



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4011/2
Permit Holder:	West Australian Land Authority trading as LandCorp
Duration of Permit:	25 December 2010 – 25 December 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 geotechnical investigations

2. Land on which clearing is to be done

Lot 301 on Plan 45656 (ROEBUCK 6725)

3. Area of Clearing

The Permit Holder must not clear more than 2 hectares of native vegetation within the area cross hatched yellow on attached Plan 4011/2.

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

(a) 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.

(b) The Permit Holder shall not clear any native vegetation after 7 November 2012.

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. 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) At an optimal time within 12 months following completion of geotechnical investigations, *revegetate* and *rehabilitate* areas not required for future scheduled and approved development by:
 - (i) ripping the ground on the contour to remove soil compaction; and
 - (ii) laying the vegetative material and topsoil retained under condition 7(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 7(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 7(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.

PART III - RECORD KEEPING AND REPORTING

8. Records must be kept

The Permit Holder must maintain the following records for activities done in relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 7 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*.

9. 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 8 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 25 September 2015, the Permit Holder must provide to the CEO a written report of records required under condition 8 of this Permit where these records have not already been provided under condition 9(a) (reporting condition) 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;

local provenance means native vegetation seeds and propagating material from natural sources within 50 kilometres of the area cleared;

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; and

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

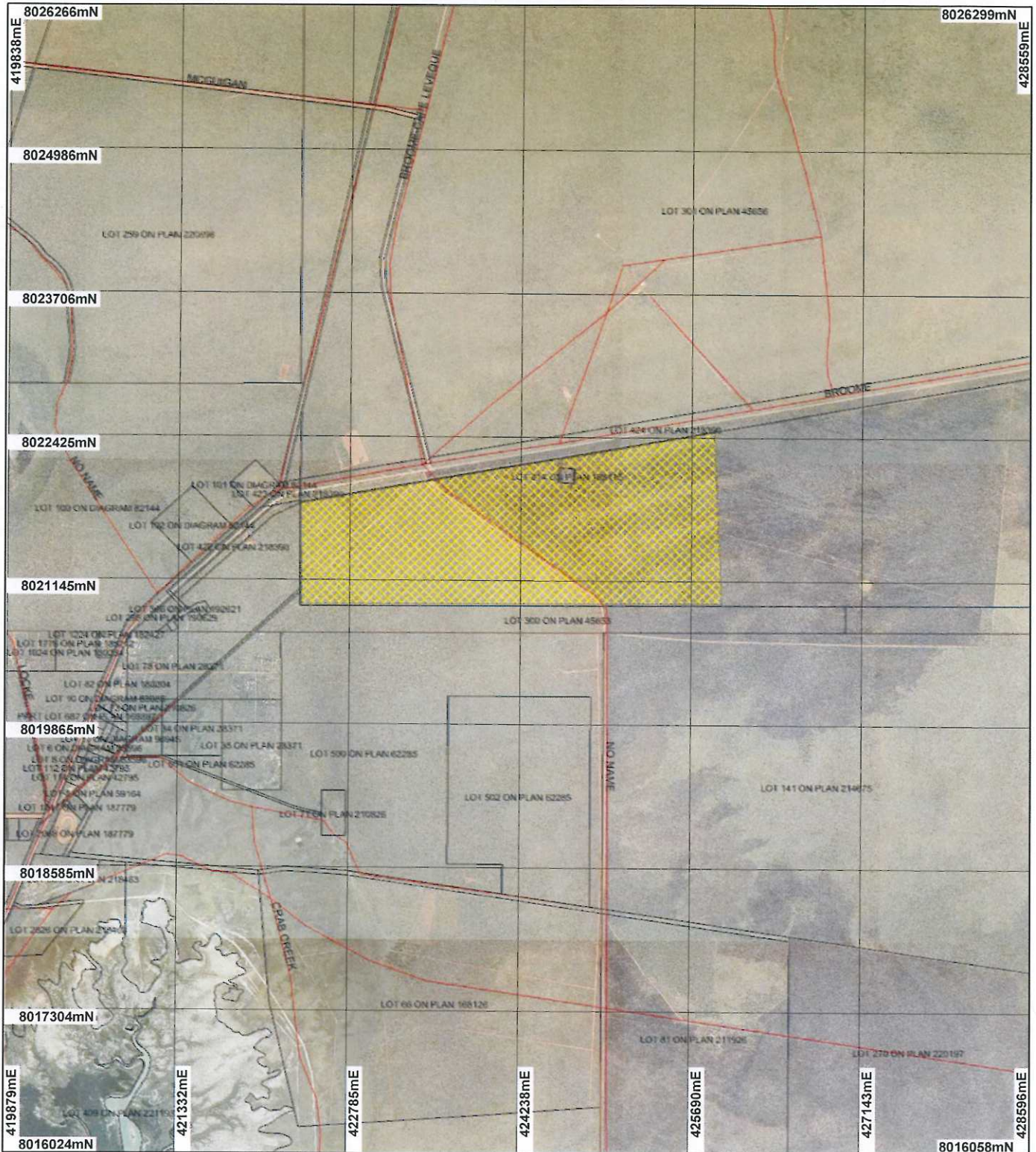


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

10 February 2011

Plan 4011/2



LEGEND

- Clearing Instruments**
-  Areas Approved to Clear
 -  Road Centrelines
 -  Cadastre
 -  Broome 50cm Orthomosaic - Landgate 2000

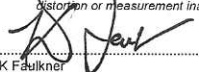


0  1.25 km

Scale 1:47554
(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 10/2/16
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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1. Application details

1.1. Permit application details

Permit application No.: 4011/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Western Australian Land Authority TA LandCorp

1.3. Property details

Property: LOT 301 ON PLAN 45656 (ROEBUCK 6725)
Local Government Area:
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2		Mechanical Removal	Geotechnical investigations
		Mechanical Removal	Geotechnical investigations

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 February 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
Mapped vegetation association 750 is described as shrublands, pindan; <i>Acacia tumida</i> shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (Shepherd, 2009).	The proposal is to clear 2 hectares of vegetation for the purpose of geotechnical investigation. Vegetation can be classified as Pindan or Pindan Woodland, with both vegetation types dominated by <i>Acacia</i> species. Pindan is a shrubland with areas of <i>Acacia</i> thickets; while Pindan woodland also has an emergent tree layer, specifically of eucalyptus and grevillea species, <i>Gyrocarpus americanus</i> , <i>Erythrophloeum chlorostachys</i> , <i>Bauhinia cunninghamii</i> , <i>Adansonia gregorii</i> , <i>Buchanania obovata</i> and <i>Terminalia canescens</i> (Wheeler et al., 1992 from GDH, 2010).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the vegetation under application was determined via digital imagery (Broome 50cm Orthomosaic - Landgate 2000) and through a Preliminary Environmental Impact Assessment and Biological Survey report provided by the applicant (GHD, 2010).

3. Assessment of application against clearing principles

Comments

Amendment of Clearing Permit CPS4011/1 was to fix an administrative error in relation to Revegetation condition on the permit.

The proposal is to clear 2 hectares of native vegetation within Lot 301 on Plan 45656 (Reserve 25716), Roebuck, for the purpose of geotechnical investigations.

The area under application has been described as having a moderate to high flora species diversity with 173 taxa from 47 families (GDH, 2010).

The area under application falls within mapped Beard vegetation association 750 which has approximately 99.82 per cent (being 1 229 175.85 hectares) of its pre-clearing extent remaining within the Dampier land bioregion (Shepherd, 2009).

Numerous fauna species of conservation significance were recorded within the local area (20km radius). A fauna survey conducted over the project area by GDH (2010) identified two potential Bilby burrows. Two priority 4 fauna species were also identified; the bush stone-curlew (*Burhinus grallarius*) and Australian Bustard (*Ardeotis australis*). The area under application therefore contains suitable habitat for fauna of conservation significance. However given the availability of suitable habitat in the local area the area under application is not considered to be significant habitat for fauna indigenous to Western Australia.

Three priority flora species, *Glycine pindanica* (P1), *Pterocaulon* sp. A Kimberley Flora (B.J. Carter 599) (P2) and *Nicotiana heterantha* (P1), have been recorded on the boundary of the property under application and within close proximity (500m to 1.3km) to the area under application. A Level 2 flora and vegetation survey (GDH, 2010) was carried out over the application area and identified *Glycine pindanica* (P1); *Pterocaulon* sp. A Kimberley Flora (B.J. Carter 599) (P2); and *Eriachne semiciliata* (P3).

Pterocaulon sp. A Kimberley Flora has a widespread distribution across the Kimberley coast and extends into the Pilbara region. *Eriachne semiciliata* is now known as *Eriachne* sp. Dampier Peninsula (K.F. Kenneally 5946) P3 and is known from Beagle Bay vicinity to One Arm Point and two separate islands. The conservation status of these species are unlikely to be significantly effected by the proposed clearing. *Glycine pindanica* is known from at least 6 separate locations from Beagle Bay to Broome and along the Cape Leveque Rd. *Glycine pindanica* was only found in one quadrat and in very low density (cover of <1). Given the proposed clearing may only potentially clear a single identified location of very low numbers, the proposed clearing is unlikely to significantly affect the conservation status of this taxon.

The area under application falls within the buffer zone of a threatened ecological community (TEC): Roebuck Bay mudflats - species rich faunal community of the intertidal mudflats of Roebuck Bay. The closest known occurrence of this TEC is 2.8km south from the application area. Supporting information provided by the applicant (GDH, 2010) states that the habitat of the study area does not match that which supports the known TECs and no TECs or PECs were identified as being present on the site during the field survey.

The assessment identified that the proposed clearing is not likely to significantly impact any biodiversity, land degradation, or environmental water values within the local or regional context.

Therefore, the clearing as proposed is not likely to be at variance to any of the clearing principles.

Methodology

References:

- GDH (2010)
- Shepherd (2009)

GIS database:

- Broome 50cm Orthomosaic - Landgate 2000
- Hedde Vegetation Complexes - DEP 22/06/95
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 20 October 2010
- Soils, Statewide DA 11/99

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

Comments

Amendment of Clearing Permit CPS4011/1 was to fix an administrative error in relation to Revegetation condition on the permit.

The applicant has a licence, pursuant to section 91 of the Land Administration Act 1997 from Department of Regional Development and Lands to access the land (Licence No. Lic 01446/1960_2_108). Expiry 7 November 2012.

The area under application falls within an area covered by the Rights in Water and Irrigation Act 1914 and the north eastern corner of the property under application falls within a Priority 3 Public Drinking Water Source Area. The Department of Water (2010) have advised they have no objections to the proposed clearing for geotechnical investigations and have offered the following advice:

* Portions of the subject area are located within the Priority 3 area of the Broome Drinking Water Source Protection Area. The exploration activities and decommissioning must not affect the quality of public drinking water supply sources. It should be ensured that adequate water quality protection measures (i.e. management of machinery, secure fuel supplies etc) are implemented during construction and rehabilitation.

* Best practice guidelines such as the Land and Water Biodiversity Committee publication Minimum construction requirements for water bores in Australia - National Minimum Bore Specifications Committee 2003, should be applied.

* Bores that are not being cased and developed, must be effectively sealed to prevent interchange of water between aquifers/uncontrolled surface water intrusion.

* Any drilling wastes and materials that have the potential to contaminate water resources within Public Drinking Water Source Areas should be appropriately disposed.

* The applicant is responsible for the immediate clean up at own expense of any spillage of fuel or other polluting substances that may contaminate water resources.

* The applicant is requested to document and provide to the Department of Water the technical information gathered, such as bore logs and soil profiles.

* Clearing of vegetation should be minimised to avoid any adverse impacts on the Broome Town Water Supply and appropriate rehabilitation of disturbed areas should be undertaken. More information regarding rehabilitation is available in the Water Quality Protection Note, Rehabilitation of disturbed land in public drinking water source areas available on the Department of Water website at: www.water.wa.90v.au > select Publications> Find a Publication> Series Browse Water Quality Protection Notes

* If the applicant wishes to drill bores for the purpose of 'Taking Water' an application needs to be made to the Department of Water. Under section 26D of the Rights in Water and Irrigation Act, 1914 the alteration of an existing bore and/or the construction of a new bore is required to be licensed.

Methodology

References:

DoW (2010)

GIS database:

- RIWI Act, Groundwater Areas - DoW 13/07/06
- RIWI Act, Irrigation Districts - DoW 13/07/06
- Town Planning Scheme Zones - MFP 31/08/98
- Public Drinking Water Source Areas (PDWSAs) ? 07/02/06

4. References

- GDH (2010) LandCorp, Report for Broome Road Industrial Area. Preliminary Environmental Impact Assessment and Biological Survey, August 2010 (DEC Ref: A337395).
- 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.
- Wheeler, J. R., Rye, B. L., Koch, B. L. and Wilson, A. J. G. (1992) Flora of the Kimberley Region. Western Australian Herbarium, Department of Conservation and Land Management, Western Australia.

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)