



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4865/1
File Number: 2011/006889-1
Duration of Permit: From 23 April 2012 to 23 April 2014

PERMIT HOLDER

Shire of Quairading

LAND ON WHICH CLEARING IS TO BE DONE

Lot 337 on Plan 91516, QUAIRADING 6383
Bruce Rock-Quairading Road reserve, PIN 1309463 (QUAIRADING 6383)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.3 hectares of native vegetation within the area shaded yellow on attached Plan 4865/1.

CONDITIONS

1. 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) shall only move soils in *dry conditions*;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

2. Records must be kept

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;
- (b) the date that the area was cleared; and
- (c) the size of the area cleared (in hectares).

3. Reporting

- (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 2 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 23 January 2014, the Permit Holder must provide to the CEO a written report of records required under condition 2 of this Permit where these records have not already been provided under condition 3(a) of this Permit.

DEFINITIONS

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

dieback means the effect of *Phytophthora* species on native vegetation;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

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 a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

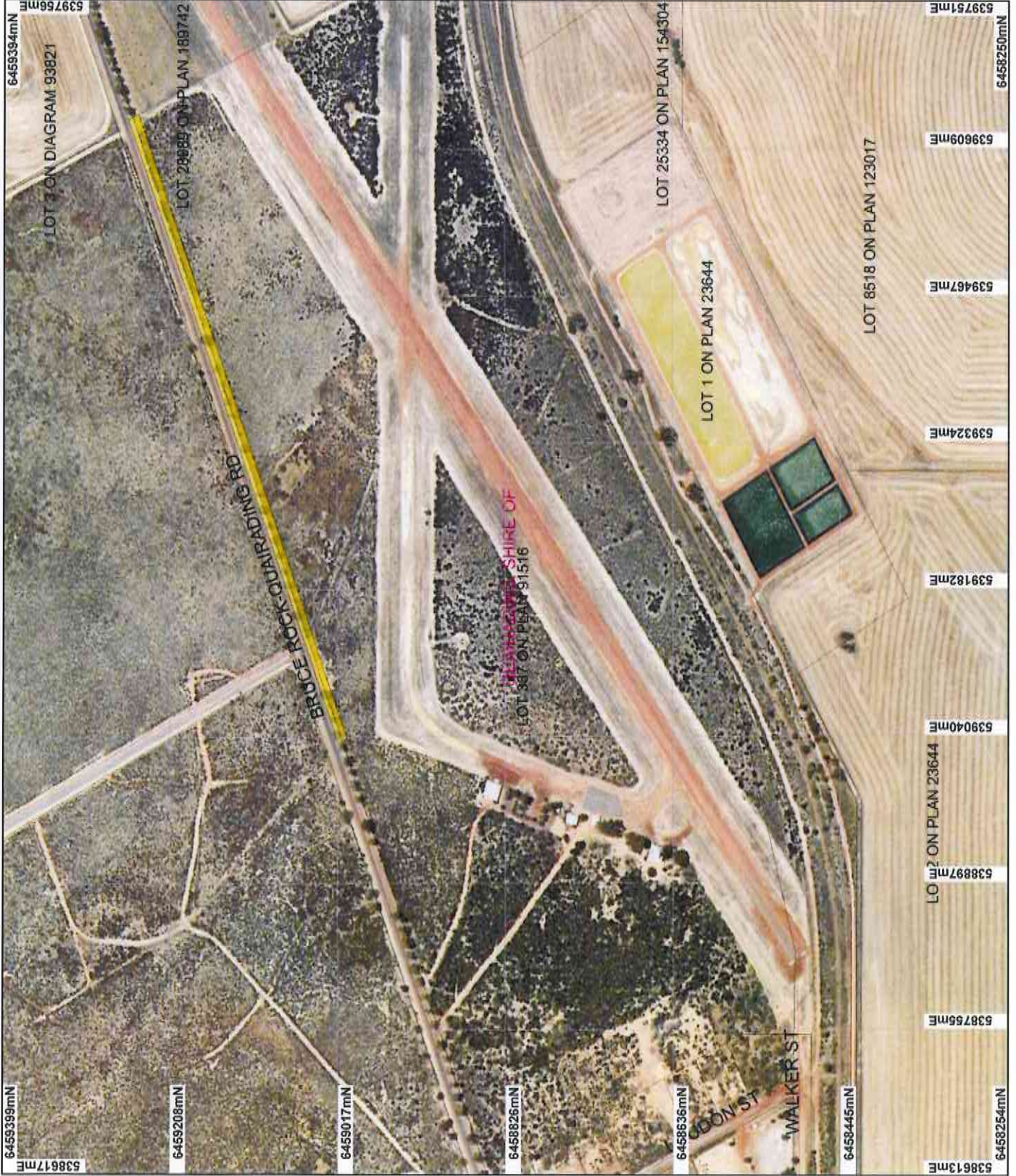


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

29 March 2012

Plan 4865/1



LEGEND

Engineering Information

As per Approved to Clear

Road Centrelines

Local Government Authorities

Towns

A

B

C

Cadastral_1

Cunderdin 50cm Orthomosaic - Landgate 2004

Brookton 80cm Orthomosaic - Landgate 2005



0 100m

Scale 1:5500

(Approximate when reproduced at A4)

Geocentric Datum, Australia 1994

Note: this plan may have not been projected. This may result in geometric distortion or measurement inaccuracies.

[Signature] Date 29/3/12

K Faulkner

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.

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1. Application details

1.1. Permit application details

Permit application No.: 4865/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Quairading

1.3. Property details

Property: LOT 337 ON PLAN 91516 (QUAIRADING 6383)
ROAD RESERVE (BRUCE ROCK-QUAIRADING ROAD, QUAIRADING 6383)
Local Government Area: SHIRE OF QUAIRADING

1.4. Application

Clearing Area (ha)	Method of Clearing	For the purpose of:
0.3	Mechanical Removal	Fence Line Maintenance

1.5. Decision on application

Decision on Permit Application: GRANT
Decision Date: 29 March 2012

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation association: 1049 - Medium woodland; wandoo, York gum, salmon gum, morrel and gimlet (Hopkins et al, 2001).	The vegetation under application and adjacent to the proposed fence consists of low heath/scrub comprising almost completely of <i>Allocasuarina campestris</i> and therefore is not consistent with the mapped Beard vegetation type, 1049. Other species that have been noted in the adjoining vegetation include <i>Calectasia pignattiana</i> , <i>Actinostrobos</i> sp. (<i>Callitris</i> sp.), <i>Calothamnus brevifolius</i> , <i>Persoonia quinquenervis</i> , <i>Grevillea paniculata</i> and <i>Acacia lirellata</i> subsp. <i>lirellata</i> .	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994) To Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The vegetation condition and type was confirmed through site visits undertaken by Department of Environment and Conservation (DEC) and through aerial imagery - Brookton 80cm Orthomosaic - Landgate 2005.

3. Assessment of application against clearing principles

Comments

The vegetation under application comprises 0.3ha of native vegetation ranging from 'completely degraded' (Keighery, 1994), due to historic clearing, to 'very good' (Keighery, 1994) condition. The vegetation comprises low heath/scrub predominantly of *Acacia campestris* with other species recorded in the vicinity being *Calectasia pignattiana*, *Callitris* sp., *Calothamnus brevifolius*, *Banksia prionotes* (only 1 plant close by but not within area under application), *Persoonia quinquenervis*, *Grevillea paniculata* and *Acacia lirellata* subsp. *lirellata*.

Two priority flora species, *Acacia lirellata* subsp. *lirellata* (P3) and *Calothamnus brevifolius* (P4), have both been recorded within and in the vicinity of, the applied clearing area. One *Acacia lirellata* subsp. *lirellata* individual is known to occur close to the fence line and could be impacted by the proposed clearing. This individual should be able to be avoided if appropriate care is taken during the works. *Calothamnus brevifolius* has been recorded in adjoining vegetation and should not be impacted by the clearing of the area under application. Clearing for the proposed fence is not going to adversely impact the conservation status of the priority flora.

Calectasia pignattiana is a declared Rare Flora species under the Wildlife Conservation Act 1950 and has been recorded within the area under application. The individual, which is located close to the fence line is avoidable if it is brought to the attention of workers and appropriate care is taken during works. Although *Calectasia pignattiana* is not intended to be cleared for the fence construction, the Shire has obtained a Permit to Take Declared Rare Flora (DRF) under the Wildlife Conservation Act 1950 should any inadvertent damage occur to the DRF during the activities. Records of declared Rare Flora species, *Jacksonia quairading*, are also within 400m of the area under application however, this species has not been observed within the applied area and is outside the proposed area of works and therefore these known populations will not be impacted.

Although minimal clearing is required for the fence construction, with much of the area already been historically cleared, due to the applied clearing area supporting one DRF and one priority flora species, the vegetation is considered to comprise a high level of biological diversity.

The closest priority ecological community (PEC) to the area under application is a priority 1 community - Banksia prionotes and Xylomelum angustifolium low woodlands on transported yellow sands approximately 1.1km to the buffer of this community. This community occurs higher in the landscape than the applied area and the vegetation under application is not consistent with the community. Given the distance of this community and the lack of affinities the applied clearing area has with the PEC, it is unlikely that the proposed clearing will support or is necessary for the maintenance of this PEC.

Although indigenous fauna are likely to utilise the vegetation under application, given the scale and condition of the area and it being adjacent to remnants supporting areas of vegetation in 'very good' (Keighery, 1994) condition, it is unlikely that the vegetation under application will provide significant habitat. In order to protect the neighbouring vegetation, dieback and weed hygiene measures will be implemented to reduce the risk of indirect impacts to this remnant that could occur as a result of the clearing and construction activities.

The applied clearing area lies within the Avon Wheatbelt bioregion within the Shire of Quairading which have 18.2% and 9.4 % of their pre-European vegetation extents remaining respectively (Shepherd, 2009). The vegetation under application is mapped as Beard vegetation association 1049 described as medium woodland; wandoo, York Gum, salmon gum, morel and gimlet (Hopkins et al., 2001) of which there is 6.8% of the pre-European extent left of this vegetation association (Shepherd, 2009). The vegetation under application however, is not representative of this vegetation type. Although the local area (20km radius) has been extensively cleared, with less than 10% native vegetation remaining, given the scale of the vegetation under application along a boundary fence line, it is not considered to be significant as a remnant.

The closest watercourses to the area under application are a minor, non-perennial and an indefinite watercourse approximately 940m east and 530m south. A non-perennial lake and area subject to inundation is approximately 3.4km south east and the closest mapped wetland is approximately 2.8km south east. Given the distances to watercourses and wetlands in the nearby area, there is not going to be any proposed clearing of riparian vegetation or impacts to watercourses and is therefore not likely to be at variance to principle (f). In addition, due to the small scale of clearing proposed, it is not likely to result in an increase in the incidence or intensity of flooding in the local area.

The groundwater salinity in the area ranges from 14000 up to greater than 35000mg/L total dissolved solids. Salinity risk is mapped mostly as low with the western end reaching medium-high risk. Given the minimal clearing proposed of low heath/ scrub vegetation, it is unlikely that the clearing will cause appreciable land degradation and given the distances to watercourses which are separated from the applied area by remnant vegetation, it is unlikely to cause any further deterioration in the quality of water resources in an already saline environment. The proposal is therefore not likely to be at variance to principles (g) and (i).

The closest conservation areas are Quairading Spring Nature Reserve approximately 4.3km south and an unnamed Nature Reserve approximately 4.1km south east. The vegetation under application is not connected to these conservation areas nor is it providing a linkage to these areas. Given this and the small scale of clearing proposed, it is not likely to be at variance to principle (h).

Given the above, the clearing as proposed is at variance to principles (a) and (c) and is not likely to be at variance any of to the remaining clearing principles.

Methodology

References:

- Hopkins et al. (2001)
- Keighery (1994)
- Shepherd (2009)

GIS Databases:

- DEC Tenure - DEC
- Geomorphic wetlands, Wheatbelt - DEC
- Groundwater Salinity, Statewide - DoW
- Hydrography, linear - DoW
- Hydrography, linear (hierarchy) - DoW
- IBRA Australia - DEH
- Local Government Authority Boundaries - Landgate
- Pre-European Vegetation - DA
- SAC Biodatasets - Accessed 29/2/2012 & 1/3/2012
- Salinity Risk LM 25m - DOLA 00

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

The vegetation under application comprises 0.3ha of native vegetation along the cadastral boundary between Crown Reserve 20494 (Lot 337 on Deposited Plan 91516) and the Bruce Rock-Quairading Road reserve, Quairading. The reserve is under a management order with the Shire of Quairading to be utilised for the designated purpose of 'Aerodrome.'

The area under application is partly zoned 'Public Purpose' under the Town Planning Scheme for the area within Lot 337 on Plan 91516 with the land use being 'Airport.' the area on the northern side of the proposed fence construction is within the Bruce Rock-Quairading Road reserve.

There is a Memorial on the Certificate of Title for Lot 337 on Plan 91516 under the Contaminated Sites Act 2003. This memorial states that the site has been classified as "Possibly contaminated - Investigation required." The contaminated area within Reserve 20494 however, is not within the area under application and therefore there should be no risk associated with the proposed clearing and works at this site.

The applied clearing area lies within the EPA Position Statement No. 2 agricultural region however, the proposed clearing is minor (0.3ha) and for the purposes of fence line construction which will assist in maintaining the condition of the vegetation within Lot 337 on Plan 91516, Quairading which is currently being impacted by illegal motorbike access.

The applied clearing area lies within the Avon River System surface water area proclaimed and managed under the Rights in Water and Irrigation Act 1914. Any taking of water or interfering with the bed and/or banks of a watercourse in this area requires approval from the Department of Water. However, there are no mapped watercourses within 500m of the applied area.

- Methodology** GIS Databases:
- Cadastre - Landgate
 - EPA Position Statement No. 2 Agricultural Region - DEP
 - RIWI Act, Surface Water Areas and Irrigation Districts - DoW
 - Town Planning Scheme Zones - MFP

4. References

- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

5. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DoW)