



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 6441/1
Permit Holder:	Shire of Menzies
Duration of Permit:	6 June 2015– 6 June 2030

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 expanding gravel pits.

2. Land on which clearing is to be done

Lot 11 on Deposited Plan 194084, Kookynie
Lot 14 on Deposited Plan 238159, Kookynie
Lot 20 on Deposited Plan 238200, Kookynie
Lot 25 on Plan 238312, Kookynie
Lot 29 on Deposited Plan 238568, Kookynie
Lot 43 on Deposited Plan 219730, Ularring
Kookynie-Yarri Road reserve (PIN 11689020), Kookynie
Evanston-Menzies Road reserve (PIN 11721576), Ularring
Unallocated Crown land (PIN 1032077), Ularring
Unallocated Crown land (PIN 781437), Ularring

3. Area of Clearing

The Permit Holder must not clear more than 74.16 hectares of native vegetation within the combined areas hatched yellow on attached Plan 6441/1(a), Plan 6441/1(b), Plan 6441/1(c), Plan 6441/1(d), Plan 6441/1(e), Plan 6441/1(f), Plan 6441/1(g), Plan 6441/1(h), Plan 6441/1(i), Plan 6441/1(j), Plan 6441/1(k), Plan 6441/1(l), Plan 6441/1(m) and Plan 6441/1(n).

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 activities to the extent that the Permit Holder has the right to access land under the *Local Government Act 1995* or any other written law.

6. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 6 June 2020.

PART II – MANAGEMENT CONDITIONS

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. Vegetation management

The Permit Holder shall not clear native vegetation within 10 metres of the *riparian vegetation* of any *watercourse* within and/or adjacent to the area cross-hatched yellow on Plan 6441/1(a) and Plan 6441/1(l).

9. 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
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

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.
- (b) within six months following the completion of extractive activities, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit 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); and
- (c) within 24 months of undertaking *revegetation* and *rehabilitation* 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 (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 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;
 - (ii) the date that the area was cleared; and
 - (iii) the size of the area cleared (in hectares).
- (b) 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 or decimal degrees;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares);
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*, and
 - (v) a copy of the environmental specialist's report.

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 11 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (c) 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 April of each year.
- (c) Prior to 6 March 2030, 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:

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;

environmental specialist means a person who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit, or who is approved by the CEO as a suitable environmental specialist.

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 50 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion 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;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing mulch;

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;

riparian vegetation has the meaning given to it in Regulation 3 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*;

watercourse has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

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 Parks and Wildlife Regional Weed Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



M Warnock
SENIOR MANAGER
CLEARING REGULATION

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

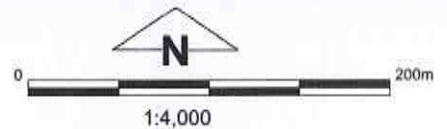
7 May 2015

Plan 6441/1(a)



Legend

- Cadastre
-  Imagery
-  Clearing Instruments Activities
- Local Government Authority



(Approximate when reproduced at A4)
GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

M Warnock Date 7/5/15
M Warnock

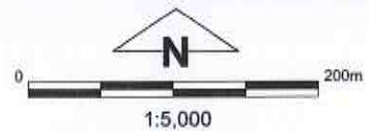
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Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the

Plan 6441/1(b)



Legend

- Cadastre
- Imagery
- Clearing Instruments Activities
- Local Government Authority



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M Warnock Date 7/5/15
M Warnock

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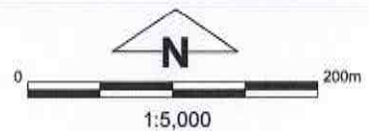
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Plan 6441/1(c)



Legend

-  Cadastre
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



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Geocentric Datum of Australia 1994

M Warnock Date *7/5/15*

M Warnock

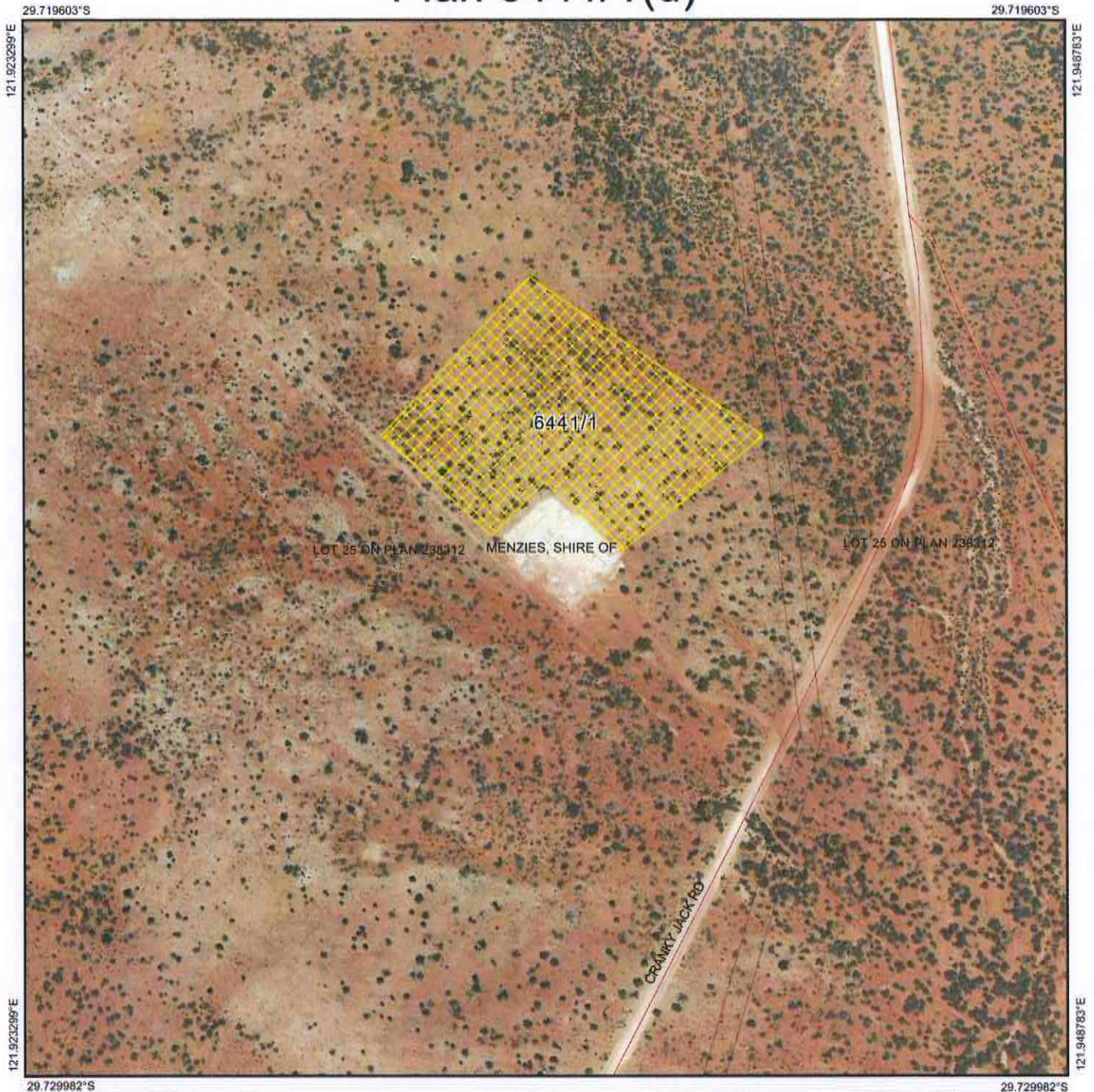
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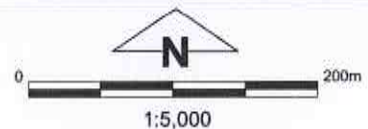
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Plan 6441/1(d)



Legend

-  Cadastre
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority

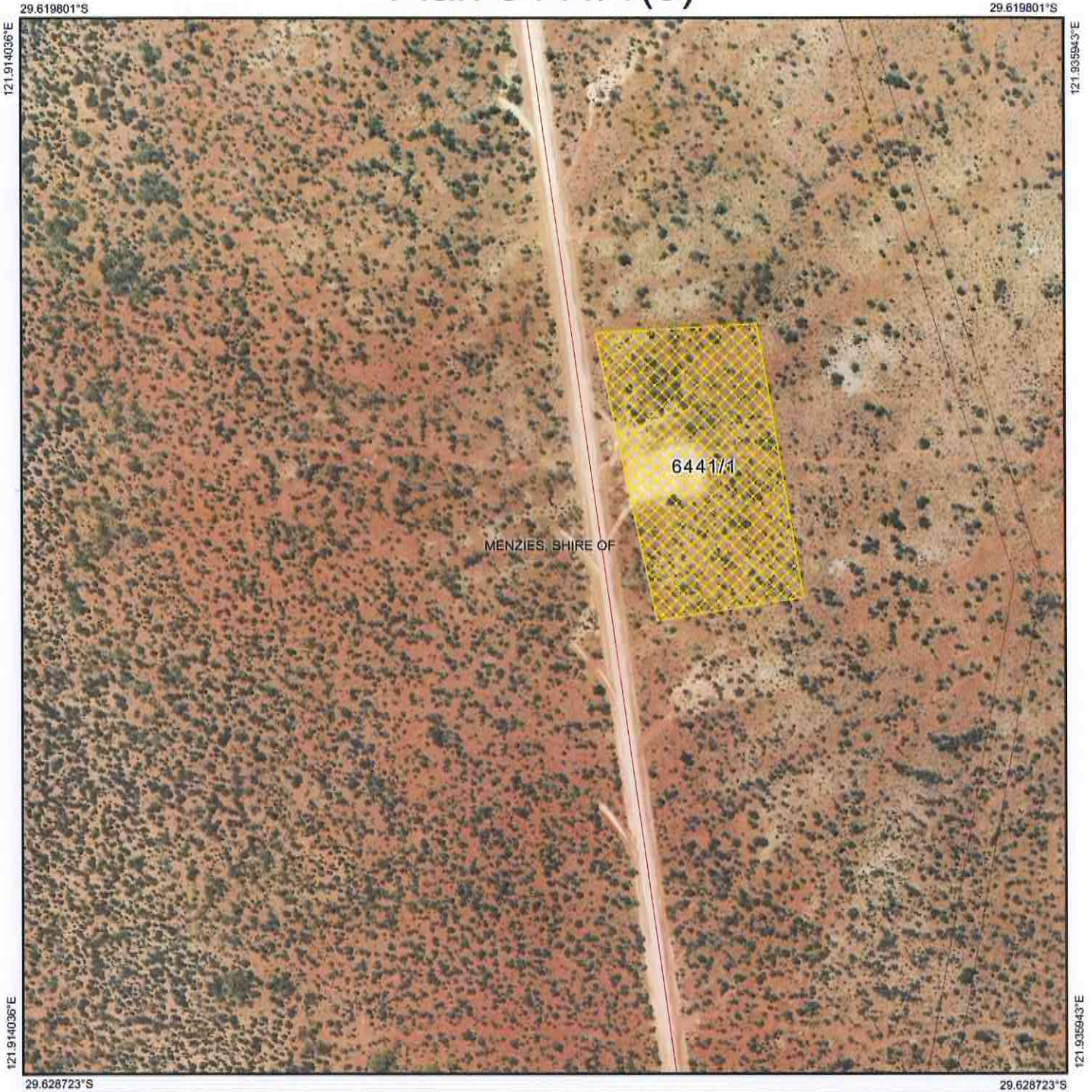


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Plan 6441/1(e)



Legend

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-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority

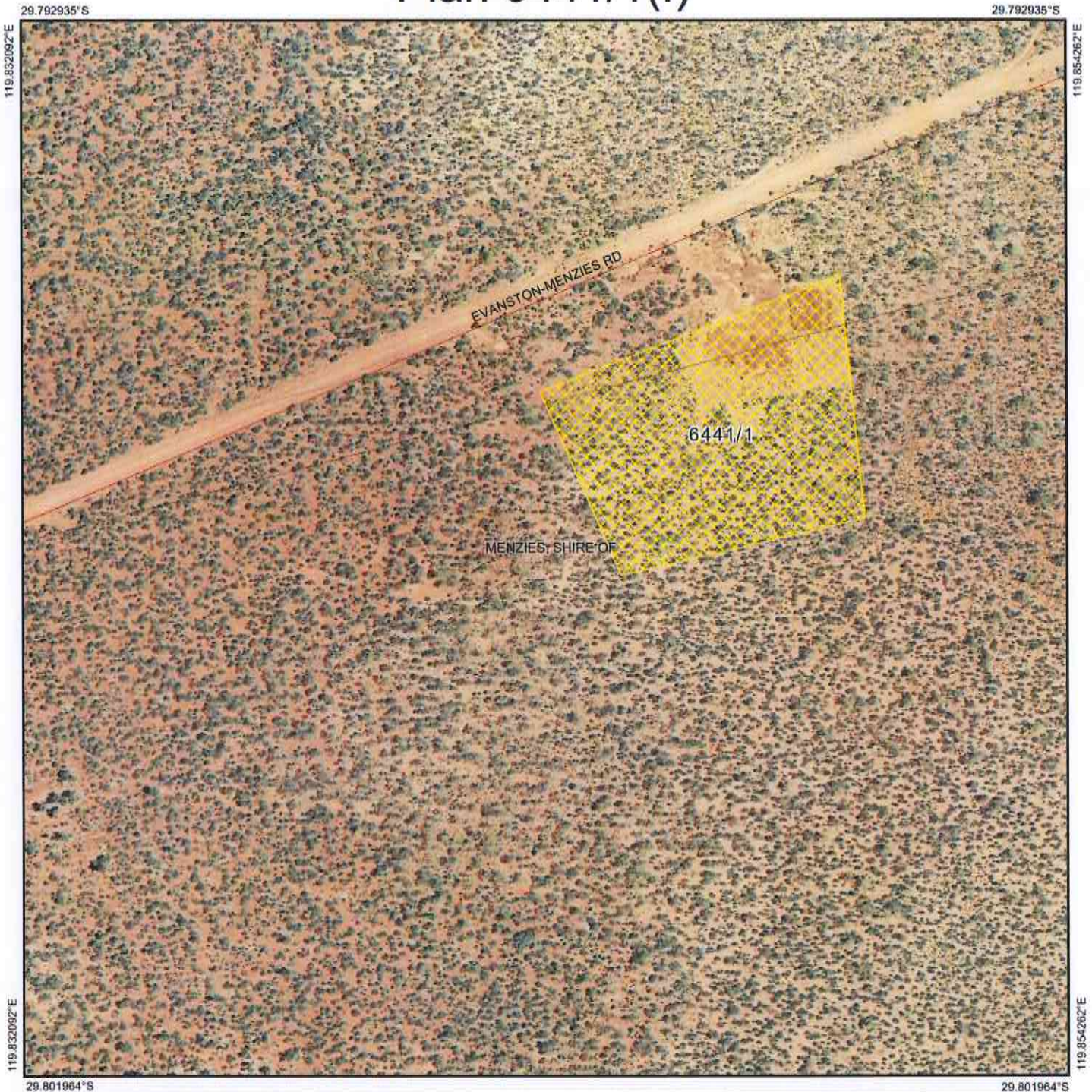


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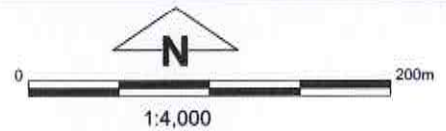
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Plan 6441/1(f)



Legend

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-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



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Geocentric Datum of Australia 1994

M Warnock Date 7/5/15
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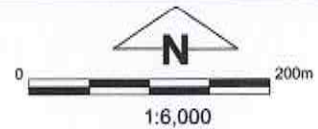
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Plan 6441/1(g)



Legend

- Cadastre
-  Imagery
- Clearing Instruments Activities
- Local Government Authority



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Geocentric Datum of Australia 1994

M Warnock Date *7/5/15*
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Plan 6441/1(h)

29.736262°S

29.736262°S

119.646167°E

119.646167°E



119.646167°E

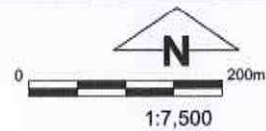
119.646167°E

29.751342°S

29.751342°S

Legend

-  Cadastre
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



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GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

M Warnock Date *7/5/15*

M Warnock

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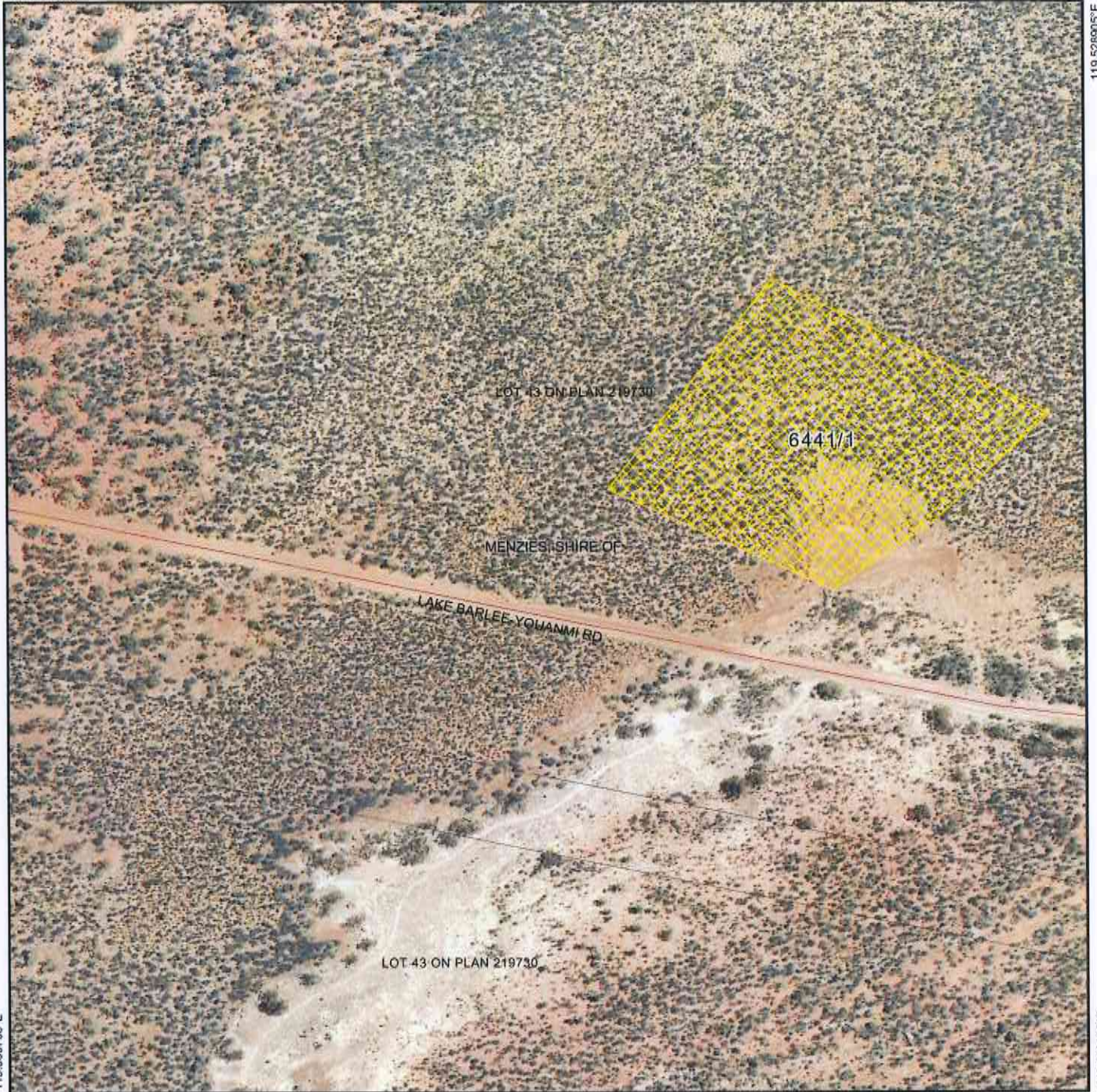
Plan 6441/1(i)

29.694478°S

29.694478°S

119.506766°E

119.528905°E



119.506766°E

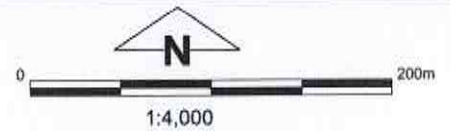
119.528905°E

29.703494°S

29.703494°S

Legend

-  Cadastre
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



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GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

M Warnock Date *7/5/15*
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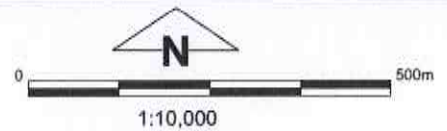
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Plan 6441/1(j)



Legend

-  Cadastre
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



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GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

M Warnock Date 7/5/15

M Warnock

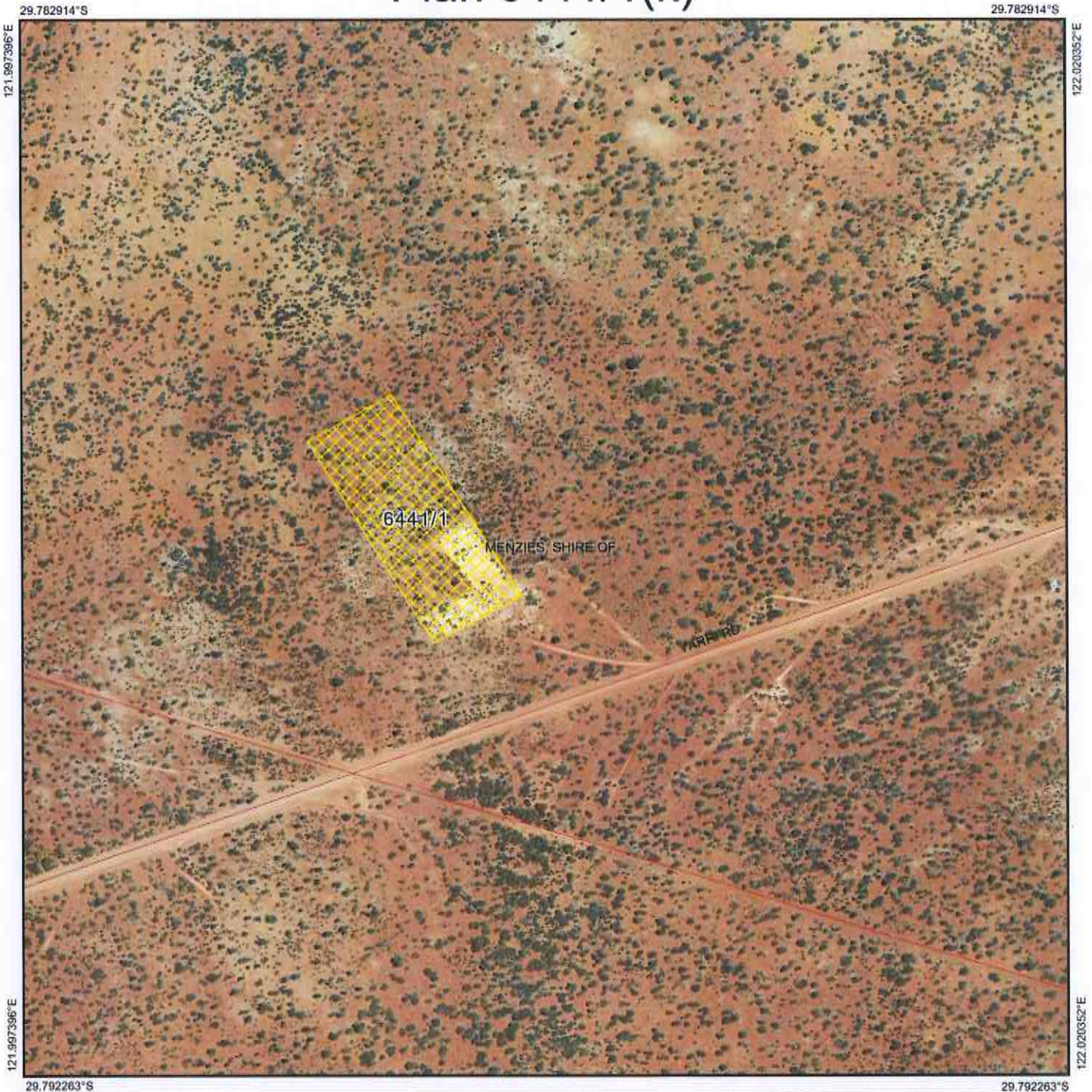
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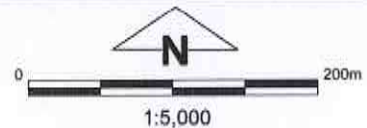
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Plan 6441/1(k)



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-  Imagery
-  Clearing Instruments Activities
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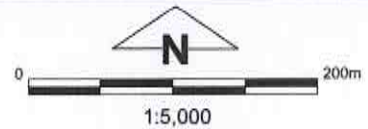
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Plan 6441/1(I)



Legend

-  Cadastre
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority

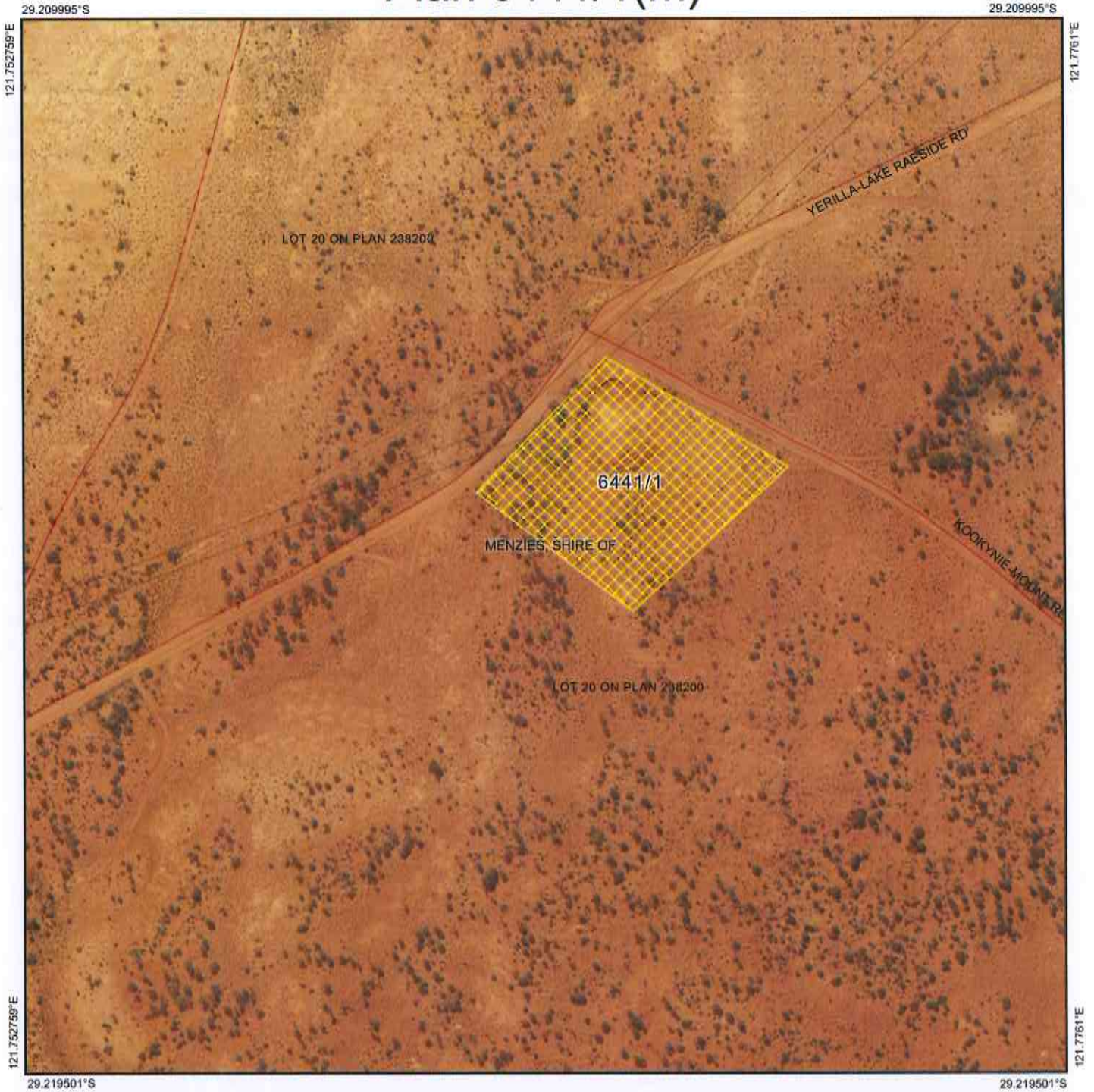


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Geocentric Datum of Australia 1994

M Warnock Date *7/5/15*
M Warnock

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Plan 6441/1(m)



Legend

-  Cadastre
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



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GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

M Wamock Date *7/5/15*
M Wamock

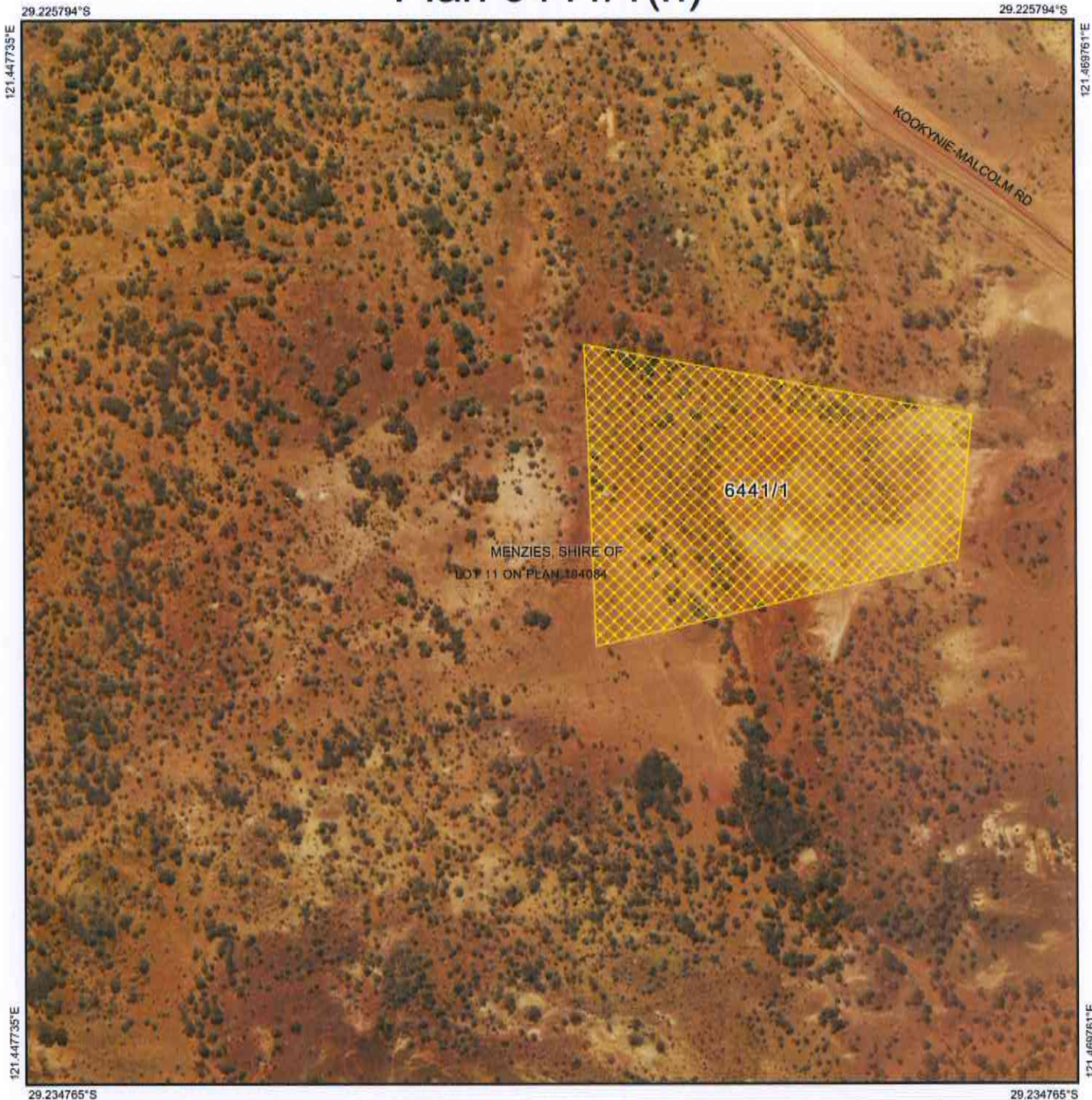
Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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



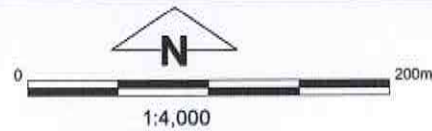
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Plan 6441/1(n)



Legend

- Cadastre
-  Imagery
-  Clearing Instruments Activities
- Local Government Authority



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M Warnock Date 7/5/15
M Warnock

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1. Application details

1.1. Permit application details

Permit application No.: 6441/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Menzies
Postal address: P.O. Box 4
MENZIES WA 6436
Contacts: Name: Shire of Menzies
Phone: 08 9024 2041
Fax: 08 90242110
Email: dceo@menzies.wa.gov.au
Phone: 08 9024 2110
Email: mws@menzies.wa.gov.au

1.3. Property details

Property: LOT 14 ON PLAN 238159, KOOKYNI
LOT 29 ON PLAN 238568, KOOKYNI
ROAD RESERVE - 11689020, KOOKYNI
LOT 43 ON PLAN 219730, ULARRING
UNALLOCATED CROWN LAND, ULARRING
LOT 25 ON PLAN 238312, KOOKYNI
UNALLOCATED CROWN LAND, KOOKYNI
ROAD RESERVE - 11721576, ULARRING
LOT 11 ON PLAN 194084, KOOKYNI
LOT 20 ON PLAN 238200, KOOKYNI
ROAD RESERVE - 11690650, KOOKYNI
Shire of Menzies

Local Government Authority:
DER Region: Goldfields
DPaW District: Goldfields

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
74.16		Mechanical Removal	Expansion of 14 gravel pits

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 7 May 2015

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
Mapped Beard vegetation association 18 is described as low woodland; mulga (Acacia aneura) (Shepherd et al, 2001) Mapped Beard vegetation association 19 is described as low woodland; mulga between sandridges (Shepherd et al,	This application proposes to clear 74.16 hectares of native vegetation within:	Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).	Vegetation condition was determined from aerial imagery.
	1. Lot 11 on Plan 194084, Kookynie	To Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).	
	2. Lot 14 on Plan 238159, Kookynie		
	3. Lot 20 on Plan 238200, Kookynie		
	4. Lot 25 on Plan 238312, Kookynie		
	5. Lot 29 on Plan 238568, Kookynie		
	6. Lot 43 on Plan 219730, Ularring		
	7. Unallocated Crown land PIN 781437, Kookynie		
	8. Unallocated Crown Land PIN 1032077, Ularring		
	9. Road reserve PIN 11721576.		
10. Road reserve PIN 1032077.			
	for the purpose of expanding 14 gravel pits		

2001).

Mapped Beard
vegetation
association 20 is
described as
succulent steppe with
open low woodland;
mulga over saltbush
(Shepherd et al,
2001).

Mapped Beard
vegetation
association 251 is
described as low
woodland; mulga &
Allocasuarina cristata
(Shepherd et al,
2001).

Mapped Beard
vegetation
association 389 is
described as
succulent steppe with
open low woodland;
mulga over saltbush
(Shepherd et al,
2001).

Mapped Beard
vegetation
association 400 is
described as
succulent steppe with
open low woodland;
mulga over bluebush
(Shepherd et al,
2001).

Mapped Beard
vegetation
association 416 is
low woodland; mulga
mixed with cypress
pine & york gum
(Shepherd et al,
2001).

Mapped Beard
vegetation
association 483 is
described as
hummock
grasslands, mixed
sandplain - open
mallee over sparse
dwarf shrubs with
spinifex ; red mallee
mallee & mixed
sparse dwarf shrubs
over Triodia
basedowii (Shepherd
et al, 2001).

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

The application is for the proposed clearing of up to 74.16 hectares of native vegetation to expand 14 gravel pits within properties, Lot 11 on Plan 194084, Lot 14 on Plan 238159, Lot 20 on Plan 238200, Lot 25 on Plan

238312, Lot 29 on Plan 238568, Kookynie-Yarri Road reserve and unallocated Crown land, Kookynie, and Lot 43 on Plan 219730, Evanston-Menzies Road reserve and unallocated Crown land, Ularring.

The vegetation is in a very good to completely degraded (Keighery 1994) condition. The completely degraded areas have been previously cleared for gravel extraction. The Shire of Menzies is well vegetated with more than 99 per cent of its pre-European vegetation remaining (Government of Western Australia, 2013).

Five species of priority flora (one priority 1, two priority 3 and two priority 4 species) have been recorded in the local area (10 kilometre radius). Priority 1 species are known from only a few collections and appear to be under imminent threat from known threatening processes, Priority 3 species are generally known from collections from several different localities not under imminent threat and Priority 4 species are considered to have been adequately surveyed and not in need of special protection, but could be if circumstances change. The Department of Parks and Wildlife (2015) advised that subsequent surveys of the area where the Priority 1 plant was recorded have been undertaken. The surveys were unable to locate this species and it is now considered that the plant recorded is likely to be a hybrid. A targeted survey for this species within the application area is therefore unwarranted (Parks and Wildlife 2015). The vegetation within the applied areas is largely consistent with the broader habitat and unlikely to contain unique flora taxa relative to the surrounding vegetation (Parks and Wildlife 2015).

There are no threatened ecological communities mapped within the local area (10 kilometre radius) for the 10 gravel pits situated in Kookynie. There are two priority ecological communities (PEC) within the local area of the four pits situated along Evanston Menzies Road, Ularring. The West Lake Giles vegetation complex (priority 1) is mapped approximately four kilometres west, and the Mount Manning Range vegetation complex (banded limestone formation) is mapped five kilometers west from these gravel pits. The vegetation under application is not representative of these mapped PECs.

Several fauna species of conservation significance have been recorded within the local area (10 kilometre radius), however given that the fauna habitats within the application area are well represented elsewhere within the extensively vegetated local and regional area, no loss of significant habitat for fauna is expected.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
-Keighery (1994)
-Government of Western Australia (2013)
- Parks and Wildlife (2015)

GIS Databases:
-SAC Bio Datasets (accessed March 2015)

(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**
Several fauna species of conservation significance have been recorded (Parks and Wildlife 2007-) within the local area (10 kilometre radius), including:

- Ardea modesta (Eastern Great Egret)
- Aspidites ramsayi (Woma)
- Falco peregrinus subsp. macropus (Australian Peregrine Falcon)
- Leipoa ocellata (Malleefowl)
- Merops ornatus (Rainbow Bee-eater)
- Sminthopsis longicaudata (Long-tailed Dunnart)

Given that the fauna habitats within the application area are well represented elsewhere within the extensively vegetated local and regional area, no loss of significant habitat for fauna is expected and the proposed clearing is not likely to be at variance to this principle.

Methodology References:
- Parks and Wildlife (2007-)

(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 rare flora species recorded within the local (10 kilometre radius) of any of the proposed clearing areas, therefore the proposed clearing is not likely to be at variance to this principle.

Methodology Reference:
GIS Databases:
-SAC Bio Datasets (accessed March 2015)

(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 mapped within the local area (10 kilometre radius) of the 14 gravel pits.

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

Methodology GIS Databases:
 -SAC Bio Datasets

(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 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 Murchison Bioregion, Shire of Menzies and mapped Beard Vegetation Associations (18, 19, 20, 251, 389, 400, 416 and 483) all retain greater than 99 per cent pre-European vegetation (Government of Western Australia, 2013). This is significantly greater than the abovementioned 30 per cent threshold, therefore the application area is not within an extensively cleared area and is not considered a significant remnant.

Given the above the proposed clearing is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion*				
Murchison	28,120,587	28,044,823	99.73	7.7
Shire*				
Shire of Menzies	12,418,344	12,412,635	99.95	27
Beard Vegetation Association in Bioregion*				
18	12,403,172	12,363,252	99.68	5
19	28,120,587	28,044,823	99.73	7.77
20	1,174,259	1,171,631	99.78	15
251	162,897	162,663	99.86	17.4
389	493,978	492,089	99.62	5
400	190,823	189,665	99.39	0
416	16,286	16,286	100	16
483	238,598	238,567	99.9	11.3

Government of Western Australia (2013) *

Methodology References:
 -Government of Western Australia (2013)
 -Commonwealth of Australia (2001)

(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 at variance to this Principle**
 There are numerous minor non-perennial watercourses and wash areas in the local area. The applied area shown on Plan 6441/1(a) is crossed by a non-perennial watercourse and the applied area shown in Plan 6441/1(l) has a non-perennial watercourse running along the outside edge of its southern boundary.

Parks and Wildlife (2015) has advised that the vegetation within the applied areas is largely consistent with the broader habitat within the local area, with the exception of the vegetation growing in association of the streams and that alteration of the hydrology may result in impacts to vegetation downstream. Avoiding the clearing of riparian vegetation will assist in mitigating potential impacts to this watercourse.

Given the above the proposed clearing includes vegetation growing in association with a watercourse and therefore is at variance to this principle.

Methodology Reference:
- Parks and Wildlife (2015)

GIS Databases:
-Hydrography, linear
-Hydrography, hierachy

(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 at variance to this Principle**

The soils proposed to be cleared are lateritic gravels (Northcote et al 1960-1968) and clearing is unlikely to result in wind erosion. The soils would provide reasonable drainage in an area that has a low annual of rainfall 300 millimetres.

Given the above the proposed clearing is not likely to be at variance to this principle.

Methodology References:
-Northcote et al (1960-1968)

GIS Databases:
-Salinity, Statewide
-Soils, Statewide
-Topographic Contours, 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**

There is one conservation area within the local area (10 kilometre area) of the applied areas. The Mount Manning nature reserve is three kilometres south west of the applied area shown on Plan 6441/1(f) and five kilometres south west of the applied area shown on Plan 6441/1(g).

Given the distance to the nearest conservation area and considering that the applied area is in a highly vegetated area, it is unlikely that the proposed clearing will reduce any ecological linkage or cause weeds to spread in the conservation areas.

Given the above the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases:
-Parks and Wildlife 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 may be at variance to this Principle**

There are numerous minor non-perennial watercourses and wash areas in the local area. The applied area shown on Plan 6441/1(a) is crossed by a non-perennial watercourse and the applied area shown in Plan 6441/1(l) has a non-perennial watercourse just outside and running along the edge of its southern boundary. Clearing these areas will deteriorate surface water through increase sedimentation. Avoiding the clearing of the water courses and their riparian vegetation will assist in mitigating potential impacts to these watercourses.

The application areas are mapped as saline to brine, measuring 7000-35000 milligrams per litre, however, given that the clearing of the applied areas are in a highly vegetative area, the risk of increasing groundwater salinity in an already highly saline area, is low.

Given the above the proposed clearing may impact on surface water it may be at variance to this principle.

Methodology GIS Databases:
-Salinity, Statewide
-Topographic Contours, Statewide
-Rainfall, Mean Annual

(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

Flooding is unlikely to be an issue given the topography (gently undulating) of the applied areas and the low rainfall of the local region (300 millimetres per annum).

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

Methodology GIS Databases:
-Rainfall, Mean Annual

Planning instruments and other relevant matters.

Comments No submissions from the public have been received.

The application area is zoned 'rural/mining' under the town planning scheme.

The access to gravel is required by the Shire of Menzies (2015) for base material for road construction and maintenance.

The Kaparn People and the Maduwongga People native title claimants, their representatives and the Goldfields Land and Sea Council have been notified of the proposed clearing.

Methodology References:
-Shire of Menzies (2015)

GIS Databases:
-Town Planning Scheme Zones

4. Recommendation

Recommendation

The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and it has been concluded that the proposed clearing is at variance to principle (f), may be at variance to principle (i) and is not likely or not at variance to the remaining clearing principles.

5. References

- Parks and Wildlife (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed 27 March 2015
- Department of Parks and Wildlife (2015) Flora advice received for Clearing Permit Application CPS 6441/1 (DER Ref A886288)
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. 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.
- Shire of Menzies (2015) Application to clear (DER ref: A859625)