



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4632/1
Permit Holder:	Shire of Esperance
Duration of Permit:	5 December 2011 to 5 December 2021

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 gravel extraction.
- 2. Land on which clearing is to be done**
Lot 1097 on Deposited Plan 211393 (Cascade 6450)
Oldfield Location 1168, Reserve 31750 (Cascade 6450)
Oldfield Location 1250, Reserve 31751 (East Munglinup)
Unallocated Crown land (Cascade 6450)
River Road reserve (Cascade 6450)
- 3. Area of Clearing**
The Permit Holder shall not clear more than 20.15 hectares of native vegetation within the combined areas cross-hatched yellow on attached Plan 4632/1a, Plan 4632/1b, Plan 4632/1c, Plan 4632/1d and Plan 4632/1e.
- 4. Period in which clearing is authorised**
The Permit Holder shall not clear any native vegetation after 5 December 2016.
- 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 activities to the extent that the Permit Holder has the power to clear native vegetation for those activities under the *Local Government Act 1995* or any other written law.
- 7. 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

8. 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.

9. Flora management

(a) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *botanist* to inspect the area hatched red on Plan 4632/1f, for the presence of priority flora listed below:

- (i) *Conostephium sp. Cascade* (R. Bruhn 24/899 CAS) (Priority 1)
- (ii) *Astroloma sp. Grass Patch* (Priority 2).

(b) Where *priority flora* are identified in relation to condition 9(a) of this Permit, the Permit Holder shall ensure that:

- (i) no clearing of identified *priority flora* occurs; and
- (ii) no clearing occurs within 10 metres of identified *priority flora*, unless approved by the CEO.

10. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

(a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.

(b) within 3 months following completion of extractive activities, *revegetate* and *rehabilitate* the areas cross-hatched yellow on attached Plan 4632/1a, Plan 4632/1b, Plan 4632/1c, Plan 4632/1d and Plan 4632/1e by:

- (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
- (ii) ripping the pit floor and contour batters within the extraction site; and
- (iii) laying the vegetative material and topsoil retained under condition 10(a) on the cleared area(s)

(c) within 24 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 10(b) of this Permit:

- (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
- (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 10(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.

(d) where additional *planting* or *direct seeding* of native vegetation is undertaken in accordance with condition 10(c)(ii) of this permit, the Permit Holder shall repeat condition 10(c)(i) and 10(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.

- (e) where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 10(c)(i) and 10(c)(ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 10(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 10(c)(ii).

PART III - RECORD KEEPING AND REPORTING

11. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
- (i) the species composition, structure and density of the cleared area;
 - (ii) 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;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).
- (b) In relation to flora management pursuant to condition 9 of this Permit:
- (i) the location of each *Conostephium sp. Cascade* (R. Bruhn 24/899 CAS) and/or *Astroloma sp. Grass Patch* 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;
 - (ii) a copy of the botanists flora survey report.
- (c) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 10 of this Permit:
- (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.

12. 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 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 year.
- (b) Prior to 5 September 2021, the Permit Holder must provide to the CEO a written report of records required under condition 11 of this Permit where these records have not already been provided under condition 12(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;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

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;

local provenance means native vegetation seeds and propagating material from natural sources within 20 kilometres of the area cleared.

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;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

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*

10 November 2011

Plan 4632/1a



LEGEND

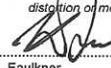
- Clearing Instruments**
-  Areas Approved to Clear
 -  Road Centrelines
 -  Cadastre
- Northover 50cm Orthomosaic - Landgate 2008



Scale 1:10322
(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.

 Date 10/10/11

K. Faulkner

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

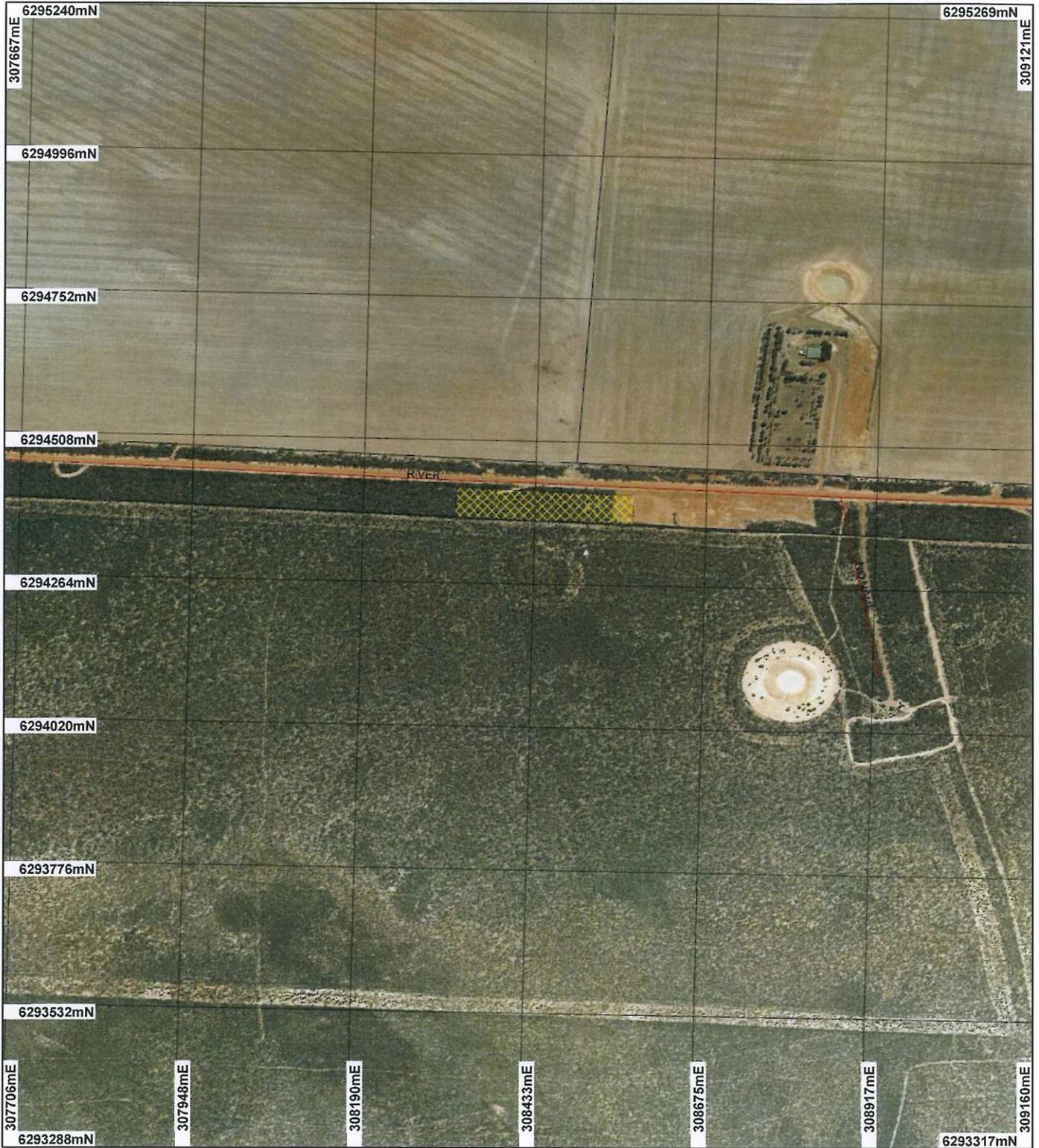
Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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Plan 4632/1b



LEGEND

Clearing Instruments

-  Areas Approved to Clear
 -  Road Centrelines
 -  Cadastre
- Northover 50cm Orthomosaic -
Landgate 2008



0  250 m

Scale 1:8604

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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 Date 12/01/11

K. Faulkner

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

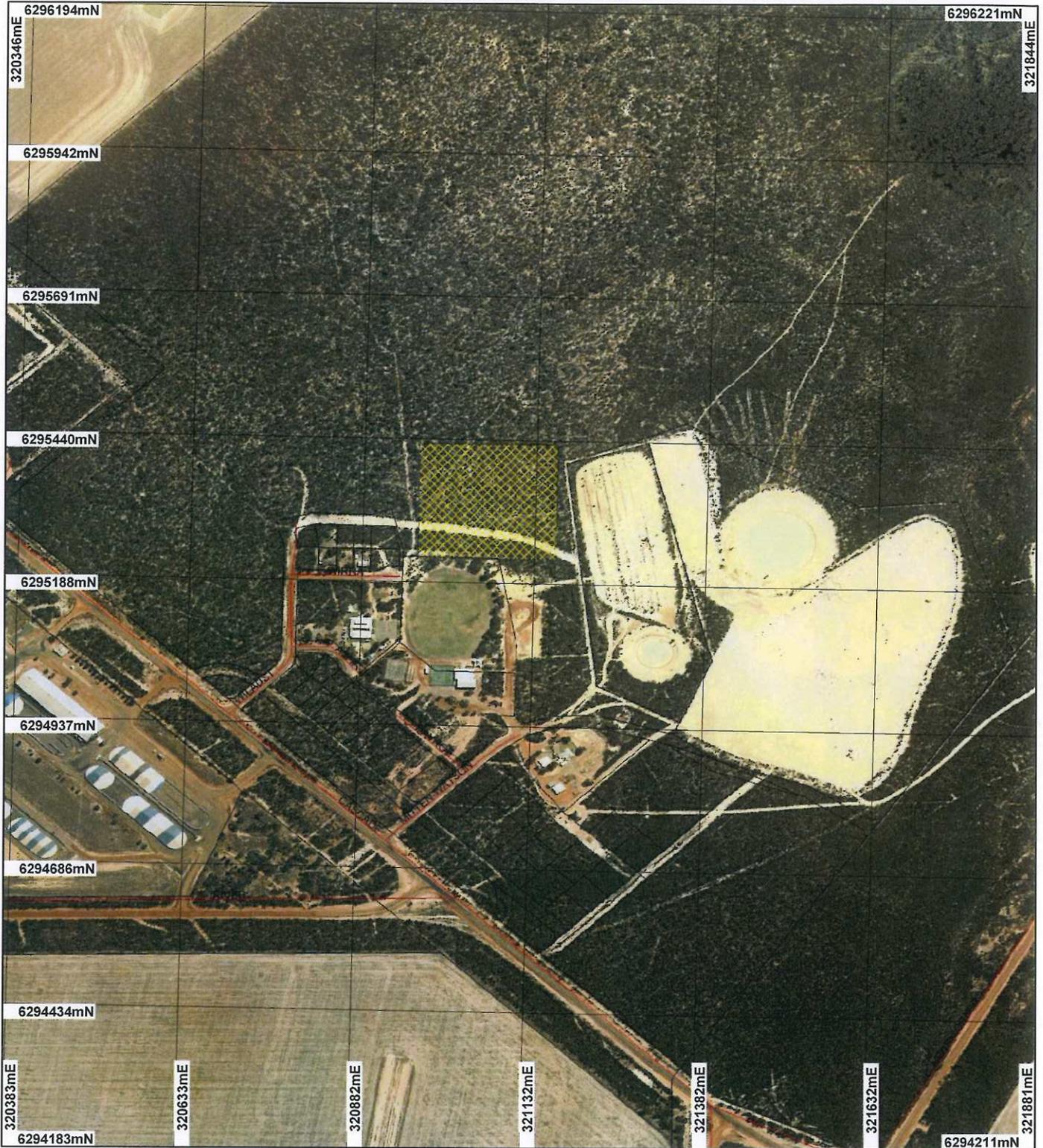
Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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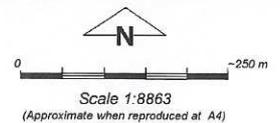
Plan 4632/1c



LEGEND

Clearing Instruments

-  Areas Approved to Clear
-  Road Centrelines
-  Cadastre
-  Lort 50cm Orthomosaic - Landgate 2008



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


 K. Faulkner Date 12/11/11

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Plan 4632/1d



LEGEND

- | | |
|-----------------------------|--|
| Clearing Instruments | Stokes Inlet 50cm
Orthomosaic - Landgate
2007 |
| Areas Approved to Clear | |
| Road Centrelines | |
| Cadastre | |



Scale 1:7040
(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.

Date 10/11/11
K. Faulkner

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

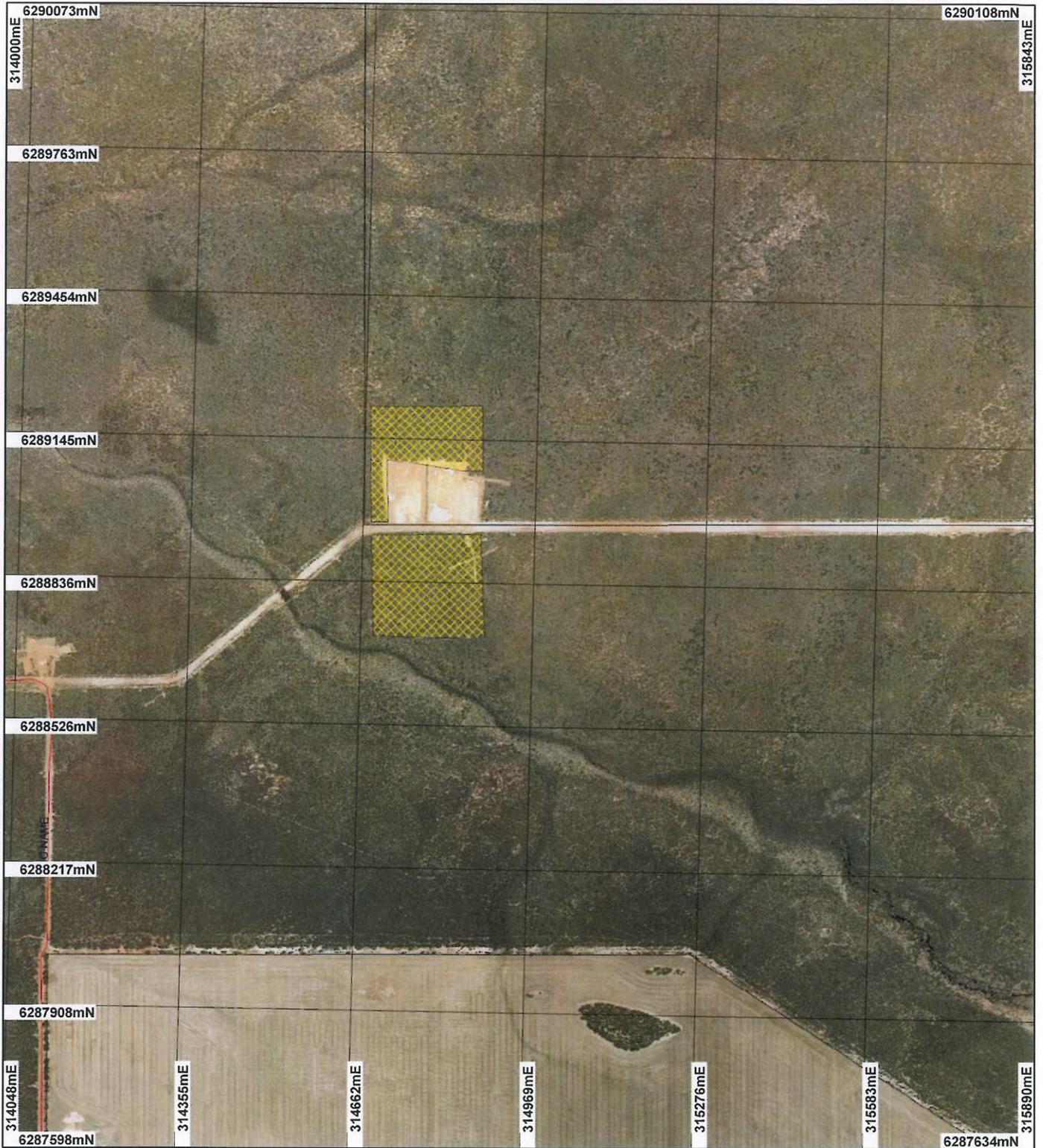
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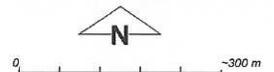
Plan 4632/1e



LEGEND

- Clearing Instruments**
-  Areas Approved to Clear
 -  Road Centrelines
 -  Cadastre

Stokes Inlet 50cm
Orthomosaic - Landgate
2007



Scale 1:10905
(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.

 Date 

K. Faulkner
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Plan 4632/1f



LEGEND

Clearing Instruments

- Areas Subject to Conditions
 - Road Centrelines
 - Cadastre
- Loft 50cm Orthomosaic - Landgate 2008



Scale 1:9167

(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.

[Signature] Date 10/01/11
K. Faulkner

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1. Application details

1.1. Permit application details

Permit application No.: 4632/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Esperance

1.3. Property details

Property: OLDFIELD LOCATION 1168 (CASCADE 6450)
UNALLOCATED CROWN LAND (CASCADE 6450)
LOT 1097 ON PLAN 211393 (CASCADE 6450)
OLDFIELD LOCATION 1250 (EAST MUNGLINUP 6450)
ROAD RESERVE (CASCADE 6450)

Local Government Area: Shire of Esperance
Colloquial name: River Road reserve

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
20.15		Mechanical Removal	Extractive Industry

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 November 2011

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
The areas under application comprise of the following Beard Vegetation Associations:	The Shire of Esperance is proposing to clear 20.15 hectares of native vegetation over six sites within the localities of Cascade and East Munglinup.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the vegetation was determined via digital imagery (Oldfield 50cm Orthomosaic - Landgate 2007, Northover 50cm Orthomosaic - Landgate 2008 and Lot 1.4m Orthomosaic - Landgate 2003).
519: Shrublands; mallee scrub, Eucalyptus eremophila (Shepherd, 2009).		To	
512: Shrublands; mallee scrub, Eucalyptus eremophila & Forrest's marlock (E. forrestianna) (Shepherd, 2009).	The vegetation under application is in a very good to excellent (Keighery, 1994) condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	
47: Shrublands; mallee scrub, Eucalyptus eremophila & Forrest's marlock (E. forrestianna) (Shepherd, 2009).			

3. Assessment of application against clearing principles

Comments	Proposal is not likely to be at variance to this Principle
	This application proposes to clear 20.15 hectares of native vegetation over 6 sites within the localities of Cascade and East Munglinup, for the purpose of extracting gravel to maintain the Shire of Esperance's road network. The six sites under application are summarised below:
	Site 1: Crown Reserve 31750, Cascade, 4 hectares
	Site 2: River Road reserve, Cascade, 1.24 hectares
	Site 3: Unallocated Crown land, Cascade, 4 hectares
	Site 4: Lot 1097 on Plan 211393, Cascade, 4 hectares
	Site 5: Lot 1097 on Plan 211393, Cascade, 3 hectares

Site 6: Crown Reserve 31751, East Munglinup, 4.34 hectares

The vegetation at all six sites appears to be in a very good to excellent (Keighery, 1994) condition and are connected to larger intact areas of remnant vegetation.

The disturbance resulting from the proposed clearing may increase the risk of weeds and dieback spreading into the adjacent remnant vegetation. Weed and dieback management practices will assist in mitigating this risk.

Two records of both *Conostephium* sp. Cascade (P1) and *Astroloma* sp. Grass Patch (P2) have been recorded within close proximity of site 3. Site 3 contains the same vegetation and soil types as the areas in which these priority species were recorded. Given this the proposed clearing may be at variance to principle (a). A requirement to survey this site prior to clearing will ensure that these priority flora species are not impacted through the proposed clearing.

The six areas under application are located within the Mallee Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 56 per cent of its Pre European vegetation extent remaining (Shepherd, 2009).

The application areas are mapped as Beard Vegetation Associations 47, 512 and 519. These vegetation associations have approximately 47 per cent, 26 per cent and 59 per cent of their pre-European extent remaining in the Jarrah Forest bioregion, respectively (Shepherd, 2009).

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).

Site 3 consists of Beard Vegetation Association 512 which retains approximately 26 per cent vegetation. This vegetation association retains less than the recommended threshold level. As site 3 may contain Priority flora and consists of a vegetation type that has been extensively cleared it may be recognised as a significant remnant in an area which has been extensively cleared and therefore, may be at variance to principle (e).

A minor, non-perennial water course is located within 40 meters of site 6. The distance between the proposed clearing and the identified watercourse should be sufficient in ensuring that the environmental values of this water course are not compromised during the clearing process.

Aside from the environmental issues raised above in relation to site 3 no other significant environmental issues have been identified.

Therefore the proposed clearing may be at variance to principles (a) and (e), and is not likely to be at variance to any of the remaining clearing principles.

Methodology

References:

Commonwealth of Australia (2001)
Shepherd (2009)

GIS Database:

- Hydrography linear
- Pre European Vegetation
- SAC Biodatasets - accessed October 2011

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

Comments

Native title exists over the areas under application. The Esperance Nyunhars Native Title Claimants were notified of the proposed clearing within Crown Reserves 31750 and 31751. To date a response has not been received.

No public submissions have been received in relation to this application.

Methodology

GIS Database:

- Native Title Claims

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
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
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)