

#### **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number: CPS 7902/1

Permit Holder: MQ Resources Pty Ltd

**Duration of Permit:** 31 May 2018 to 31 May 2023

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 upgrades.

# 2. Land on which clearing is to be done

Brand Highway road reserve (PIN 11726301), Breera Breera Road reserve (PIN 11726290 and 11726296), Breera Midland Railway reserve (PIN 14079), Breera Lot 98 on Plan 69915, Breera

#### 3. Area of Clearing

The Permit Holder must not clear more than 0.43 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7902/1.

# 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.

## **PART II – MANAGEMENT CONDITIONS**

# 5. 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:

- (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.

#### 6. 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 and dieback:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared:
- (b) ensure that 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.

## PART III - RECORD KEEPING AND REPORTING

#### 7. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) 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;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 5 of this Permit; and
- (e) actions taken to minimise the risk of the introduction and spread of weeds in accordance with condition 6 of this Permit;

## 8. Reporting

The Permit Holder must provide to the CEO the records required under condition 7 of this Permit, when requested by the CEO.

#### **DEFINITIONS**

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

**CEO** means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

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 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 Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

Jane Clarkson

**MANAGER** 

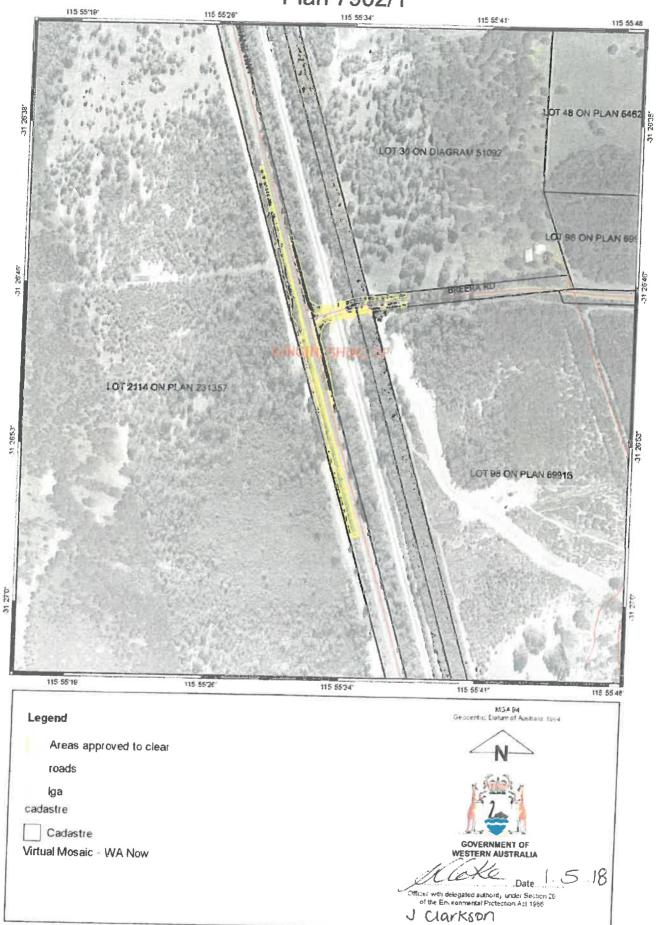
CLEARING REGULATION

Make

Officer delegated under Section 20 of the Environmental Protection Act 1986

1 May 2018

Plan 7902/1



# Department of Water and Environmental Regulation Clearing Permit Decision Report

#### 1. Application details

1.1. Permit application details

Permit application No.:

7902/1

Permit type:

Purpose Permit

1.2. Applicant details

Applicant's name:

MQ Resources Pty Ltd

1.3. Property details

Property:

Brand Highway road reserve (PIN 11726301), Breera Breera Road reserve (PIN 11726290 and 11726296), Breera

Midland Railway reserve (PIN 14079), Breera

Lot 98 on Plan 69915, Breera

**Local Government Authority:** 

DWER Region: DBCA District: Localities: GINGIN, SHIRE OF GREATER SWAN

SWAN COASTAL BREERA

1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing

For the purpose of: Road upgraded

0.43

Mechanical Removal

26 April 2018

1.5. Decision on application

**Decision on Permit Application:** 

Decision Date:

Granted

Reasons for Decision:

The clearing permit application was received on 6 December 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 510 of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to clearing principle (f) and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer noted that the proposed clearing may impact on native vegetation growing in association with a wetland, however determined that the proposed clearing is unlikely to have any significant environmental impacts. The Delegated Officer also determined that the proposed clearing may increase the risk of weeds being introduced or spread into adjacent native vegetation. Weed management measures will minimise impacts to adjacent native vegetation.

#### 2. Site Information

**Clearing Description:** 

The application is to clear up to clear 0.43 hectare of native vegetation within a clearing footprint of 0.71 hectares, for the purpose of road upgrades to the intersection of Breera Road and Brand Highway.

**Vegetation Description:** 

The application area is mapped as Heddle vegetation complex:

Yanga Complex, described as predominantly a closed scrub of *Melaleuca* species and low open forest of *Casuarina obesa* (Swamp Sheoak) on the flats subject to inundation. On drier sites the vegetation reflects the adjacent vegetation complexes of Bassendean and Coonambidgee. (Heddle et al., 1980).

A spring flora and vegetation assessment of the site undertaken by Emerge Associates (2017) (applicant's survey) identified five vegetation types within the application area:

- AsM: Acacia saligna, Melaleuca preissiana, Melaleuca rhaphiophylla over Kunzea glabrescens and Hypocalymma angustifolium over Dielsia stenostachya, Kennedia prostrata, Austrostipa compressa, Podotheca gnaphalioides and/or non-native weed species;
- CcAsM: Corymbia calophylla, Acacia saligna, Melaleuca preissiana, Melaleuca rhaphiophylla over Jacksonia furcellata, Kunzea glabrescens, Xanthorrhoea preissii and Hypocalymma angustifolium over Dielsia stenostachya, Cyathochaeta avenacea, Dianella revoluta, Kennedia prostrata, Austrostipa compressa and/or non-native weed species;
- CcMXp: Corymbia calophylla, Melaleuca preissiana, Melaleuca rhaphiophylla, Banksia littoralis over Jacksonia furcellata and Xanthorrhoea preissii over Dielsia stenostachya, Sowerbaea laxiflora, Dianella revoluta, Kennedia prostrata and/or non-native weed species;
- ErM: Eucalyptus rudis over Melaleuca preissiana, Melaleuca rhaphiophylla over Dielsia stenostachya, Lepidosperma longitudinale and other scattered native species and/or nonnative weed species; and

Non-native vegetation: Modified areas comprising non-native plants with bare earth. (Emerge Associates, 2017).

# **Vegetation Condition:**

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

To

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

The condition of the vegetation types within the 0.71 hectare footprint are a follows;

Plant community	Vegetation condition	Area (ha)
AsM	Good	0.08
CcAsM	Good	0.08
	Degraded	0.07
СсМХр	Good	0.15
ErM	Good	0.02
	Degraded	0.03
Non-native vegetation	Completely degraded	0.28
Total		0.71

Soil and Landform Type:

The application area is mapped within land subsystems:

Yanga 8 Subsystem (Map Unit 213Ya\_8x), described as flat plain with occasional low dunes.
 Subject to seasonal inundation. Deep white and pale yellow sands interspersed with swamp and generally underlain by siliceous/humic pans depth (Schoknecht et al., 2004).

Comment:

The local area referred to in the below assessment is defined as the area within a 10 kilometre radius of the application area.

Figure 1: Map of application area



Figure 2: Photographs of vegetation within the application area



Photo 1: Plant community AsM in a good condition.



Photo 2: Plant community CcAsM in a good condition.



Photo 3: Plant community CcMXp in a good condition



Photo 4: Plant community ErM in a degraded condition

# 3. Assessment of application against clearing principles

The application is to clear 0.43 hectares of native vegetation within a clearing footprint of 0.71 hectares to accommodate future traffic flow, which will include the widening of the Breera Road and Brand Highway intersection.

According to available databases and advice received from the Department of Biodiversity, Conservation and Attractions (DBCA), 18 priority flora species and five rare flora species have been recorded within the local area. Of these, two rare flora species and three Priority 3 flora species (being species that are known from several locations and do not appear to be under imminent threat (Jones, 2015)) and one Priority 1 flora species (being species that are known from one or a few locations (generally five or less) which are potentially at risk (Jones, 2015)) have been recorded from the same soil and vegetation types as found within the application area, as discussed below.

- Myriophyllum echinatum (Priority 3) is known from 17 records at sites generally in the vicinity of winter-wet clay-based depression or ephemeral wetlands (FloraBase website, January 2018). The nearest record of this species occurs approximately 1.3 kilometres west of the application area.
- Meionectes tenuifolia (Priority 3) is known from 24 records at sites generally supporting seasonally wet poorly drained flats or granite flats, shallow soil at margins, inundated. (Western Australian Herbarium, 1998-). The nearest record of this species occurs approximately 1.3 kilometres west of the application area.
- Eryngium pinnatifidum subsp. Palustre (G.J. Keighery 13459) (Priority 3) is known from 13 records at sites generally associated with seasonally wet poorly drained flats and winter inundated claypans (Western Australian Herbarium, 1998-).
   The nearest record of this species occurs in close proximity to a watercourse approximately 1.3 kilometres west of the application area.
- Grevillea evanescens (Priority 1) is known form 15 records at sites generally associated with winter wet flats, lateritic brown clay loam soils Western Australian Herbarium, 1998-). The nearest record of this species occurs in close proximity to a watercourse approximately 1.3 kilometres west of the application.
- The two rare flora species are *Grevillea* sp. both being erect shrubs, 0.1-2.5 metres high associated with sandy loam soils and winter-wet heaths (Western Australian Herbarium, 1998-).

Noting the preferred habitat for the above mention priority and rare flora species and that the clearing footprint occurs within mapped wetlands, it is considered the application area contains suitable habitat for the theses species. A spring flora and vegetation assessment of the site recorded a total of 35 native and 16 non-native flora species were recorded (Emerge Associates, 2017). Of the species identified none where of any conservation significance (Emerge Associates, 2017). Noting this, along with

relatively small extent of the proposed clearing of which majority is within the existing road reserves and is adjacent to a railway reserve, the proposed clearing is unlikely to impact on priority or rare flora.

According to available databases, three fauna species specially protected under the *Wildlife Conservation Act 1950*, six fauna species protected under international agreement and three priority fauna have been recorded within the local area (DBCA, 2007-). Noting the extent of the proposed clearing, the condition of the vegetation within the application area and that the proposed clearing is confined linear strips adjacent to existing roads, the application area is unlikely to comprise significant habitat for indigenous fauna.

According to available databases, several occurrences of the ecological community 'Banksia Woodlands of the Swan Coastal Plain' occur within the local area. This ecological community is listed as Priority 3 by DBCA and as a threatened ecological community (TEC) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Approved Conservation Advice for this TEC specifies a number of criteria for vegetation to be considered representative of this TEC (Threatened Species Scientific Committee, 2016). Noting this, as well as the extent of the proposed clearing, the condition of the vegetation and the mapped vegetation types within the application area, the application area is not likely to comprise the whole or part of, or be necessary for the maintenance of, a TEC.

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). Heddle vegetation complex Yanga is below the 30 per cent threshold. Noting the descriptions of the vegetation within the application area, Heddle vegetation complex Yanga is unlikely to be represented within the application area. The remaining extents of native vegetation within the bioregion, local government authority within the bioregion are above the 30 per cent threshold (Government of Western Australia, 2018). Aerial imagery indicates that the local area retains approximately 45 per cent native vegetation cover. Noting this, the application does not occurs in extensively cleared landscape and the vegetation is unlikely to be significant as a remnant.

According to available databases, approximately 0.116 hectares of the clearing footprint is within a conservation category wetland (CCW) with the remainder of the clearing footprint within a multiple use wetland (MUW). The CCW covers an area 93.3 hectares in size and with the MUW being 13752 hectares in size. Noting the application is within mapped wetlands and the vegetation types identified within the application area, the vegetation proposed to be cleared is growing in association with these wetlands. Given the relatively small extent of the proposed clearing of which majority is within the existing road and railway reserve, it is therefore not likely to have a significant impact on the environmental values of the wetlands.

According to available databases, there are a number of conservation areas within the local area. None of these conservation areas are directly adjacent to the application area, and are separated from the application area by other areas of remnant vegetation roads and farmland. Noting this, the proposed clearing is not likely to impact on the environmental values of these conservation areas. The proposed clearing is likely to impact on the vegetation adjoining the application area through the increased risk of weeks being spread into the adjoining vegetation. Weed management practices will assist in minimising this risk.

Noting the linear shape of the application area and the extent of the proposed clearing, the proposed clearing is not likely to result in appreciable land degradation or deterioration in the quality of surface or underground water, and is not likely to cause or exacerbate the incidence or intensity of flooding.

The proposed clearing is at variance to Principle (f) and is not likely to be at variance to the remaining clearing Principles.

#### Planning instruments and other relevant matters.

The application was advertised on the Department of Water and Environmental Regulation's website on 22 January 2018 for a 21 day submission period. Two submissions were received during this period. The submissions raised concerns in relation to a red gum tree (possibly a Marri, *Corymbia calophylla*) within the application area. One of the appeals was in relation to the trees visual amenity, cultural heritage in conjunction with alternative road alignments and planning proposals. The second submission raised concerns similar to the first with the addition that mature marri trees are important foraging and roosting habitat for black cockatoos. Fauna impacts, including potential impacts to black cockatoos, has been considered within the above assessment report. Considering the extent of the proposed clearing, the condition of the vegetation within the application area and that the proposed clearing is confined linear strips adjacent to existing roads, the application area is unlikely to comprise significant habitat for indigenous fauna.

Majority of the parameters raised within the submissions are beyond the impacts associated with the clearing and cannot be taken into consideration within this assessment. However the applicant was contacted and informed of the issues raised within the submissions. The applicant advised that 'the engineering design cannot be modified to retain the tree in question and still provide the upgrade to the intersection. The tree is too close to the existing road and to provide left and right hand access the intersection will need to be expanded over the area where the tree occurs. Furthermore, moving the intersection is not feasible from design stand point, if the intersection was somehow redesigned to avoid the tree then larger areas of wetland vegetation north of Breera Road would then potentially be impacted' (MQ Resources Pty Ltd, 2018).

No registered Aboriginal Sites of Significance occur within the application area.

#### References

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

- Department of Biodiversity Conservation and Attractions (DBCA) (2007- ) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/. Accessed April 2018.
- Emerge Associates (2017) Technical Memorandum Spring flora and vegetation assessment for Clearing Permit Application CPS 7902/1 MQ Resources Pty Ltd (DWER Ref: A1575047).
- Government of Western Australia (2018). 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of November 2017. WA Department of Parks and Wildlife, Perth.
- Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Jones, A. (2015) Threatened and Priority Flora List, 11 November 2015. Department of Parks and Wildlife: Kensington, WA.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- MQ Resources Pty Ltd (2018) Advice provided in relation to the submissions received Clearing Permit Application CPS 7902/1 (DWER Ref:A1665063).
- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Threatened Species Scientific Committee (2016). Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain Ecological Community. Canberra: Department of the Environment and Energy. Available from: Error! Hyperlink reference not valid.. In effect under the EPBC Act from 16 September 2016.
- Western Australian Herbarium (1998- ) FloraBase The Western Australian Flora. Department of Parks and Wildlife. http://florabase.dpaw.wa.gov.au/ (Accessed April 2018).

GIS Databases:
Aboriginal Sites of Significance
DBCA Estate
Groundwater salinity
Hydrography, Linear
Hydrography, Hierarchy
Remnant Vegetation
SAC bio datasets (accessed March 2018)
Soils, Statewide
Topographic contours