



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7955/1
Permit Holder:	Shire of Murchison
Duration of Permit:	10 June 2018 – 10 June 2028

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 road realignment and a gravel pit.

2. Land on which clearing is to be done

Lot 11804 on Deposited Plan 40893, South Murchison,
Lot 225 on Deposited Plan 193792, Murchison
Lot 222 on Deposited Plan 27847, Murchison
Carnarvon Mullewa Road Reserve (PIN 11707613), Murchison

3. Area of Clearing

The Permit Holder must not clear more than 13.69 hectares of native vegetation within the area hatched yellow on attached Plan 7955/1(a), Plan 7955/1(b) and Plan 7955/1(c).

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

The Permit Holder shall not clear any native vegetation after 9 June 2023.

6. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

PART II – MANAGEMENT CONDITIONS

7. Avoid, minimise and reduce the impacts and extent of 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:

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

8. Vegetation management

- (a) Where practicable the Permit Holder shall avoid clearing *riparian vegetation*.
- (b) Where a *watercourse* is to be impacted by clearing, the Permit Holder shall maintain the existing surface flow by use of culverts.

9. 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*:
 - (iv) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (v) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (vi) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) Prior to leaving the area hatched yellow on attached Plan 7955/1(a), Plan 7955/1(b) and Plan 7955/1(c), the Permit Holder must clean earth-moving machinery of soil and vegetation.

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 for the area hatched yellow on attached Plan 7955/1(c), and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) At an *optimal time* following clearing authorised under this Permit for the area hatched yellow on attached Plan 7955/1(c), *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 ground on the contour to remove soil compaction; and
 - (iii) ripping the pit floor and contour batters within the extraction site; and
 - (iv) laying the vegetative material and topsoil retained under condition 10(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 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.

PART III - RECORD KEEPING AND REPORTING

11. Records to 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 or decimal degrees;
 - (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 10 of this Permit:
 - (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a GPS unit set to 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); and
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.
- (b) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 7 of this Permit;
- (c) actions taken in accordance with condition 8 of this Permit; and
- (d) actions taken to minimise the risk of the introduction and spread of weeds in accordance with condition 9 of this Permit

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.
- (b) 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 June of each year.
- (c) Prior to 6 November 2027, 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:

CEO means the Chief Executive Officer of the Department responsible for administering the *Environmental Protection Act 1986*;

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;

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;

optimal time means the period from November to December for undertaking *direct seeding*, and *planting*;

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; and

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.

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 Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

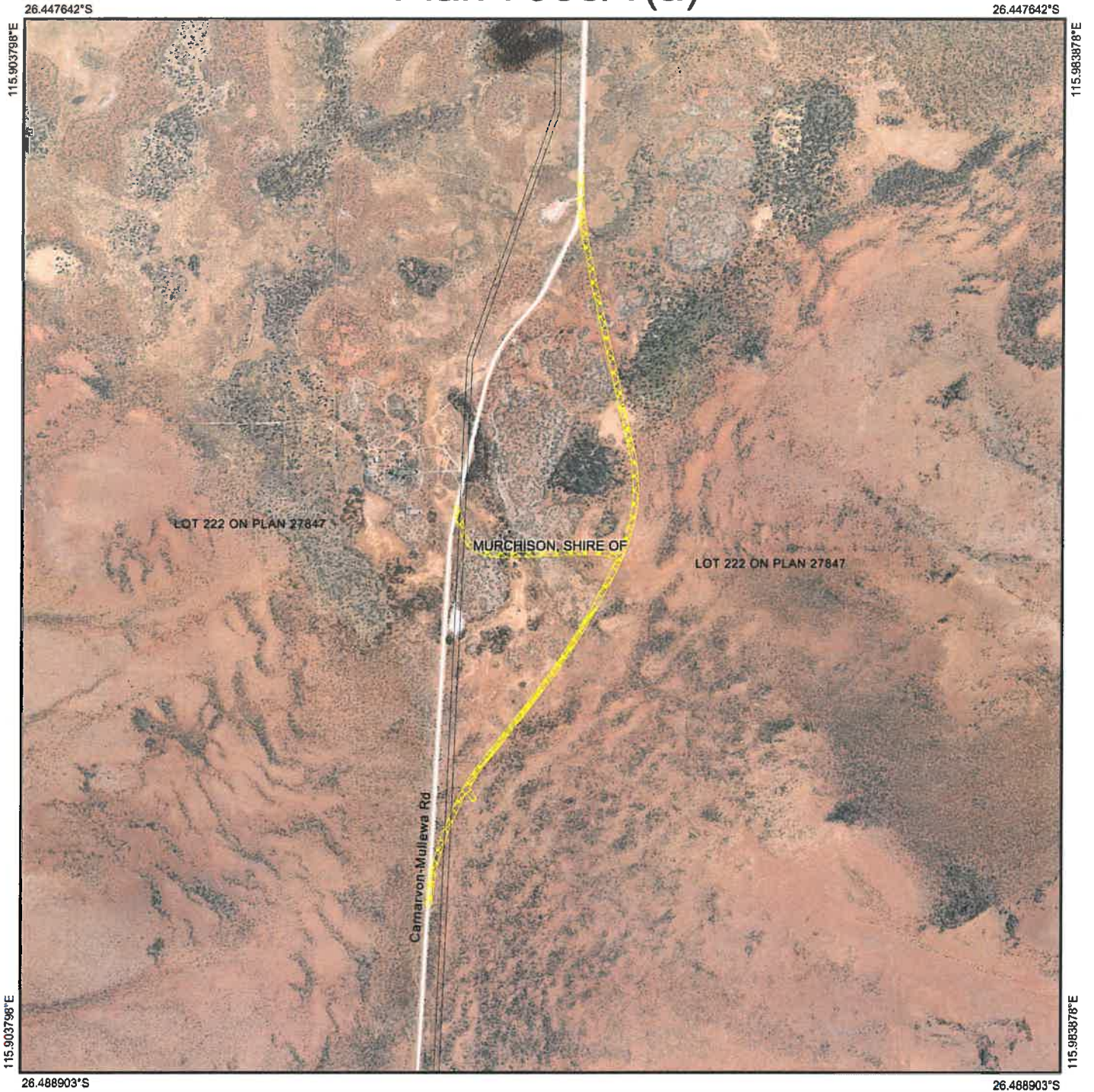


Mathew Gannaway
MANAGER
CLEARING REGULATION

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

11 May 2018

Plan 7955/1(a)



Legend

-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority
-  Roads - Main Road




0 1km

1:20,000

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

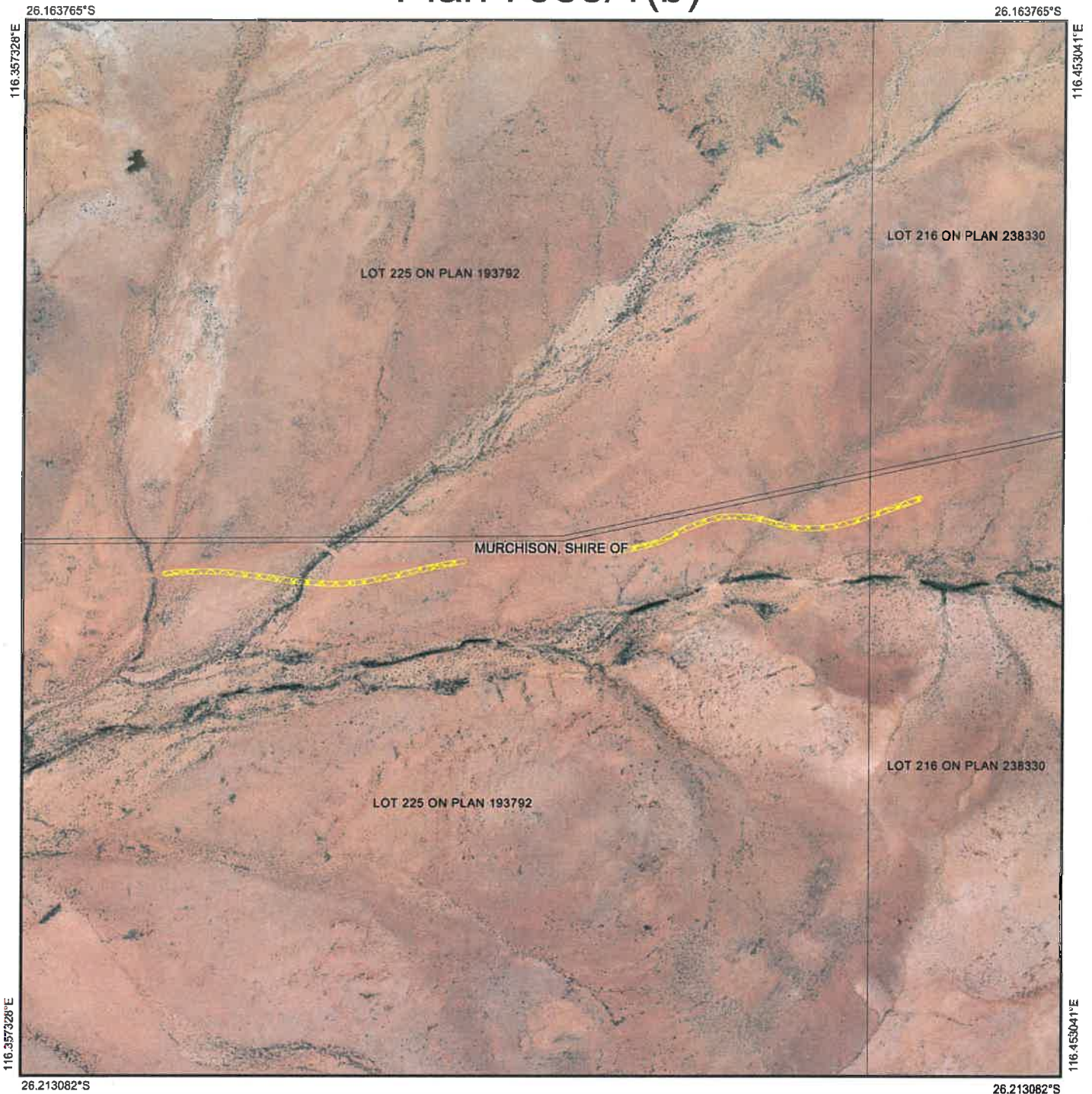
 Date 11/05/2018..
Matthew Gannaway

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






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Plan 7955/1(b)



Legend

-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority




1:20,000

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

 Date 11/05/2019

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



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Plan 7955/1(c)



Legend

- Imagery
- Clearing Instruments Activities
- Local Government Authority
- Cadastral
- Roads - Local and Others



1:4,000
(Approximate when reproduced at A4)
GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

Date 11/05/2018
Matthew Gernawey

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.: 7955/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Shire of Murchison
Application received date: 19 January 2018

1.3. Property details

Property: Carnarvon Mullewa Road Reserve – PIN 11707613, Murchison
Lot 222 on Deposited Plan 27847, Murchison
Lot 11804 on Deposited Plan 238483, South Murchison
Lot 225 on Deposited Plan 193792, Murchison
Local Government Authority: Murchison, Shire of

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
13.69		Mechanical Removal	Road construction or upgrades and extractive industry

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 11 May 2018

Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 510 of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing is at variance to principle (f) and (i) and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer determined that the proposed clearing will impact on vegetation growing in association with multiple watercourses. The Delegated Officer determined that the proposed clearing will cause short-term impact to the quality of surface water, however, the impact to water quality will be short-term and mostly limited to the proposed clearing activity. The risk of water erosion and sedimentation is also determined to be minor. Avoiding the clearing of the watercourses and their riparian vegetation will assist in mitigating potential impacts to these watercourses.

A revegetation condition has been placed on the clearing permit requiring the applicant to revegetate to the pre-clearing vegetation type to minimise long term land degradation risks.

The Delegated Officer determined that the proposed clearing may indirectly impact on the environmental values of an adjacent area of remnant vegetation through the introduction or spread of weeds. Weed management practices will help mitigate this risk.

In determining to grant a clearing permit subject to conditions, the Delegated Officer found that the proposed clearing is not likely to lead to an unacceptable risk to the environment.

2. Site Information

Clearing Description The clearing of 13.69 hectares of native vegetation within Lot 11804 on Deposited Plan 40893, South Murchison, and Lot 225 on Deposited Plan 193792, Lot 222 on Deposited Plan 27847 and Carnarvon Mullewa Road Reserve (PIN 11707613), Murchison, for the purpose of road realignment and a gravel pit.

Vegetation Description The vegetation under application has been mapped as Beard vegetation association:

- 18 which is described as low woodland; mulga (*Acacia aneura*)
- 300 which is described mosaic: low woodland; mulga / succulent steppe; saltbush & bluebush
- 419 which is described shrublands; bowgada, jam and *Melaleuca uncinata* thicket 95.4% (Shepherd et al., 2001).

GHD Pty Ltd conducted a flora survey over the application area. Fifteen vegetation types were identified within the applicant area:

- *Acacia* tall shrubland;
- Rehabilitation area;
- *Eucalyptus victrix*, *Melaleuca stereophloia* on flats;
- *Acacia*, *Eremophila*, *Senna* on calcareous soils;
- *Acacia*, *Eremophila*, *Senna* tall shrubland on sandy loams;
- *Melaleuca stereophloia* on sandy rise;
- Mulga grove;
- *Frankenia* flats;
- Chenopod flats;
- Bare areas;
- *Acacia*, *Eremophila*, *Senna* open shrublands on stony plains;
- *Acacia*, *Eremophila*, *Senna* open shrublands on drainage lines;
- *Acacia* open shrubland on sheetwash; and
- Cleared/degraded areas (GHD Pty Ltd, 2017).

Vegetation Condition

Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).

To

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

Vegetation condition was determined by flora survey conducted by GHD Pty Ltd (2017).

Soil type

For the application area represented Plan (a), the soil has been mapped as dissected plateau at moderate to high elevation, gently undulating plateau-top areas of acid leached red and yellow earths flanked by steep, often benched, or terraced slopes of soils with various soils on the flatter portions and soils in areas of impeded drainage. GHD Pty Ltd's (2017) survey described these soils as predominantly shallows sandy loam with occasional calcareous soil type.

For the application area represented Plan (b) the soil has been mapped as extensive flat and gently sloping plains with a scatter of surface gravels: chief soils are shallow acid red earths and shallow earthy loams often occurring in intimate microassociation.

For the application area represented Plan (c) the soil has been mapped as gently undulating to low hilly areas with gneissic rock outcrops; some low dunes: chief soils seem to be shallow loams.

Comments

The local area considered in the assessment on this application is defined as a 20 kilometre radius measured from the perimeter of the application area.

3. Assessment of application against clearing principles

As discussed within Section 2, the application is to clear 13.69 hectares of native vegetation for the purpose of road realignment and a gravel pit.

Fifteen vegetation types were identified within the application area, with the dominating vegetation types including *Acacia* tall shrubland, *Eucalyptus victrix*, *Melaleuca stereophloia* on flats and *Acacia*, *Eremophila*, *Senna* open shrubland on stony plains (GHD Pty Ltd, 2017).

Consideration has been given to clearing impacts relating to biodiversity, significant fauna habitat, rare flora, threatened ecological communities, remnant vegetation values, wetlands and watercourses, land degradation, conservation areas, surface water quality, groundwater quality and flooding.

The National Objectives and Targets for Biodiversity Conservation includes a target that does not support the clearing of ecological communities with an extent below 30 per cent of that present pre-European settlement (Commonwealth of Australia 2001). The vegetation type under application is well represented locally and regionally, with mapped Beard vegetation association 300 and 419 retaining approximately 100 per cent of its pre-European extent, and Beard vegetation association 419 retaining approximately 94.5 of its native vegetation. The Shire of Murchison retains approximately 100 per cent of its native vegetation. The application area represented in Plan 7955/1 (a) and Plan 7955/1 (b) retains approximately 99 per cent native vegetation in the local area (20 kilometres radius) and the application area represented in Plan 7955/1(c) has 70 per cent native vegetation remaining in the local area (20 kilometres radius). Given this, the vegetation under application is not considered to be a significant remnant within an extensively cleared area.

Six conservation significant fauna species have been mapped within the local area. No fauna of conservation significance was recorded in the application areas during a fauna survey (GHD Pty Ltd, 2017). The Department of Biodiversity, Conservation and Attractions (DBCA) advised that the fauna survey was suitable and adequate (DBCA, 2018).

One rare flora and twenty six priority species have been recorded within the local area (20 kilometres radius) of the application areas, however, none of these species were identified within the application areas during a flora survey (GHD Pty Ltd, 2017).

There are no DBCA managed conservation areas located within the local area (20 kilometres radius). No threatened or priority ecological communities occur within the application areas represented by Plan 7955/1(a) and 7955/1(c). The priority ecological community (PEC), Mount Dugel/Mount Nairn vegetation complexes (banded ironstone formation), is mapped over the application area represented by Plan 7955/1(b). DBCA (2018) advised that the proposed clearing will not impact on this community. None of the mapped vegetation types resemble this PEC (GHD Pty Ltd, 2017).

The application areas transect multiple watercourses, of particular significance is the application area represented in Plan 7955/1(a) which is within close vicinity to Yarra Yarra Creek, a non-perennial wetland. The Department of Water and Environmental Regulation (DWER) (Regulatory Services – Water) advised that due to the linear and minor nature of the proposed clearing for road construction, the risk of water erosion and sedimentation will be minor (DWER, 2018). Rehabilitation of the area represented in Plan 7955/1(c), when the gravel pit is no longer required, will limit the long term degradation risks associated with increased land degradation for this area. There is a risk that the proposed clearing will increase turbidity surface water resources (DWER, 2018), however, the impact to water quality will be short-term and mostly limited to the proposed clearing activity. The application includes areas of riparian vegetation (DWER, 2018). Avoiding and minimising the clearing of riparian vegetation will assist in mitigating potential impacts to this watercourse.

The disturbance caused by the proposed clearing will increase the likelihood of weeds being spread into adjacent areas of remnant native vegetation. Weed management practices will assist in mitigating this risk.

Given the above, the proposed clearing is at variance to principle (f) and (i) and is not likely to be at variance to the remaining principles.

Planning instruments and other relevant matters

The application area is zoned 'pastoral' under the Town Planning Scheme.

No Aboriginal sites of significance have been mapped within the application area.

DWER (Regulatory Services – Water) (2017) advised that the application area is located within the Gascoyne Groundwater Area which is proclaimed under the *Rights in Water and Irrigation Act 1914*. Abstraction of groundwater for this type of development, excluding any road construction dewatering, requires a licence under this act. The Shire of Murchison hold a groundwater licence within the application area for purposes of earth works and construction.

The application areas are located within the boundaries of the registered area of interest of the Southern Yamatji claimant and the Wajarri Yamatji claimant. All claimants have been notified of the proposed clearing. No responses have been received.

The clearing permit application was advertised on the DWER website on 6 March 2018 with a 21 day submission period. No public submissions have been received in relation to this application.

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity, Conservation and Attractions (2018) Fauna and flora advice for application CPS 7955/1 (DWER Ref: A1667164).
- Department of Water and Environmental Regulation (2018) DWER (Regulatory Services – Water) *Rights in Water and Irrigation Act 1914* advice (DWER Ref: A1667163).
- GHD Pty Ltd (2017) Shire of Murchison Biological Surveys and Biological Assessment (DWER Ref: A1627835).
- 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.