, the groundwater salinity is 500-1000 milligrams to litres total dissolved solids within the application areas.<br>There are no RIWI waterlines which intersect the application area. |
| Flora | Available databases indicate that there are 47 records of conservation significant species within the local area.<br>17 conservation significant flora species in the local area are within the same soil and vegetation complex, 7 of which are priority listed species and 10 listed as Threatened. The closest to the application area being threatened species *Grevillea brachystylis subsp. grandis*, recorded approximately 0.5 kilometres away.<br>The two flora species of *Grevillea brachystylis subsp. Grandis* and *Verticordia plumosa var. ananeotes* were found within the survey area, along the same road reserve as the application area (Plant Ecology Consulting, 2024). |
| Ecological communities | There are no threatened ecological communities within the application area.<br>The closest threatened ecological community is 2 kilometres away. |
| Fauna | There are records of 33 fauna of conservation significance within the local area, with 18 of these are either migratory birds or freshwater marine species, which are unlikely to utilise the application area.<br>The other 15 records of conservation significant fauna, six are priority listed fauna, 9 are on the Threatened fauna list under the EPBC Act.<br>The application area lies within the mapped distribution area for all three black cockatoo species. There are five records of black cockatoo roosts within 10 kilometres of the application area, with the closest record being approximately 6 kilometres from the application area. There are no confirmed black cockatoo breeding trees within the application area. |

## 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* | | | | | |
| Swan coastal plain | 1,501,221.93 | 579,813.47 | 38.62 | 222,916.97 | 17.98 |
| Vegetation complex | | | | | |
| Swan Coastal Plain – Abba_30 | 50,892.78 | 3,326.20 | 6.54 | 183.20 | 0.36 |

| | 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 |
|---|---|---|---|---|---|
| Local area | | | | | |
| 10km radius | 321,927 | 52,779 | 16.4 | - | - |

*Government of Western Australia (2019a)

## A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), and biological survey information, impacts to the following conservation significant flora required further consideration.

| Species name | Conservation status | Suitable habitat features? [Y/N] | Suitable vegetation type? [Y/N] | Suitable soil type? [Y/N] | Distance of closest record to application area (km) | Number of known records (total) |
|---|---|---|---|---|---|---|
| *Andersonia barbata* | 2 | N | Y | Y | 3.03 | 2 |
| *Caladenia procera* | T | N | Y | Y | 2.76 | 1 |
| *Calothamnus quadrifidus subsp. teretifolius* | 4 | N | Y | Y | 1.49 | 5 |
| *Cyanothamnus tenuis* | 4 | N | Y | Y | 7.03 | 1 |
| *Daviesia elongata* | T | N | Y | Y | 2.44 | 1 |
| *Grevillea brachystylis subsp. brachystylis* | 3 | N | Y | Y | 1.26 | 7 |
| *Grevillea brachystylis subsp. grandis* | T | N | Y | Y | 0.43 | 5 |
| *Hakea oldfieldii* | 3 | N | Y | Y | 1.74 | 1 |
| *Isopogon formosus subsp. dasylepis* | 3 | N | Y | Y | 1.74 | 2 |
| *Leptomeria furtiva* | 2 | N | Y | Y | 3.21 | 2 |
| *Leucopogon sp. Busselton (D. Cooper 243)* | 2 | N | Y | Y | 0.87 | 1 |
| *Loricobbia pinifolia* | 3 | N | Y | Y | 2.16 | 4 |
| *Loxocarya magna* | 3 | N | Y | Y | 1.74 | 1 |
| *Morelotia australiensis* | T | N | Y | Y | 2.80 | 1 |
| *Verticordia densiflora var. pedunculata* | T | N | Y | Y | 1.60 | 2 |
| *Verticordia lehmannii* | 4 | N | Y | Y | 2.78 | 1 |
| *Verticordia plumosa var. ananeotes* | T | N | Y | Y | 1.34 | 7 |
| *Verticordia plumosa var. vassensis* | T | N | Y | Y | 1.60 | 4 |

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

## A.4. Fauna analysis table

| Species name | Conservation status | Suitable habitat features? [Y/N] | Suitable vegetation type? [Y/N] | Distance of closest record to application area (km) | Number of known records (total) |
|---|---|---|---|---|---|
| western ringtail possum, ngwayir | CR | N | N | 2.57 | 3446 |
| Baudin's cockatoo | EN | Y | Y | 2.44 | 25 |
| Carnaby's cockatoo | EN | Y | Y | 2.92 | 13 |
| forest red-tailed black cockatoo | VU | Y | Y | 5.75 | 7.00 |
| masked owl (southwest) | P3 | Y | Y | 6.48 | 5 |
| quenda, southwestern brown bandicoot | P4 | N | N | 5.75 | 14 |
| south-western brush-tailed phascogale, wambenger | CD | N | Y | 5.75 | 17 |
| white-tailed black cockatoo | EN | Y | Y | 4.35 | 6 |

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

# Appendix B. Assessment against the clearing principles

| Assessment against the clearing principles | Variance level | Is further consideration required? |
|---|---|---|
| **Environmental value: biological values** | | |
| Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."*<br>Assessment:<br>The area proposed to be cleared does not contain significant flora, fauna, habitats, or assemblages of plants. | Not likely to be at variance | No |
| 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."*<br>Assessment:<br>The application area contains habitat for black cockatoo species, and possibly habitat for western ringtail possums, and south-western brush-tailed phascogale. However the lack of tree canopy within the road reserve indicates the application area does not provide significant habitat. | May be at variance | Yes<br>*Refer to Section 3.2.1, above.* |
| Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."*<br>Assessment:<br>The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act. The flora survey conducted by Plant Ecology Consulting, 2024 found the application area to be severely degraded, with no threatened flora within the application area. | Not likely to be at variance | No |

| Assessment against the clearing principles | Variance level | Is further consideration required? |
|---|---|---|
| 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."*<br><br>Assessment:<br><br>The area proposed to be cleared does not contain species that can indicate a threatened ecological community. Noting the distance to the closest record of a TEC, and the disturbed and completely degraded vegetation in the application area, the application area is not representative of a TEC. | Not likely to be at variance | No |
| **Environmental value: significant remnant vegetation and conservation areas** | | |
| Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."*<br><br>Assessment:<br><br>The extent of the mapped vegetation type and the native vegetation in the local area is not consistent with the national objectives and targets for biodiversity conservation in Australia. The application area contains suitable habitat for threatened fauna and occurs adjacent to records of threatened fauna. The native vegetation is considered to be a significant remnant. | At variance | Yes<br><br>*Refer to Section 3.2.2, above.* |
| Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."*<br><br>Assessment:<br><br>Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of adjacent and nearby conservation areas. | Not likely to be at variance | No |
| **Environmental value: land and water resources** | | |
| Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."*<br><br>Assessment:<br><br>No watercourses or wetlands are mapped within the application area. The application area does not include riparian vegetation. Photographs of the application area indicate a drainage line occurs adjacent to the application area. However noting the proposed clearing is to repair drainage infrastructure, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality. | Not likely to be at variance | No |
| Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."*<br><br>Assessment:<br><br>The mapped soils are moderately to highly susceptible to wind erosion, water erosion, nutrient export and salinity. Noting the extent of the application area and the condition of the vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation. | Not likely to be at variance | No |
| Principle (i): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."<br><br>Assessment: | Not likely to be at variance | No |

| Assessment against the clearing principles | Variance level | Is further consideration required? |
|---|---|---|
| Given no rivers, creeks or wetlands are recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality. | | |
| 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."*<br>Assessment:<br>The mapped soils and topographic contours in the surrounding area are susceptible to increased incidence or intensity of flooding.<br>Given no water courses or wetlands are recorded within 1.8 kilometres of the application area, along with the extent of the clearing, the proposed clearing is unlikely to contribute to waterlogging. | Not likely to be at variance | No |

## Appendix C. Vegetation condition rating scale

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

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared.

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. Biological survey information excerpts / photographs of the vegetation

Plate 1. Tree 1 (T1)- A *Corymbia calophylla* tree with a DBH <50 cm.

Figure 3 - *Corymbia Calophylla* (marri) tree with a DHB <50cm (Accendo Australia; City of Busselton, 2025)

**Plate 2. Tree 2 (T2) – A *Corymbia calophylla* tree with a DBH >50 cm. The top of this tree has broken off during a storm. It provides very limited foraging habitat for black cockatoos (with only a single branch remaining) and does not provide any hollows.**

Figure 4 - *Corymbia Calophylla* (marri) tree with a DHB >50cm (Accendo Australia; City of Busselton, 2025)

Plate 3. Tree 3 (T3) - A *Corymbia calophylla* tree with a DBH <50cm. No obvious hollows were observed.

Figure 5 - *Corymbia Calophylla* (marri) tree with a DHB <50cm (Accendo Australia; City of Busselton, 2025)

Plate 4. Tree 4 (T4) - A single *Corymbia calophylla* tree with a DBH <50 cm.

Figure 6 - *Corymbia Calophylla* (marri) tree with a DHB <50cm (Accendo Australia, City of Busselton, 2025)


Figure 7 – Vegetation type surveyed around application area (Plant ecology consulting, 2024)


Figure 8 – Condition rating surveyed around application area (Plant ecology consulting, 2024)

# 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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