



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 3961/4
<b>Permit Holder:</b>	Karara Mining Limited
<b>Duration of Permit:</b>	11 December 2010 – 11 December 2020

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 constructing a transmission line.

#### 2. Land on which clearing is to be done

LOT 10246 ON PLAN 206717 (ENEABBA 6518)  
LOT 10842 ON PLAN 210815 (ENEABBA 6518)  
LOT 10488 ON PLAN 208223 (ENEABBA 6518)  
LOT 10890 ON PLAN 210786 (ENEABBA 6518)  
LOT 2 ON PLAN 22567 (ENEABBA 6518)  
LOT 10893 ON PLAN 210804 (KADATHINNI 6519)  
LOT 10897 ON PLAN 210818 (KADATHINNI 6519)  
LOT 201 ON DIAGRAM 74650 (KADATHINNI 6519)  
LOT 10433 ON PLAN 207347 (KADATHINNI 6519)  
LOT 4586 ON PLAN 136992 (KADATHINNI 6519)  
LOT 8031 ON PLAN 149613 (KADATHINNI 6519)  
PART LOT 5283 ON PLAN 139408 (KADATHINNI 6519)  
LOT 4212 ON PLAN 136982 (KADATHINNI 6519)  
LOT 11 ON PLAN 231998 (KADATHINNI 6519)  
LOT 50 ON DIAGRAM 7478 (WOMARDEN 6519)  
LOT M764 ON PLAN 3086 (WOMARDEN 6519)  
LOT M763 ON PLAN 3086 (WOMARDEN 6519)  
LOT M762 ON PLAN 3086 (WOMARDEN 6519)  
LOT M761 ON PLAN 3086 (WOMARDEN 6519)  
LOT 3 ON PLAN 4578 (WOMARDEN 6519)  
LOT M1369 ON DIAGRAM 5877 (WOMARDEN 6519)  
LOT 1 ON PLAN 7190 (PERENJORI 6620)  
LOT M1586 ON DIAGRAM 6969 (BOWGADA 6623)  
LOT 5485 ON PLAN 82618 (BOWGADA 6623)  
LOT M1554 ON DIAGRAM 6856 (BOWGADA 6623)  
LOT 5593 ON PLAN 138910 (BOWGADA 6623)  
LOT 7418 ON PLAN 201958 (BOWGADA 6623)  
LOT 6316 ON PLAN 226642 (BOWGADA 6623)  
LOT 7652 ON PLAN 150615 (KOOLANOOKA 6623)  
LOT 7684 ON PLAN 202082 (KOOLANOOKA 6623)  
LOT 7876 ON PLAN 202083 (KOOLANOOKA 6623)

LOT 4608 ON PLAN 136994 (KADATHINNI 6519)  
LOT 8637 ON PLAN 152179 (KADATHINNI 6519)  
LOT 5282 ON PLAN 139407 (KADATHINNI 6519)  
LOT 16 ON PLAN 231998 (KADATHINNI 6519)  
LOT 8903 ON PLAN 204618 (KADATHINNI 6519)  
LOT 4213 ON PLAN 136983 (KADATHINNI 6519)  
LOT 3 ON PLAN 4578 (WOMARDEN 6519)  
LOT 5485 ON PLAN 82618 (BOWGADA 6623)  
LOT 4459 ON PLAN 143563 (BOWGADA 6623)  
LOT 1 ON DIAGRAM 23570 (BOWGADA 6623)  
LOT 6954 ON PLAN 82617 (BOWGADA 6623)  
LOT 7812 ON PLAN 150616 (KOOLANOOKA 6623)  
LOT 7684 ON PLAN 202082 (KOOLANOOKA 6623)  
LOT 7876 ON PLAN 202083 (KOOLANOOKA 6623)  
LOT M1255 ON DIAGRAM 5355 (PERENJORI 6620)  
LOT 10832 ON PLAN 210805 (WARRADARGE 6518)  
LOT 10831 ON PLAN 210805 (WARRADARGE 6518)

**3. Area of Clearing**

The Permit Holder must not clear more than 16.7 hectares of native vegetation within the combined areas shaded yellow on attached Plan 3961/4a and Plan 3961/4b and Plan 3961/4c and Plan 3961/4d and Plan 3961/4e.

**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*, *Mining Act 1978* or any other written law.

**6. Compliance with Assessment Sequence and Management Procedures**

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

**PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES**

**7. Avoid, minimise etc clearing**

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

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

**8. Environmental management plan**

- (a) The Permit Holder must prepare, implement and adhere to a fauna impact and threatened ecological community *EMP*.
- (b) The *EMP* must include:
  - (i) an Environmental Risk Assessment;
  - (ii) a plan for managing the *impacts* to fauna habitat and threatened ecological community;
  - (iii) a table setting out the Permit Holder's commitments to the *EMP*'s requirements; and
  - (iv) a program for monitoring compliance with the Permit Holder's commitments.

- (c) Once the Permit Holder has developed an *EMP*, the Permit Holder must provide that *EMP* to the CEO for the CEO's approval. The clearing to which the *EMP* relates and the implementation of the *EMP* shall not take place until the Permit Holder receives approval from the CEO.

#### 9. Dieback and 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* and *dieback*:
  - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
  - (ii) shall only move soil in *dry conditions*;
  - (iii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
  - (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

#### 10. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the area shall be inspected by a *fauna specialist* for the presence of *Kwonkan* sp spider mounds.
- (b) Where *Kwonkan* sp spider mounds are identified in relation to condition 10(a) of this Permit, the Permit Holder shall ensure that no clearing occurs within 50 metres of the identified *Kwonkan* sp spider mound.

#### 11. 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 three months following clearing authorised under this permit, *revegetate* and *rehabilitate* areas 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 ground on the contour to remove soil compaction; and
  - (iii) laying the vegetative material and topsoil retained under condition 11(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 11(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 11(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.

#### 12. Offsets

If part or all of the clearing to be done is or may be at variance with one or more of the clearing principles, then the Permit Holder must implement an *offset* in accordance with conditions 12(a) and (b) of this Permit with respect to that clearing.

- (a) Determination of *offsets*:
  - (i) in determining the *offset* to be implemented with respect to a particular area of native vegetation proposed to be cleared under this Permit, the Permit Holder must have regard to the *offset* principles contained in condition 12(b) of this Permit;
  - (ii) once the Permit Holder has developed an *offset proposal*, the Permit Holder must provide that *offset proposal* to the CEO for the CEO's approval prior to undertaking any clearing to which the *offset* relates, and prior to implementing the *offset*;

- (iii) clearing may not commence until and unless the CEO has approved the *offset proposal* to which the clearing relates;
  - (iv) the Permit Holder shall implement the *offset proposal* approved under condition 12(a)(iii); and
  - (v) each *offset proposal* shall include a *direct offset*, timing for implementation of the *offset proposal* and may additionally include *contributing offsets*.
- (b) For the purpose of this condition, the *offset* principles are as follows:
- (i) *direct offsets* should directly counterbalance the loss of the native vegetation;
  - (ii) *contributing offsets* should complement and enhance the *direct offset*;
  - (iii) *offsets* are implemented only once all avenues to avoid, minimise, rectify or reduce environmental impacts have been exhausted;
  - (iv) the environmental values, habitat, species, *ecological community*, physical area, ecosystem, landscape, and hydrology of the *offset* should be the same as, or better than, that of the area of native vegetation being *offset*;
  - (v) a ratio greater than 1:1 should be applied to the size of the area of native vegetation that is offset to compensate for the risk that the *offset* may fail;
  - (vi) *offsets* must entail a robust and consistent assessment process;
  - (vii) in determining an appropriate *offset*, consideration should be given to ecosystem function, rarity and type of *ecological community*, vegetation *condition*, habitat quality and area of native vegetation cleared;
  - (viii) the *offset* should either result in no net loss of native vegetation, or lead to a net gain in native vegetation and improve the *condition* of the natural environment;
  - (ix) *offsets* must satisfy all statutory requirements;
  - (x) *offsets* must be clearly defined, documented and audited;
  - (xi) *offsets* must ensure a long-term (10-30 year) benefit; and
  - (xii) an *environmental specialist* must be involved in the design, assessment and monitoring of *offsets*.

### **PART III - RECORD KEEPING AND REPORTING**

#### **13. 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;
  - (iii) the date that the area was cleared; and
  - (iv) the size of the area cleared (in hectares).
- (b) In relation to the environmental management plan pursuant to condition 8, a description of the environmental management plan activities undertaken, in accordance with that environmental management plan.
- (c) In relation to fauna management pursuant to condition 10 of this Permit, the location of each *Kwonkan* sp spider mound recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings
- (d) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 11 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*.

- (e) In relation to the *offset* of areas pursuant to condition 12 of this Permit:
  - (i) the location of any area of *offsets*, 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 *offset* activities undertaken; and
  - (iii) the size of the *offset* area (in hectares).

#### 14. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 13 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 11 October 2020, the Permit Holder must provide to the CEO a written report of records required under condition 13 of this Permit where these records have not already been provided under condition 14(a) of this Permit.

#### DEFINITIONS

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

***condition*** means the rating given to native vegetation using the *Keighery scale* and refers to the degree of change in the structure, density and species present in the particular vegetation in comparison to undisturbed vegetation of the same type;

***contributing offset/s*** has the same meaning as is given to that term in the Environmental Protection Authority's *Position Statement No.9: Environmental Offsets*, January 2006;

***dieback*** means the effect of *Phytophthora* species on native vegetation;

***direct offset/s*** has the same meaning as is given to that term in the Environmental Protection Authority's *Position Statement No.9: Environmental Offsets*, January 2006;

***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;

***ecological community/ies*** means a naturally occurring biological assemblage that occurs in a particular type of habitat (English and Blythe, 1997; 1999);

***EMP*** means environmental management plan;

***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;

***fauna specialist*** means a person who holds a tertiary qualification specializing in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the CEO as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the Wildlife Conservation Act 1950;

***fill*** means material used to increase the ground level, or fill a hollow;

***Keighery scale*** means the vegetation condition scale described in *Bushland Plant Survey: A Guide to Plant Community Survey for the Community (1994)* as developed by B.J. Keighery and published by the Wildflower Society of WA (Inc), Nedlands, Western Australia;

***impacts*** means any impact of clearing on environmental values;

***local provenance*** means native vegetation seeds and propagating material from natural sources within 50 kilometres of the area cleared and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared;

*offset/s* means an offset required to be implemented under condition 12 of this Permit;

*offset proposal* means an *offset* determined by the Permit Holder in accordance with condition 12 of this Permit;

*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; 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.

*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 Rankings 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*

24 September 2015

# Plan 3961/4a



## Legend

-  LGA
-  Areas approved to clear
-  Roads
-  Cadastre
- Virtual Mosaic (LGATE-V001)



1:100,000

MGA 94  
Geocentric Datum of Australia 1994

*M Warnock* Date *24/9/15*  
M Warnock

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

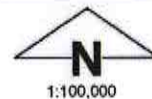


# Plan 3961/4b



## Legend

-  LGA
  -  Areas approved to clear
  -  Roads
  -  Cadastre
- Virtual Mosaic (LGATE-V001)



1:100,000

MGA94  
Geocentric Datum of Australia 1994

*M Warnock* Date 24/9/15  
M Warnock

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









# Plan 3961/4c



## Legend

-  LGA
  -  Areas approved to clear
  -  Roads
  -  Cadastre
- Virtual Mosaic (LGATE-V001)



1:100,000

MGA94  
Geocentric Datum of Australia 1994

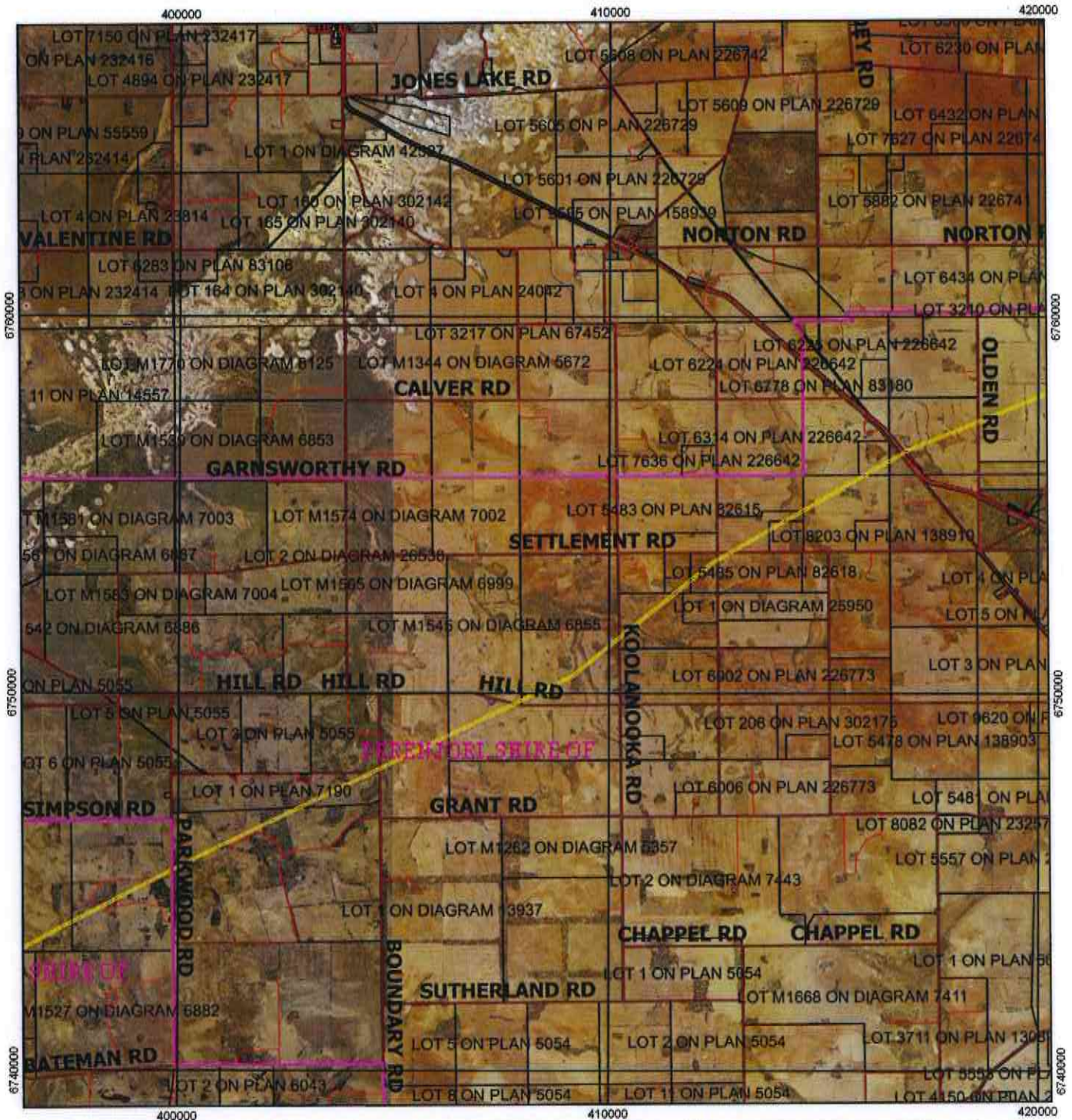
*M Warnock* Date *24/9/15*  
M Warnock

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







GOVERNMENT OF  
WESTERN AUSTRALIA

# Plan 3961/4d



## Legend

-  LGA
-  Areas approved to clear
-  Roads
-  Cadastre
- Virtual Mosaic (LGATE-V001)



1:100,000

MGA 94  
Geocentric Datum of Australia 1994

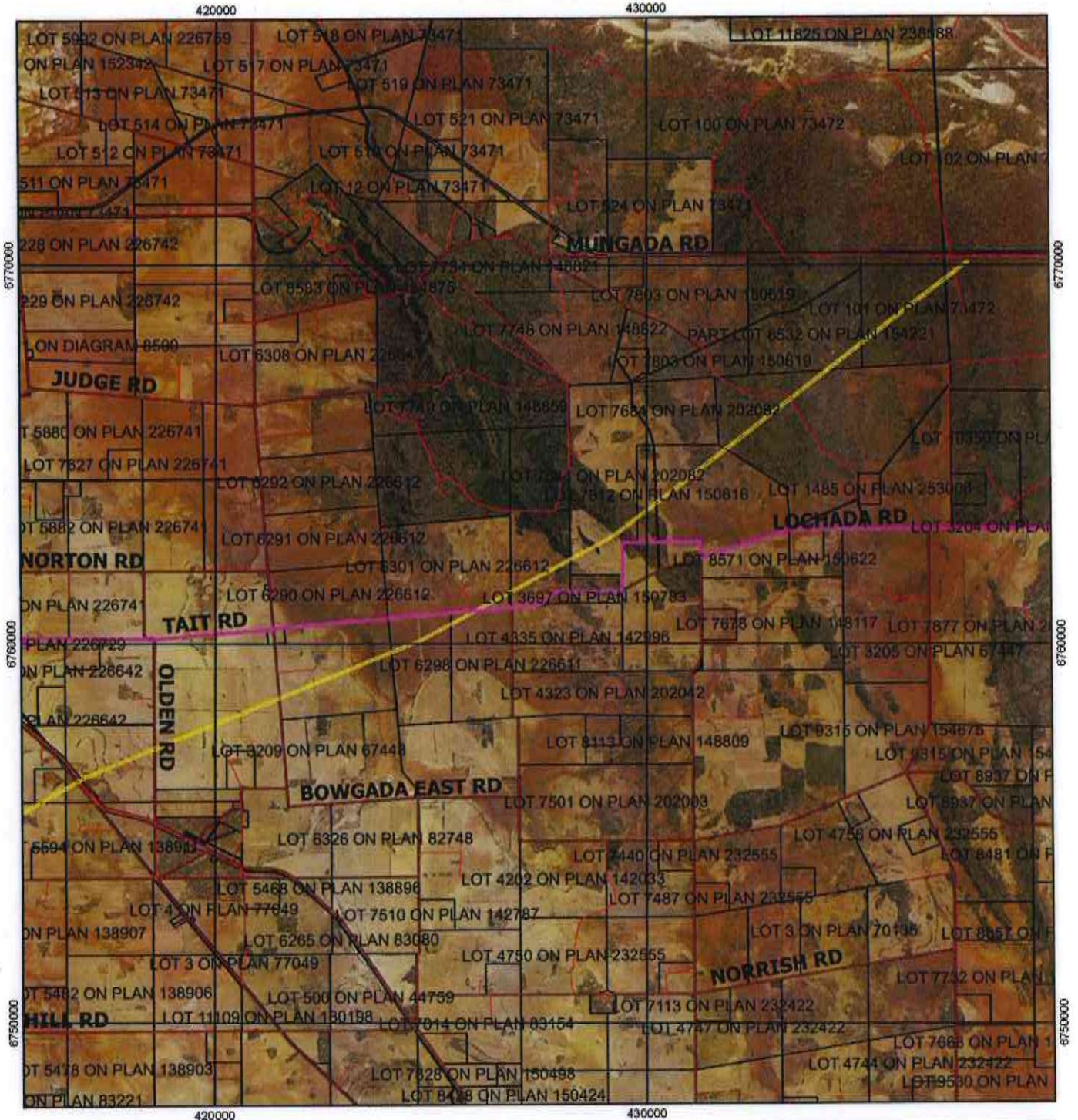
*M Warnock* Date *24/9/15*  
M Warnock

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







GOVERNMENT OF  
WESTERN AUSTRALIA

# Plan 3961/4e



## Legend

-  LGA
  -  Areas approved to clear
  -  Roads
  -  Cadastre
- Virtual Mosaic (LGATE-V001)



1:100,000

MGA 94  
Geocentric Datum of Australia 1994

*M Warnock* Date *24/9/15*

M Warnock

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





## 1. Application details

### 1.1. Permit application details

Permit application No.: 3961/4  
Permit type: Purpose Permit

### 1.2. Applicant details

Applicant's name: Karara Mining Limited

### 1.3. Property details

Property: Various properties, Eneabba to Three Springs  
Local Government Authority: Coorow, Carnamah, Three Springs, Morawa, Perenjori

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
16.7		Mechanical Removal	Infrastructure maintenance

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 24 September 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
The application area is mapped as Beard Vegetation Association's (Shepherd 2009): 49 - Shrublands, mixed heath; 352 - Medium woodland, York gum; 379 - Shrublands, scrub-heath on lateritic sandplain in the central Geraldton Sandplain Region; 420 - Shrublands, bowgada & jam scrub; 437 - Shrublands, mixed acacia thicket on sandplain.	To clear 16.7 hectares of native vegetation for the purpose of power line installation	Excellent; Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).	The vegetation condition was determined by aerial imagery and supporting information provided with the applicant (Karara Mining Ltd 2010).

## 3. Assessment of application against clearing principles

**Comments** The proponent has applied to extend the duration of permit CPS 3961/3 by 5 years in order to fulfil the offset condition on the permit. Therefore the assessment against the clearing principles as well as planning and other matters has not changed and can be found in the Clearing Permit Decision Report CPS 3961/3.

## 4. References

Karara Mining Ltd (2010) Karara Iron Ore Project - Native Vegetation Clearing Permit Application Supporting Information, Management Plans, Karara Mining Limited. DEC Ref A345614  
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.