



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 8631/1
Permit Holder:	Shire of Dandaragan
Duration of Permit:	1 March 2020 to 1 March 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 road upgrades.

2. Land on which clearing is to be done

North West Road road reserve (PINs 11675995 and 11675996), Dandaragan

3. Area of Clearing

The Permit Holder must not clear more than 0.34 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8631/1.

4. Clearing Not authorised

This Permit does not authorise the Permit Holder to clear *Corymbia calophylla* (Marri) Trees within the area cross-hatched yellow on attached Plan 8631/1 at the following Global Positioning Systems (GPS) coordinates:

EASTING	NORTHING	SPECIES
373039	6628546	<i>Corymbia calophylla</i>
372923	6628580	<i>Corymbia calophylla</i>
372908	6628583	<i>Corymbia calophylla</i>
372849	6628588	<i>Corymbia calophylla</i>

5. 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.

6. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

PART II – MANAGEMENT CONDITIONS

7. 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.

8. Weed control and Dieback

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 known *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

PART III – RECORD KEEPING AND REPORTING

9. 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 7 of this Permit.
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 8 of this Permit.

10. Records must be kept

- (a) The Permit Holder must provide to the *CEO* on or before 30 June of each year, a written report:
 - (i) of records required under condition 9 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the *CEO* on or before 30 June of each year.
- (c) Prior to 1 December 2024 the Permit Holder must provide to the *CEO* a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.

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.



Ryan Mincham

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Ryan Mincham
MANAGER
NATIVE VEGETATION REGULATION

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

31 January 2020

Plan 8631/1

30.463003°S

30.463003°S

115.671093°E

115.691579°E






30.477141°S

30.477141°S

115.671093°E

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Legend

-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



1:10,421

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

Ryan Mincham

2020.01.31

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Date

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986



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1. Application details

1.1. Permit application details

Permit application No.: 8631/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Shire of Dandaragan

1.3. Property details

Property: North West Road road reserve (PIN 11675995 and 11675996)
Local Government Authority: Shire of Dandaragan
Localities: Dandaragan

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.34		Mechanical Removal	Road Upgrades

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 31 January 2020

Reasons for Decision: The clearing permit application was received on 31 July 2019 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed is not likely to be at variance with the clearing principles.

The Delegated Officer determined that the proposed clearing may increase the risk of weeds being introduced or spread into adjacent native vegetation. Weed management measures will minimise impacts to adjacent native vegetation.

2. Site Information

Clearing Description: The application is to clear up to clear 0.34 hectares of native vegetation within North West Road, road reserve (PIN 11675995 and 11675996), for the purpose of road upgrades. The Shire plan to clear a one metre wide strip along the northern side of the road and within the existing maintenance areas (either cleared areas or disturbed vegetation between the edge of the bitumen and intact vegetation) and includes six overhanging *Jacksonia sternbergiana* shrubs (Maia, 2019). An additional one metre has been included in the impact calculations (total of two metres) to allow for potential clearing if any drainage culverts are required. The total area of clearing will not exceed 0.34 ha which represents 10.03% of the Survey Area (Maia, 2019).

Vegetation Description: The vegetation within the application area is mapped as the Swan Coastal Plain vegetation association 999, described as medium woodland; marri (Shepherd et al, 2001).

A Vegetation and Flora and Carnaby's Black Cockatoo Habitat Reconnaissance Survey (the Survey) was undertaken by Maia Environmental Consultancy on 16 June 2019. The following vegetation types were recorded within the application area (Maia, 2019):

Vegetation Group	Vegetation Type	Survey Area (ha)
CcCTF	Closed Tall Forest (CTF) of <i>Corymbia calophylla</i> with a Tussock Grassland of <i>Eragrostis curvula</i> * and <i>Ehrharta calycina</i> * sometimes with Isolated Tall Shrubs of <i>Jacksonia sternbergiana</i> and Sparse Low Shrubland of <i>Hibbertia subvaginata</i> or <i>Scholtzia laxiflora</i> .	0.46 ha
AmOTF/LW	Open Tall Forest (OTF) to Low Woodland (LW) of <i>Acacia microbotrya</i> , an Open Mid Shrubland of <i>Jacksonia sternbergiana</i> and a Sparse Tall Shrubland of <i>Corymbia calophylla</i> (juveniles).	0.06 ha
JsOTS	Open Tall Shrubland (OTS) of <i>Jacksonia sternbergiana</i> with an Open Low Woodland of <i>Banksia prionotes</i> , a Sparse Low Shrubland of	0.03 ha

	<i>Hypocalymma angustifolium</i> and Sparse Tussock Grassland of <i>Eragrostis curvula</i> *	
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Vegetation Condition: Very Good; Vegetation structure altered; obvious signs of disturbance 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 condition and structure of the vegetation under application was obtained via a Vegetation and Flora and Carnaby's Black Cockatoo Habitat Reconnaissance Survey (the Survey) undertaken by Maia Environmental Consultancy (Maia, 2019). Based on the findings within the survey area, the vegetation condition of the area proposed to be cleared is 'degraded' to 'completely degraded'.

Soil Type: The application area is mapped within the Dandaragan System (Map Unit 222Da) described as subdued dissected lateritic plateau, undulating low hills and rises with narrow alluvial plains. Variable deep sands and sandy gravels plus minor earths, duplexes and clays. Marri woodlands and shrublands (Schoknecht et al., 2004).

Comment: The local area referred to in the below assessment is defined as the area within a 10 kilometre radius of the application area.

Figure 1: Map of application area



Figure 2: Photographs of vegetation within the application area



Photo 1: Vegetation type CcCTF



Photo 2: Vegetation type AmOTF/LW



Photo 3: Vegetation type JsOTS

3. Assessment of application against clearing principles

The application is to clear 0.34 hectares of native vegetation within a 1.27 hectare footprint for the purpose of road upgrades. The vegetation under application is in a degraded to completely degraded (Keighery, 1994) condition (Maia, 2019), with approximately 73 per cent of the clearing footprint infested with weeds.

According to available databases from the Department of Biodiversity, Conservation and Attractions (DBCA), a total of 17 priority flora species and two threatened flora species have been recorded within the local area. Of these, one threatened flora species and four priority flora species have been recorded from the same soil and vegetation types as those found within the application area.

The Vegetation and Flora and Carnaby's Black Cockatoo Habitat Reconnaissance Survey recorded 58 taxa within the survey area (Maia, 2019). In comparison to a reconnaissance survey along the eastern section of Jurien East Road in 2016 undertaken by Maia, the survey area is far less diverse with this attributed to the weedy understorey and sparse vegetation along most of the northern side of the road and some of the southern side (Maia, 2019).

Of the 58 taxa recorded in the survey, the priority 3 species *Banksia dallanneyi* subsp. *pollostia* (two individuals) was recorded on the southern side of the road reserve (Maia, 2019). This is outside of the application area which is on the northern side of the road reserve, therefore the species will not be impacted upon by the proposed clearing (Maia, 2019). No other conservation significant flora species were recorded within the survey area (Maia, 2019). Noting this and that the area proposed to be cleared is in a degraded to completely degraded (Keighery, 1994) condition (Maia, 2019), the proposed clearing area is unlikely to represent significant habitat for any priority of threatened flora known to occur within the local area.

According to available databases, the Carnaby's cockatoo (*Calyptorhynchus latirostris*) is the only recorded fauna species specially protected under the *Biodiversity Conservation Act 2016* which is known to occur within the local area (DBCA, 2007-). While no Carnaby's cockatoo were observed or heard during the survey, there was evidence of foraging occurring within the survey area (chewed marri nuts) (Maia, 2019). In addition to marri foraging habitat being recorded in the survey area, the potential foraging species *Banksia prionotes* was recorded at releve NWR-6 of the survey area. This is located outside of the clearing footprint on the southern side of the road reserve and will not be impacted by the proposed clearing.

The nearest confirmed breeding site for Carnaby's cockatoo is 12 kilometres away from the application area. The survey report identified 31 marri trees with a Diameter at Breast Height (DBH) of 500 mm or greater which are considered a suitable size for breeding by black cockatoos, however, none of the trees appeared to contain hollows (Maia, 2019). Of the 31 trees identified, four were recorded within the clearing footprint as indicated within Figure 3 below. Whilst the survey identified marri trees within the clearing footprint that are potentially suitable for breeding and foraging, the applicant has made a commitment that no marri trees will be cleared. The permit has been conditioned to give effect to this commitment.



Figure 3: Shows the location of potential Carnaby's cockatoo habitat trees (red dots) identified during the survey. Of the 31 identified, four are located within the clearing footprint. The applicant has made a commitment that no potential habitat trees will be cleared within the clearing footprint.

According to available databases, there are no state listed threatened ecological communities known to occur within 10 kilometres of the application area. The Federally listed Threatened Ecological Community (TEC) 'Banksia woodlands of the Swan Coastal Plain' has been mapped as occurring six kilometres east of the application area. This ecological community is listed as a Priority 3 Priority Ecological Community (PEC) by the Department of Biodiversity, Conservation and Attractions (DBCA) and as a TEC under the *Environment Protection and Biodiversity Conservation Act 1999*. The flora and vegetation survey identified three vegetation types within the area surveyed, none of which represented a priority or threatened ecological community (Maia, 2019).

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 remaining extent of the mapped vegetation association 999 is below the 30 per cent threshold (Government of Western Australia, 2018). Aerial imagery indicates that the local area retains approximately 10 per cent native vegetation cover. Noting this, the application occurs within an extensively cleared landscape. However, based on the vegetation condition, the vegetation type mapped within the application area is not representative of that proposed to be cleared. In addition, noting the applicant's commitment to avoid clearing of marri trees within the application area, and the assessment that the application area does not comprise significant habitat for conservation significant fauna or flora, the area proposed to be cleared is not considered to be significant as a remnant within an extensively cleared area.

There are no known wetlands or watercourses that intersect with the application area. The nearest conservation area is an unnamed nature reserve, which is approximately 12.2 km northeast of the application area. Noting this distance, the proposed clearing is unlikely to impact on the environmental values of the conservation area. Although there is unlikely to be impacts to conservation areas from the proposed clearing, the disturbance caused by the proposed clearing is likely to increase the risk of weeds and dieback being introduced into adjacent areas of remnant vegetation. Weed and dieback management conditions imposed on the permit will assist in mitigating this risk.

According to available databases, no watercourses or wetlands occur with the application area. Noting this and that the survey report did not identify any wetland vegetation or watercourses within the application area, the proposed clearing will not impact on vegetation growing in, or in association with, an environment associated with a watercourse or wetland.

Noting the extent of the proposed clearing over a linear distance of 1.68 kilometres and that the vegetation proposed to be cleared is in a degraded to completely degraded (Keighery, 1994) condition, the proposed clearing is not likely to result in appreciable land degradation or deterioration in the quality of surface or underground water and is not likely to cause or exacerbate the incidence or intensity of flooding.

Based on the above, the proposed clearing is not likely to be at variance with the clearing Principles.

Planning instruments and other relevant matters.

The application was advertised on the Department of Water and Environmental Regulation's website on 27 August 2019 for a 21 day submission period. No submissions were received during the submission period.

No registered Aboriginal Sites of Significance occur within the application area.

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed November 2017
- Government of Western Australia (2018). 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2018. WA Department of Parks and Wildlife, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Maia Environmental Consultancy Pty Ltd (2019) Shire of Dandaragan: North West Road – SLK 26.08 to 27.78; Vegetation and Flora and Carnaby's Black Cockatoo Habitat Reconnaissance Survey, June 2019.

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.

GIS Databases:

Aboriginal Sites of Significance
DBCA Estate
Groundwater salinity
Hydrography, Linear
Hydrography, Hierarchy
Remnant Vegetation
SAC bio datasets (accessed December 2019)
Soils, Statewide
Topographic contours