



## Referral of proposed action

### What is a referral?

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate. (Further references to 'the Minister' in this form include references to the Minister's delegate.) To obtain approval from the Environment Minister, a proposed action should be referred. The purpose of a referral is to obtain a decision on whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister's decision as to whether approval is necessary and, if so, the type of assessment that will be undertaken. These decisions are made within 20 business days, provided sufficient information is provided in the referral.

### Who can make a referral?

Referrals may be made by or on behalf of a person proposing to take an action, the Commonwealth or a Commonwealth agency, a state or territory government, or agency, provided that the relevant government or agency has administrative responsibilities relating to the action.

### When do I need to make a referral?

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Protection of the environment from nuclear actions (sections 21 and 22A)
- Commonwealth marine environment (sections 23 and 24A)
- Great Barrier Reef Marine Park (sections 24B and 24C)
- A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
  - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
  - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure. This will provide a greater level of certainty that Commonwealth assessment requirements have been met.

To help you decide whether or not your proposed action requires approval (and therefore, if you should make a referral), the following guidance is available from the Department's website:

- the Policy Statement titled Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Additional sectoral guidelines are also available.

- the Policy Statement titled Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies.
- the Policy Statement titled Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources.
- the interactive map tool (enter a location to obtain a report on what matters of NES may occur in that location).

#### **Can I refer part of a larger action?**

In certain circumstances, **the Minister may not accept a referral for an action that is a component of a larger action and may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (Section 74A, EPBC Act)**. If you wish to make a referral for a staged or component referral, read 'Fact Sheet 6 Staged Developments/Split Referrals' and contact the Referrals Gateway (1800 803 772).

#### **Do I need a permit?**

Some activities may also require a permit under other sections of the EPBC Act or another law of the Commonwealth. Information is available on the Department's web site.

#### **Is your action in the Great Barrier Reef Marine Park?**

If your action is in the Great Barrier Reef Marine Park it may require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If a permission is required, referral of the action under the EPBC Act is deemed to be an application under the GBRMP Act (see section 37AB, GBRMP Act). This referral will be forwarded to the Great Barrier Reef Marine Park Authority (the Authority) for the Authority to commence its permit processes as required under the Great Barrier Reef Marine Park Regulations 1983. If a permission is not required under the GBRMP Act, no approval under the EPBC Act is required (see section 43, EPBC Act). The Authority can provide advice on relevant permission requirements applying to activities in the Marine Park.

The Authority is responsible for assessing applications for permissions under the GBRMP Act, GBRMP Regulations and Zoning Plan. Where assessment and approval is also required under the EPBC Act, a single integrated assessment for the purposes of both Acts will apply in most cases. Further information on environmental approval requirements applying to actions in the Great Barrier Reef Marine Park is available from <http://www.gbrmpa.gov.au/> or by contacting GBRMPA's Environmental Assessment and Management Section on (07) 4750 0700.

The Authority may require a permit application assessment fee to be paid in relation to the assessment of applications for permissions required under the GBRMP Act, even if the permission is made as a referral under the EPBC Act. Further information on this is available from the Authority:

Great Barrier Reef Marine Park Authority

2-68 Flinders Street PO Box 1379

Townsville QLD 4810

AUSTRALIA

Phone: + 61 7 4750 0700

Fax: + 61 7 4772 6093

[www.gbrmpa.gov.au](http://www.gbrmpa.gov.au)

#### **What information do I need to provide?**

**Completing all parts of this form will ensure that you submit the required information and will also assist the Department to process your referral efficiently. If a section of the referral document is not applicable to your proposal enter N/A.**

You can complete your referral by entering your information into this Word file.

#### **Instructions**

Instructions are provided in blue text throughout the form.

#### **Attachments/supporting information**

The referral form should contain sufficient information to provide an adequate basis for a decision on the likely impacts of the proposed action. You should also provide supporting documentation, such as environmental reports or surveys, as attachments.

Coloured maps, figures or photographs to help explain the project and its location should also be submitted with your referral. Aerial photographs, in particular, can provide a useful perspective and context. Figures should be good quality as they may be scanned and viewed electronically as black and white documents. Maps should be of a scale that clearly shows the location of the proposed action and any environmental aspects of interest.

**Please ensure any attachments are below three megabytes (3mb) as they will be published on the Department's website for public comment. To minimise file size, enclose maps and figures as separate files if necessary. If unsure, contact the Referrals Gateway (email address below) for advice. Attachments larger than three megabytes (3mb) may delay processing of your referral.**

**Note: the Minister may decide not to publish information that the Minister is satisfied is commercial-in-confidence.**

### **How do I pay for my referral?**

From 1 October 2014 the Australian Government commenced cost recovery arrangements for environmental assessments and some strategic assessments under the EPBC Act. If an action is referred on or after 1 October 2014, then cost recovery will apply to both the referral and any assessment activities undertaken. Further information regarding cost recovery can be found on the Department's website at:

<http://www.environment.gov.au/epbc/publications/cost-recovery-cris>

#### **Payment of the referral fee can be made using one of the following methods:**

- **EFT Payments can be made to:**

BSB: 092-009

Bank Account No. 115859

Amount: \$7352

Account Name: Department of the Environment.

Bank: Reserve Bank of Australia

Bank Address: 20-22 London Circuit Canberra ACT 2601

Description: The reference number provided (see note below)

- **Cheque** - Payable to "Department of the Environment". Include the reference number provided (see note below), and if posted, address:

The Referrals Gateway

Environment Assessment Branch

Department of the Environment

GPO Box 787

Canberra ACT 2601

- **Credit Card**

Please contact the Collector of Public Money (CPM) directly (call (02) 6274 2930 or 6274 20260 and provide the reference number (see note below).

Note: in order to receive a reference number, submit your referral and the Referrals Gateway will email you the reference number.

### **How do I submit a referral?**

Referrals may be submitted by mail or email.

#### **Mail to:**

Referrals Gateway

Environment Assessment Branch

Department of Environment

GPO Box 787

CANBERRA ACT 2601

- If submitting via mail, electronic copies of documentation (on CD/DVD or by email) are required.

**Email to: [epbc.referrals@environment.gov.au](mailto:epbc.referrals@environment.gov.au)**

- Clearly mark the email as a 'Referral under the EPBC Act'.
- Attach the referral as a Microsoft Word file and, if possible, a PDF file.
- **Follow up with a mailed hardcopy including copies of any attachments or supporting reports.**

## **What happens next?**

Following receipt of a valid referral (containing all required information) you will be advised of the next steps in the process, and the referral and attachments will be published on the Department's web site for public comment.

The Department will write to you within 20 business days to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is required. There are a number of possible decisions regarding your referral:

**The proposed action is NOT LIKELY to have a significant impact and does NOT NEED approval**

No further consideration is required under the environmental assessment provisions of the EPBC Act and the action can proceed (subject to any other Commonwealth, state or local government requirements).

**The proposed action is NOT LIKELY to have a significant impact IF undertaken in a particular manner**

The action can proceed if undertaken in a particular manner (subject to any other Commonwealth, state or local government requirements). The particular manner in which you must carry out the action will be identified as part of the final decision. You must report your compliance with the particular manner to the Department.

**The proposed action is LIKELY to have a significant impact and does NEED approval**

If the action is likely to have a significant impact a decision will be made that it is a *controlled action*. The particular matters upon which the action may have a significant impact (such as World Heritage values or threatened species) are known as the *controlling provisions*.

The controlled action is subject to a public assessment process before a final decision can be made about whether to approve it. The assessment approach will usually be decided at the same time as the controlled action decision. (Further information about the levels of assessment and basis for deciding the approach are available on the Department's web site.)

**The proposed action would have UNACCEPTABLE impacts and CANNOT proceed**

The Minister may decide, on the basis of the information in the referral, that a referred action would have clearly unacceptable impacts on a protected matter and cannot proceed.

## **Compliance audits**

If a decision is made to approve a project, the Department may audit it at any time to ensure that it is completed in accordance with the approval decision or the information provided in the referral. If the project changes, such that the likelihood of significant impacts could vary, you should write to the Department to advise of the changes. If your project is in the Great Barrier Reef Marine Park and a decision is made to approve it, the Authority may also audit it. (See "*Is your action in the Great Barrier Reef Marine Park*," p.2, for more details).

## **For more information**

- call the Department of the Environment Community Information Unit on 1800 803 772 or
- visit the web site <http://www.environment.gov.au/epbc>

All the information you need to make a referral, including documents referenced in this form, can be accessed from the above web site.

# Referral of proposed action

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## Project title:

Lot 561 Paris Road, Australind

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## 1 Summary of proposed action

**NOTE:** You must also attach a map/plan(s) and associated geographic information system (GIS) vector (shapefile) dataset showing the location and approximate boundaries of the area in which the project is to occur. Maps in A4 size are preferred. You must also attach a map(s)/plan(s) showing the location and boundaries of the project area in respect to any features identified in 3.1 & 3.2, as well as the extent of any freehold, leasehold or other tenure identified in 3.3(i).

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### 1.1 Short description

Use 2 or 3 sentences to uniquely identify the proposed action and its location.

Ascot Capital Australind Property Trust Pty Ltd (the proponent) proposes to subdivide and develop Lot 561 Paris Road, Australind, Western Australia for industrial use in accordance with its current zoning (the site) (Shire of Harvey; Figure 1). This proposal has undergone assessment and has been approved by state and local government at various stages including but not limited to a Town Planning Scheme Amendment, Local Structure Plan, and a subdivision application (Appendix 1) (Figure 2).

The focus of this referral is a consolidated area of ~4.7 ha of remnant vegetation (~9% of the site) and some scattered paddock trees within the surrounding 45.5 ha of cleared land (~90% of the site) that will be cleared as part of the development process. The majority of this vegetation has been degraded and is declining as a result of partial clearing, stock grazing, altered fire regimes, and ongoing infection with *Phytophthora cinnamomi* (dieback) disease (Harewood 2016).

Relevant to matters of National Environmental Significance (NES), the proposed development will remove <0.8 ha of black cockatoo foraging habitat, 42 potential black cockatoo nesting habitat trees, including 20 that had hollows, of which only three with usable hollows and none of which have evidence of current or historical use, and ~1.3 ha of western ringtail possum habitat.

The development clearing area is small, most of the vegetation proposed for clearing is poor quality and there are much larger areas of better quality habitat in the vicinity of the site, and on this basis no significant impacts on matters of NES are anticipated.

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1.2

**Latitude and longitude**

Latitude and longitude details are used to accurately map the boundary of the proposed action. If these coordinates are inaccurate or insufficient it may delay the processing of your referral.

location point	Latitude dec degrees	Longitude dec degrees
A	-33.2704477005	115.7521432
B	-33.2717946005	115.7526882
C	-33.2731157005	115.7525652
D	-33.2731003005	115.7501182
E	-33.2732818005	115.7501166
F	-33.2732946005	115.7521099
G	-33.2755752005	115.752632
H	-33.2756851005	115.7526472
I	-33.2758284005	115.7526669
J	-33.2764620005	115.7527543
K	-33.2791389355	115.75253316
L	-33.2790847179	115.751848087
M	-33.2795679102	115.751796882
N	-33.279673169	115.751674494
O	-33.2794230543	115.747722223
P	-33.279332071	115.747651043
Q	-33.2789010295	115.747814335
R	-33.2786907005	115.7469372
S	-33.2759765779	115.747495934
T	-33.2758711717	115.746772102
U	-33.2757308223	115.74679536
V	-33.2756942002	115.746582992
W	-33.2758415005	115.7465545
X	-33.2756535005	115.7452861
Y	-33.2753872005	115.745342
Z	-33.2753558005	115.7451306
A1	-33.2732280005	115.7455775
B1	-33.2732128005	115.7456865
C1	-33.2730932005	115.746179
D1	-33.2729330005	115.7468393
E1	-33.2723152005	115.7480273
F1	-33.2713363005	115.7493322
G1	-33.2709355005	115.7500881
H1	-33.2708839005	115.7501854
I1	-33.2705558005	115.7511158
J1	-33.2703869005	115.7520033
K1	-33.2703854005	115.7520108

The site boundary is shown on Figure 3 and GIS compliant files are attached.



The Interactive Mapping Tool may provide assistance in determining the coordinates for your project area.

If the area is less than 5 hectares, provide the location as a single pair of latitude and longitude references. If the area is greater than 5 hectares, provide bounding location points.

There should be no more than 50 sets of bounding location coordinate points per proposal area.

Bounding location coordinate points should be provided sequentially in either a clockwise or anticlockwise direction.

If the proposed action is linear (eg. a road or pipeline), provide coordinates for each turning point.

Also attach the associated GIS-compliant file that delineates the proposed referral area. If the area is less than 5 hectares, please provide the location as a point layer. If greater than 5 hectares, please provide a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer (refer to GIS data supply guidelines at [Attachment A](#)).

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**Do not use AMG coordinates.**

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**1.3 Locality and property description**

Provide a brief physical description of the property on which the proposed action will take place and the project location (eg. proximity to major towns, or for off-shore projects, shortest distance to mainland).

The site comprises Lot 561 on Deposited Plan (DP) 68321, located approximately 2.5 kilometres (km) east of the Australind town site (Figure 1).

The site encompasses an area of 50.8 ha, of which 5.3 ha comprises remnant vegetation. The balance of the site (45.5 ha) is characterised by cleared paddocks with scattered trees, with two isolated dams and one seasonal lake. The proponent is proposing to clear up to ~4.7 ha of vegetation and some scattered paddock trees within the site during construction.

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**1.4 Size of the development footprint or work area (hectares)**

Site area - 50.8 ha

Development footprint – ~45.7 ha comprising ~4.7 ha remnant vegetation and ~41.0 ha of previously cleared land.

The focus of this referral is a consolidated area of ~4.7 ha of remnant vegetation and some scattered paddock trees. The majority of this vegetation has been degraded and is declining as a result of partial clearing, stock grazing, altered fire regimes and ongoing infection with *Phytophthora cinnamomi* (dieback) disease.

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**1.5 Street address of the site**

Lot 561, Paris Road  
Australind, WA, 6233

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**1.6 Lot description**

Describe the lot numbers and title description, if known.

Lot 561 on DP 68321.

Certificate of Title Vol 2763 Folio 465.

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**1.7 Local Government Area and Council contact (if known)**

If the project is subject to local government planning approval, provide the name of the relevant council contact officer.

Shire of Harvey

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**1.8 Time frame**

Specify the time frame in which the action will be taken including the estimated start date of construction/operation.

Construction will commence in 2016–2017.

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1.9	<b>Alternatives to proposed action</b> Were any feasible alternatives to taking the proposed action (including not taking the action) considered but are not proposed?	X	No
			Yes, you must also complete section 2.2
1.10	<b>Alternative time frames etc</b> Does the proposed action include alternative time frames, locations or activities?	X	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2–1.9, 2.4–2.7 and 3.3 (where relevant).
1.11	<b>State assessment</b> Is the action subject to a state or territory environmental impact assessment?	X	No
			Yes, you must also complete Section 2.5
1.12	<b>Component of larger action</b> Is the proposed action a component of a larger action?	X	No
			Yes, you must also complete Section 2.7
1.13	<b>Related actions/proposals</b> Is the proposed action related to other actions or proposals in the region (if known)?	X	No
			Yes, provide details:
1.14	<b>Australian Government funding</b> Has the person proposing to take the action received any Australian Government grant funding to undertake this project?	X	No
			Yes, provide details:
1.15	<b>Great Barrier Reef Marine Park</b> Is the proposed action inside the Great Barrier Reef Marine Park?	X	No
			Yes, you must also complete Section 3.1 (h), 3.2 (e)



## 2 Detailed description of proposed action

**NOTE:** It is important that the description is complete and includes all components and activities associated with the action. If certain related components are not intended to be included within the scope of the referral, this should be clearly explained in section 2.7.

### 2.1 Description of proposed action

This should be a detailed description outlining all activities and aspects of the proposed action and should reference figures and/or attachments, as appropriate.

The proposed development site comprises an area of ~50.8 ha, of which ~4.7 ha of remnant vegetation is proposed to be cleared.

The proposal is to construct a light industrial development that will comprise:

- light industrial lots of a variety of sizes
- roads and footpaths
- vegetation buffer
- drainage reserve.

### 2.2 Alternatives to taking the proposed action

This should be a detailed description outlining any feasible alternatives to taking the proposed action (including not taking the action) that were considered but are not proposed (note, this is distinct from any proposed alternatives relating to location, time frames, or activities – see section 2.3).

N/A

### 2.3 Alternative locations, time frames or activities that form part of the referred action

If you have identified that the proposed action includes alternative time frames, locations or activities (in section 1.10) you must complete this section. Describe any alternatives related to the physical location of the action, time frames within which the action is to be taken and alternative methods or activities for undertaking the action. For each alternative location, time frame or activity identified, you must also complete (where relevant) the details in sections 1.2-1.9, 2.4-2.7, 3.3 and 4. Please note, if the action that you propose to take is determined to be a controlled action, any alternative locations, time frames or activities that are identified here may be subject to environmental assessment and a decision on whether to approve the alternative.

N/A

### 2.4 Context, planning framework and state/local government requirements

Explain the context in which the action is proposed, including any relevant planning framework at the state and/or local government level (e.g. within scope of a management plan, planning initiative or policy framework). Describe any Commonwealth or state legislation or policies under which approvals are required or will be considered against.

In 2013, the Western Australian Planning Commission (WAPC) approved subdivision of the site for light industrial development (Application Number 147060). The site is currently zoned Light Industry under the Shire of Harvey District Planning Scheme No. 1.

## **2.5 Environmental impact assessments under Commonwealth, state or territory legislation**

If you have identified that the proposed action will be or has been subject to a state or territory environmental impact statement (in section 1.11) you must complete this section. Describe any environmental assessment of the relevant impacts of the project that has been, is being, or will be carried out under state or territory legislation. Specify the type and nature of the assessment, the relevant legislation and the current status of any assessments or approvals. Where possible, provide contact details for the state/territory assessment contact officer.

Describe or summarise any public consultation undertaken, or to be undertaken, during the assessment. Attach copies of relevant assessment documentation and outcomes of public consultations (if available).

No Environmental Impact Assessments under Commonwealth or state legislation have been undertaken. To support this EPBC referral and state clearing permits, a fauna assessment of the site (Harewood 2016) was undertaken in accordance with relevant guidelines.

## **2.6 Public consultation (including with Indigenous stakeholders)**

Your referral must include a description of any public consultation that has been, or is being, undertaken. Where Indigenous stakeholders are likely to be affected by your proposed action, your referral should describe any consultations undertaken with Indigenous stakeholders. Identify the relevant stakeholders and the status of consultations at the time of the referral. Where appropriate include copies of documents recording the outcomes of any consultations.

All consultation occurred when this proposal was assessed and approved by state and local government. Consultation and subsequent approval comprised of a staged process that involved application of a Town Planning Scheme Amendment, Local Structure Plan, and a subdivision application (Appendix 1) (Figure 2).

Key regulatory agencies consulted included the Shire of Harvey, Western Australian Planning Commission, Department of Parks and Wildlife and the Environmental Protection Authority, and the community consultation opportunities ("advertising") embedded within those process.

## **2.7 A staged development or component of a larger project**

If you have identified that the proposed action is a component of a larger action (in section 1.12) you must complete this section. Provide information about the larger action and details of any interdependency between the stages/components and the larger action. You may also provide justification as to why you believe it is reasonable for the referred action to be considered separately from the larger proposal (eg. the referred action is 'stand-alone' and viable in its own right, there are separate responsibilities for component actions or approvals have been split in a similar way at the state or local government levels).

N/A

## 3 Description of environment & likely impacts

### 3.1 Matters of national environmental significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest.

Your assessment of likely impacts should refer to the following resources (available from the Department's web site):

- specific values of individual World Heritage properties and National Heritage places and the ecological character of Ramsar wetlands;
- profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;
- *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance*; and
- associated sectoral and species policy statements available on the web site, as relevant.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The Minister has prepared four marine bioregional plans (MBP) in accordance with section 176. It is likely that the MBP's will be more commonly relevant where listed threatened species, listed migratory species or a Commonwealth marine area is considered.

**Note that even if your proposal will not be taken in a World Heritage area, Ramsar wetland, Commonwealth marine area, the Great Barrier Reef Marine Park or on Commonwealth land, it could still impact upon these areas (for example, through downstream impacts). Consideration of likely impacts should include both direct and indirect impacts.**

#### 3.1 (a) World Heritage Properties

##### Description

N/A

##### Nature and extent of likely impact

Address any impacts on the World Heritage values of any World Heritage property.

N/A

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#### 3.1 (b) National Heritage Places

##### Description

N/A

##### Nature and extent of likely impact

Address any impacts on the National Heritage values of any National Heritage place.

N/A

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#### 3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

##### Description

N/A

##### Nature and extent of likely impact

Address any impacts on the ecological character of any Ramsar wetlands.

N/A

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### 3.1 (d) Listed threatened species and ecological communities

A fauna assessment of the site was undertaken by zoologist Dr Greg Harewood in February 2016 (Appendix 1). The fauna assessment included a search of the Department of Environment's (DoE) Protected Matters Search Tool, which was undertaken on 23 February 2016. No Threatened Ecological Communities (TEC) were identified on or within the vicinity of the site. However, the species in Table 1 were identified as having the potential to occur within the site.

**Table 1: EPBC Act Listed Threatened Species**

Species	Common Name	Status	Habitat / Presence
<b>Birds</b>			
<i>Botaurus poiciloptilus</i>	Australasian bittern	Endangered	Species or species habitat known to occur within the area
<i>Calyptorhynchus banksii naso</i>	Forest red-tailed black-cockatoo	Vulnerable	Species or species habitat may occur within the area
<i>Calyptorhynchus baudinii</i>	Baudin's black cockatoo	Vulnerable	Breeding likely to occur within the area
<i>Calyptorhynchus latirostris</i>	Carnaby's Black-Cockatoo	Endangered	Breeding likely to occur within the area
<b>Mammals</b>			
<i>Dasyurus geoffroii</i>	Chuditch	Vulnerable	Species or species habitat likely to occur within the area
<i>Pseudocheirus occidentalis</i>	Western ringtail possum	Vulnerable	Species or species habitat likely to occur within the area
<b>Plants</b>			
<i>Andersonia gracilis</i>	Slender Andersonia	Endangered	Species or species habitat may occur within the area.
<i>Caladenia huegelii</i>	King spider-orchid	Endangered	Species or species habitat may occur within the area.
<i>Darwinia foetida</i>	Muchea bell	Critically Endangered	Species or species habitat likely to occur within the area
<i>Diuris micrantha</i>	Dwarf bee-orchid	Vulnerable	Species or species habitat likely to occur within the area
<i>Diuris purdiei</i>	Purdie's donkey orchid	Endangered	Species or species habitat may occur within the area.
<i>Drakaea elastica</i>	Glossy-leafed hammer-orchid	Endangered	Species or species habitat likely to occur within the area
<i>Drakaea micrantha</i>	Dwarf hammer-orchid	Vulnerable	Species or species habitat likely to occur within the area

#### Nature and extent of likely impact

Address any impacts on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat.

A specific Fauna Assessment was undertaken by Greg Harewood in February 2016 (Appendix 1). Based on this assessment the likelihood of those species detailed in Table 1 occurring in the site is provided in Table 2.

**Table 2: EPBC Act – listed Threatened Species Likelihood Of Occurrence**

Species	Habitat Description and/or Distribution	Likelihood of Occurrence	Likelihood Justification
<b>Birds</b>			
<i>Calyptorhynchus banksii naso</i> (Forest red-tailed black-cockatoo)	Eucalyptus forests, feeds on <i>Corymbia calophylla</i> (marri), <i>Eucalyptus marginata</i> (jarrah), <i>Eucalyptus tottiana</i> (blackbutt), <i>Eucalyptus diversicolor</i> (karri), <i>Allocasuarina fraseriana</i> (sheoak) and <i>Persoonia micranthera</i> (snottygobble). Nests in large hollows in marri, jarrah and karri.  Found in humid and subhumid south-west Australia, mainly hilly interior, north to Gingin and east to Mt. Helena, Christmas Tree well, North Bannister, Mt. Saddleback, Rock Gully and the Upper King River (Johnstone and Storr 1998).	High	Foraging evidence observed. Remnant vegetation present represents potential foraging habitat. Larger trees (>50 cm) may provide breeding habitat.
<i>Calyptorhynchus baudinii</i> (Baudin's black cockatoo)	Mainly Eucalyptus forests. Feeds on marri seeds (Morcombe 2004), Banksia, <i>Hakea Erodium</i> sp. Also strips bark from trees in search of beetle larvae.  Confined to south-west of Western Australia, north to Gidgegannup, east to Mt. Helena, Wandering, Quindanning, Kojonup, Frankland and King River and west to the eastern strip of the Swan Coastal Plain including West Midland, Byford, North Dandalup, Yarloop, Wokalup and Bunbury (Johnstone and Storr 1998). On the Southern Swan Coastal Plain is in some areas resident but mainly a migrant moving from the deep south-west to the central and northern Darling Range.	High	Known to frequent the general area. Remnant vegetation present represents potential foraging habitat. Larger trees (>50 cm) may provide breeding habitat.
<i>Calyptorhynchus latirostris</i> (Carnaby's Black-Cockatoo)	Forests, woodlands, heathlands and farms. Feeds on Banksia, hakea and marri.  Confined to the south-west of Western Australia, north to the lower Murchison River and east to Nabawa, Wilroy, Waddi Forest, Nugadong, Manmanning, Durokoppin, Noongar (Moorine Rock), Lake Cronin, Ravensthorpe Range, head of Oldfield River, 20 km ESE of Condingup and Cape Arid. Also causal on Rottnest Island (Johnstone and Storr 1998).	High	Foraging evidence observed. Remnant vegetation present represents potential foraging habitat. Larger trees (>50 cm) may provide breeding habitat.
<b>Mammals</b>			
<i>Dasyurus geoffroii</i> (Chuditch)	Have occupied a wide range of habitats from woodlands, dry sclerophyll (leafy) forests, riparian vegetation, beaches and deserts. Highly mobile with a male home range > 15 square kilometres (km <sup>2</sup> ) and female home range 3–4 km <sup>2</sup> (Sorena and Soderquist 1995).	Unlikely	Rarely observed in the coastal plain (Dell 2000). Most likely locally extinct. Vegetation in the site and surrounds is limited and too fragmented to support a viable population.
<i>Pseudocheirus occidentalis</i> (Western ringtail possum)	Most common in coastal or near coastal forest that includes peppermint-tuart associations. The main determinant for western ringtail possum habitat is the presence of <i>Agonis flexuosa</i> (peppermint) as the dominant tree species or as an understorey component of a Eucalyptus forest or woodland.  Most known populations are now restricted to near coastal areas of the south-west from Dawesville to Waychinicup National Park. Inland it is also known to be relatively common in a small part of the lower Collie River valley, the Perup Nature Reserve and surrounding forest blocks near Manjimup.	High	Individuals observed at the site. However, extent of usable habitat within the site is limited.



Plants			
<i>Andersonia gracilis</i> (Slender Andersonia)	This species inhabits soils comprising white or grey sand, sandy clay and/or gravelly loam. The species prefers winter-wet areas near swamps and occurs in eastern Perth near Gosnells, north to Gingin and Dandaragan.	Unlikely	The site is located outside the species known distribution, approximately 130 km from the nearest recorded population.
<i>Caladenia huegelii</i> (King spider-orchid)	This perennial herb inhabits grey or brown sand and clay loam. This species has been recorded throughout the Swan Coastal Plain and Jarrah Forest from Busselton north to Wanneroo.	Unlikely	Suitable soil habitat may be present on site; however, vegetation present has been degraded by livestock for many years. Consequently, low diversity is present and cryptic species such as the king spider orchid are unlikely to occur.
<i>Darwinia foetida</i> (Mucnea bell)	This species occur in grey and white sand and prefers seasonally inundated swamp areas. The distribution of this species is extremely restricted and is limited to the Mucnea area north of Perth (DoE 2016).	Unlikely	Given the separation distance between the site and the known distribution of this species, the presence of <i>Phytophthora</i> throughout the site and the historical degradation of vegetation caused by agricultural activities in the area, it is very unlikely that this species would be present.
<i>Diuris micrantha</i> (Dwarf bee-orchid)	This species occurs in brown loamy clay areas, typically in winter-wet swamps in shallow water. This species has been recorded in the Swan Coastal Plain and Jarrah Forest from West Arthur to Kwinana.	Unlikely	Suitable soil habitat may be present on site. However, the site is located outside this species known distribution. Given the site has been degraded by livestock it is unlikely that this species is present.
<i>Diuris purdiei</i> (Purdie's donkey orchid)	This species occurs in grey/black sands, typically in winter-wet swamps. This species has been recorded in the Swan Coastal Plain and Jarrah Forest, generally in the vicinity of Perth from Serpentine to Canning.	Unlikely	Records of this species are limited to Perth and surrounds. The site is located a significant distance away from this species known distribution.
<i>Drakaea elastica</i> (Glossy-leafed hammer-orchid)	This species occurs in white or grey sand and prefers low-lying locations adjoining winter-wet swamps. This species generally occurs in the Swan Coastal from Busselton to Rockingham, and has been recorded further north in Dandaragan.	Unlikely	Given that the site has been heavily grazed by livestock it is unlikely that this species is present at the site.
<i>Drakaea micrantha</i> (Dwarf hammer-orchid)	This species occurs in white or grey sand. Generally, this species has been recorded in coastal areas throughout the South-West. Its distribution extends from Perth, south to the Augusta-Margaret River region and further east as far as Albany.	Unlikely	Given that the site has been heavily grazed by livestock it is unlikely that this species is present at the site.

### Black Cockatoos

Black cockatoo habitat within the site was assessed by Dr Greg Harewood (2016) in accordance with guidelines published by the then Department Sustainability, Environment, Water, Population and Communities (now the Department of the Environment) (SEWPaC 2012). The habitat tree assessment comprised identification of all suitable tree species that could provide breeding habitat, foraging habitat and/or night roosting habitat, as described below:



Breeding habitat – identification of suitable trees with a diameter at breast height (DBH) equal to or over 50 centimetres (cm). Trees species that do not typically develop hollows used by black cockatoos were not assessed. Hollows identified in the field were examined using binoculars for evidence of actual use by black cockatoos (e.g. chewing marks, scarring and scratch marks on trunks and branches).

Foraging habitat – location and nature of any foraging evidence present (e.g. chewed fruits around the base of trees). Potential foraging habitat was documented irrespective of the presence of foraging evidence.

Night Roosting Habitat – Direct and indirect evidence of black cockatoos roosting in trees within the site (e.g. branch clippings, dropping or moulted feathers).

A total of 47 potential breeding habitat trees were identified within the site (Figure 4). Twenty of the 47 trees observed contained hollows. Only three of these trees were observed to have hollows potentially large enough to provide breeding habitat for black cockatoos. However, no evidence of current or previous nesting was observed. It is estimated that 42 of the 47 potential habitat trees (including the three trees with hollows large enough to provide breeding habitat to black cockatoos) will be impacted by the proposal. In accordance with the approved subdivision plan, the remaining five trees will be retained within a vegetation buffer.

Species within the site that provide foraging habitat for black cockatoos include *Corymbia calophylla*, *Eucalyptus marginata*, *Eucalyptus rudis*, *Banksia attenuata*, *Banksia ilicifolia* and *Xanthorrhoea gracilis*. The majority of the site comprises cleared pasture with some scattered marri, flooded gum and paperbark. The small area of vegetation within the site is mainly comprised of *Banksia*, peppermint and *Kunzea glabrescens* with some emergent jarrah and marri over low heath in more degraded areas. The site has been grazed by livestock and the remaining vegetation has been severely impacted by *Phytophthora cinnamomi* (dieback). It has been estimated that historical grazing and dieback have depleted site of 85% of its original flora species and is anticipated to lead to the deaths of the remaining *Banksia* and jarrah trees.

The main source of potential foraging habitat within the site is a 1 ha area of *Banksia* and *Banksia* and Peppermint Low Closed Forest that includes live *Banksia attenuate* among other species (Figure 5). However, it should be noted that since *B. attenuata* only accounts for fraction of the vegetation composition in this area, the amount of quality foraging habitat available is considered much less than 1 ha.

Scattered jarrah and marri trees within the site also provide a food source for black cockatoos, however their contribution to the total area of foraging habitat is difficult to accurately quantify. Observations in the field suggested that these trees make a much smaller contribution to overall foraging habitat when compared to *B. attenuata*. Most of these trees exhibited no evidence of foraging.

It is estimated that the proposal will require the clearing of ~4.7 ha of remnant vegetation, including less than 0.8 ha of black cockatoo foraging habitat. In accordance with the approved subdivision plan, the balance of foraging habitat (approximately 0.2 ha) will be retained within a vegetation buffer. Given that foraging habitat has been degraded by livestock and has been severely impacted by dieback, it is extremely unlikely that the proposed clearing would have a significant impact on black cockatoo within the region. Furthermore, the 42 ha Wardandi Flora Reserve adjoins the site to the west. Much of the Wardandi Flora Reserve, which has an area of 42 ha, appears to contain *Banksia* and is likely to provide a larger, better quality source of foraging habitat for black cockatoos protected in perpetuity. Consequently, it is unlikely that black cockatoos are reliant of foraging habitat within the site.

No night roosting habitat was identified within the site.

As part of the fauna assessment Dr Greg Harewood evaluated impact significance using criteria for Vulnerable/Endangered Species (Carnaby's, Baudin's and forest red-tailed black cockatoos) (DoE 2013). Using the DoE guidelines for assessing impacts on black cockatoos (DoE 2012), the proposed development presents an action that has a high risk of significant impact due to the clearing of potential breeding habitat (i.e. any tree  $\geq 50$  cm DBH). However, assessment using the DoE "significant impact" criteria suggests that in this case, the chance of a "significant impact" is in fact unlikely. The results of the impact significance assessment are provided in Table 3, below.

**Table 3: Assessment of Significance of Impact of Proposal on Black Cockatoos**

Criteria	Assessment of Impact of Proposal on Black Cockatoos
Lead to long-term decrease in the size of an important population/population of a species?	<p>The area of potential/existing habitat that may be lost as a consequence of the proposal is relatively small (42 habitat trees and &lt;0.8 ha of quality foraging habitat), much of which is poor in quality and/or declining due to dieback disease. The loss of this vegetation is unlikely to impact on a significant number of cockatoos or result in long-term decrease in population numbers.</p> <p>No evidence of black cockatoos breeding on site was found despite the presence of three trees with hollows of a suitable size. The probability that any of the 42 identified potential breeding trees (DBH <math>\geq 50</math> cm) would ever develop hollows of a suitable size that would then be used by cockatoos for breeding can be considered to be very low.</p> <p>The foraging habitat present within the proposed clearing area (primarily Banksia Woodland) has a limited extent (no more than 0.8 ha) and is only likely to provide sufficient food to support a very small number of cockatoos per year. This area is in decline due to the ongoing effects of dieback.</p> <p>There are larger areas of remnant bushland within 10 km of the survey site, a high percentage of which are likely to represent potential cockatoo habitat and it can be expected that black cockatoos will continue to utilise these areas despite development at the subject site.</p>
Reduce the area of occupancy of an important population/population of the species?	<p>The area of occupancy of black cockatoos will not change as a consequence of the development proceeding. While potential/existing habitat will require clearing it is relatively small compared to reserve areas within the vicinity of the site (e.g. Wardandi Flora Reserve, Leschenault Conservation Reserve and Kemerton Nature Reserve) and black cockatoos will persist in the area despite development of the site.</p>
Fragment an existing important population/population into two or more populations?	<p>The proposed development and clearing will not create a barrier to black cockatoo movement in the area and/or fragment populations.</p>
Adversely affect habitat critical to the survival of a species?	<p>The area of potential/existing habitat that may be lost as a consequence of the proposal proceeding is relatively small (42 potential breeding habitat trees and &lt;0.8 ha of foraging habitat). The vegetation on site is unlikely to represent 'habitat critical' to the survival of black cockatoos.</p> <p>No evidence of black cockatoos breeding on site was found despite the presence of three trees with hollows of suitable size. The probability that any of the 47 identified potential breeding trees (DBH <math>\geq 50</math> cm) would ever develop hollows of a suitable size that would then be used by cockatoos for breeding can be considered to be very low.</p> <p>The foraging habitat present within the proposed clearing area (primarily Banksia woodland) has a limited extent (no more than 0.8 ha) and is only likely to provide sufficient food to support a very small number of cockatoos per year. This area is in decline due to the ongoing effects of dieback.</p> <p>There are larger areas of remnant bushland within 10 km of the survey site, a high percentage of which is likely to represent potential cockatoo habitat and it can be expected that black cockatoos will continue to utilise these areas despite development at the subject site.</p>
Disrupt the breeding cycle of an important population/population?	<p>No evidence of black cockatoos breeding on site was found despite the presence of three trees with hollows of a suitable size and the probability that any breeding will ever take place on site can be considered to be very low. The foraging habitat present has a limited extent (&lt;0.8 ha) and is only likely to provide sufficient food to support a very small number of cockatoos per year.</p> <p>There are larger areas of remnant bushland within 10 km of the survey site, a high percentage of which is likely to represent potential cockatoo habitat and it can be expected that black cockatoos will continue to utilise these areas despite development at the subject site. It is therefore considered unlikely that the proposed development would disrupt the breeding cycle of an important population or population of black cockatoos.</p>
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	<p>The area of potential/existing habitat that may be lost as a consequence of the proposal proceeding is relatively small (~42 habitat trees and &lt;0.8 ha of "quality" foraging habitat). The loss of this vegetation is unlikely to impact on a significant number of cockatoos or result in long-term decrease in population numbers.</p> <p>No evidence of black cockatoos breeding on site was found despite the presence of three trees with hollows of a suitable size. The probability that any of the 47 identified potential breeding trees (DBH <math>\geq 50</math> cm) would ever develop hollows of a suitable size that would then be used by cockatoos for breeding can be considered to be very low.</p> <p>The foraging habitat present within the proposed clearing area (primarily banksia woodland) has a limited extent (no more than 0.8 ha) and is only likely to provide sufficient food to support a very small number of cockatoos per year. This area is in decline due to the ongoing effects of dieback.</p> <p>There are larger areas of remnant bushland within 10 km of the survey site, a high percentage of which is likely to represent potential cockatoo habitat and it can be expected that black cockatoos will continue to utilise these areas despite development at the subject site.</p>

Result in invasive species that are harmful to a Vulnerable/Endangered species becoming established in the Vulnerable/Endangered species' habitat?	The future developed of the site is unlikely to result in introduction of any new harmful invasive species, as it is an industrial subdivision. The area is already currently utilised by foxes, cats and corellas.
Introduce disease that may cause the species to decline?	The proposed action is unlikely to introduce a disease that would impact on black cockatoos.
Interfere substantially with the recovery of the species?	The population growth of the black cockatoos is primarily limited by factors associated with breeding, and consequently priority areas for the recovery of the species are currently focused on known breeding sites (Cale 2003).  The survey area does not represent a known breeding site and no evidence of breeding taking place within the subject site will interfere substantially with the recovery of any of the black cockatoo species.
Is a significant impact expected?	No. The proposed action (future development at the site requiring clearing) is not considered as likely to have a significant impact. This conclusion is primarily justified when considering the small area involved, poor quality of much of the habitat, lack of breeding activity on site and in the immediate area, and the presence of larger better quality areas of similar habitat in nearby reserves.

#### Western Ringtail Possum

Western ringtail possum habitat within the site was assessed by Dr Greg Harewood (2016). Five possum dreys and 20 trees with hollows were observed, however not all are likely to be suitable for use by western ringtail possums. Other habitat within the site that is likely to provide daytime refuge for western ringtail possums included forks in trees, subtle cavities in tree trunks, fallen hollow logs, rabbit burrows and dense ground cover.

Four western ringtail possums were observed during the survey (Harewood 2016) and scats were observed in one location. All evidence of western ringtail possums (scats, dreys and individuals) were within the vicinity of areas mapped as Peppermint Low Open Forest or Banksia and Peppermint Low Closed Forest (Figure 5). This comprises 1.5 ha of vegetation identified as "core" western ringtail possum habitat. The remaining remnant vegetation is considered to represent poor quality western ringtail possum habitat.

The Wardandi Flora Reserve adjoining the west of the site appears to provide a much larger area of habitat suitable for the western ringtail possum.

Approximately 1.3 ha of core possum habitat is proposed for clearing. The balance of core possum habitat, about 0.2 ha, will be retained within the proposed vegetation buffer. Given that a much larger area of suitable habitat is located immediately adjacent to the site, within the 42 ha Wardandi Flora Reserve, it is considered unlikely that the proposal will have a significant impact on populations of western ringtail possums within the region.

As part of the fauna assessment Greg Harewood evaluated impact significance using criteria for Vulnerable in relation to the western ringtail possum. The assessment of significant impact criteria found that significant impact is not likely. The results are provided in Table 4, below.

**Table 4: Assessment of Significance Of Impact Of Proposal on Western Ringtail Possum**

Criteria	Assessment of Impact of Proposal on Western Ringtail Possum
Lead to long-term decrease in the size of an important population/population of a species?	It is estimated that approximately 1.3 ha of western ringtail possum habitat will be removed. It is very unlikely that this small area of vegetation is being utilised by an 'important population' or that clearing of it will result in a long-term decrease in the size of an 'important population' of western ringtail possum. The existing possums will be relocated under a specific management plan.
Reduce the area of occupancy of an important population/population of the species?	It has been estimated that about 1.3 ha of western ringtail possum habitat will be removed. It is considered very unlikely that the clearing of this small area of vegetation will have a significant impact on populations present in the area. The area of occupancy of important populations of western ringtail possums are also unlikely to be significantly affected.
Fragment an existing important population/population into two or more populations?	The vegetation within the subject site does not provide linkage to other areas of habitat and therefore its removal will not fragment any populations (important or otherwise).
Adversely affect habitat critical to the survival of a species?	It has been estimated that about 1.3 ha of western ringtail possum habitat will be removed. It is unlikely that this represent habitat critical for the survival of the species given that western ringtail possums are common in the Bunbury area and other areas of reserved vegetation, much of which would be western ringtail possum habitat, are present nearby.
Disrupt the breeding cycle of an important population/population?	Western ringtail possum individuals are likely to be displaced as a consequence of the required clearing and therefore it is possible that the breeding cycle of some individuals may be "disrupted". However, the number of individuals affected is likely to be small and it is also debatable if the individuals present represent an 'important population' as defined by the DoE.
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	It has been estimated that about 1.3 ha of western ringtail possum habitat will be removed. It is very unlikely that the removal of this relatively small area of vegetation will result in an overall decline in western ringtail possum numbers.
Result in invasive species that are harmful to a Vulnerable/Endangered species becoming established in the Vulnerable/Endangered species' habitat?	The future industrial development of the site is unlikely to result in the introduction of any new invasive species known to be harmful to western ringtail possum. The general area is already utilised by feral predators such as foxes and cats.
Introduce disease that may cause the species to decline?	The proposed action is unlikely to introduce a disease that would impact on western ringtail possums.
Interfere substantially with the recovery of the species?	The area of potential/existing habitat that will be modified/lost as a consequence of the proposal proceeding is relatively small (1.3 ha) and is unlikely to have a substantial impact on the recovery of the species. The quality of this habitat is already in decline due to the effects of dieback.
Is a significant impact expected?	No. The proposed action (future industrial development at the site requiring clearing) is not considered as likely to have a significant impact. The extent of western ringtail possum habitat that will require clearing is small. Only a small number of western ringtail possum will be displaced (but relocated) and the species can be expected to persist in nearby reserve areas despite the proposal proceeding in its current form.

### 3.1 (e) Listed migratory species

#### Description

The EPBC Act Protected Matters Search Tool (Appendix 2) identified seven migratory species potentially occurring on the site (Table 4).

**Table 5: EPBC Act – Listed Migratory Species**

Species	Common Name	Habitat / Presence
<b>Migratory Marine Birds</b>		
<i>Apus pacificus</i>	Fork-tailed swift	Species or species habitat likely to occur within area
<b>Migratory Terrestrial Species</b>		
<i>Merops ornatus</i>	Rainbow bee-eater	Species or species habitat may occur within area
<i>Motacilla cinerea</i>	Grey wagtail	Species or species habitat may occur within area
<b>Migratory Wetland Species</b>		
<i>Ardea alba</i>	Great egret	Breeding known to occur within area
<i>Ardea ibis</i>	Cattle egret	Species or species habitat may occur within area
<i>Pandion haliaetus</i>	Osprey	Species or species habitat may occur within area
<i>Tringa nebularia</i>	Common greenshank	Species or species habitat likely to occur within area

#### Nature and extent of likely impact

Address any impacts on the members of any listed migratory species, or their habitat.

During the Fauna Assessment (Harewood 2016), no species protected under international agreements were identified on the site and it is unlikely that there would be any significant impacts to any migratory species based on the proposed action (Table 5).

**Table 6: EPBC Act – Listed Migratory Species Likelihood of Occurrence**

Species	Habitat	Likelihood of Presence
<i>Apus pacificus</i> (Fork-tailed swift)	Fork-tailed swifts migrate to Australia in the winter months. Preferred habitats comprise low to very high aerial space above over varied habitat from rainforest to semi-desert.	This species occasionally visits the south-west of Western Australia during summer. However, it is entirely aerial largely independent of terrestrial habitats.
<i>Merops ornatus</i> (Rainbow bee-eater)	Utilises a variety of habitat including open country, woodlands, open forest, semi-arid scrub, grasslands, clearings in heavier forest, and farmlands (Morecombe 2004). Breeds underground in areas with soft soil firm enough to support tunnelling.	A common visitor to the south-west. Parts of the site with sandy soils may provide suitable breeding habitat. However, population levels would not be significant as this species typically breeds in pairs and rarely forms small colonies (Johnstone and Storr 1998).
<i>Motacilla cinerea</i> (Grey wagtail)	In Australia, this species occupies areas in disused quarries, sandy, rocky streams in escarpments and rainforest, sewerage ponds, ploughed fields and airfields (Pizzey and Knight 2012).	As this species is an "accidental vagrant" the likelihood of occurrence within the site is extremely low. The cleared pasture within the site may provide suitable species; however, in the unlikely event that this species did visit the site, it would only be for brief periods of time.
<i>Ardea alba</i> (Great egret)	Found in wetlands, flooded pasture, dams, estuarine mudflats, mangroves and reefs (Morecombe 2004).	Suitable habitat within the sites is marginal in quality. However, this species may utilise man-made lakes and dams within the site as foraging habitat.
<i>Ardea ibis</i> (Cattle egret)	Occurs in moist pastures with tall grasses, shallow open wetlands and mudflats (Morecombe 2004)	Although suitable habitat is present at the site, this species is usually found with livestock, which are absent from the site.



<i>Pandion haliaetus</i> (Osprey)	Preferred habitat includes coastal areas, estuaries, bays, inlets, islands and surrounding waters, coral atolls, reefs, lagoons, rock cliffs and stacks. This species constructs nests on prominent headlands, large trees and communication towers (Simpson and Day 2010).	No suitable habitat is present at the site.
<i>Tringa nebularia</i> (Common greenshank)	Found in both coastal and inland areas this species can utilise beaches and a variety of wetlands such as swamps, lakes, dams, billabong, rivers, creeks, flood plains and saline plains.	The site generally lacks suitable habitat for this species. The man-made lake may provide marginal habitat, but this species is more likely to use better quality habitat that is abundant in the surrounding region.

### 3.1 (f) Commonwealth marine area

(If the action is in the Commonwealth marine area, complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)

#### Description

N/A

#### Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth marine area.

N/A

### 3.1 (g) Commonwealth land

(If the action is on Commonwealth land, complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land.)

#### Description

If the action will affect Commonwealth land also describe the more general environment. The Policy Statement titled *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* provides further details on the type of information needed. If applicable, identify any potential impacts from actions taken outside the Australian jurisdiction on the environment in a Commonwealth Heritage Place overseas.

N/A

#### Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth land. Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

N/A

### 3.1 (h) The Great Barrier Reef Marine Park

#### Description

N/A

#### Nature and extent of likely impact

Address any impacts on any part of the environment of the Great Barrier Reef Marine Park.

Note: If your action occurs in the Great Barrier Reef Marine Park you may also require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If so, section 37AB of the GBRMP Act provides that your referral under the EPBC Act is deemed to be an application under the GBRMP Act and Regulations for necessary permissions and a single integrated process will generally apply. Further information is available at [www.gbrmpa.gov.au](http://www.gbrmpa.gov.au)

N/A



### 3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development

#### Description

If the action is a coal seam gas development or large coal mining development that has, or is likely to have, a significant impact on water resources, the draft *Policy Statement Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources* provides further details on the type of information needed.

N/A

#### Nature and extent of likely impact

Address any impacts on water resources. Your assessment of impacts should refer to the draft *Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources*.

N/A

### 3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

You must describe the nature and extent of likely impacts (both direct & indirect) on the whole environment if your project:

- is a nuclear action;
- will be taken by the Commonwealth or a Commonwealth agency;
- will be taken in a Commonwealth marine area;
- will be taken on Commonwealth land; or
- will be taken in the Great Barrier Reef marine Park.

Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

3.2 (a)	Is the proposed action a nuclear action?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment			
3.2 (b)	Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment			
3.2 (c)	Is the proposed action to be taken in a Commonwealth marine area?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))			
3.2 (d)	Is the proposed action to be taken on Commonwealth land?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))			

3.2 (e)	Is the proposed action to be taken in the Great Barrier Reef Marine Park?	X	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))

### 3.3 Other important features of the environment

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed above). If at Section 2.3 you identified any alternative locations, time frames or activities for your proposed action, you must complete each of the details below (where relevant) for each alternative identified.

#### 3.3 (a) Flora and fauna

##### Flora

No Priority or Threatened flora species protected under state or federal legislation have been recorded within the site.

Approximately 90% of the site has been previously cleared for pastoral use and only a small amount of remnant vegetation (5.3 ha) remains on site. Remanent vegetation has been degraded by partial clearing, altered fire regimes and infection by dieback disease (*Phytophthora cinnamomi*). This has resulted in an estimated loss of approximately 85% of the original flora species diversity and associated environmental values.

##### Fauna

A Level 1 Fauna survey, including targeted assessments black cockatoo and western ringtail possum habitat, was undertaken by Dr Greg Harewood in February 2016. The site comprises six broad fauna habitats:

- Cleared – Grasslands and Bare Grey Sand
- Kunzea Tall Shrubland with Emergent Jarrah
- Banksia and Peppermint Low Closed Forest
- Peppermint Low Open Forest
- Dams and Lakes
- Closed Sedgeland.

A total of 38 native and three introduced fauna species were observed (or positively identified from foraging evidence, scats, tracks, skeleton or calls) within the site. Three fauna species protected under the EPBC Act were identified on the site:

- *Calyptorhynchus banksii naso* (forest red-tailed black cockatoo)
- *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo)
- *Pseudocheirus occidentalis* (western ringtail possum).

#### 3.3 (b) Hydrology, including water flows

The proposal is located within the Bunbury Groundwater Area and Australind sub-area. The site is subject to the *Kemerton Subareas Groundwater Management Plan 2007*.

Groundwater in this area is characterised by a superficial aquifer, which can have hydraulic connection with the Leederville aquifer in parts. The superficial aquifer ranges in thickness from 20–40 metres, generally flows west, and can discharge into local watercourses, wetlands and swamps. The site is also located within the Leschenault Estuary surface water catchment.

#### 3.3 (c) Soil and Vegetation characteristics

Geology of the site is dominated by the Guildford formation (Qpa), which comprises mainly of alluvial sandy clays (Figure 5). Within the site, this geological formation generally correlates with the current extent of cleared land. The balance of the site comprises Bassendean sand over the Guildford formation (Qpb/Qpa). Bassendean sands are characterised by basal conglomerates overlain by dune quartz sand with heavy mineral concentrations.

### 3.3 (d) Outstanding natural features

None

### 3.3 (e) Remnant native vegetation

Approximately 90% of the site has been previously cleared for pastoral use and only a small amount of remnant vegetation (5.3 ha) remains on site. Remnant vegetation has been degraded by partial clearing, altered fire regimes and infection by dieback disease. This has resulted in a loss of approximately 85% of the original flora species diversity.

Fauna habitat types described by Harewood (2016) are generally consistent with vegetation types that characterise the site and include:

- Cleared – Grasslands and Bare Grey Sand
- Kunzea Tall Shrubland with Emergent Jarrah
- Banksia and Peppermint Low Closed Forest
- Peppermint Low Open Forest
- Dams and Lakes
- Closed Sedgeland.

The majority of the site comprises cleared pasture with some scattered marri, flooded gum and paperbark. The small area of vegetation within the site is mainly comprised of Banksia, peppermint and *Kunzea glabrescens* with some emergent jarrah and marri over low heath in more degraded areas. The site has been grazed by livestock and the remaining vegetation has been severely impacted by dieback. It has been estimated that historical grazing and dieback have depleted site of 85% of its original flora species and is anticipated to lead to the deaths of the remaining Banksia and jarrah trees.

No Threatened or Priority Ecological Communities have been recorded within the vicinity of the site.

### 3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

N/A

### 3.3 (g) Current state of the environment

Include information about the extent of erosion, whether the area is infested with weeds or feral animals and whether the area is covered by native vegetation or crops.

A fauna assessment undertaken by Dr Greg Harewood (2016) identified that the site has been degraded by grazing livestock and dieback disease.

Three introduced fauna species were recorded at the site:

- *Gambusia holbrooki* – mosquito fish
- *Columba livia* – domestic pigeon
- *Streptopelia senegalensis* – laughing turtle-dove.

### 3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

N/A

### 3.3 (i) Indigenous heritage values

A search of the Aboriginal Heritage Inquiry System was undertaken on 30 March 2016, no Registered Aboriginal Heritage Sites or Other Heritage Places were identified within the site.

### **3.3 (j) Other important or unique values of the environment**

Describe any other key features of the environment affected by, or in proximity to the proposed action (for example, any national parks, conservation reserves, wetlands of national significance etc).

There are no other important or unique environmental values within the site. However, immediately to the west of the site is the Wardandi Flora Reserve, a 42 ha reserve of native vegetation. Other reserves within the vicinity of the site include Leschenault Conservation Reserve and Kemerton Nature Reserve.

### **3.3 (k) Tenure of the action area (e.g. freehold, leasehold)**

The proposed action is located on freehold land owned by the proponent.

### **3.3 (l) Existing land/marine uses of area**

The site comprises mostly cleared land historically used for agriculture. The balance of the site is comprised of remnant vegetation, which has been subject to degradation from grazing livestock and infection by dieback disease. Approximately 4.7 ha of the remnant vegetation (and some scattered trees) are proposed for clearing.

### **3.3 (m) Any proposed land/marine uses of area**

The proposed land use for the site is light industrial development.

## 4 Environmental outcomes

Provide descriptions of the proposed environmental outcomes that will be achieved for matters of national environmental significance as a result of the proposed action. Include details of the baseline data upon which the outcomes are based, and the confidence about the likely achievement of the proposed outcomes. Where outcomes cannot be identified or committed to, provide explanatory details including any commitments to identify outcomes through an assessment process.

If a proposed action is determined to be a controlled action, the Department may request further details to enable application of the draft *Outcomes-based Conditions Policy 2015* and *Outcomes-based Conditions Guidance 2015* (<http://www.environment.gov.au/epbc/consultation/policy-guidance-outcomes-based-conditions>), including about environmental outcomes to be achieved, details of baseline data, milestones, performance criteria, and monitoring and adaptive management to ensure the achievement of outcomes. If this information is available at the time of referral it should be included.

General commitments to achieving environmental outcomes, particularly relating to beneficial impacts of the proposed action, CANNOT be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, and conditions of approval, if your proposal proceeds to these stages).

The only matters of NES with potential to be affected by the proposal are Threatened fauna species, black cockatoos and the western ringtail possum. A Fauna Assessment of the site was undertaken by Dr Greg Harewood (2016) (Appendix 2), which specifically considered fauna of NES and concluded that given the extent of vegetation clearing required (~4.7 ha in addition to some scattered paddock trees) was small and generally in a degraded state of decline, no substantial impacts are anticipated. In situations where impacts are possible, the degree of impact is only expected to be low. Assessment against the Department of Environment (DoE) criteria indicated that "significant impact" is not likely for any for these species or their habitat.

There are Recovery Plans in place for all of these species, including:

- Carnaby's Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan – Western Australian Wildlife Management Program No. 52 (DPaW 2013)
- Forest Black Cockatoo (Baudin's Cockatoo *Calyptorhynchus baudinii* and Forest Red-tailed Black Cockatoo *Calyptorhynchys banksii naso*) Recovery Plan (DEC 2008)
- Western Ringtail Possum (*Pseudocheirus occidentalis*) Recovery Plan – Wildlife Management Program No. 58 (DPaW 2014).

Generally, the objectives of these recovery plans are:

- to retain and effectively manage habitat critical for the survival of these species
- ensure that threatening processes do not impact on the ongoing viability, extent and number of the species
- to slow the decline of population size, extent and area of occupancy through managing threatening processes.

Given that vegetation (i.e. fauna habitat) proposed for clearing is in a degraded, declining condition and represents an extremely small fraction of the overall habitat available for these species, the proposal is not expected to compromise these objectives. The environmental outcome of the proposal will be to ensure that potential for the net loss in the abundance of black cockatoo species or western ringtail possums, is minimised.



## 5 Measures to avoid or reduce impacts

**Note:** If you have identified alternatives in relation to location, time frames or activities for the proposed action at Section 2.3 you will need to complete this section in relation to each of the alternatives identified.

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

For any measures intended to avoid or mitigate significant impacts on matters protected under the EPBC Act, specify:

- what the measure is,
- how the measure is expected to be effective, and
- the time frame or workplan for the measure.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

Provide information about the level of commitment by the person proposing to take the action to achieve the proposed environmental outcomes and implement the proposed mitigation measures. For example, if the measures are preliminary suggestions only that have not been fully researched, or are dependent on a third party's agreement (e.g. council or landowner), you should state that, that is the case.

Note, the Australian Government Environment Minister may decide that a proposed action is not likely to have significant impacts on a protected matter, as long as the action is taken in a particular manner (section 77A of the EPBC Act). The particular manner of taking the action may avoid or reduce certain impacts, in such a way that those impacts will not be 'significant'. More detail is provided on the Department's web site.

For the Minister to make such a decision (under section 77A), the proposed measures to avoid or reduce impacts must:

- clearly form part of the referred action (eg be identified in the referral and fall within the responsibility of the person proposing to take the action),
- be must be clear, unambiguous, and provide certainty in relation to reducing or avoiding impacts on the matters protected, and
- must be realistic and practical in terms of reporting, auditing and enforcement.

More general commitments (eg preparation of management plans or monitoring) and measures aimed at providing environmental offsets, compensation or off-site benefits CANNOT be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, if your proposal proceeds to these stages).

Potential impacts to ~4.7 ha of vegetation (and some scattered paddock trees), including 42 potential black cockatoo habitat trees, including 20 with hollows and three with usable (but unused) hollows, and ~1.3 ha of core western ringtail possum habitat, are unavoidable. To minimise potential impacts on fauna to acceptable levels, a Fauna Management Plan has been developed to support the proposal (Appendix 3).

Actions proposed to reduce impacts to significant fauna species resulting from the proposed action are summarised below.

### **Subdivision Design**

The approved subdivision plan includes a ~5 ha vegetation buffer, which has been strategically located adjacent to Paris Road, the Australind Bypass, and the Kingston Drive (future road). The vegetation buffer has been designed to retain ~0.9 ha of remnant vegetation, including ~0.2 ha of western ringtail possum habitat, five potential black cockatoo habitat trees (although none of these currently contain hollows suitable for black cockatoos) and ~0.2 ha of black cockatoo foraging habitat. The balance of the vegetation buffer was previously cleared of vegetation and will be landscaped accordingly.

### **Pre-clearing Fauna Trapping**

Prior to clearing, fauna species present will be trapped and relocated (where practicable) to an approved location, with a focus on conservation significant species (e.g. western ringtail possums).



### **Pre-clearing Tree Hollow and Drey Assessment**

Trees previously identified as potential habitat for fauna (e.g. black cockatoo habitat trees) will be reinspected immediately prior to or during site works to minimise risk to fauna. If found to be occupied then an effort will be made to relocate fauna to an approved location. If possible, any dreys identified will be relocated prior to clearing.

### **Clearing Contractor Induction**

Contractors will be provided with suitable information to ensure compliance with the Fauna Management Plan. This will include (but not be limited to) details on the locations of significant fauna habitat trees and the locations of areas likely to contain important fauna such as western ringtail possums. Personnel working on site will not be allowed to bring any weapons or pets on site. Contractors will be instructed to contact the delegated "fauna spotter" if fauna of any type is encountered.

### **Vegetation Retention**

- Areas requiring clearing will be obviously marked and access to areas where vegetation is to be retained will be restricted to prevent accidental clearing.
- Project infrastructure such as access routes, lay down areas, and turnaround points will be located within previously cleared areas.
- Where practicable, contractors will
  - Avoid impacts on tree roots – if feasible implementing a ~3 metre buffer around retained vegetation within which no soil disturbance should occur.
  - Avoid branch pruning on trees that are to be retained (especially where canopy connection could be affected).
  - Avoid filling of more than one metre above the pre-construction height around the base of trees.

### **Site Clearing (in accordance with an approved Fauna Management Plan)**

- Department of Parks and Wildlife (DPaW) Regional Wildlife Officer will be contacted on (08) 9725 4300 prior to any clearing commencing.
- A suitably experienced fauna spotter will be present on site at all times during clearing to supervise animal handling and any capture of injured fauna required.
- Prior to clearing the fauna spotter will inspect the area for fauna present. This will include raking leaf litter, turning logs and other debris while searching for fauna. Fauna encountered will be captured and relocated.
- The following management procedures will be implemented as required. They relate to removal of trees and are based on DPaW recommended procedures for western ringtail possums, but can apply to other arboreal fauna
  - All trees to be cleared will be inspected by a fauna spotter prior to the commencement of clearing to determine best methods for clearing specific trees.
  - Clearing will be undertaken in a systematic manner to encourage any fauna present to move to suitable habitat in land adjoining the proposal site (e.g. Wardandi Flora Reserve).
  - All trees will be bumped or shaken first. The operator and fauna spotter will then wait and observe the tree for a short time. If no possums appear to be present then the tree will be removed. However, at all times during clearing, personnel will proceed with caution prepared for the possibility that fauna are still present in vegetation subject to clearing. Any trees identified to contain western ringtail possums may need to be left for clearing the subsequent day to allow for natural dispersal.
  - If a western ringtail possum is observed in a tree that is about to be cleared and there is a tree marked for retention nearby, then the tree will be gently lowered to the ground to allow the animal to safely evacuate and personnel will encourage the animal towards tree being retained.

- If a western ringtail possum is identified in a tree and there are no trees being retained in the vicinity then the fauna spotter will attempt to catch the animal prior to the tree being pushed over. Captured and uninjured animals should be relocated to the nearest area of suitable habitat.
- Drey will be inspected prior to clearing and removed if possible. Dreys observed in felled trees will be checked immediately as baby western ringtail possums may remain in the drey.
- Tree hollows will be inspected prior to clearing. If this is impractical then hollows will be checked immediately after trees are felling if accessible.
- If possible, cleared vegetation will not be stockpiled on site. If stockpiling is required then contractors involved in the removal of stockpiled material should be made aware the displaced western ringtail possums may shelter in stockpiles of vegetation and building material. Stockpiled material should be removed in a manner that reduces chance of injury to fauna. If western ringtail possums are identified in a stockpile then the fauna spotter should attempt to capture and relocate the animals. Any dreys should be removed from vegetation going into stockpiles. If western ringtail possums are encountered and a fauna spotter is not present then DPaW should be notified.
- If practicable, any chipping of cleared vegetation should be undertaken as far away from areas known to contain western ringtail possums, to minimise disturbance due to noise. If chipping is undertaken over a number of days then it is preferred that the chipper remains in the same location and vegetation brought to the chipper. This would consolidate noise impacts to one area.
- If contractors encounter any injured western ringtail possums during clearing then the fauna spotter will be notified immediately so that arrangements can be made for the welfare of the injured animal. The fauna spotter will
  - Have suitable equipment to administer immediate emergency care to any injured western ringtail possums (e.g. heat packs, boxes/cages and blankets).
  - Have made prior arrangement with a carer who could care for/rehabilitate any injured animals in Bunbury/Busselton.
  - Notify DPaW's Regional Wildlife Officer in Bunbury on (08) 9725 4300.

#### **Post-clearing Reporting**

- The proponent will provide DPaW with a report on the impact on western ringtail possums during the clearing process within 28 days of completion of each stage of clearing.
- A report will also be required under the Regulation 15 Licence issued by DPaW. This report will be submitted to the Wildlife Licensing Branch of DPaW within one month of the expiration of the licence and contain a list of all fauna handled, the localities involved and a copy of any interpretive data prepared.

## 6 Conclusion on the likelihood of significant impacts

Identify whether or not you believe the action is a controlled action (ie. whether you think that significant impacts on the matters protected under Part 3 of the EPBC Act are likely) and the reasons why.

### 6.1 Do you THINK your proposed action is a controlled action?

<input checked="checked" type="checkbox"/>	No, complete section 5.2
<input type="checkbox"/>	Yes, complete section 5.3

### 6.2 Proposed action IS NOT a controlled action.

Specify the key reasons why you think the proposed action is NOT LIKELY to have significant impacts on a matter protected under the EPBC Act.

The proposal area has been extensively cleared (~90% of the site) and the little fauna habitat that remains has been degraded by partial clearing, altered fire regimes, grazing by livestock and infection by *Phytophthora cinnamomi* (dieback) disease. Consequently, the site has little conservation significance to fauna in general.

The site does contain a small amount of foraging and potential (but unused) nesting habitat for black cockatoos and habitat for the western ringtail possum. However, given its small size and the presence of much larger areas of better quality habitat within surrounding areas such as Wardandi Flora Reserve, Kemerton and Leschenault, this habitat is not considered regionally significant.

It is likely that vegetation within the site currently available for use by black cockatoos and western ringtail possums will continue to decline as impacts associated with dieback disease spread.

Given that clearing for the development comprises a small area, most of the vegetation proposed for clearing is poor quality and there are much larger areas of better quality habitat in the vicinity of the site, no significant impacts on matters of NES are anticipated.

Furthermore, potential impacts on fauna will be minimised through the use of a landscaped vegetation buffer and implementation of an approved Fauna Management Plan, which includes the relocation of fauna to an approved alternative location.

It has been noted that recent referrals proposing to clear remnant vegetation of similar size and quality (i.e. containing black cockatoo habitat and/or western ringtail possum habitat, and some infected with dieback) within the Shire of Harvey, have been determined by the DoE as "not a controlled action". Examples include:

- Stanley Road Waste Management Facility (Lot 45), Wellesley WA (EPBC Referral 2014/7131)
- Australind Piggery Expansion (Vegetation Clearance), Parkfield Western Australia (EPBC Referral 2014/7117).

Consequently, we have determined that this proposal should not be considered a controlled action.

### 6.3 Proposed action IS a controlled action

Type 'x' in the box for the matter(s) protected under the EPBC Act that you think are likely to be significantly impacted. (The 'sections' identified below are the relevant sections of the EPBC Act.)

#### Matters likely to be impacted

<input type="checkbox"/>	World Heritage values (sections 12 and 15A)
<input type="checkbox"/>	National Heritage places (sections 15B and 15C)
<input type="checkbox"/>	Wetlands of international importance (sections 16 and 17B)
<input type="checkbox"/>	Listed threatened species and communities (sections 18 and 18A)
<input type="checkbox"/>	Listed migratory species (sections 20 and 20A)
<input type="checkbox"/>	Protection of the environment from nuclear actions (sections 21 and 22A)
<input type="checkbox"/>	Commonwealth marine environment (sections 23 and 24A)
<input type="checkbox"/>	Great Barrier Reef Marine Park (sections 24B and 24C)
<input type="checkbox"/>	A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
<input type="checkbox"/>	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
<input type="checkbox"/>	Protection of the environment from Commonwealth actions (section 28)
<input type="checkbox"/>	Commonwealth Heritage places overseas (sections 27B and 27C)

Specify the key reasons why you think the proposed action is likely to have a significant adverse impact on the matters identified above.

## 7 Environmental record of the responsible party

**NOTE:** If a decision is made that a proposal needs approval under the EPBC Act, the Environment Minister will also decide the assessment approach. The EPBC Regulations provide for the environmental history of the party proposing to take the action to be taken into account when deciding the assessment approach.

	Yes	No
<b>7.1 Does the party taking the action have a satisfactory record of responsible environmental management?</b>  <b>Provide details</b>  This is the first development undertaken by the proponent. The proponent has acquired the land with the appropriate state approvals in place.	X	
<b>7.2 Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources?</b>  <b>If yes, provide details</b>		X
<b>7.3 If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework?</b>  <b>If yes, provide details of environmental policy and planning framework</b>	N/A	
<b>7.4 Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?</b>  <b>Provide name of proposal and EPBC reference number (if known)</b>		X

## 8 Information sources and attachments

(For the information provided above)

### 8.1 References

- List the references used in preparing the referral.
- Highlight documents that are available to the public, including web references if relevant.
- Cale, B. 2003. Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan 2002-2012. CALM, Wanneroo.
- Dell, J. 2000. A draft summary assessment of the fauna values of the Kemerton Bushland. Unpublished report for the Conservation Branch, Policy Division, Department of Environmental Protection.
- Department of Environment 2016. *Darwinia foetida* in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: <http://www.environment.gov.au/sprat>. Accessed 31 Mar 2016.
- Department of Environment and Conservation. 2008. Forest Black Cockatoo (Baudin's Cockatoo *Calyptorhynchus baudinii* and Forest Red-tailed Black Cockatoo *Calyptorhynchus banksii naso*) Recovery Plan. Australian Government.
- Department of Parks and Wildlife. 2013. Carnaby's Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan – Western Australian Wildlife Management Program No. 52. Australian Government.
- Department of Parks and Wildlife. 2014. Western Ringtail Possum (*Pseudocheirus occidentalis*) Recovery Plan – Wildlife Management Program No. 58. Australian Government.
- Department of Sustainability, Environment, Water, Population and Communities (SEWPaC). 2012. EPBC Act Referral Guidelines for Three Threatened Black Cockatoo Species: Carnaby's Cockatoo (Endangered) *Calyptorhynchus latirostris*, Baudin's Cockatoo (Vulnerable) *Calyptorhynchus baudinii*, Forest Red-tailed Black Cockatoo (Vulnerable) *Calyptorhynchus banksii naso*.
- Harewood, Greg. 2016. Fauna Assessment Lot 1001 Paris Rd Australind. Prepared for RPS Environment and Planning Pty Ltd.
- Johnstone, R.E. and Storr, G.M. 1998. Handbook of Western Australian Birds: Volume 1 – Non-passerines (Emu to Dollarbird). Western Australian Museum, Perth Western Australia.
- Morecombe, M. 2004. Field Guide to Australian Birds. Steve Parish Publishing, Archerfield Queensland
- Pizzey, G. and Knight, F. 2012. The field guide to the birds of Australia. 9th Edition. Harper Collins, Sydney.
- Simpson, K. and Day, N. 2010. Field guide to the birds of Australia. Penguin Books, Ringwood.
- Sorena, M. and Soderquist, T. 1995. Brush-tailed Phascogale *Phascogale tapoatafa*. Pp. 104–106 in Strahan R. (ed). (1995). The Mammals of Australia. Australian Museum/Reed Books.

### 8.2 Reliability and date of information

For information in section 3 specify:

- source of the information;
- how recent the information is;
- how the reliability of the information was tested; and
- any uncertainties in the information.

Information was sourced from reliable databases and sub-consultants. Database searches were undertaken at the time of this referral and during individual environmental assessments to ensure the most up to date and accurate data were used.



### 8.3 Attachments

Indicate the documents you have attached. All attachments must be less than three megabytes (3mb) so they can be published on the Department's website. Attachments larger than three megabytes (3mb) may delay the processing of your referral.

		✓ attached	Title of attachment(s)
<b>You must attach</b>	figures, maps or aerial photographs showing the project locality (section 1)	✓	Figure 1: Site Location Figure 2: Subdivision Plan Figure 3: Site Coordinates GIS Files attached
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	Figure 4: Potential Fauna Habitat Figure 5: Vegetation Units Figure 6: Geology
<b>If relevant, attach</b>	copies of any state or local government approvals and consent conditions (section 2.5)	✓	Appendix 1: WAPC Subdivision Approvals
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)	✓	N/A
	copies of any flora and fauna investigations and surveys (section 3)	✓	Appendix 2: Fauna Assessment
	technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)	✓	Appendix 2: Fauna Assessment Appendix 3: Fauna Management Plan
	report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)	N/A	

## 9 Contacts, signatures and declarations

**NOTE:** Providing false or misleading information is an offence punishable on conviction by imprisonment and fine (s 489, EPBC Act).

Under the EPBC Act a referral can only be made by:

- the person proposing to take the action (which can include a person acting on their behalf); or
- a Commonwealth, state or territory government, or agency that is aware of a proposal by a person to take an action, and that has administrative responsibilities relating to the action<sup>1</sup>.

**Project title:** Lot 561 Paris Road, Australind

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### 9.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action.

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If the proposed action requires a permit under the Great Barrier Reef Marine Park Act<sup>2</sup>, this is the person requiring the grant of a GBRMP permission.

The Minister may also request relevant additional information from this person.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

If the Minister decides that further assessment and approval is required, the Minister must designate a person as a proponent of the action. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent will generally be the person proposing to take the action<sup>3</sup>.

1. Name and Title:

David van der Walt

2. Organisation (if applicable):

Paris Road Australind CT Pty Ltd

3. EPBC Referral Number (if known):

4: ACN / ABN (if applicable):

ACN 167 254 319

5. Postal address 37 Stirling Hwy NEDLANDS WA 6009

6. Telephone: (08) 6389 3900

7. Email:

8. Name of proposed proponent (if not the same person at item 1 above and if applicable):

9. ACN/ABN of proposed

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<sup>1</sup> If the proposed action is to be taken by a Commonwealth, state or territory government or agency, section 8.1 of this form should be completed. However, if the government or agency is aware of, and has administrative responsibilities relating to, a proposed action that is to be taken by another person which has not otherwise been referred, please contact the Referrals Gateway (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

<sup>2</sup> If your referred action, or a component of it, is to be taken in the Great Barrier Reef Marine Park the Minister is required to provide a copy of your referral to the Great Barrier Reef Marine Park Authority (GBRMPA) (see section 73A, EPBC Act). For information about how the GBRMPA may use your information, see [http://www.gbrmpa.gov.au/privacy/privacy\\_notice\\_for\\_permits](http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits).

proponent (if not the same person named at item 1 above):

**COMPLETE THIS SECTION ONLY IF YOU QUALIFY FOR EXEMPTION FROM THE FEE(S) THAT WOULD OTHERWISE BE PAYABLE**

I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

an individual; OR

a small business entity (within the meaning given by section 328-110 (other than subsection 328-119(4)) of the *Income Tax Assessment Act 1997*); OR

not applicable.

If you are small business entity you must provide the Date/Income Year that you became a small business entity:

**Note: You must advise the Department within 10 business days if you cease to be a small business entity. Failure to notify the Secretary of this is an offence punishable on conviction by a fine (regulation 5.23B(3) *Environment Protection and Biodiversity Conservation Regulations 2000 (Cth)*).**

**COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER**

I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations. Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made:

not applicable.

Declaration

I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.  
I understand that giving false or misleading information is a serious offence.  
I agree to be the proponent for this action.  
I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature

Date 24.05.16

**9.2 Person preparing the referral information (if different from 8.1)**

Individual or organisation who has prepared the information contained in this referral form.

Name Clifford Bennison

Title Senior Environmental Scientist

Organisation RPS Environment and Planning Pty Ltd

ACN / ABN (if applicable) 45 108 680 977

Postal address PO Box 749, BUSSELTON WA 6280

Telephone (08) 9754 2898

Email clifford.bennison@rpsgroup.com.au

Declaration

I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.  
I understand that giving false or misleading information is a serious offence.

Signature



Date 24.05.16

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# REFERRAL CHECKLIST

NOTE: This checklist is to help ensure that all the relevant referral information has been provided. It is not a part of the referral form and does not need to be sent to the Department.

## HAVE YOU:

- ☐ Completed all required sections of the referral form?
- ☐ Included accurate coordinates (to allow the location of the proposed action to be mapped)?
- ☐ Provided a map showing the location and approximate boundaries of the project area?
- ☐ Provided a map/plan showing the location of the action in relation to any matters of NES?
- ☐ Provided a digital file (preferably ArcGIS shapefile, refer to guidelines at Attachment A) delineating the boundaries of the referral area?
- ☐ Provided complete contact details and signed the form?
- ☐ Provided copies of any documents referenced in the referral form?
- ☐ Ensured that all attachments are less than three megabytes (3mb)?
- ☐ Sent the referral to the Department (electronic and hard copy preferred)?



## **Geographic Information System (GIS) data supply guidelines**

If the area is less than 5 hectares, provide the location as a point layer. If the area greater than 5 hectares, please provide as a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer.

GIS data needs to be provided to the Department in the following manner:

- Point, Line or Polygon data types: ESRI file geodatabase feature class (preferred) or as an ESRI shapefile (.shp) zipped and attached with appropriate title
- Raster data types: Raw satellite imagery should be supplied in the vendor specific format.
- Projection as GDA94 coordinate system.

Processed products should be provided as follows:

- For data, uncompressed or lossless compressed formats is required - GeoTIFF or Imagine IMG is the first preference, then JPEG2000 lossless and other simple binary+header formats (ERS, ENVI or BIL).
- For natural/false/pseudo colour RGB imagery:
  - If the imagery is already mosaiced and is ready for display then lossy compression is suitable (JPEG2000 lossy/ECW/MrSID). Prefer 10% compression, up to 20% is acceptable.
  - If the imagery requires any sort of processing prior to display (i.e. mosaicing/colour balancing/etc) then an uncompressed or lossless compressed format is required.

Metadata or 'information about data' will be produced for all spatial data and will be compliant with ANZLIC Metadata Profile. ([http://www.anzlic.org.au/policies\\_guidelines#guidelines](http://www.anzlic.org.au/policies_guidelines#guidelines)).

The Department's preferred method is using ANZMet Lite, however the Department's Service Provider may use any compliant system to generate metadata.

All data will be provide under a Creative Commons license (<http://creativecommons.org/licenses/by/3.0/au/>)





## Site Location



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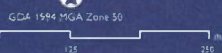


**LEGEND**

- EXISTING CADASTRE
- SUBJECT LAND
- PROPOSED CADASTRE
- FUTURE ROAD
- ▨ SUBDIVISIONAL ACCESS ROAD
- ▨ POS VEGETATION BUFFER (PROPOSED)

**RPS**

Job Number: 11601901  
 Doc Number: 002  
 Date: 01/04/16  
 Scale: 1:5,000 @ A3  
 Created by: MA  
 Source: Subdivision Plan - TME 12209P-SU-01, 25.10.2012



**Figure 2**

**Subdivision Plan**

