

#### **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number: CPS 4001/1

Permit Holder: Aquila Steel Pty and AMCI (IO) Pty Ltd

**Duration of Permit:** 20 June 2011 – 20 June 2016

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

PART LOT 77 ON PLAN 220192 (ROCKLEA 6751)

PART LOT 106 ON PLAN 220192 (ROCKLEA 6751)

LOT 3004 ON PLAN 41994 NANUTARA-WITTENOOM ROAD (ROCKLEA 6751)

LOT 3005 ON PLAN 41995 NANUTARA-WITTENOOM ROAD (ROCKLEA 6751)

UNALLOCATED CROWN LAND PIN 1013845 (ROCKLEA 6751)

UNALLOCATED CROWN LAND PIN 1013848 (ROCKLEA 6751)

UNALLOCATED CROWN LAND PIN 1188605 (ROCKLEA 6751)

LOT 122 ON PLAN 27721 (NANUTARRA 6751)

LOT 123 ON PLAN 27721 (NANUTARRA 6751)

LOT 208 ON PLAN 27721 (NANUTARRA 6751)

LOT 3002 ON PLAN 41992 NANUTARA-WITTENOOM ROAD (NANUTARRA 6751)

LOT 3003 ON PLAN 41993 NANUTARA-WITTENOOM ROAD (NANUTARRA 6751)

UNALLOCATED CROWN LAND PIN 1016629 (NANUTARRA 6751)

UNALLOCATED CROWN LAND PIN 11888604 (NANUTARRA 6751)

UNALLOCATED CROWN LAND PIN 1188606 (NANUTARRA 6751)

## 3. Area of Clearing

The Permit Holder must not clear more than 64 hectares of native vegetation within the area shaded yellow on attached Plan 4001/1.

### 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:

- (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. 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.

## 9. 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 activities under this permit, 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 9(a) on the cleared area(s).
- (c) Within 18 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 9(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 9(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 9(c)(ii) of this permit, the Permit Holder shall repeat condition 9(c)(i) and 9(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 9(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 9(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 9(c)(ii).

### PART III - RECORD KEEPING AND REPORTING

## 10. 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 revegetation and rehabilitation of areas pursuant to condition 9 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.

## 11. 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 10 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 20 March 2016, the Permit Holder must provide to the CEO a written report of records required under condition 10 of this Permit where these records have not already been provided under condition 11(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 is engaged by the Permit Holder for the purpose of providing environmental advice, 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;

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 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 revegetation that can be established from in situ seed banks 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 regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the Agriculture and Related Resources Protection Act 1976.

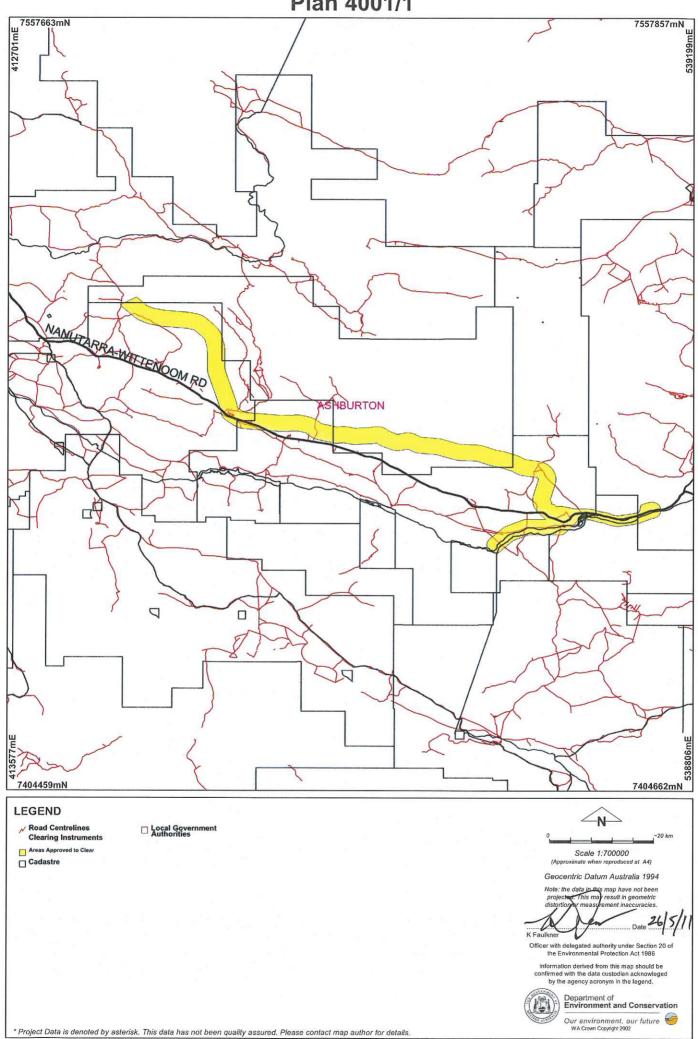
Kelly Faulkner MANAGER

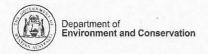
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20 of the Environmental Protection Act 1986

26 May 2011

Plan 4001/1





## **Clearing Permit Decision Report**



## 1. Application details

#### 1.1. Permit application details

Permit application No.:

4001/

Permit type:

Purpose Permit

#### 1.2. Proponent details

Proponent's name:

Australian Premium Iron Joint Venture

## 1.3. Property details

Property:

PART LOT 77 ON PLAN 220192 ( ROCKLEA 6751) PART LOT 106 ON PLAN 220192 (ROCKLEA 6751) LOT 3005 ON PLAN 41995 ( ROCKLEA 6751) UNALLOCATED CROWN LAND (ROCKLEA 6751) UNALLOCATED CROWN LAND (ROCKLEA 6751) UNALLOCATED CROWN LAND (ROCKLEA 6751) LOT 3004 ON PLAN 41994 ( ROCKLEA 6751) LOT 123 ON PLAN 27721 ( NANUTARRA 6751) LOT 3003 ON PLAN 41993 ( NANUTARRA 6751) LOT 208 ON PLAN 27721 ( NANUTARRA 6751) UNALLOCATED CROWN LAND ( NANUTARRA 6751) UNALLOCATED CROWN LAND ( NANUTARRA 6751) UNALLOCATED CROWN LAND ( NANUTARRA 6751) LOT 122 ON PLAN 27721 ( NANUTARRA 6751) LOT 3002 ON PLAN 41992 ( NANUTARRA 6751) Ashburton

**Local Government Area:** 

Colloquial name:

T BOOK

#### 1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing Mechanical Removal For the purpose of:

Geotechnical investigations

## 1.5. Decision on application

**Decision on Permit Application:** 

**Decision Date:** 

26 May 2011

Grant

### 2. Site Information

### 2.1. Existing environment and information

### 2.1.1. Description of the native vegetation under application

#### **Vegetation Description**

This section consists of various Beard's vegetation associations:

- -Hamersley 18: Low woodland; mulga (Acacia aneura)
- -Hamersley 82: Hummock grasslands, low tree steppe; snappy gum over Triodia wiseana;
- Stewart Hills 103: Hummock grasslands, shrub steppe; snakewood over soft spinifex & Triodia wiseana
- -Stewart Hills 157: Hummock grasslands, grass steppe; hard spinifex, Triodia wiseana
- Hamersley 160: Shrublands; snakewood &

#### Clearing Description

The proposal is to clear 64 ha of native vegetation within a 140 km long and 3.2 km wide corridor, in the Shire of Ashburton for the purpose of geotechnical and hydrological feasibility investigations for the proposed Hardey project.

A vegetation and flora survey was undertaken for this proposal. This survey comprised a 150 km long and a 400 m wide study area (Astron 2011) that encompasses most of the applied area.

The 43 vegetation units described within the study area can be defined according to the following five broad landforms (Astron 2011):

- minor creeklines
- major creeklines
- floodplains

#### **Vegetation Condition**

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)

#### Comment

The description and condition of the vegetation under application is determined from consultant's report (Astron 2011).

Acacia victoriae scrub

-Hamersley 162:Shrublands; snakewood scrub

-Ashburton Valley 181: Shrublands; mulga & snakewood scrub

-Hamersley 567:

Hummock grasslands, shrub steppe; mulga & kanji over soft spinifex & Triodia basedowii (Hopkins et al 2001; Shepherd et al 2009) - hills

- plains

These 43 vegetation units ranged in vegetation condition from excellent to poor (Astron 2011).

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)

## 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 may be at variance to this Principle

The proposal is to clear 64 ha of native vegetation within a 140 km long and 3.2 km wide corridor for the purpose of geotechnical and hydrological feasibility investigations.

A vegetation and flora survey was undertaken for this proposal. This survey comprised a 150 km long and a 400 m wide study area (Astron 2011) that encompasses most of the applied area. The 43 vegetation units described within the study area and the vegetation condition ranged from excellent to poor (Astron 2011).

There were no rare flora species and three priority listed species (Indigofera sp. Bungaroo Creek P3, Rhynchosia bungarensis P4 and Triodia sp Robe River P3) recorded within the study area (Astron 2011) with Indigofera sp. Bungaroo Creek and Triodia sp Robe River possibly occurring within the applied area. It is noted that Triodia sp Robe River is associated with priority ecological community (P3) Triodia sp. Robe River assemblages of mesas in the Robe Valley. In addition, three ecosystems that have been identified within the study area as comprising high conservation values in the Hamersley subregion being, major ephemeral watercourses, valley floor mulga and lower slope mulga (Astron 2011), which may within the applied area.

Given the proposal involves clearing 64 ha over a 140 km corridor; it is unlikely to have any significant impact on fauna habitat values. However, the proposal has the potential to impact priority listed flora and ecosystems of high conservation value, including a priority ecological community. Therefore the applied area may comprise a high level of biodiversity.

#### Methodology

Reference:

- Astron (2011)

(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

The Shire of Ashburton has approximately 100% of its pre-1750 native vegetation remaining and the Beard vegetation associations occurring over the proposed corridor are well represented in the Pilbara bioregion (Sheppard 2009).

Several priority listed fauna species are recorded within 40 km of the proposed corridor including three bird species (Australian bustard, Bush Stonecurlew and Striated Grasswren); two mammal species (Ghost Bat and Western Pebble-mound Mouse); and one reptile Notoscincus butleri.

Given proposal involves clearing 64 ha over a 140 km corridor and comprises vegetation that is well represented locally and regionally; it is unlikely to have any significant impact on fauna habitat values. Therefore the proposed clearing is not likely to be at variance to this Principle.

#### Methodology

Reference:

- Shepherd (2009)

GIS databases:

- Pre European Vegetation
- SAC Bio Datasets (accessed 20 May 2011)

## (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 known records of rare flora within the local area (40 km radius). A vegetation and flora survey undertaken for this proposal did not identify any rare flora species (Astron 2011). Therefore, the proposed clearing is not likely to be at variance to this Principle.

#### Methodology

Reference:

- Astron (2009)
- GIS database:
- SAC Bio Datasets (accessed 20 May 2011)

## (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 known occurrences of threatened ecological communities within the local area (40 km radius). A vegetation and flora survey undertaken for this proposal did not identify any threatened ecological communities (Astron 2011). Therefore, the proposed clearing is not likely to be at variance to this Principle.

#### Methodology

Reference:

- Astron (2009)
- GIS database:
- SAC Bio Datasets (accessed 20 May 2011)

## (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 Beard vegetation types mapped within the proposal area retain more than this 30% threshold.

In addition, within the Shire of Ashburton and the Pilbara bioregion 99.6% and 99.9% (Shepherd 2009) of pre-1750 extent of native vegetation remains, respectively.

Given that the vegetation is well represented locally and regionally, the vegetation under application it is not significant as a remnant and given the current extent remaining, the landscape is not highly cleared.

Therefore, the clearing as proposed is not likely to be at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	Pre-European % in reserves/DEC managed lands
BIOREGION*				
Pilbara (P)	17,804,193	17,785,000	99.9	N/A
LOCAL GOVERNMENT	AUTHORITY*			
Shire of Ashburton	10,086,658	10,050,099	99.6	15.5
BEARD VEGETATION A	SSOCIATIONS*			
- 18 in P bioregion	676,556	676,556	100	17.1
- 82 in P bioregion	2,563,583	2,563,583	100	10.5
- 103 in P bioregion	614,056	614,056	100	4.9
- 157 in P bioregion	198,633	198,158	100	5.6
- 160 in P bioregion	9,439	9,439	100	0.0
- 162 in P bioregion	20,009	20,009	100	0.0
- 181 in P bioregion	65,090	65,090	100	4.8
- 567 in P bioregion	776,823	776,823	100	22.5
				STY OF THE STATE OF STREET

\*(Shepherd 2009)

#### Methodology

References:

- Commonwealth of Australia (2001)
- Shepherd (2009)

GIS Databases:

- Interim Biogeographic Regionalisation of Australia
- Pre-European Vegetation

## (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

The proposed clearing crosses Hardey River (major river and main tributary of the Ashburton River), Beasley River (significant stream) and numerous non perennial watercourses.

A vegetation and flora survey was undertaken for this proposal. The study area comprises 43 vegetation units, of which 14 of these vegetation units are associated with the broad landform types, minor creeklines, major creeklines and floodplains; and range in vegetation condition from excellent to poor (Astron 2011).

Given the presence of numerous watercourses and vegetation associated with watercourses within the applied area, the proposed clearing is at variance to this Principle.

It is noted that no clearing of riverine vegetation is proposed (API 2010).

#### Methodology

References:

- API (2010)
- Astron (2011)

GIS Databases:

- Hydrography, linear
- Rivers

# (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 to be at variance to this Principle

The proposal is to clear 64 ha of native vegetation within a 140 km long and 3.2 km wide corridor for the purpose of geotechnical and hydrological feasibility investigations.

It is considered that the proposed clearing may cause short term impacts in particular within and in close proximity to watercourses. However, given the long and linear nature of the proposal, the proposed clearing is not likely to result in appreciable land degradation.

#### Methodology

GIS Databases:

- Hydrography, linear
- Rivers

## (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 DEC managed land recorded within 50 km radius of the applied area, this is the proposed conservation park, West Hamersley Range, which is located approximately 8 km from the applied area at the closest point. Given the distance to the nearest conservation area, this clearing proposal is not likely to be at variance to this Principle.

#### Methodology

GIS Database:

- DEC 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

The proposed clearing crosses Hardey River (major river and main tributary of the Ashburton River), Beasley River (significant stream) and numerous non perennial watercourses.

A vegetation and flora survey was undertaken for this proposal. The study area comprises 43 vegetation units, of which 14 of these vegetation units are associated with the broad landform types, minor creeklines, major

creeklines and floodplains; and range in vegetation condition from excellent to poor (Astron 2011).

Given the occurrence of several watercourses the proposed clearing may cause short term deterioration to the quality of the surface water, through sedimentation. Therefore, the clearing proposal may be at variance to this Principle.

It is noted that no clearing of riverine vegetation is proposed (API 2010).

#### Methodology

References:

- API (2010)
- Astron (2011)

GIS Databases:

- Hydrography, linear
- Rivers

## (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

The proposed clearing crosses Hardey River, Beasley River and numerous non perennial watercourses.

Given the long and linear nature of the clearing for the pipeline and the occurrence of the watercourses to maintain natural water flows, the proposal is not likely to cause or increase the incidence or intensity of flooding.

#### Methodology

GIS Databases:

- Hydrography, linear
- Rivers

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

#### Comments

The proposal is to clear 64 ha of native vegetation within a 140 km long and 3.2 km wide corridor for the purpose of geotechnical and hydrological feasibility investigations (includes clearing for drill pads, sumps and burrow pits).

This clearing proposal is related to clearing permit application CPS 3701/1 that was withdrawn on 21 September 2010 and relates to a satelite ore body and is not related to the West Pilbara Iron Ore Project. This is in addition to a longer rail corridor received from the same proponent (refer to CPS 3438/1). The north end of the current proposal (CPS 4001/1) overlaps the southern section of the applied area for CPS 3438/1 (under assessment).

The proposal falls within the proclaimed Pilbara groundwater and surface water areas. Therefore, a bed and banks permit will be required for any interference with the bed or banks of a watercourse and a ground water licence will be required for groundwater exploration drilling.

The proposed clearing falls within the Puutu Kunti Kurrama and Pinikura claimants and Yinhawangka Part A People, native title claimants' area. The native title claimants and the representatives were notified and comments were sought regarding the proposed clearing but no response has been received by DEC to date.

The proposed clearing crosses approximately three Aboriginal Sites of Significance. The proponent will be advised to contact the Department of Indigenous Affairs to ensure compliance with the Aboriginal Heritage Act 1972.

API Management Pty Ltd (API 2011) has submitted an application for land tenure to the Department of Regional Development and Lands, in regards to a section 91 licence under the Land Administrative Act 1997 to undertake the investigative works.

#### Methodology

Reference:

- API (2010)

GIS databases:

- Native Title Claims
- Aboriginal Sites of Significance
- RIWI, groundwater areas
- RIWI, surface and irrigation areas

## 4. References

API (2010) Hardey Feasibility Study - Native Vegetation Clearing Permit Application Supporting Information (CPS 4001/1), API Management Pty Ltd. DEC Ref A335884

Astron (2011) Hardey Rail Corridor Vegetation and Flora Survey (Phase 1) Interim Report March 2009-October 2010, Prepared for API Management Pty Ltd. Astron Environmental Services. DEC Ref A391845

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

Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience 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

TEC

WRC

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 Department of Industry and Resources DolR DRF Declared Rare Flora **EPP Environmental Protection Policy** Geographical Information System GIS Hectare (10,000 square metres) ha

Threatened Ecological Community

Water and Rivers Commission (now DEC)