

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number:8268/1File Number:DWERVT1830Duration of Permit:From 18 March 2019 to 18 March 2021

PERMIT HOLDER

City of Armadale

LAND ON WHICH CLEARING IS TO BE DONE

Balannup Road Reserve (PIN 12280792), Harrisdale Balannup Road Reserve (PIN 12314228), Harrisdale Balannup Road Reserve (PIN 12314226), Harrisdale Balannup Road Reserve (PIN 12308286), Harrisdale Balannup Road Reserve (PIN 12308289), Harrisdale Balannup Road Reserve (PIN 12308293), Harrisdale Balannup Road Reserve (PIN 12308293), Harrisdale

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.62 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8268/1.

CONDITIONS

1. 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.

2. 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 spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *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.

3. Wind erosion management

The Permit Holder shall not clear native vegetation unless development commences within three months of the authorised clearing being taken.

4. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, 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 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 1 of this Permit;
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* in accordance with condition 2 of this Permit; and
- (f) Actions taken in accordance within condition 3 of this Permit.

5. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 4 of this Permit, when requested 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*;

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 Regional Weed RankingsSummary, regardless of ranking; or

(c) not indigenous to the area concerned.

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Samara Rogers MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

22 February 2019





1. Application details

1.1. Permit application details			
Permit application No.: Permit type:	8268/1 Area Permit		
1.2. Applicant details	1.2. Applicant details		
Applicant's name: Application received date:	City of Armadale 26 November 2018		
1.3. Property details			
Property:	ROAD RESERVE – 12280792, HARRISDALE ROAD RESERVE – 12314228, HARRISDALE ROAD RESERVE – 12314226, HARRISDALE ROAD RESERVE - 12308286, HARRISDALE ROAD RESERVE - 12308289, HARRISDALE ROAD RESERVE – 12308293, HARRISDALE ROAD RESERVE – 12308295, HARRISDALE		
Local Government Authority: Localities:	ARMADALE, CITY OF HARRISDALE		
1.4. ApplicationClearing Area (ha)No. Tree0.62	es Method of Clearing Mechanical Removal	Purpose category: Road construction or upgrades	
1.5. Decision on application			
Decision On Permit Application. Decision Date: Reasons for Decision:	22 February 2019		
	The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 510 of the <i>Environmental Protection Act 1986</i> (EP Act). It has been concluded that the proposed clearing is at variance to principle (f), and is not likely to be at variance to the remaining principles.		
	Through the assessment it was determined that the application area comprised of vegetation associated with a resource enhancement and multiple use and a watercourse.		
	The proposed clearing may increase the risk of weeds spreading into adjacent vegetated areas. A weed management condition has been placed on the permit to mitigate the environmental impacts of spreading weeds into adjacent vegetation.		
	Through the assessment it was determined that the proposed clearing may cause wind erosion. A wind erosion management condition requiring the Permit Holder to upgrade the Balannup road within three months of undertaking clearing will minimise potential impacts.		
	The widening of Balannup Road may result in changes to the local drainage system. The Delegated Officer had regard to a stormwater management plan developed by the City of Armadale, to ensure that a nearby conservation category wetland will not be adversely impacted.		
	In determining to grant a clearing permi determined that the proposed clearing is a environment.	t subject to conditions, the Delegated Officer unlikely to lead to any unacceptable risk to the	
2. Site Information			
Clearing Description	The application is to clear 0.62 hectares Reserve (PINs 12280792, 12314228, 123 12308295), Harrisdale, for the purpose of u	of native vegetation within Balannup Road 14226, 12308286, 12308289, 12308293 and Ipgrading Balannup Road.	
Vegetation Description	The application is mapped as Swan Coas vegetation complex which is described as " - <i>Eucalyptus marginata</i> (Jarrah) - Banksia <i>rudis</i> (Flooded Gum) - <i>Melaleuca rhaphiop</i> (Heddle et al., 1998).	stal Plain (previously Heddle) Southern River Open woodland of <i>Corymbia calophylla</i> (Marri) species with fringing woodland of <i>Eucalyptus</i> <i>ohylla</i> (Swamp Paperbark) along creek beds "	

	 A survey undertaken in October 2018 (Natural Area Holdings Pty Ltd, 2018) determined that the area consists of three vegetation types: Melaleuca rhaphiophylla woodland, Foreign Eucalyptus sp. and Casuarina glauca woodland, and Melaleuca preissiana woodland
Vegetation Condition	Completely degraded: The structure of the vegetation is no longer intact and the area is completely or almost completely without native species (Keighery, 1994).
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	Very good: Vegetation structure altered, obvious signs of disturbance (Keighery, 1994).
Soil Type	The application area is mapped as the following two soil categories (Schoknecht et al., 2004);
	Bassendean B3 Phase which is described as "Closed depressions and poorly defined stream channels with moderately deep, poorly to very poorly drained bleached sands with an iron-organic pan, or clay subsoil. Surfaces are dark grey sand or sandy loam"; and
	Bassendean B1 Phase which is described as "Extremely low to very low relief dunes, undulating sandplain and discrete sand rises with deep bleached grey sands sometimes with a pale yellow B horizon or a weak iron-organic hardpan at depths generally greater than 2 m; banksia dominant".
Comments	The local area considered in the assessment of this application is defined as a 10 kilometre radius measured from the centre of the application area.
	According to advice received from the Department of Biodiversity, Conservation and Attractions (DBCA), the western end of the application has been cleared in the past for a powerline and road shoulder (DBCA, 2019).

3. Minimisation and mitigation measures

The City of Armadale discussed and considered avoidance. The City of Armadale advised that there may be opportunity for some tree retention and salvage will be explored (City of Armadale, 2018a).

4. Assessment of application against clearing principles

According to the available databases, 18 threatened flora and 59 priority flora species have been mapped within the application area. *Diuris purdiei* (Threatened), *Drakaea micrantha* (Threatened), *Drakaea elastica* (Threatened), *Eleocharis keigheryi* (Threatened), *Lepidosperma rostratum* (Threatened), *Aponogeton hexatepalus* (Priority 4), *Schoenus benthamii* (Priority 3), *Schoenus capillifolius* (Priority 3), *Ornduffia submersa* (Priority 4), and *Jacksonia gracillima* (Priority 3) have been mapped with similar soil and vegetation types as the application area. The remaining threatened and priority flora have been mapped with different soil and vegetation types than that mapped within the application area.

A targeted flora survey undertaken in October 2018 (Natural Area Holdings Pty Ltd, 2018), identified one conservation significant flora; *Schoenus pennisetis* (Priority 3) within the application area. Priority 3 species are species that are known from several locations, and the species do not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat (Smith & Jones, 2018). Additionally, advice from DBCA stated that there is a low risk of significant impacts to occur to any conservation status of flora species potentially occurring within the application area, due to the very little structurally intact vegetation remaining within the application area is not likely to impact on the conservation status of the priority species mentioned above.

According to available databases, 11 conservation significant fauna species listed under the *Biodiversity Conservation Act 2016* (BC Act) within the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*, have been recorded within the local area (Department of Biodiversity, Conservation and Attractions, 2007). These species are Australasian bittern (*Botaurus poiciloptilus*), curlew sandpiper (*Calidris ferruginea*), forest red-tailed black cockatoo (*Calyptorhynchus banksii subsp. naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), chuditch (*Dasyurus geoffroii*), a short-tongued bee (*Leioproctus douglasiellus* and *Neopasiphae simplicior*), numbat (*Myrmecobius fasciatus*) and carter's freshwater mussel (*Westralunio carteri*).

Noting the vegetation types identified in the flora survey, the majority of the application being in completely degraded (Keighery, 1994) condition and advice from DBCA (DBCA, 2019), the application area is not necessary for the maintenance of a significant habitat for the above fauna species.

According to the available databases, the Commonwealth-listed threatened ecological community (TEC) "Banksia Woodlands of the Swan Coastal Plain IBRA region "(Banksia Woodlands TEC) (listed as endangered) is mapped within the application area. Noting the species composition of this TEC and the vegetation types identified in the flora survey (Natural Area Holdings Pty Ltd, 2018), the application area is not likely to be representative of this TEC. The application area is not likely to comprise the whole or part of, or is necessary for the maintenance of TEC.

The National Objectives and Targets for Biodiversity Conservation include a target to prevent the clearance of ecological communities with an extent below 30 per cent of that present pre-European settlement (Commonwealth of Australia, 2001). The application area falls within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and is mapped as the Swan Coastal Plain (previously Heddle) Southern River vegetation complex, retaining 38.57 per cent and 18.42 per cent of their pre-European vegetation extents respectively (Government of Western Australia, 2018a; Government of Western Australia, 2018b). The Environmental Protection Authority (EPA) recognised the Perth Metropolitan region as a constrained area, which provides for the reduction of vegetation complexes to a minimum of ten per cent of their pre-European extent (EPA, 2006). The mapped vegetation complex is above the ten per cent level. Therefore, the application area is not considered a significant remnant in an area that has been extensively cleared.

According to available databases, three wetlands have been recorded within the application area. These wetlands are classified as one resource enhancement (sumpland) and two multiple use wetlands (dampland and sumpland). The application area is located 20 metres north of a conservation category wetland (CCW) (sumpland), which is separated by the existing Balannup Road. Given this and the vegetation types identified in the flora survey (Natural Area Holdings Pty Ltd, 2018), a majority of the vegetation within the application area is growing in an environment associated with a wetland or watercourse, therefore the proposed clearing is at variance to principle (f). Noting the small size of the application area, that very little structurally intact vegetation remains within the application area and the abundance of weeds identified by the flora survey (Natural Area Holdings Pty Ltd, 2018), the proposed clearing is not considered significant. A weed management condition will minimise and mitigate any potential impacts to nearby wetlands.

Soils mapped within the application area may be prone to wind erosion, waterlogging and water repellence risk (>70% of map unit has a high to extreme wind erosion risk, >70% of map unit has a moderate to very high waterlogging risk and >70% of map unit has a high water repellence risk, respectively). However, noting the linear nature of the application area and the majority of the application area falling within completely degraded (Keighery, 1994) condition, the proposed clearing is not likely to cause appreciable land degradation. A wind erosion management conditions, requiring the application to undertake construction within three months of clearing will mitigate any potential impacts.

According to the available databases, the closest conservation area occurs approximately 25 metres north east and east of the application area. The application area and the conservation area are separated by Balannup Road and Ranford Road. Given the separation, the application area is not likely to have an impact on the environmental values of any adjacent or nearby conservation areas.

As mentioned above, the application area falls within a resource enhancement and multiple use category wetlands. Groundwater salinity is mapped within 500-1000 milligrams per litre total dissolved solids which is conserved to be 'marginal' saline. Due to the size and linear nature of the application area, the application area is unlikely to increase sedimentation and runoff into the wetlands. Therefore, the application area is not likely to cause deterioration in the quality of surface or underground water or cause exacerbate the incidence or intensity of flooding.

Given the above, the application area is at variance to principle (f) and not likely to be at variance to the remaining clearing principles.

Planning instruments and other relevant matters

The City of Armadale stated that a number of changes to the local drainage are required in order to facilitate the upgrade of Balannup Road. A stormwater management plan has been compiled to ensure that the nearby conservation category wetland will not be impacted (City of Armadale, 2018b). The management plan states that the proposed changes will potentially increase the volume and quality of water discharging into Lake Balannup over time (City of Armadale, 2018b).

The Department of Biodiversity, Conservation and Attractions (DBCA) (2018) Planning Division has approved the stormwater management plan. DBCA Planning Division state that assuming best management practices in drainage design are being employed by the City of Armadale, there should be an improvement in the quality of water discharging into Lake Balannup.

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 21 December 2018 with a 21 day submission period. No public submissions have been received in relation to this application.

5. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2006, Canberra. City of Armadale (2018a) Application form excerpt, City of Armadale, Western Australia (DWER 1750052).

City of Armadale (2018b) Stormwater management plan, City of Armadale, Western Australia (DWER 1761675).

Department of Biodiversity, Conservation and Attractions (DBCA) (2007) NatureMap Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <u>http://naturemap.dpaw.wa.gov.au/</u>. Accessed January 2019.

Department of Biodiversity, Conservation and Attractions (DBCA) Regional advice submission received 23 January 2019, Government of Western Australia (DWER A1761669).

Government of Western Australia (2018a) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of February 2018. WA Department of Parks and Wildlife, Perth.

Government of Western Australia (2018b) 2017 South West Vegetation Complex Statistics. Current as of October 2017. WA Department of Parks and Wildlife, Perth.

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Natural Area Holdings Pty Ltd (2018) Balannup Road Targeted Flora Survey, City of Armadale, Western Australia.

Schoknecht et al. (2004) Soil-landscape mapping in south-Western Australia: an overview of methodology and outputs, Department of Agriculture and Food, Perth.

Smith M.G. & Jones A. (2018) Threatened and Priority Flora List, 16 January 2018. Department of Biodiversity, Conservation and Attractions, Kensington, Western Australia.