



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5355/1
Permit Holder:	Shire of Kulin
Duration of Permit:	8 February 2013 – 8 February 2018

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 realignment.

2. Land on which clearing is to be done

Davies Road reserve PIN 11584022 (KULIN WEST 6365)
Gorge Rock-Lake Grace Road reserve PIN 1322354 (KULIN 6365)
Gorge Rock-Lake Grace Road reserve PIN 1322360 (KULIN WEST 6365)
Kulin West Road reserve PIN 1322364 (KULIN 6365)
Lot 13765 on Deposited Plan 233569 (KULIN 6365)

3. Area of Clearing

The Permit Holder must not clear more than 0.18 hectares of native vegetation within the area hatched yellow on attached Plan 5355/1.

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.

5. 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.

6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. Avoid, minimise etc 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

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*:

- (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 restrict the movement of machines and other vehicles to the limits of the areas to be cleared

DEFINITIONS

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

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 declared under the section 37 of the *Agriculture and Related Resources Protection Act 1976*; or
- (b) published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- (c) not indigenous to the area concerned.

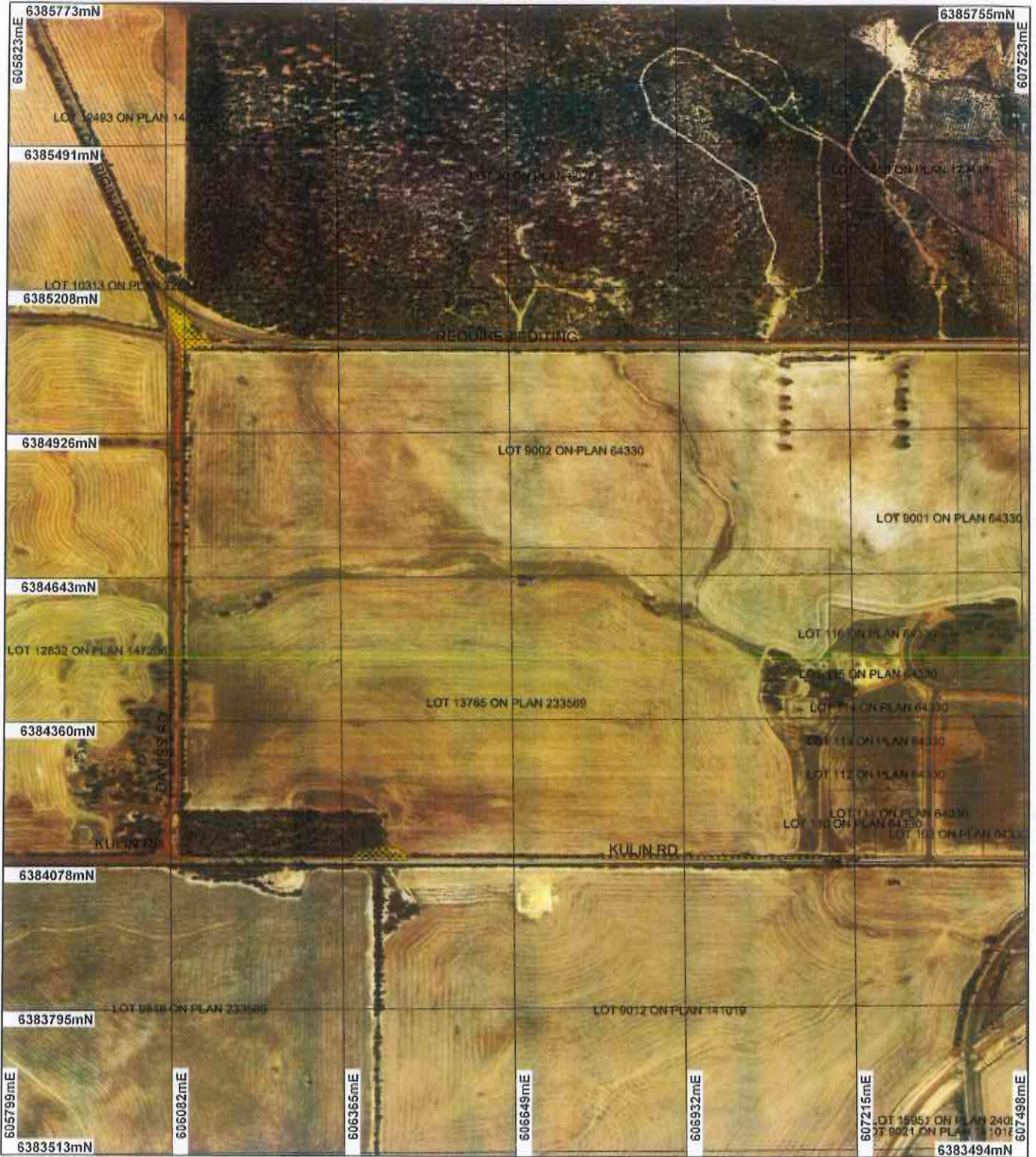
B. Walker

Belinda Walker
A/ MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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


17 January 2013

Plan 5355/1



LEGEND

Clearing Instruments	Cadastre for labelling
<input type="checkbox"/> Areas Approved to Clear	<input type="checkbox"/> Local Government Authorities
<input type="checkbox"/> Road Centrelines	<input type="checkbox"/> Cadastre
<input type="checkbox"/> Cadastre	Kulin 2532 Jan 2011 Mosaic



0 ————— 250 m

Scale 1:10000
(Approximate when reproduced at A4)


Geocentric Datum Australia 1994

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

B. Walker Date 17/1/13
Belinda Walker

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

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.: 5355/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Kulin

1.3. Property details

Property: ROAD RESERVE (KULIN 6365)
ROAD RESERVE (KULIN 6365)
ROAD RESERVE (KULIN WEST 6365)
ROAD RESERVE (KULIN WEST 6365)
LOT 13765 ON PLAN 233569 (KULIN 6365)

Local Government Area: Shire of Kulin

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.18		Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 17 January 2013

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: 960 - Shrublands; mallee scrub, redwood & black marlock (Shepherd et al, 2001)	The application is to clear up to 0.18 hectare of native vegetation for the purpose of road realignment. The application is divided into three separate sites. Site A at the junction of Davies Road and Kulin-Corrigin Road has been previously cleared and modified on a number of occasions and is in a degraded (Keighery, 1994) condition (Campbell, 2012). There is a fringe of shrubs and small trees around a triangular road metal dump containing a number of non-native species. The dominant native species are Allocasuarina acutivalvis and Eucalyptus capillosa (Campbell, 2012). Site B is a 600 metre strip of vegetation along the northern side of Kulin West Road reserve. The vegetation is in very good (Keighery, 1994) condition and consists of mallees with a few scattered shrubs. Many of the mallees are very old with wide trunks and many are dead. Some of these trees may be hollow-bearing habitat trees (Campbell, 2012). Site C is an approximately 0.05 hectare portion of a 5 hectare woodland in excellent (Keighery, 1994) condition (Campbell, 2012), occurring at the north east of the junction of Davies Road and Kulin West Road. The woodland consists predominantly of mallee species such as Eucalyptus longicornis (Red Morrell), with some scattered shrubs (Campbell, 2012).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) To Very good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994).	The condition and description of the vegetation has been determined by a flora survey and photos provided by the applicant (Campbell, 2012) and aerial imagery (Kulin 2532 Jan 2011 Mosaic).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal is not likely to be at variance to this Principle

This application proposes to clear up to 0.18 hectares of native vegetation for the purpose of road realignment. The proposed clearing consists of three separate sites, the condition of the vegetation (Keighery, 1994) ranging from degraded to very good (Campbell, 2012).

Site A is approximately 0.01 hectares, located at the junction of Davies Road and Kulin-Corrigin Road in a degraded (Keighery 1994) condition (Campbell, 2012). The site consists of a fringe of shrubs and small trees surrounding a triangular road metal dump.

Site B is approximately 0.12 hectares and occurs along the northern side of Kulin West Road, consisting of a narrow strip of road side vegetation in very good (Keighery, 1994) condition (Campbell, 2012).

Site C is approximately 0.05 hectares occurring on the edge of a larger remnant (approximately 5 hectares in excellent condition) (Campbell, 2012). The vegetation consists predominantly of mallee species such as *Eucalyptus longicornis* (Red Morrel), with some scattered shrubs (Campbell, 2012). Given the level of disturbance caused by edge effects the vegetation is in good to very good (Keighery 1994) condition.

A Priority 3 species of flora has previously been mapped as occurring within Site A. A flora survey provided by the applicant (Campbell, 2012) did not record this species within the application area. This record was made in 1995 and the recorded GPS coordinates are not considered accurate.

A Priority 4 species of flora was mapped within an area proposed to be revegetated as an offset, at the junction of Lange Road and Kulin-Corrigin Road (Campbell, 2012). There are several other priority flora recorded within approximately 1 kilometre of the application area, within the same vegetation and soil type. The areas under application were surveyed and no priority flora species were identified (Campbell, 2012)

There are no ecological communities of conservation significance recorded within a 10 kilometre radius of the application area.

Considering the small scale of the proposed clearing and the level of disturbance caused by edge effects, the application area is not likely to comprise a high level of biodiversity and therefore is not likely to be at variance to this principle.

There may be a potential for clearing activities to pose a weed risk to the surrounding vegetated remnant of 5 hectares at Site C. Weed management measures would help to minimise this risk.

Methodology

References:

- Campbell (2012)
 - Government of Western Australia (2011)
 - Keighery (1994)
- GIS Databases
- Kulin 2532 Jan 2011 Mosaic
 - Pre-European vegetation
 - NWLRA, Extent of native vegetation

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposal is not likely to be at variance to this Principle

Five conservation significant fauna species have been recorded in the local area (10 kilometre radius) including *Dasyurus geoffroii* (Chuditch), *Myrmecobius fasciatus* (Numbat), *Phascogale calura* (Red-tailed Phascogale), *Merops ornatus* (Rainbow Bee-eater) and *Macropus irma* (Western Brush Wallaby).

The area to be cleared may contain suitable habitat for the Red-tailed Phascogale and the Chuditch, however there is no record of their presence in the immediate area and there is likely to be no impact on their conservation status.

The majority of the vegetation is in good to very good (Keighery, 1994) condition (Campbell, 2012). The areas under application occur in a highly cleared landscape and may contain suitable habitat for other species of fauna in the local area acting as a corridor for fauna movement. The proposed clearing within area B (northern side of Kulin West Road) will retain vegetation occurring along the southern reserve within Kulin West road and also retain a row of trees within the paddock to the north. Therefore, it is not expected for the proposed clearing to impact on ecological linkages.

Considering the above, the area under application is not likely to be significant habitat for fauna of conservation significance.

Therefore, the application is not likely to be at variance to this principle.

Methodology References
 -DEC (2007-)
 GIS Databases
 - NWLRA, Extent of native vegetation

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposal is not likely to be at variance to this Principle**
 There are no records of rare flora within the local area (10 kilometre radius) and no rare flora was identified during surveys of the application areas (Campbell 2012)..

 Therefore, the application is not likely to be at variance to this principle.

Methodology References
 -Campbell (2012)
 GIS Databases
 - SAC Bio Datasets - accessed November 2012

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments **Proposal is not likely to be at variance to this Principle**
 There are no threatened ecological communities recorded within the local area (10km radius).

 The proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases
 -SAC Bio Datasets - accessed November 2012

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments **Proposal is not likely to be at variance to this Principle**
 The vegetation under application is mapped as Beard Vegetation Association 960 which retains approximately 14 percent (30,390 hectares) of the pre-European extent within the Mallee IBRA bioregion (Government of Western Australia, 2011). Approximately 35 per cent (10,494 hectares) of the current extent is held in conservation estate (Government of Western Australia, 2011).

 The Shire of Kulin is highly cleared, with approximately 15 per cent (69,089 hectares) of the pre-European vegetation cover remaining (Government of Western Australia, 2011), and there is approximately 10 per cent native vegetation cover remaining within the local area (10 kilometre radius).

 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 proposed clearing of 0.18 hectares will result in a loss of less than 0.001 percent of Beard Vegetation Association 960. The vegetation under application is in degraded to very good (Keighery 1994) condition and shows signs of disturbance and edge effects.

 Considering the small size and condition of the vegetation proposed to be cleared, it is not considered to be significant as a remnant and therefore not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Mallee	7,395,897	4,115,655	56	31
Shire*				
Shire of Kulin	471,820	69,089	15	36
Beard Vegetation Association in Bioregion* 960	220,470	30,390	14	35 (10,494ha)

*Government of Western Australia (2011)

- Methodology** **References**
- Keighery (1994)
- Government of Western Australia (2011)
- Shepherd et al, (2001)
GIS Databases
- Pre-European vegetation
- SAC Biodatasets, accessed November 2012

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposal is not likely to be at variance to this Principle**

A minor non-perennial watercourse is mapped intersecting the Kulin Road section of the application area.

However, no riparian vegetation was recorded within flora surveys undertaken of the application area (Campbell 2012).

Therefore, the application is not likely to be at variance to this principle.

- Methodology** **GIS Databases**
- Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal is not likely to be at variance to this Principle**

Soil in the application area is described as gently undulating to rolling terrain with some ridges and uneven slopes; and with the variable presence of lateritic mesas and buttes and granitic tors and bosses: chief soils are hard alkaline yellow mottled soils and hard alkaline red soils (Northcote et al. 1960-68).

The proposed clearing is within an area which has a high level of groundwater salinity (7000-14000mg/L). There is no elevation and the average annual rainfall of 400mm is low.

Although groundwater salinity in the local area is high, the clearing under application is unlikely to cause appreciable land degradation due to the small size of the proposed area.

The application is not likely to be at variance to this principle.

- Methodology** **References**
-Northcote et al. (1960-68)
GIS Databases
-Groundwater Salinity, statewide
-Rainfall, Mean Annual
-Soils, statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not likely to be at variance to this Principle**

The Kulin Road Nature Reserve is located approximately 5.5 kilometres to the north-west of the application area. An un-named nature reserve is mapped 6 kilometres to the south-west.

Considering the distance and the small size of the application area, the proposed clearing is unlikely to impact upon the environmental values of the nature reserves.

The application is not likely to be at variance to this principle.

- Methodology** **GIS Databases**
- DEC, tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments **Proposal is not likely to be at variance to this Principle**

Groundwater salinity in the application area is relatively high (7000-14000mg/L). However, due to the small size of the proposed clearing, it is unlikely to cause deterioration in the quality of surface or ground water.

The application is not likely to be at variance to this principle.

Methodology GIS Databases
- Groundwater Salinity, statewide

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments **Proposal is not likely to be at variance to this Principle**
The area under application is subject to a low average annual rainfall of 400mm and 0.18 hectares in size. Considering this, the proposed clearing is unlikely to cause or exacerbate flooding.

The proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases
- Rainfall, Mean Annual

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

Comments The proposal is to clear up to 0.18 hectares of native vegetation for the purpose of road realignment.

Under the Town Planning Scheme Zoning, the application area is zoned as road reserves and rural.

No public submissions have been received.

There are no known Aboriginal Sites of Significance within the application area.

Methodology GIS Databases
- Aboriginal Sites of Significance
- Town Planning Scheme Zones

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 20/11/2012
DEC (2012) Regional Advice for Clearing Permit Application CPS 5355/1. Department of Environment and Conservation, Western Australia (TRIM Ref. A576744).
Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, 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.
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
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
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 DEC)

