



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3871/1
Permit Holder:	Geoscience Australia
Duration of Permit:	9 October 2010 – 9 October 2015

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 construction of earth monitoring stations and access tracks.

2. Land on which clearing is to be done

LOT 92 ON DEPOSITED PLAN 238127 (NULLAGINE 6758)

3. Area of Clearing

The Permit Holder shall not clear more than 0.9 hectares of native vegetation within the combined areas shaded yellow on attached Plan 3871/1a and Plan 3871/1b and Plan 3871/1c and Plan 3871/1d and Plan 3871/1e and Plan 3871/1f and Plan 3871/1g.

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 power to clear native vegetation for those activities under the *Land Administration Act 1997* 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:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

8. Weed control

- (a) 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*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iii) 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 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*.

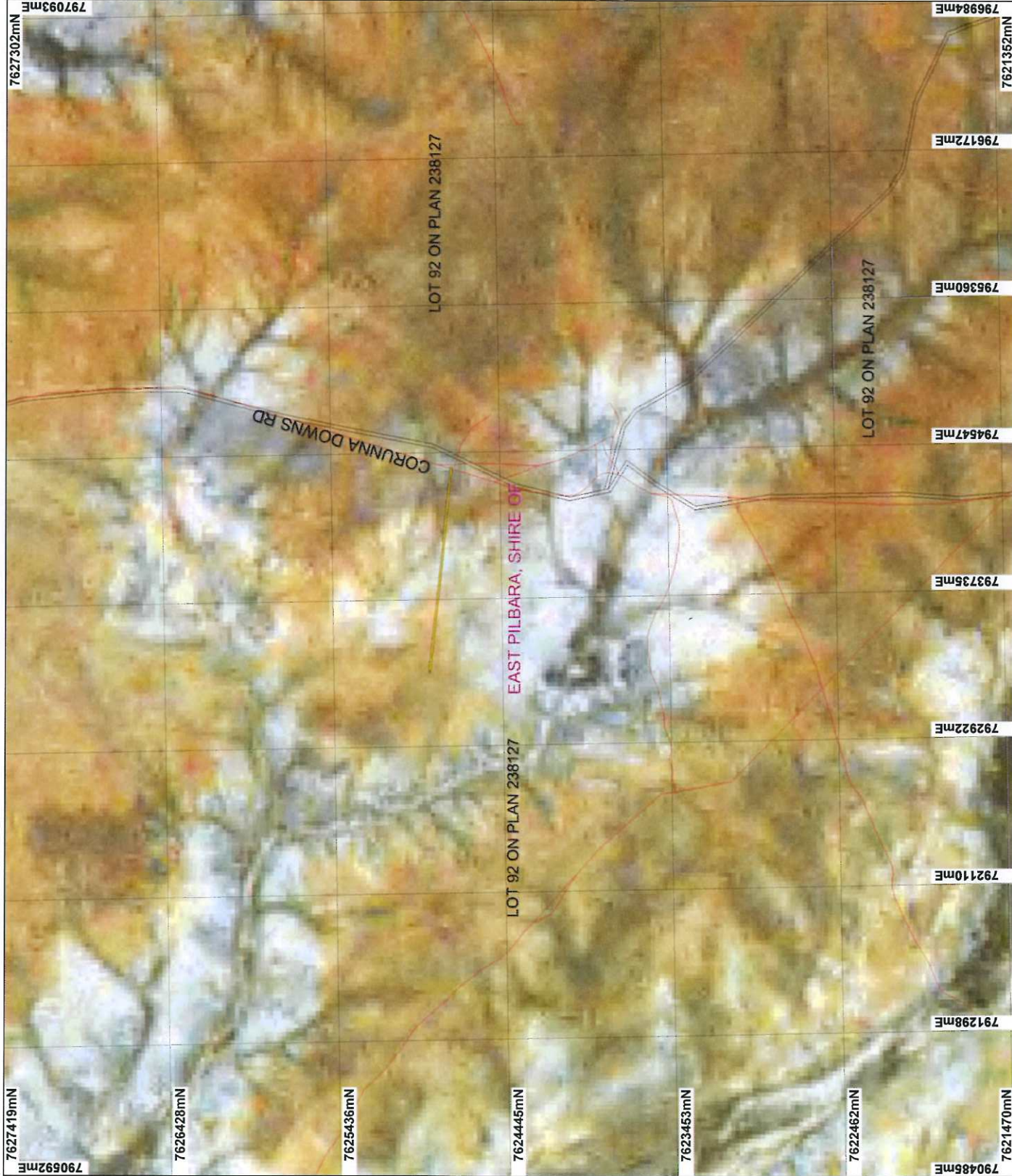


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

9 September 2010

Plan 3871/1a



LEGEND

- Western Australia L
ASCO 2006
- Cadastral for labelling
Clearing Instrument
- Areas Approved to Clear
- Road Centrelines
- Local Government



Scale 1:30000
(Approximate when reproduced at A4)

Geocentric Datum Australia 1984

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

K Faulkner Date: 9/9/10

K Faulkner

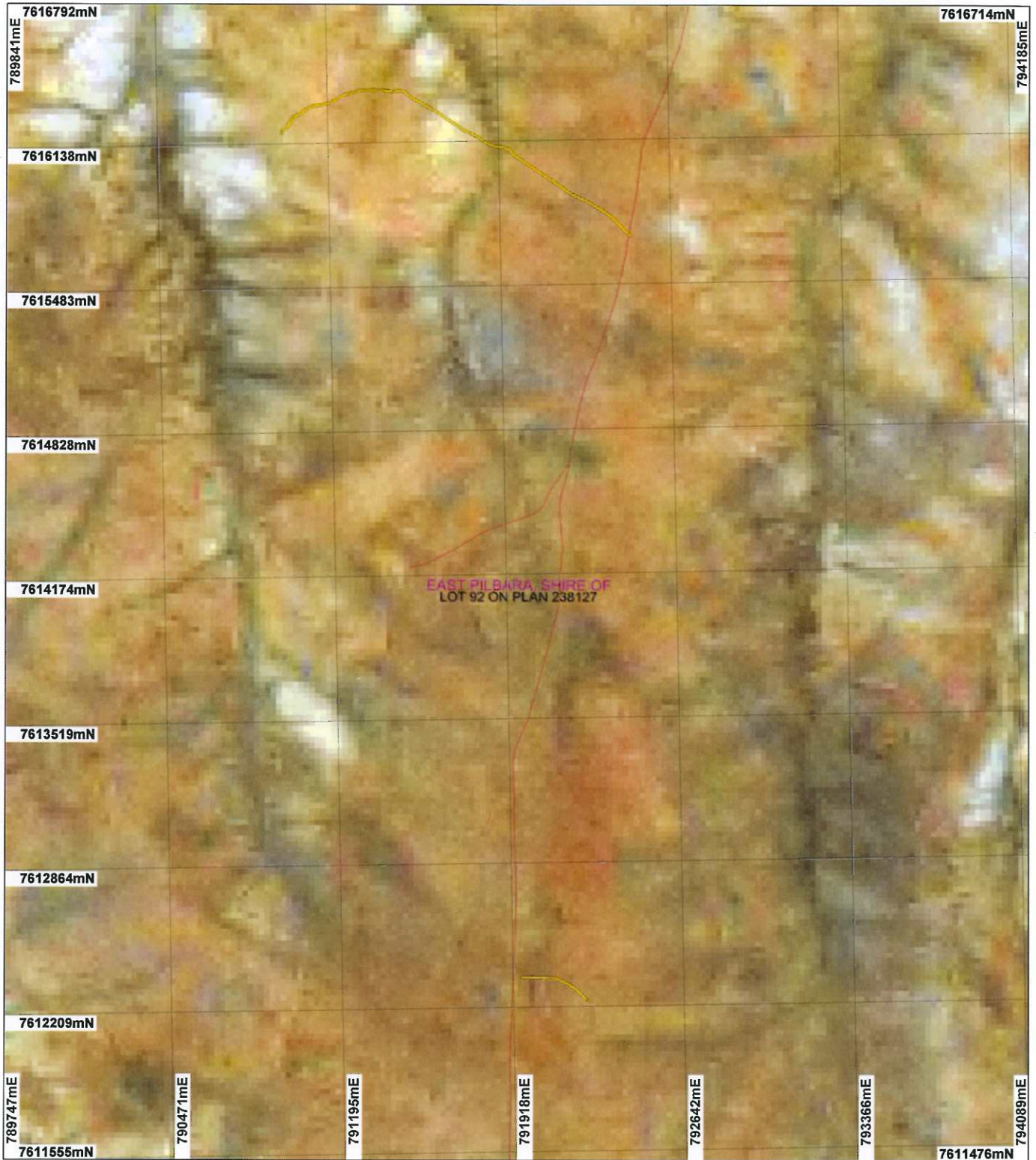
Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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 3871/1b



LEGEND

Western Australia Landsat
Mosaic 25m - AGO 2006
Cadastre for labelling

-  Road Centrelines
-  Local Government Authorities



0 625 m

Scale 1:24000

(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 9/9/00
K Faulkner

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

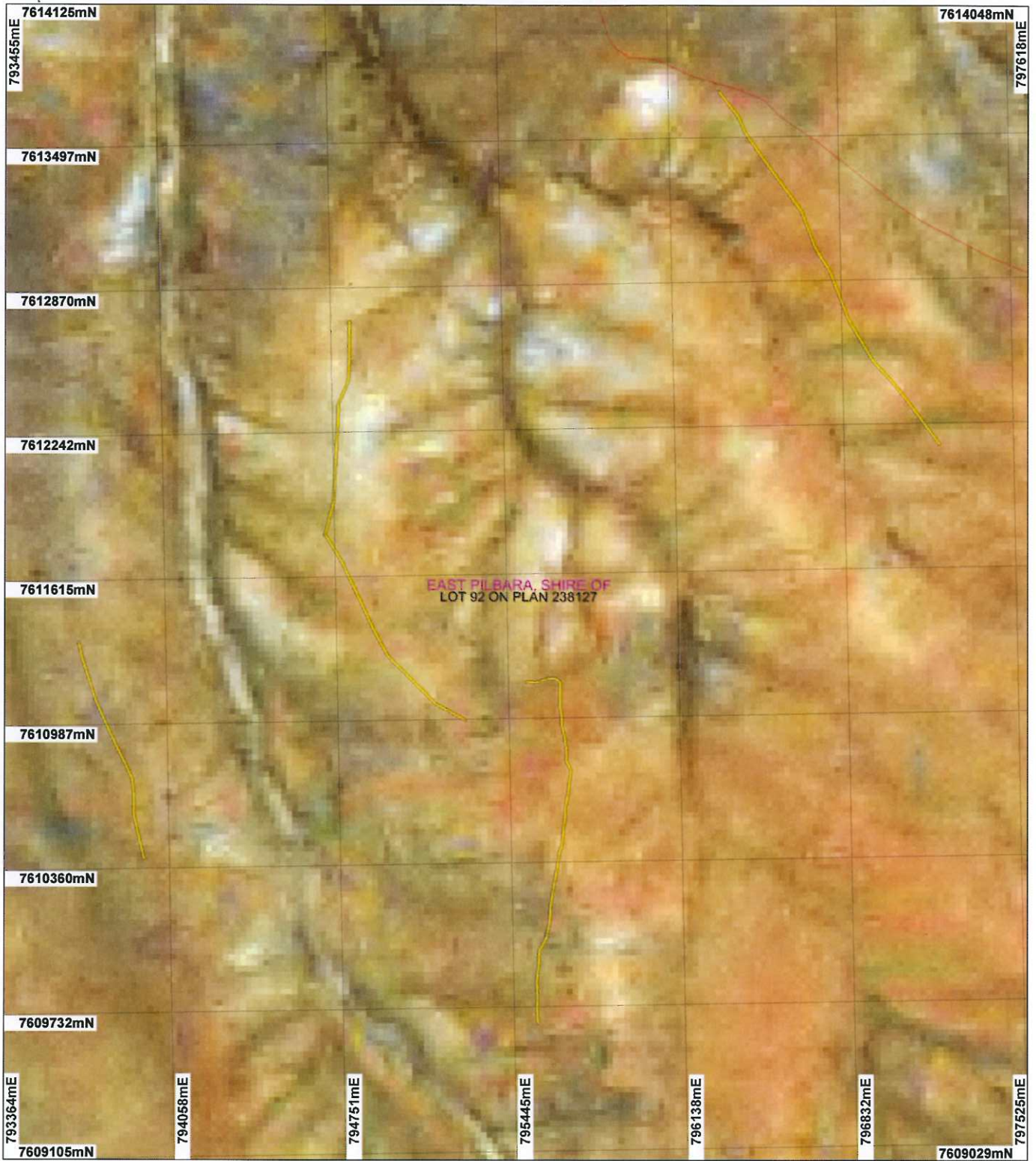
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Plan 3871/1c



LEGEND

Western Australia Landsat
Mosaic 25m - AGO 2006
Cadastre for labelling

-  Road Centrelines
-  Local Government Authorities



Geocentric Datum Australia 1994
Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

 Date 9/9/10
K Faulkner

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

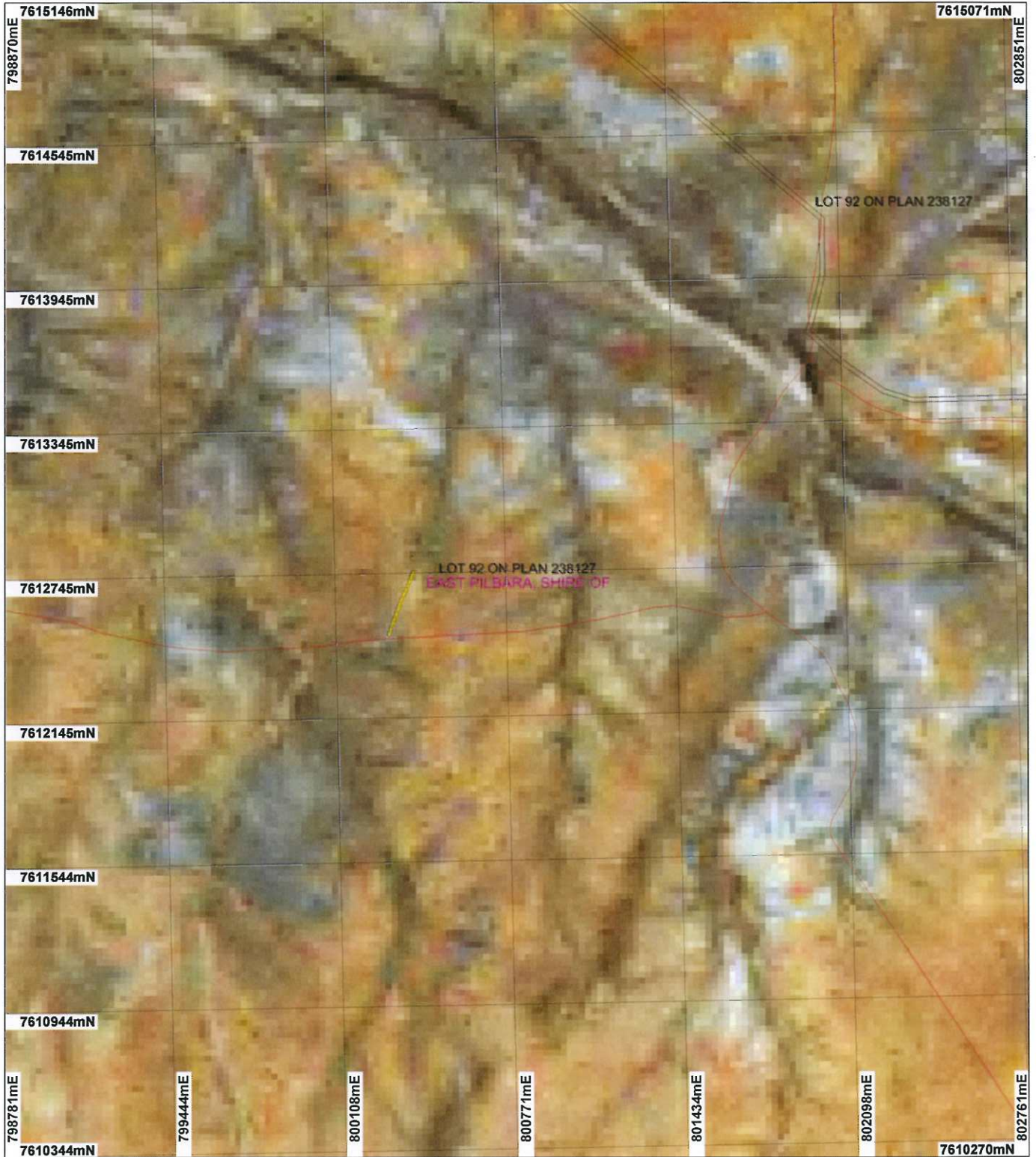
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Plan 3871/1d



LEGEND

Western Australia Landsat
Mosaic 25m - AGO 2006
Cadastre for labelling

-  Road Centrelines
-  Local Government Authorities



0  625 m

Scale 1:22000

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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 Date 9/9/10

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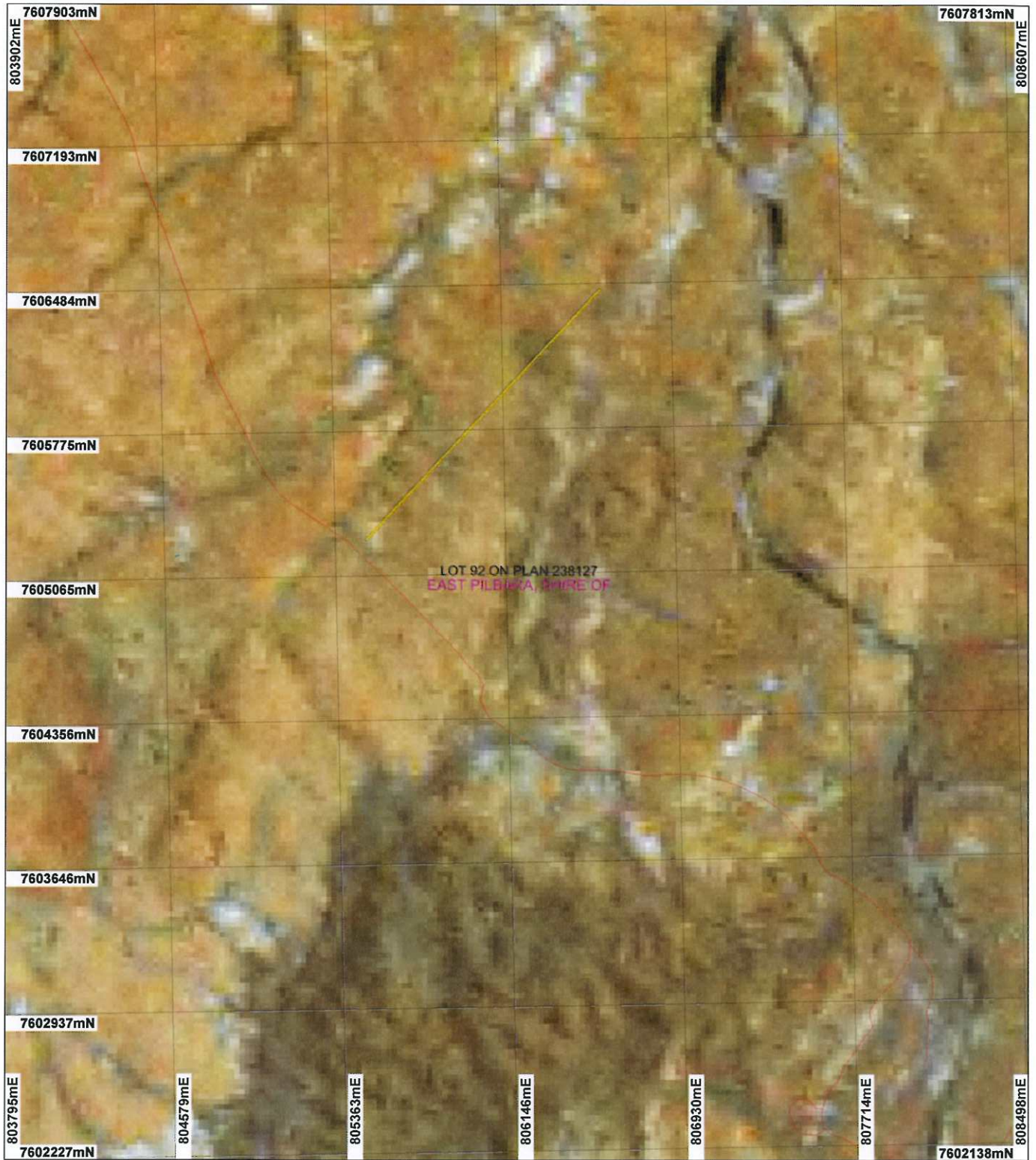
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Plan 3871/1e



LEGEND

Western Australia Landsat
Mosaic 25m - AGO 2006
Cadastral for labelling

— Road Centrelines
□ Local Government
Authorities



0 ————— ~750 m

Scale 1:26000
(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.

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the Environmental Protection Act 1986

Information derived from this map should be
confirmed with the data custodian acknowledged
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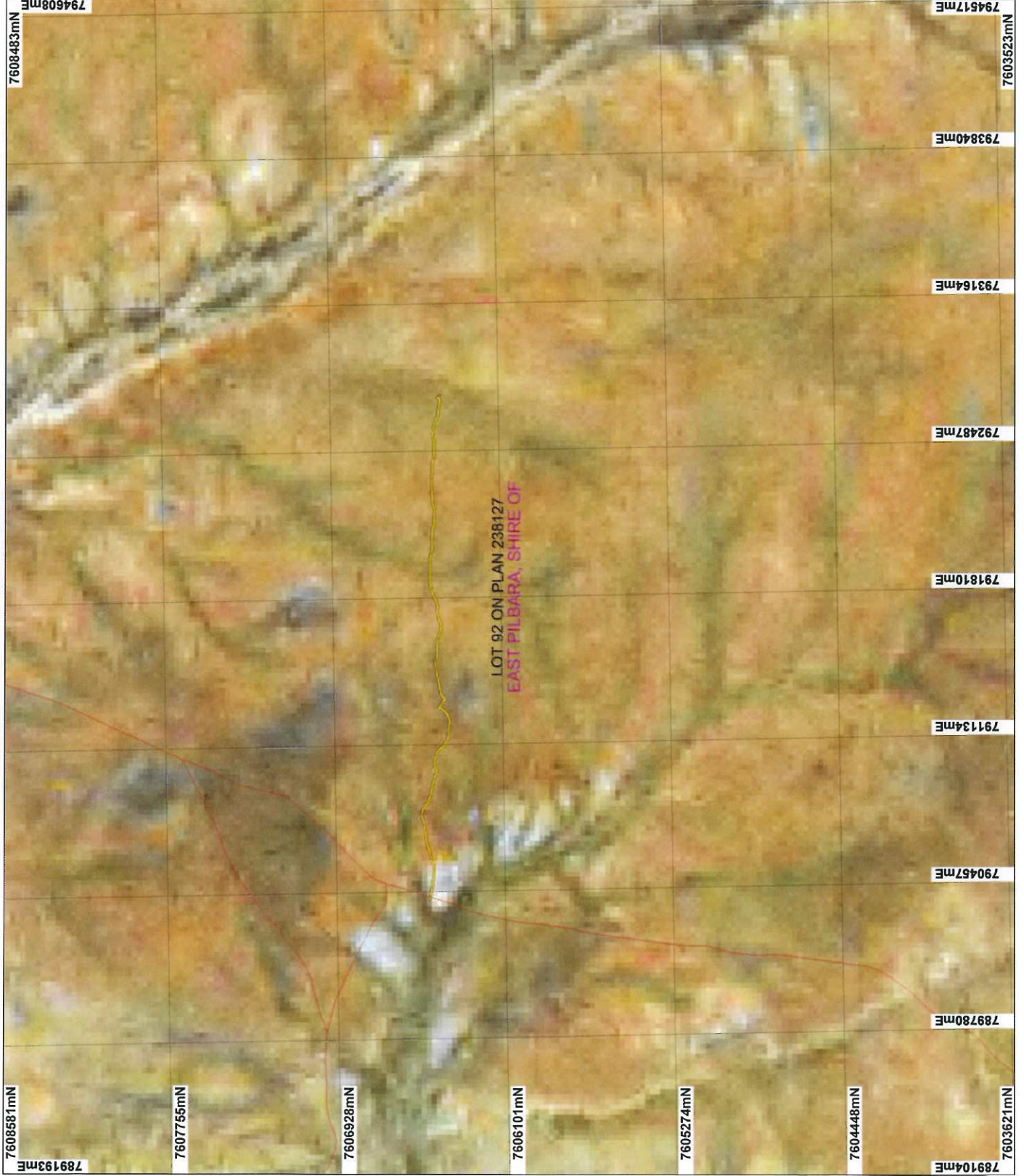


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Date 9/9/10

Plan 3871/1f



LEGEND

- Western Australia L
- AGPS 2006
- Cadastral for labelling
- Clearing Instrument
- Areas Approved to Clear
- Road Centrelines
- Local Government /



0 750 m

Scale 1:25000
(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.

K Faulkner Date **9/9/10**

K Faulkner

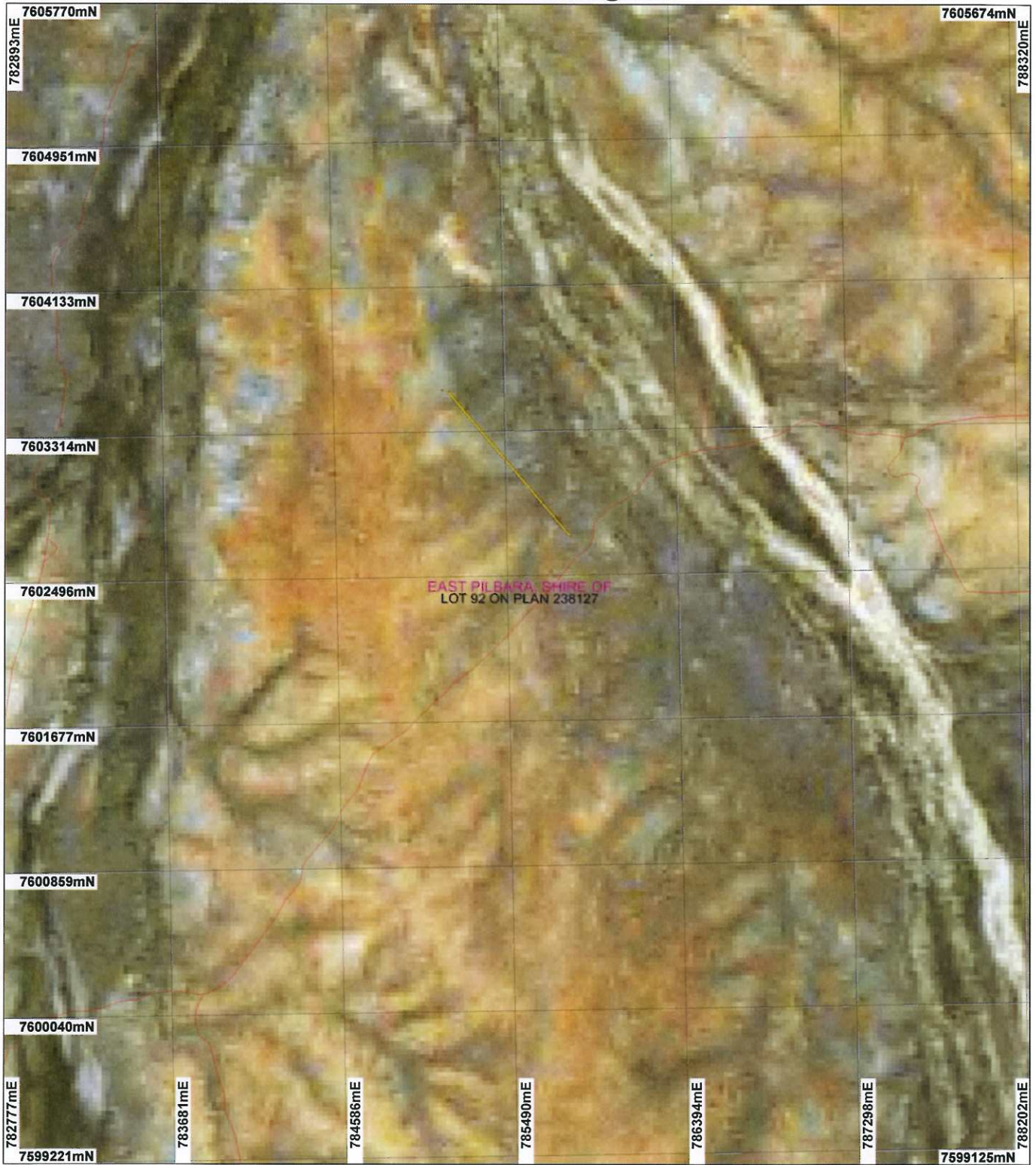
Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.

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Plan 3871/1g



LEGEND

Western Australia Landsat
Mosaic 25m - AGO 2006
Cadastre for labelling

— Road Centrelines
□ Local Government
Authorities



Scale 1:30000

(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.

K Faulkner Date 9/9/10

K Faulkner

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

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1. Application details

1.1. Permit application details

Permit application No.: 3871/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Geoscience Australia

1.3. Property details

Property: LOT 92 ON PLAN 238127 (NULLAGINE 6758)
Local Government Area: SHIRE OF EAST PILBARA

1.4. Application

Clearing Area (ha)	Method of Clearing	For the purpose of:
0.9	Mechanical Removal	Earth monitoring stations and access tracks

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 93 - Hummock grasslands, shrub steppe; kanji over soft spinifex (Hopkins et al, 2001).	The vegetation under application comprises 0.9ha of native vegetation in 'very good' (Keighery, 1994) or better condition with localised areas of disturbance associated with existing tracks. The area under application lies within the Corunna Downs Pastoral Lease and therefore may have also had some degradation to the vegetation as a result of grazing impacts.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Vegetation condition derived from mapping and aerial photography (Western Australia Landsat Mosaic 25m - AGO 2006).
Macroy land system - stony plains and occasional tor fields based on granite supporting hard and soft spinifex grasslands (Rangelands Land System Mapping).	As above.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	As above.
Granitic land system - rugged granitic hills supporting shrubby hard and soft spinifex grasslands (Rangelands Land System Mapping).	As above.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	As above.

3. Assessment of application against clearing principles

Comments

The proposal to clear up to 0.9 hectares of native vegetation for the purpose of the construction of earth monitoring stations and access tracks for a tsunami warning system is unlikely to have significant environmental impacts.

The vegetation is considered to be in a 'very good' (Keighery, 1994) condition or better with localised degraded areas attributed to existing tracks and has been mapped as the Beard Vegetation Association 93 - hummock grasslands, shrub steppe; kanji over soft spinifex (Hopkins et al, 2001).

The vegetation to be cleared is well represented in the local area (Shepherd, 2009), and given the scale of the proposed clearing is unlikely to have a detrimental impact on fauna.

The most eastern portion of the area under application lies within the buffer of a priority 3 ecological community (PEC), the 'stony saline clay plains of the Mosquito Land System.' This community lies within a different mapped land system and vegetation type to the areas under application, with mapped occurrences being approx. 19.5km away and therefore is unlikely to have any affinities with this ecological community. Given the scale and scattered nature of the proposed clearing it is also unlikely to impact upon this PEC.

Nine priority flora species have been recorded within the local area (50km radius) of the applied clearing area and mapped within the same vegetation and soil types to the areas under application, with the closest record being *Acacia* sp. Nullagine (Priority 1) approx. 3.5km away. Although there is the potential for priority species to inhabit the applied clearing areas, it is unlikely that given the scale of the applied clearing (0.9ha over eleven small linear areas) that the clearing will significantly impact upon the conservation status of these species.

There is one minor, non-perennial watercourse mapped as crossing the most northern area under application however, the applicant has advised that there is no indication on site that they will interfere with any watercourses and that the applicant has chosen more upland areas to ensure that the monitoring stations are not inundated. Given the scale of the proposed clearing and the nature of the vegetation in this area it is unlikely that the proposal will significantly impact upon riparian vegetation or watercourses.

Given the clearing consists of a total of 0.9ha of native vegetation over eleven small linear areas and high vegetation representation of surrounding vegetation, it is unlikely the proposal will be considered as significant fauna and flora habitat; impacting on conservation areas; or causing or exacerbating land degradation, water quality or flooding.

- Methodology** References:
- Hopkins et al (2001)
 - Keighery (1994)
 - Shepherd (2009)
- GIS Databases:
- DEC Tenure - DEC
 - Hydrography, linear - DoW
 - IBRA Australia - DEH
 - Local Government Authorities – DOLA
 - Pre-European Vegetation - DA
 - Rangeland Land System Mapping - AgWA
 - SAC Biodatasets, DEC - Accessed 19/8/2010
 - Western Australia Landsat Mosaic 25m - AGO 2006

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

Comments

The property lies within the bounds of the Corunna Downs Station Pastoral Lease.

The Department of Regional Development and Lands (2010) as the owner of State Land in WA, has agreed to the limited clearing for the purposes of establishing tsunami warning infrastructure within the Corunna Downs Pastoral Station.

Due to the site being within Crown Land, notification of the proposal was given by DEC as required by Section 24MC of the Native Title Act 1993 to the claimants and representative body of the land on the 6 August 2010.

The area under application lies within the Pilbara River and Tributaries Area and Pilbara Groundwater Area managed under the Rights in Water and Irrigation Act 1914 administered by the Department of Water. Any abstraction of groundwater or interference with beds and banks of a watercourse require approvals from the Department of Water. The applicant has advised that no abstraction of groundwater, dewatering or interference with watercourses is required as a result of the proposal (Geoscience Australia, 2010).

- Methodology** References:
- DORDAL (2010)
 - Geoscience Australia (2010)
- GIS Databases:
- RiWI Act, Areas - DoW
 - RiWI Act, Groundwater Areas - DoW
 - Native Title Claims - DOLA

4. References

- DORDAL (2010) Application by Geoscience Australia for Clearing Permit, Tsunami Warning System - Corunna Downs. Department of Regional Development and Lands, Midland, Western Australia. DEC ref A321914.
- Geoscience Australia (2010) Email correspondence: CPS 3871/1 - Geoscience Australia, Lot 92 on Deposited Plan 238127, Nullagine, Corunna Downs Pastoral Station, Information regarding water approvals. Geoscience Australia, Canberra, Australian Capital Territory. DEC ref A329378.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMSscience 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
AgWA	Agriculture WA (now DAFWA)
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now DEC)
DA	Department of Agriculture (now DAFWA)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEH	Department of Environment and Heritage (now DEWHA)
DEP	Department of Environmental Protection (now DEC)
DEWHA	Department of Environment, Water, Heritage and the Arts
DLI	Department of Land Information
DoE	Department of Environment
DoIR	Department of Industry and Resources
DOLA	Department of Land Administration (now DLI)
DoW	Department of Water
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)