



Title of Proposal - Residential development of 118 Coogee Road, Mariginiup

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Residential Development

1.2 Provide a detailed description of the proposed action, including all proposed activities.

Harcourts Pty Ltd (Harcourts) is proposing to develop 118 Coogee Road, Mariginiup for residential land use (the proposed action; Figure 1). The development will require rezoning of the proposed action area to 'Urban Deferred' under the Metropolitan Region Scheme which will allow the area to accommodate residential lots at a range of densities, public open space. The proposed action will involve the clearing of 1.64 ha of native vegetation within 118 Coogee Road, Mariginiup. This area proposed to be cleared represents all of the native vegetation that is present within the Lot.

No public consultation has been required to be undertaken for the project. The rezoning proposal will be referred to relevant government agencies as required as part of the State planning process.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
118 Coogee Rd, Marginup	1	-31.708739818376	115.82242557784
118 Coogee Rd, Marginup	2	-31.708739818376	115.82404563208
118 Coogee Rd, Marginup	3	-31.709752949007	115.82405636092
118 Coogee Rd, Marginup	4	-31.709734694499	115.82245776435
118 Coogee Rd, Marginup	5	-31.708748945729	115.82243630667
118 Coogee Rd, Marginup	6	-31.708739818376	115.82242557784



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

The proposed action is located in Mariginiup, within the City of Wanneroo, approximately 27 km north of the Perth Central Business District and 8 km southwest of Joondalup. The proposed action area comprises 1.64 ha and is bound by Coogee Road to the north, Pinelake Trail to the west, semi cleared rural properties to the south and Caporn Park to the east (Figure 1).

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

The size of the proposed action area is 1.64 ha, of which 1.64 ha will be cleared of remnant native vegetation.

1.7 Is the proposed action a street address or lot?

Street Address

118 Coogee Road
Mariginiup WA 6078
Australia

1.8 Primary Jurisdiction.

Western Australia

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

No

1.10 Is the proposed action subject to local government planning approval?

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 01/2020



End date 12/2025

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

The site is zoned Rural under the Metropolitan Region Scheme and General Rural under the City of Wanneroo Town Planning Scheme No. 2. The site is identified as Potential Urban by the East Wanneroo Structure Plan–Final Report (EWSP–2011) and is within the Urban Class of Action of the Green Growth Plan (Perth and Peel Strategic Assessment). The Green Growth Plan identifies broad commitments over the majority of the site, reflecting the Black Cockatoo habitat and Banksia Woodland TEC.

The development will require, in the first instance, rezoning of the proposed action area to 'Urban' under the Metropolitan Region Scheme which will allow the area to accommodate residential lots at a range of densities and public open space. The referral of the site under the EPBC Act is preferred ahead of this process in order to efficiently address and consider the matters of NES present, specifically Black Cockatoo habitat and the Banksia Woodland on the Swan Coastal Plain TEC. Addressing these matters early in the process will enable the progression of the MRS amendment.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

Public consultation by way of advertising will be undertaken during the MRS amendment process. There are no registered Aboriginal sites present within the project area.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

No impact assessments outside of this referral have been undertaken to date. A copy of the flora, vegetation and Black Cockatoo assessment (Strategen 2017) is provided as an attachment in Section 3.1.1.

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

No



Section 2 - 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. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

- [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](#);
- [Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies](#).

2.1 Is the proposed action likely to have ANY direct or indirect impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to have ANY direct or indirect impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to have ANY direct or indirect impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Banksia Woodlands of the Swan Coastal Plain	Removal of 1.08 ha of very good quality



Species	Impact
	Threatened Ecological Community (TEC) Banksia woodlands of the Swan Coastal Plain (listed as Endangered under the EPBC Act) (Strategen 2017). FCT similarity analysis indicates the likely presence of FCT21a (not listed as a threatened community) and FCT22 (listed as Priority 3 ecological community) present within the proposed action area (Figure 4).
Calidris ferruginea Curlew Sandpiper	Species or species habitat is known to occur in the area (DEE 2017a); however, <i>C. ferruginea</i> is listed as a Critically Endangered under the EPBC Act, Marine and Migratory (Bonn, CAMBA, JAMBA, ROKAMBA) species (DEE 2017b). They occur around the coasts of Australia on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. They are also quite widespread inland Australia, though less often recorded, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand (DEE 2017a). The proposed action area does not contain suitable habitat for this species, and; therefore, impact is unlikely.
Calyptorhynchus banksii naso Forest Red-tailed Black Cockatoo	Known habitat includes remnant eucalypt woodlands, especially Jarrah, Marri and Karri forest. The species is also known from the Perth metropolitan area and in remnant patches of native vegetation on land cleared for development or agriculture (DEE 2017b). Known to utilise <i>Corymbia calophylla</i> , * <i>Corymbia citriodora</i> , <i>Allocasuarina fraseriana</i> , <i>Eucalyptus patens</i> and <i>Eucalyptus marginata</i> as a foraging plant and <i>C. calophylla</i> as breeding habitat (DEC 2011). Removal of 1.08 ha of excellent quality foraging habitat for Forest Red-tailed Black Cockatoo (FRBC) (Strategen 2017). This species is listed as a Threatened species under the EPBC Act and the Wildlife Conservation Act 1950. A total of 13 potentially significant habitat trees were identified within the proposed action area



Species	Impact
	(Strategen 2017), two of which contained hollows sufficient for breeding purposes but showed no signs of use by Black Cockatoos. The trees provide foraging and breeding habitat for FRBC.
<i>Calyptrorhynchus latirostris</i> Carnaby's Black Cockatoo	Known habitat includes remnant eucalypt woodlands, and shrubland or Kwongan heathland dominated by proteaceous species. The species is also known from the Perth metropolitan area and in remnant patches of native vegetation on land cleared for agriculture (DEE 2017b). Known to utilise <i>C. calophylla</i> , * <i>C. citriodora</i> , <i>E. patens</i> , <i>E. marginata</i> , <i>X. preissii</i> , <i>A. fraseriana</i> as a foraging plant, <i>C. calophylla</i> as breeding habitat and <i>C. calophylla</i> and <i>E. marginata</i> as roosting habitat (DEC 2011). Removal of 1.08 ha of excellent quality foraging habitat for Carnaby's Black Cockatoo (CBC) (Strategen 2017). This species is listed as a Threatened species under the EPBC Act and the Wildlife Conservation Act 1950. A total of 13 potentially significant habitat trees were identified within the proposed action area (Strategen 2017), two of which contained hollows sufficient for breeding purposes but showed no signs of use by Black Cockatoos. The trees provide foraging and roosting habitat for CBC.
<i>Leipoa ocellata</i> Malleefowl	Species or species habitat is likely to occur in the area (DEE 2017a); however, <i>L. ocellata</i> is listed as a Vulnerable under the EPBC Act and is widely distributed throughout southern Australia. This species occupies semi-arid to arid shrublands and low woodlands that are dominated by mallee vegetation (Benshemesh 2007). The shrublands and low woodlands communities where Malleefowl occur are dominated by multistemmed species of eucalypts (such as <i>Eucalyptus socialis</i> , <i>E. dumosa</i> or <i>E. incrassata</i>) and occur on sandy or loamy soils that receive 200 to 450 mm of rainfall each year. The proposed action area does not contain habitat suitable for this species, and; therefore, impact is unlikely.
<i>Numenius madagascariensis</i> Eastern Curlew	Species or species habitat may occur in the area (DEE 2017a). <i>N. madagascariensis</i> is



Species	Impact
	listed as a Critically Endangered under the EPBC Act, Marine and Migratory (Bonn, CAMBA, JAMBA, ROKAMBA) species (DEE 2017b). The Eastern Curlew has a primarily coastal distribution (DEE 2017b). In southern Western Australia, the Eastern Curlew is recorded from Eyre, and there are scattered records from Stokes Inlet to Peel Inlet. The Eastern Curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. The proposed action area does not contain habitat suitable for this species, and; therefore, impact is unlikely.
Rostratula australis Australian Painted Snipe	Species or species habitat may occur in the area (DEE 2017a). <i>R. australis</i> is listed as an Endangered under the EPBC Act (DEE 2017b) and is common in eastern Australia, where it has been recorded at scattered locations throughout much of Queensland, NSW, Victoria and south-eastern South Australia (DEE 2017b). The Australian Painted Snipe generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans (DEE 2017b). They also utilise inundated or waterlogged grassland or salt marsh, dams, rice crops, sewage farms and bore drains. Typical sites include those with rank emergent tussocks of grass, sedges, rushes or reeds, or samphire; often with scattered clumps of lignum <i>Muehlenbeckia</i> or canegrass or sometimes teatree (<i>Melaleuca</i>). The proposed action area does not contain habitat suitable for this species, and; therefore, impact is unlikely.
Dasyurus geoffroii Chuditch, Western Quoll	Species or species habitat is likely to occur in the area (DEE 2017a). <i>D. geoffroii</i> is listed as an Endangered under the EPBC Act (DEE 2017b) and is localised to the southwest corner of Western Australia (DEC 2012). Chuditch currently inhabit most kinds of wooded habitat within its current range including eucalypt forest (especially Jarrah), dry woodland and mallee shrublands. In Jarrah forest, Chuditch



Species	Impact
	populations occur in both moist, densely vegetated, steeply sloping forest and drier, open, gently sloping forest. The densest populations of Chuditch have been found in riparian forest. There are a number of recordings of the Chuditch in the local area; however, the latest recording of this species in the local area is 1978 (NCRIS 2016). Given the time since the previous recording and give that the proposed action area does not contain Jarrah forest and it does not occur on the south coast of WA, the proposed action area is not considered a key habitat area for this species. This species is therefore considered unlikely to occur within the proposed action area.
Andersonia gracilis Slender Andersonia	Species or species habitat may occur in the area (DEE 2017a). <i>A. gracilis</i> is listed as Endangered under the EPBC Act and occurs in white/grey sand, sandy clay, gravelley loam within winter-wet areas and near swamps (Western Australian Herbarium 1998-). The preferred soil type/habitat for this species does not occur within the proposed action area; and, the presence of <i>A. gracilis</i> was not recorded within the proposed the action area during a flora and vegetation assessment (Strategen 2017); therefore, impact to this species is unlikely.
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw	Species or species habitat is likely to occur in the area (DEE 2017a). <i>A. viridis</i> subsp. <i>terraspectans</i> is listed as Vulnerable under the EPBC Act and occurs on grey sand, clay loam in winter-wet depressions (Western Australian Herbarium 1998-). The preferred soil type/habitat for this species does not occur within the proposed action area; and, the presence of <i>A. viridis</i> subsp. <i>Terraspectans</i> was not recorded within the proposed the action area during a flora and vegetation assessment (Strategen 2017); therefore, impact to this species is unlikely.
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid	Species or species habitat is likely to occur in the area (DEE 2017a). <i>C. huegelii</i> is listed as Endangered under the EPBC Act and occurs within well-drained, deep sandy soils in low mixed Banksia, Allocasuarina and Jarrah



Species	Impact
	woodlands (Western Australian Herbarium 1998-, DEE 2017b). The preferred soil type/habitat for this species potentially occurs within the proposed action area; however, the presence of <i>C. huegelii</i> was not recorded within the proposed the action area during a flora and vegetation assessment (Strategen 2017); therefore, impact to this species is unlikely.
<i>Diuris micrantha</i> Dwarf Bee-orchid	Species or species habitat may occur in the area (DEE 2017a). <i>D. micrantha</i> is listed as Endangered under the EPBC Act and occurs within clay-loam substrates in winter-wet depressions or swamps (DEE 2017b). The preferred soil type/habitat for this species potentially occurs within the proposed action area; however, the presence of <i>D. micrantha</i> was not recorded within the proposed the action area during a flora and vegetation assessment (Strategen 2017); therefore, impact to this species is unlikely.
<i>Diuris purdiei</i> Purdie's Donkey-orchid	Species or species habitat may occur in the area (DEE 2017a). <i>D. purdiei</i> is listed as Endangered under the EPBC Act and occurs in areas subject to winter inundation within dense heath with scattered Myrtaceous trees (DEE 2017b). The preferred soil type/habitat for this species potentially occurs within the proposed action area; however, the presence of <i>D. purdiei</i> was not recorded within the proposed the action area during a flora and vegetation assessment (Strategen 2017); therefore, impact to this species is unlikely.
<i>Drakaea elastica</i> Glossy-leafed Hammer Orchid, Glossy-leafed Hammer Orchid, Warty Hammer Orchid	Species or species habitat is likely to occur in the area (DEE 2017a). <i>D. elastica</i> is listed as Endangered under the EPBC Act and occurs within bare patches of white sand over dark sandy loams on damp areas (DEE 2017b). The preferred soil type/habitat for this species does not occur within the proposed action area; and, the presence of <i>D. elastica</i> was not recorded within the proposed the action area during a flora and vegetation assessment (Strategen 2017); therefore, impact to this species is unlikely.
<i>Drakaea micrantha</i> Dwarf Hammer-orchid	Species or species habitat may occur in the area (DEE 2017a). <i>D. micrantha</i> is listed as



Species	Impact
	Vulnerable under the EPBC Act and occurs within cleared, open sandy patches (Brown et al. 1998). The preferred soil type/habitat for this species potentially occurs within the proposed action area; however, the presence of <i>D. micrantha</i> was not recorded within the proposed the action area during a flora and vegetation assessment (Strategen 2017); therefore, impact to this species is unlikely.
<i>Lepidosperma rostratum</i> Beaked <i>Lepidosperma</i>	Species or species habitat is likely to occur in the area (DEE 2017a). <i>L. rostratum</i> is listed as Endangered under the EPBC Act and occurs within b sandy soils among low heath comprised of <i>Banksia telmatiaea</i> and <i>Calothamnus hirsutus</i> in winter-wet swamps. (DEE 2017b). The preferred soil type/habitat for this species does not occur within the proposed action area.
<i>Thelymitra dedmaniarum</i> Cinnamon Sun Orchid	Species or species habitat may occur in the area (DEE 2017a). <i>T. dedmaniarum</i> is listed as Endangered under the EPBC Act and occurs in <i>Eucalyptus wandoo</i> and <i>E. accedens</i> woodlands on red-brown sandy-loam soil associated with dolerite and granite outcrops (TSSC 2016). The preferred soil type/habitat for this species does not occur within the proposed action area.

2.4.2 Do you consider this impact to be significant?

No

2.5 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed migratory species, or their habitat?

Yes

2.5.1 Impact table

Species	Impact
<i>Apus pacificus</i> Fork-tailed Swift	Species or species habitat likely to occur within area (DEE 2017a). The Fork-tailed Swift is almost exclusively aerial, flying from less than 1



Species	Impact
	m to at least 300 m above ground and probably much higher. This species is potentially a very occasional summer visitor to the south west of Western Australia but is entirely aerial and largely independent of terrestrial habitats (DEE 2017b).
<i>Calidris acuminata</i> Sharp-tailed Sandpiper	Species or species habitat known to occur within area (DEE 2017a). In Western Australia (WA), <i>C. acuminata</i> are widespread from Cape Arid to Carnarvon, around coastal and subcoastal plains of Pilbara Region to southwest and east Kimberley Division. Inland records indicate the species is widespread and scattered from Newman, east to Lake Cohen, south to Boulder and west to Meekatharra (DEE 2017b). This species prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline saltlakes inland. They also occur in saltworks and sewage farms (DEE 2017b). The preferred habitat type is not present within the proposed action area; therefore, impact to this species is unlikely.
<i>Calidris ferruginea</i> Curlew Sandpiper	Species or species habitat known to occur within area. This species is migratory. Known habitat includes intertidal mudflats in sheltered coastal areas, such as estuaries and non-tidal swamps and lakes near the coast (DEE 2017b). The species has been recorded less often inland around lakes, dams and bore drains with bare edges of mud or sand (DEE 2017b). The distribution of the species is limited by land clearing and disturbance at roost and feeding sites (DEE 2017b). The preferred habitat type is not present within the proposed action area; therefore, impact to this species is unlikely.
<i>Calidris ruficollis</i> Red-necked Stint	Species or species habitat known to occur within area (DEE 2017a). <i>C. ruficollis</i> mostly found in coastal areas, including in sheltered inlets, bays, lagoons and estuaries with intertidal mudflats, often near spits, islets and banks and, sometimes, on protected sandy or



Species	Impact
	coralline shores (DEE 2017b). Occasionally they have been recorded on exposed or ocean beaches, and sometimes on stony or rocky shores, reefs or shoals. They also occur in saltworks and sewage farms; saltmarsh; ephemeral or permanent shallow wetlands near the coast or inland, including lagoons, lakes, swamps, riverbanks, waterholes, bore drains, dams, soaks and pools in saltflats. They sometimes use flooded paddocks or damp grasslands and have occasionally been recorded on dry gibber plains, with little or no perennial vegetation (DEE 2017b). The preferred habitat type is not present within the proposed action area; therefore, impact to this species is unlikely.
Calidris subminuta Long-toed Stint	Species or species habitat known to occur within area (DEE 2017a). In Western Australia C. subminuta is found mainly along the coast, with a few scattered inland records (DEE 2017b). This species occurs in a variety of terrestrial wetlands. They prefer shallow freshwater or brackish wetlands including lakes, swamps, river floodplains, streams, lagoons and sewage ponds. The species is also fond of areas of muddy shoreline, growths of short grass, weeds, sedges, low or floating aquatic vegetation, reeds, rushes and occasionally stunted samphire (DEE 2017b). This species also been observed at open, less vegetated shores of larger lakes and ponds and is common on muddy fringes of drying ephemeral lakes and swamps and also frequents permanent wetlands such as reservoirs and artificial lakes (DEE 2017b). They are uncommon, but not unknown, at tidal estuaries, saline lakes, saltponds and bore swamps (DEE 2017b). The preferred habitat type is not present within the proposed action area; therefore, impact to this species is unlikely.
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew	Species or species habitat may occur within area (DEE 2017a). N. madagascariensis is listed as a Critically Endangered under the EPBC Act, Marine and Migratory (Bonn, CAMBA, JAMBA, ROKAMBA) species (DEE 2017b). The Eastern Curlew has a primarily



Species	Impact
	coastal distribution (DEE 2017b). In southern Western Australia, the Eastern Curlew is recorded from Eyre, and there are scattered records from Stokes Inlet to Peel Inlet. The Eastern Curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. The proposed action area does not contain habitat suitable for this species, and; therefore, impact is unlikely.
Pandion haliaetus Osprey	Species or species habitat known to occur within area (DEE 2017a). <i>P. haliaetus</i> is widely distributed around the coast of Australia and occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands (DEE 2017b). This species is mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia (DEE 2017b). The proposed action area does not contain habitat suitable for this species, and; therefore, impact is unlikely.
Tringa glareola Wood Sandpiper	Species or species habitat known to occur within area (DEE 2017a). In Western Australia <i>T. Glareola</i> is widespread along the coast but scattered in most regions. This species utilises well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. <i>T. Glareola</i> are typically associated with emergent, aquatic plants or grass, and dominated by taller fringing vegetation, such as dense stands of rushes or reeds, shrubs, or dead or live trees, especially <i>Melaleuca</i> and River Red Gums <i>Eucalyptus camaldulensis</i> and often with fallen timber (DEE 2017b). The proposed action area does not contain habitat suitable for this species, and; therefore, impact is unlikely.
Tringa nebularia Common Greenshank, Greenshank	Species or species habitat known to occur within area (DEE 2017a) and is widespread across Australia. In Western Australia, <i>T. nebularia</i> occurs around most of the coast from Cape Arid in the south to Carnarvon in the northwest. In the Kimberley, it is recorded in the southwest and the northeast of Western



Species	Impact
	Australia, with isolated records from the Bonaparte Archipelago (DEE 2017b). This species utilises a wide variety of inland wetlands and sheltered coastal habitats of varying salinity, this includes sheltered coastal habitats, typically with large mudflats and saltmarsh, mangroves or seagrass (DEE 2017b). Habitats include embayments, harbours, river estuaries, deltas and lagoons and are recorded less often in round tidal pools, rock-flats and rock platforms. The species uses both permanent and ephemeral terrestrial wetlands, including swamps, lakes, dams, rivers, creeks, billabongs, waterholes and inundated floodplains, claypans and saltflats (DEE 2017b). The proposed action area does not contain habitat suitable for this species, and; therefore, impact is unlikely.

2.5.2 Do you consider this impact to be significant?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action to be taken on or near Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No

2.10 Is the proposed action a nuclear action?



No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No



Section 3 - Description of the project area

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 in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

A Level 1 flora and vegetation survey of the proposed action area (Strategen 2017) was conducted in October 2016. The field survey was conducted according to standards set out in Guidance Statement 51 and Technical Guide – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2004; Parks and Wildlife 2015a). A targeted survey for Threatened orchid species was also undertaken within the survey area in accordance with the Draft Survey Guidelines for Australia's Threatened Orchids (DEE 2013).

This included a field assessment to:

- *collect and identify the vascular plant species present
- *search for Threatened flora
- *define and map the native vegetation types present and assess their condition.
- *an assessment of the likelihood of occurrence of each flora species identified in the EPBC Act Protected Matters Search Tool, based on the available habitat within the proposed action area.

The search of the DEE EPBC Act protected matters search tool identified:

- *one Threatened Ecological Community (Banksia Woodlands of the Swan Coastal Plain)
- *sixteen threatened species (six bird species, one mammal species, nine flora species)
- *ten migratory species (one marine, one terrestrial, eight wetland species).

A total of 28 native vascular flora species were identified within the proposed action area during the Level 1 flora assessment (Strategen 2017). No conservation significant flora species were recorded within the proposed action area.



Seven introduced flora species were identified within the proposed action area; however, none were listed as Declared Plant species under s 22 of the Biosecurity and Agriculture Management Act 2007. Introduced flora species included:

**Avena barbata*

**Briza maxima*

**Ehrharta calycina*

**Gladiolus caryophyllaceus*

**Hypochaeris glabra*

**Ursinia anthemoides*

**Watsonia meriana*.

3.2 Describe the hydrology relevant to the project area (including water flows).

Depth to groundwater ranges from 12 m below surface level in the east of the site to 14 m below the surface in the west of the site. Groundwater flows in a westerly direction. There are no wetlands of conservation significance west of the site, prior to groundwater discharging into the ocean. There are no Public Drinking Water Source Areas (PDWSA) within the proposed action area.

There are no surface water bodies within the proposed action area. The nearest wetland is Conservation Category Wetland (UFI 8161) approximately 0.37 km southeast from the proposed action area.

3.3 Describe the soil and vegetation characteristics relevant to the project area.

Vegetation was observed to be in various states of degradation due to historical clearing and rural land use activities, as well as weed invasion from surrounding areas (Strategen 2017). Vegetation condition ranged (Figure 3) from 'Very Good' to 'Completely Degraded' with approximately 57.6% of the proposed action area in 'Very Good' condition (Strategen 2017).

Two vegetation types (VT1 and VT2) were defined and mapped (Figure 4) within the proposed action area (Strategen 2017):



*VT1: *Banksia attenuata*, *Banksia menziesii* and *Eucalyptus marginata* woodland over *Jacksonia sternbergiana*, *Adenanthos cygnorum* and *Xanthorrhoea preissii* open scrub over *Hibbertia hypericoides*, **Watsonia meriana* and *Stirlingia latifolia* low shrubland over **Ehrharta calycina*, **Briza maxima* and **Avena barbata* open bunch grassland on sandy loam soils (1.08 ha)

*VT2: **Ehrharta calycina* open bunch grassland with emergent *Agonis flexuosa* and *Xanthorrhoea preissii* (0.28 ha)

*balance of the proposed action area is cleared.

Surface geology is Tamala Limestone that is described as aeolian calcarenite, variably lithified, leached quartz sand.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

No applicable.

3.5 Describe the status of native vegetation relevant to the project area.

The proposed action area supports approximately 1.64 ha of native remnant vegetation. Vegetation condition ranges from 'Very Good' to 'Completely Degraded' according to the Keighery (1994) Bushland Condition Scale (Strategen 2017). The proposed action will result in the clearing of 1.33 ha of native vegetation.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The proposed action area ranges between 50 and 55 mAHD sloping upwards from the northwestern corner of the proposed action area boundary.

3.7 Describe the current condition of the environment relevant to the project area.

The proposed action area is predominantly native remnant vegetation in varying condition from 'Very Good' to 'Completely Degraded' (Strategen 2017).

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.



There are no places listed on the Commonwealth Heritage Places Register within the proposed action area (DEE 2017c).

3.9 Describe any Indigenous heritage values relevant to the project area.

A search of the Department of Aboriginal Affairs inquiry system shows reveals there are no Registered Heritage Sites or Other Heritage Places within the proposed action area (DAA 2017). Lake Adams (Legacy ID: S02766) was identified as the nearest Other Heritage Place with mythological, hunting place, plant resource and water source value (DAA 2017). The nearest Registered Heritage Site (Lake Mariginiup; Legacy ID: S02188) is approximately 1.05 km southwest from the proposed action area which has mythological and hunting place value (DAA 2017).

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

There are no other important features within the proposed action area.

3.11 Describe any existing or any proposed uses relevant to the project area.

The proposed action area currently consists of areas of remnant vegetation and cleared access tracks. The surrounding area comprises semi cleared rural properties and low density residential development.

Residential development is the proposed land use.



Section 4 - Measures to avoid or reduce impacts

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.

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.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

Harcourts will implement environmental management measures designed to address any potential environmental impacts associated with proposed clearing activities undertaken as part of the proposed action. Some of the environmental management measures to be implemented include the following:

- *clearing to stay within approved footprint by clearly delineated clearing footprint boundaries
- *access to areas not proposed to be developed will be restricted to authorised personnel
- *land clearing to take place in stages to allow for local migration of fauna into adjacent areas
- *appropriate speed limits to be enforced to minimise fauna vehicle interactions
- *include in inductions fauna awareness and environmental awareness training sessions
- *installing relevant signage on roads and entry points to the development noting presence of fauna
- *inspection of potential habitat for black cockatoos and other fauna species.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

The proposed action will result in the clearing of 1.08 ha of excellent quality foraging habitat for the two species of black cockatoo (Forest Red-tailed Black Cockatoos, and Carnaby's Black Cockatoos). Removal of potential foraging habitat is not considered to pose a significant threat to black cockatoo species; given the small area of disturbance. Opportunities to retain significant trees within areas of Public Open Space will be considered at detailed subdivision design.



The removal of 1.08 ha of very good quality Threatened Ecological Community (TEC) Banksia woodlands of the Swan Coastal Plain (listed as Endangered under the EPBC Act) (Strategen 2017) is not expected to have a significant impact on the TEC.



Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No



5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

The proposed clearing of up to 1.08 ha of Banksia Woodland is unlikely to significantly impact the Banksia Woodlands of the Swan Coastal Plain ecological community. Key reasons for this conclusion are:

*the proposed action area supports vegetation belonging to the Spearwood system, of which the native vegetation extent on the Swan Coastal Plain is 23.80%

*the proposed action area's inferred Floristic Community Type (FCT21a), FCT 21a is not identified by the State as a Threatened or Priority Ecological Community and is therefore adequately represented elsewhere on the Swan Coastal Plain

*the proposed action area's inferred Floristic Community Type (FCT22) is recognised as a Priority 3 ecological community is not expected to be significantly impacted due to:

-small scale nature of the clearing

-the already modified and disturbed nature of the vegetation.

The proposed clearing of 1.08 ha of excellent quality foraging habitat, habitat for two species of black cockatoo (FRBC Forest Red-tailed Black Cockatoos, and Carnaby's Black Cockatoos) is unlikely to significantly impact these black cockatoo species.

Key reasons for this conclusion are:

*the small scale of clearing of black cockatoo foraging habitat relative to the habitat available within 5 km of the site



*there are extensive areas of potential foraging, breeding and roosting habitat close to the proposed action area Gnangara-Moore River State Forest (2.5 km east; 66006 ha), Jandabup Nature Reserve (<1.5 km southeast; 6.6 ha) and William and Mary Beachham Reserve (<1.5 km to the west; 5.54 ha)

*potential for significant trees to be retained within areas of POS where practicable.

The predicted environmental impact resulting from the proposed action is not expected to be significant at a national, regional or local scale and can be adequately managed through implementation of environmental management measures.

The proposed action is therefore not considered likely to have a significant impact on any black cockatoo species or other matter of national environmental significance and therefore not a controlled action.



Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

N/A. The party undertaking the action has not been involved with similar development actions and therefore there is no record from which to reference.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

Not applicable.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

No

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

No



Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
Department of Aboriginal Affairs (DAA) 2017, Aboriginal Heritage Inquiry System, [Online], Western Australian Government available at: http://maps.dia.wa.gov.au/AHIS2/ [2 February 2017].	High - State database	Limited
Department of the Environment and Energy (DEE) 2017a, EPBC Act Protected Matters Search Tool, [Online], Australian Government, Available from: http://www.environment.gov.au/epbc/pmst/index.html [30 January 2017].	High – Commonwealth database	Limited
Department of the Environment and Energy (DEE) 2017b, Species Profiles and Threats Database, [Online], Australian Government, Available from: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl [30 January 2017].	High – Commonwealth database	Limited
Benshemesh, J. 2007, National Recovery Plan for Malleefowl, Department for Environment and Heritage, South Australia.	High – technical reference	-
Department of Environment and Conservation (DEC) 2012, Chuditch (<i>Dasyurus geoffroii</i>) Recovery Plan. Wildlife Management Program No. 54, Department of Environment and Conservation, Perth, Western Australia.	High – technical reference	-



Reference Source	Reliability	Uncertainties
Western Australian Herbarium 1998-, FloraBase – the Westernreference Australian Flora, [Online], Government of Western Australia, Available from: http://florabase.dpaw.wa.gov.au/ [31 January 2017].	High – State technical	-
Strategen Environmental Consultants (Strategen) 2017, Level 2 flora and vegetation survey and black cockatoo assessment 118 Coogee Rd Mariginiup, report prepared for Harcourts Pty Ltd, January 2017, Perth.	High – technical assessment by qualified personnel	Seasonal and observational limitations as typically associated with flora and vegetation surveys
Brown A, Thomson-Dans C & Marchant N 1998, Western Australia's Threatened Flora, Department of Conservation and Land Management, Perth.	High - State technical reference -	
Threatened Species Scientific Committee (TSSC) 2016, Approved Conservation Advice for <i>Thelymitra dedmaniarum</i> (cinnamon sun orchid). Canberra: Department of the Environment and Energy. Available from: http://www.environment.gov.au/biodiversity/threatened/species/pubs/65105-conservation-advice-16122016.pdf .	High – Commonwealth technical reference	-
Department of Energy and Environment (DEE) 2017c, Heritage Places Register, [Online], Australian Government, available at: https://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=search_results;state=WA;list_code=CHL;legal_status=35 [2 February 2017].	High – Commonwealth database	-



Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?



Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Director

9.2.2 First Name

Terry

9.2.3 Last Name

Taylor

9.2.4 E-mail

terry.taylor@harcourts.com.au

9.2.5 Postal Address

C/- PO Box 243
Subiaco WA 6904
Australia

9.2.6 ABN/ACN

ABN

64165763388 - COOGEE ROAD INVESTMENTS PTY LTD

9.2.7 Organisation Telephone

0417 271 410



9.2.8 Organisation E-mail

terry.taylor@harcourts.com.au

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

Small business

9.2.9.1 You must provide the Date/Income Year that you became a small business entity:

Wed, 09/11/2013

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature: T. Taylor Date: 19-10-2017

DIRECTOR

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

Yes

9.2.9.3 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

Coogee Road Investments P/L is a land development company for this property only and is recognised as a small business entity for income tax purposes (shareholding: 2,400,001 shares and total paid on these shares was \$2,400.001).

Person proposing the action - Declaration

I, TERRENCE CHARLES TAYLOR, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature: T. Taylor Date: 19-10-2017

DIRECTOR



I, TERRENCE CHARLES TAYLOR, the person proposing the action, consent to the designation of COOGEE ROAD INVESTMENTS P/L as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature: Terry Taylor Date: 19-10-2017
DIRECTOR

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Director

9.5.2 First Name

Terry

9.5.3 Last Name

Taylor

9.5.4 E-mail

terry.taylor@harcourts.com.au

9.5.5 Postal Address

C/- PO Box 243
Subiaco WA 6904
Australia

9.5.6 ABN/ACN

ABN

64165763388 - COOGEE ROAD INVESTMENTS PTY LTD

9.5.7 Organisation Telephone

0417 271 410

9.5.8 Organisation E-mail



terry.taylor@harcourts.com.au

Proposed designated proponent - Declaration

I, TERRY TAYLOR / COOGEE ROAD INV - A/C, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature: [Signature] Date: 19-10-2017
DIRECTOR

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Partner and Senior Principal

9.8.2 First Name

Dale

9.8.3 Last Name

Newsome

9.8.4 E-mail

d.newsome@strategen.com.au

9.8.5 Postal Address

PO Box 243
Subiaco WA 6904
Australia

9.8.6 ABN/ACN

ABN

32056190419 - STRATEGEN ENVIRONMENTAL CONSULTANTS PTY LTD

9.8.7 Organisation Telephone



08 9380 3100

9.8.8 Organisation E-mail

d.newsone@strategen.com.au

Referring Party - Declaration

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

Signature: [Signature] Date: 19-10-17



Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. figure_1_project_area.pdf
2. figure_2_site_location_state_significant_values.pdf
3. figure_3_vegetation_types.pdf
4. figure_4_fct_mapping.pdf
5. figure_5_black_cockatoo_habitat.pdf
6. strategien_2017_level_2_fv_bc_assessment.pdf