

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number: CPS 8699/1

Permit Holder: Housing Authority

Duration of Permit: 15 January 2020 to 15 January 2025

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of the construction of a sales office and associated infrastructure.

2. Land on which clearing is to be done

Lot 821 on Deposited Plan 410680, Brabham Lot 822 on Deposited Plan 410680, Brabham

3. Area of Clearing

The Permit Holder must not clear more than 0.262 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8699/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

PART II - MANAGEMENT CONDITIONS

5. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

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

6. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

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

PART III - RECORD KEEPING AND REPORTING

7. Record keeping

The Permit Holder must maintain the following records in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date(s) that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 5 of this Permit;
- (e) actions taken to minimise the risk of the introduction and spread of *dieback* and *weeds* in accordance with condition 6 of this Permit; and

8. Reporting

The Permit Holder must produce the records required under condition 7 of this Permit when required by the *CEO*.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

dieback means the effect of Phytophthora species on native vegetation;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act* 2007; or
- (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

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Ryan Mincham MANAGER

NATIVE VEGETATION REGULATION

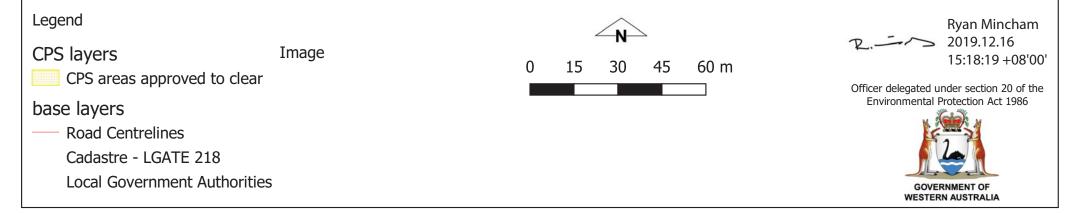
Officer delegated under Section 20 of the Environmental Protection Act 1986

16 December 2019

Plan 8699/1

115°57′57.600″E 115°58'4.800"E Youle-Dean Rd LOT 501 ON DEPOSITED PLAN 409791 LOT 14340 ON DEPOSITED PLAN 28955 LOT 805 ON DEPOSITED PLAN 409816 31°50′2.400″S 31°50′2.400″S SWAN, CITY OF LOT 822 ON DEPOSITED PLAN 410680 Road OT 803 ON DEPOSITED PLAN 53666 LOT 821 ON DEPOSITED PLAN 410680 LOT 98 ON PLAN 22611

115°57′57.600″E 115°58′4.800″E



600 ON DEPOSITED PLAN 73193

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8699/

Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Housing Authority
Application received date: 14 October 2019

1.3. Property details

Property:

Lot 821 and Lot 822 on Deposited Plan 410680

Local Government Authority: Localities:

City of Swan Brabham

1.4. Application

Clearing Area (ha) No. Trees 0.262

Method of Clearing

Purpose category: Building or structure

Mechanical Removal

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 16 December 2019

Reasons for Decision: The clearing permit application has been assessed against the clearing principles,

planning instruments and other matters in accordance with section 510 of

the Environmental Protection Act 1986 (EP Act). It has been concluded that the proposed

clearing is at variance with principle (f) and is not likely to be at variance with the

remaining principles.

The application area occurs within a nationally significant wetland area, however, based on vegetation condition and the size of the proposed clearing, the Delegated Officer has determined that the impacts are not environmentally unacceptable. The applicant has avoided and minimised impacts through the placement of the site office within a historically cleared area to minimise the clearing footprint.

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Given the above, the Delegated Officer decided to grant a clearing permit subject to

standard conditions.

2. Site Information

Clearing Description

The application is to clear 0.262 hectares of native vegetation within a 0.439 hectare footprint at Lot 821 and Lot 822 on Deposited Plan 410680, Brabham, for the purposes of constructing an interim sales office and car park (Figure 1).

Vegetation Description

The vegetation within the application area is mapped as Southern River Vegetation Complex which is described as "open woodland of *Corymbia calophylla-Eucalyptus marginata-* Banksia species with fringing woodland of *Eucalyptus rudis-Melaleuca rhaphiophylla* along creek beds" (Shepherd *et al.*, 2001).

A reconnaissance flora and vegetation survey of the application area was undertaken in 2019, which characterised the native vegetation as a "low closed woodland of *Melaleuca rhaphiophylla* over sparse to open sedgeland of *Typha orientalis* and *Baumea juncea* over sparse to open forbland of *Centella asiatica*, *Cycnogeton lineare*, **Cotula coronopifolia*, **Rumex crispus* (or native understorey layers absent in disturbed areas) and open to closed grassland of weed species" (Emerge Associates, 2019a; Figure 2, Figure 3).

Vegetation Condition

Good; Vegetation structure significantly altered with obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate (Keighery, 1994);

to

Completely degraded; the structure of the vegetation is no longer intact and the area is completely or almost completely without native species (Keighery, 1994).

The vegetation condition of the application area was determined during a reconnaissance flora and vegetation survey undertaken in 2019 to support the clearing application (Emerge Associates, 2019a). The majority of the proposed clearing area in a degraded to completely degraded vegetation condition (Figure 2, Figure 3).

Soil type

There is one soil type present on site; Bassendean Yanga Phase (Bassendean) which is described as flat, poorly drained complex landscape; soils include shallow sand over limestone or ferruginous pan, deep leached sand, and saline soils; dense Melaleuca spp. along drainage lines (Schoknecht *et al.*, 2004).

Comments:

The local area referred to in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area.



Figure 1: map of application area.



Figure 2: vegetation within the application area.



Figure 3: vegetation within the application area.

3. Minimisation and mitigation measures

The applicant has advised that the extent of clearing has been minimised by the placement of the building in an area that has been previously cleared (historic airstrip); with the clearing on the west of the application area to allow vehicle access from a safer location and the clearing of the northern and eastern portion for associated infrastructure (Emerge Associates, 2019b).

4. Assessment of application against clearing principles

A review of the available information identified records of 1,319 plant, 490 animal and 67 other (alga fungi, slime moulds) species in the local area. A total of ten native and ten non-native species were recorded within the application area during the 2019 flora and vegetation reconnaissance survey (Emerge Associates, 2019a). Fauna was not assessed during this survey.

According to available databases, 45 conservation significant flora and three conservation significant fungi have been recorded in the local area. Of these, the application area likely provides suitable habitat for two:

- Drosera occidentalis (P4)
- Verticordia lindleyi subsp. lindleyi (P4), which has been recorded within Lot 822, but not within the application area.

The application area may also provide suitable habitat for four conservation significant species:

- Amanita fibrillopes (P3)
- Amanita preissii (P3)
- Cyathochaeta teretifolia (P3)
- Diuris drummondii (VU)
- Stylidium longitubum (P3)

Based on the surveys undertaken within the application and surrounding area, although the habitat has suitability for these species, the application area does not support them (Emerge, 2019a; PGV Environmental, 2013). Based on the available information, the application area does not support a high level of biological diversity.

Of the 45 conservation significant flora recorded in the local area, seven are listed as Threatened under the *Biodiversity Conservation Act 2016* (WA). Of these, the application area may have suitable habitat for one species, *Diuris drummondii* (Tall Donkey Orchid) (DEWHA, 2008). The record of this species in the local area is not verified and historic (1901), with the location described as "near Guildford". The closest verified population is over 28 kilometres from the application area in the Jarrah Forest Bioregion. The closest populations on the Swan Coastal Plain are 63 kilometres north and 68 kilometres south of the application area in melaleuca woodland. Although the habitat is suitable for this flora species, previous surveys have not identified *D. drummondii* on site (Emerge, 2019a; PGV Environmental, 2013). Based on the above, the vegetation proposed to be cleared will not likely be necessary for the continued existence of rare flora.

A total of 12 Threatened and Priority ecological communities (PEC/TEC) have been recorded in the local area. One conservation significant ecological community has been mapped within the application area, Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region, listed as a Priority 3 at state level and Endangered federally. Based on the aerial imagery and the reconnaissance flora survey undertaken in 2019, there are no characteristics typical of this community within the

application area (TSSC, 2016; Emerge, 2019a). The flora composition of the application area is not consistent with any other PEC/TECs recorded in the local area. There are some consistencies in vegetation composition with the Forests and woodlands of deep seasonal wetlands of the Swan Coastal Plain (SCP15), an ecological community listed at Vulnerable under the *Biodiversity Conservation Act 2016* and recorded approximately 12 kilometres from the application area. However, based on the small area, degraded vegetation condition, indication of historical clearing and isolation in the landscape, the application area likely does not represent a significant portion of this TEC.

A total of 15 conservation significant fauna species have been recorded in the local area. Of these the application area may provide suitable habitat for three species, namely quenda (*Isoodon fusciventer*) (P4), blue-billed duck (*Oxyura australis*) (P4) and glossy ibis (*Plegadis falcinellus*) (IA). Other species recorded in the local area either require larger areas to persist (e.g. western brush wallaby (*Notamacropus irma*), or specific habitat not identified in the application area, such as perennial water sources (Carter's Freshwater mussel (*Westralunio carteri*), rakali (*Hydromys chrysogaster*)) or specific foraging species (black cockatoos) (Yeatman and Groom, 2012; TSSC, 2018). There are no large trees within the application area to provide suitable roosting or breeding for black cockatoos, with the nearest confirmed roosting site for a Carnaby's Cockatoo (*Calyptorhynchus latirostris*) being 2.8 kilometres from the application area. Based on the predominantly degraded vegetation condition (Keighery, 1994) and the large extent of remnant vegetation located to the west (Whiteman Park), the application area is not likely to be significant habitat for fauna indigenous to Western Australia.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). The Swan Coastal Plain currently has 39 per cent of the pre-1750 extent remaining, with the Southern River vegetation complex having 18 per cent of the area vegetated currently. Within the local area, approximately 17 per cent of the area that was vegetated pre-1750 remains (Government of Western Australia, 2018).

In the Perth Metropolitan and Bunbury regions, the Environmental Protection Authority (EPA) has a modified objective to retain at least 10 per cent of the pre-clearing extent of vegetation complexes for defined constrained areas (intensely developed) (EPA, 2015; EPA, 2003). Given that the vegetation representations are above this modified objective, and that clearing will not reduce vegetation representation below this threshold, it is not likely that the proposed clearing will have a significant residual impact.

The application area falls within an area mapped as part of the Gnangara Mound Ecological Linkage system (Figure 4). This conceptual linkage connects Whiteman Park (Bush Forever Site 304) to Caversham Airbase Bushland (Bush Forever Site 200) and the Swan River. Lot 821 is zoned 'Urban' under the Metropolitan Region Scheme (MRS) and 'Special Use 10' under the City's Local Planning Scheme No.17 (LPS17), with the proposed development planned within portions of this ecological linkage. Based on the size of the application area and the remnant vegetation remaining within the local area, the proposed clearing is not likely to compromise the ecological linkage function.

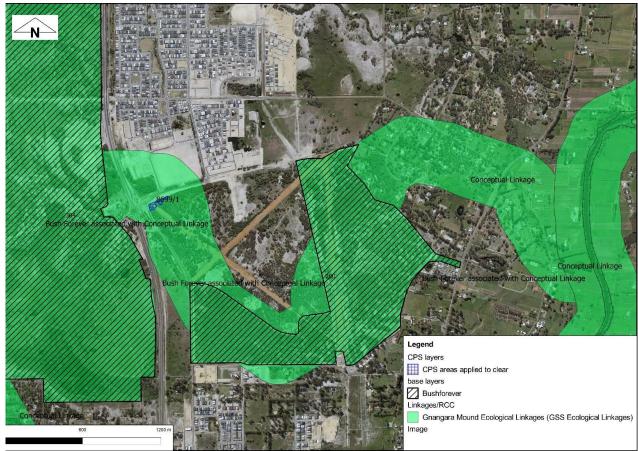


Figure 4: conceptual linkage between two Bush Forever and the Swan River.

The application area is part of the Bennet Brook Wetland suite. The majority of the application area forms part of the RAAF Caversham Wetland, a wetland recognised as important nationally (Environment Australia, 2001). The proposed clearing area is also mapped as a high value palusplain Swan Coastal Plain Wetland (DWER, 2017). Additionally, there is a palusplain wetland approximately 5 metres to the north of the application area in the mapped geomorphic wetlands of the Swan Coastal Plain. Based on this information and the results of the reconnaissance flora and vegetation survey the site is a wetland (Emerge Associates, 2019a). However, based on the vegetation condition and size of the application area, it is not likely to be significant habitat or perform significant ecological functions consistent of wetlands.

There is one soil type present on site; Bassendean Yanga Phase (Bassendean): flat, poorly drained complex landscape; soils include shallow sand over limestone or ferruginous pan, deep leached sand, and saline soils; dense Melaleuca spp. along drainage lines (Schoknech *et al.*, 2004). This soil type has a high risk of waterlogging and subsurface acidification, and a low to moderate disturbance risk of acid sulfate soils (<3 metres from the surface). Waterlogging is a feature already observed within the application area (Figure 2), however, based on the small application area the proposed clearing is not likely to cause further flooding or other appreciable land degradation.

The closest conservation area to the application area is Whiteman Park (Bush Forever Site 304), located 250 metres to the west of the application area, and Caversham Airbase Bushland (Bush Forever Site 200) approximately 640 metres to the south and approximately 1 kilometre to the east. Other conservation areas nearby include the Swan River (3.1 kilometres east) and Gnangara-Moore State River State Forest. Although the application area is part of the conceptual ecological linkage between conservation areas, the proposed clearing area is small and not likely to significantly impact the ecological linkage between the Swan River, Caversham Airbase Bushland and Whiteman Park.

Based on the size of the application area, landscape position and low groundwater salinity levels (500 - 1000 mg/L), the proposed clearing is not likely to deteriorate the quality of surface or groundwater, and is not likely to cause, or exacerbate, the incidence or intensity of flooding.

Planning instruments and other relevant matters.

Aboriginal sites of significance have been recorded within the local area, with numerous registered sites in the local area. The closest is 225 metres to the north-west of the application area.

The clearing permit application was advertised on the DWER website on 12 November 2019 with a 14 day submission period. No public submissions were received.

The City of Swan was notified of the clearing application and invited to submit comments. An email from the City of Swan was received on 28 November 2019, advising that the application to develop the proposed structure is with the City for dealing (City of Swan, 2019). The application area is currently within planned Public Open Space/drainage area (City of Swan, 2019). Generally, Public Open Spaces are likely candidates from native vegetation retention; however, based on the close proximity to a planned wastewater pumping station the vegetation is likely to be cleared for the associated infrastructure and the City has no objection to the clearing of this portion of the Lot (City of Swan, 2019).

5. References

- City of Swan (2019) Supporting Information for clearing permit application CPS 8699/1.City od Swan. Received by DWER on 28 November 2019 (DWER Ref: A1846098).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra. Department of the Environment, Water, Heritage and the Arts (DEWHA) (2008). Approved Conservation Advice for *Diuris drummondii* (Tall Donkey Orchid). Canberra: Department of the Environment, Water, Heritage and the Arts.
- Department of Primary Industries and Regional Development (DPIRD) (2019) NRInfo Digital Mapping. Accessed at https://maps.agric.wa.gov.au/nrm-info/ Accessed November 2019. Department of Primary Industries and Regional Development. Government of Western Australia.
- Department of Water and Environmental Regulation (DWER) (2017) Strategic Assessment of the Perth and Peel Regions: Review of wetlands mapping data.
- Environment Australia (2001) A Directory of Important Wetlands in Australia, Third Edition. Environment Australia, Canberra. *Environmental Protection Act 1986* (Western Australia)
- EPA (2003) Greater Bunbury Region Scheme. Bulletin 1108. Environmental Protection Authority, Western Australia.
- EPA (2015) Perth and Peel @ 3.5 million Environmental impacts, risks and remedies, Interim strategic advice of the Environmental Protection Authority to the Minister for Environment under section 16(e) of the Environmental Protection Act 1986. Environmental Protection Authority, Western Australia July 2015.
- Emerge Associates (2019) Reconnaissance Flora and Vegetation Survey Clearing permit area for portions of Lots 821 Isoodon Street and Lot 822 Youle-Dean Road Brabham, EP19-073(07)--008 SKP, Version 1. Unpublished report prepared for the Department of Communities and Peet.
- Emerge Associates (2019b) Email correspondence from Emerge Associates indicating the purpose of clearing outside of the building/structure envelope. Received by DWER on 3 December 2019 (DWER Ref: A1847800)
- Government of Western Australia (2018) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- PGV Environmental (2013) Lot 800 Youle-Deane Road, Brabham Flora and Vegetation Survey, 2013- 88, Version 1 in Emerge Associates (2019) Reconnaissance Flora and Vegetation Survey Clearing permit area for portions of Lots 821 Isoodon Street and Lot 822 Youle-Dean Road Brabham, EP19-073(07)--008 SKP, Version 1. Unpublished report prepared for the Department of Communities and Peet.

- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Threatened Species Scientific Committee (TSSC) (2016). Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community. Canberra: Department of the Environment and Energy.
- Threatened Species Scientific Committee (2018). *Conservation Advice* Westralunio carteri *Carter's freshwater mussel*. Canberra: Department of the Environment and Energy.
- Yeatman, G.J. & C.J. Groom (2012). *National Recovery Plan for the woylie* Bettongia penicillata. *Wildlife Management Program No. 51*. Department of Environment and Conservation, Perth.

GIS Databases:

- Aboriginal Sites of Significance
- DAFWA Heritage
- DBCA Estate
- DEC Covenant
- Groundwater salinity
- Hydrography, linear
- National Trust WA Covenant
- Remnant vegetation
- SAC bio datasets (accessed December 2019)
- · Soils, Statewide
- Topographic contours
- Wetlands