



## CLEARING PERMIT

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

<b>Purpose Permit number:</b>	CPS 5770/1
<b>Permit Holder:</b>	Lunard Pty Ltd trading as Stoneridge Quarries WA
<b>Duration of Permit:</b>	22 November 2014 – 22 November 2019

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

**1. Purpose for which clearing may be done**

Clearing for the purpose of constructing a hard stand.

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

Lot 569 on Plan 3475 (Hope Valley)

Lot 570 on Plan 3475 (Hope Valley)

**3. Area of Clearing**

The Permit Holder must not clear more than 2.5 hectares of native vegetation within the area hatched yellow on attached Plan 5770/1.

**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.

A handwritten signature in cursive script, appearing to read "M. Warnock", written over a horizontal line.

M Warnock  
SENIOR MANAGER  
CLEARING REGULATION

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

23 October 2014

# Plan 5770/1



## LEGEND

- |   |   |
|---|---|
| <p><b>Clearing Instruments</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; background-color: yellow; margin-right: 5px;"></span> Areas Approved to Clear</li> <li><span style="display: inline-block; width: 15px; border-bottom: 1px solid black; margin-right: 5px;"></span> Road Centrelines</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Cadastre</li> <li>Perth Metropolitan Area<br/>Central 15cm Orthomosaic -<br/>Landgate 2012</li> </ul> | <p><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Local Government<br/>Authorities</p> |
|---|---|



Scale 1:3885  
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*M. Warnock* Date 23/10/14  
M. Warnock

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

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



# Clearing Permit Decision Report

Government of Western Australia  
Department of Environment Regulation

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5770/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Lunard Pty Ltd TA Stoneridge Quarries

### 1.3. Property details

Property: LOT 569 ON PLAN 3475 (House No. 243 POSTANS HOPE VALLEY 6165)  
LOT 570 ON PLAN 3475 (House No. 203 POSTANS HOPE VALLEY 6165)  
Local Government Area: City of Kwinana

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.5		Mechanical Removal	Building or Structure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 23 October 2014

## 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
Beard vegetation association 998: Medium woodland; tuart (Shepherd et al, 2001).	The application is to clear 2.5 hectares of native vegetation within Lots 569 and 570 on Plan 3475, Hope Valley, City of Kwinana for the purpose of constructing a hardstand area.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The vegetation under application is described as open Eucalyptus gomphocephala (Tuart) woodland with a midstory of Banksia and Grevillea species. A large amount of weed species (veldt grass) present within the applied area. The east side of the clearing area has previously been impacted upon from the installation of a gas pipe line.
Beard vegetation association 6: Medium woodland; tuart & jarrah (Shepherd et al, 2001).		To	
Hedde vegetation complex, Karrakatta Complex central and south: Predominantly open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri) and woodland of Eucalyptus marginata (Jarrah) - Banksia species (Hedde et al, 1980).		Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The vegetation under application is in a completely degraded to good condition (Keighery, 1994) condition (DER, 2013).  The vegetation condition and description was determined from a Department of Environment Regulation (DER) site visit undertaken on 15 October 2013 (DER, 2013).

## 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

This application is to clear 2.5 hectares of native vegetation within Lots 569 and 570, Hope Valley, for the purpose of constructing a hard stand area.

The vegetation under application consists of open Eucalyptus gomphocephala (Tuart) woodland with a large amount of understorey consisting of weed species, predominately veldt grass. Native midstorey and understorey species are also present within the applied area which includes Banksia and Grevillea species (DER, 2013). The vegetation under application is in a completely degraded to good (Keighery, 1994) condition (DER, 2013).

Several species of priority flora have been recorded within five kilometres of the applied area. Of the mapped priority flora none have been recorded within the same soil and vegetation types as the application area.

Several fauna species of conservation significance have been recorded within 10 kilometres of the area under application. A site inspection of the applied area recorded a large number of suspected Quenda diggings. The possible presence of Quenda within the applied area is likely to be due to the dense veldt grass (non-native) within the applied area. Although Quenda may be present within the applied area, the vegetation under application is not considered significant habitat given the dense ground cover of veldt grass (DER, 2013).

Carnaby's and Forest Red-tailed black cockatoo are known to exist within 10 kilometres of the area under application. The vegetation under application comprises of Eucalypt (Tuart), Banksia and Grevillea species (DER, 2013), these species are known to be significant foraging habitat for black cockatoo species.

Given that the vegetation under application provides foraging habitat for black cockatoo species and has the possibility of Quenda being within the applied area, the application may be at variance to this principle.

**Methodology**    References  
- Keighery (1994)  
- DER (2013)  
GIS Databases  
-SAC Bio Datasets - Accessed September 2013

**(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 may be at variance to this Principle**

Within five kilometres of the area under application numerous fauna species of conservation significance have been recorded. This includes but not limited to, Carnaby's cockatoo (*Calyptorhynchus latirostris*), Forest Red-tailed black Cockatoo (*Calyptorhynchus banksii naso*) *Isodon obesulus* subsp. *fusciventer* (Quenda), *Dasyurus geoffroi* (Chuditch), *Myrmecobius fasciatus* (Numbat), and *Setonix brachyurus* (Quokka) (DPaW, 2007- ).

A Carnaby's cockatoo confirmed roosting area is mapped approximately five kilometres east of the proposed clearing.

Black cockatoos forage on the seeds, nuts and flowers of proteaceous species (Banksia, Hakea, Grevillea), as well as *Allocasuarina* and *Eucalyptus* species (Valentine and Stock, 2008). The vegetation under application includes occurrences of *Eucalyptus* (Tuarts) *Banksia* and *Grevillea* species, therefore foraging habitat is present on site.

Carnaby's cockatoo is listed as endangered under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Carnaby's cockatoo was once abundant in Western Australia. Since the late 1940s the species has suffered a 30 per cent contraction in range, a 50 per cent decline in population, and between 1968 and 1990 disappeared from more than a third of its breeding range (Saunders 1990; Johnstone and Storr 1998; Saunders and Ingram 1998; Garnett et al. 2011).

A black cockatoo assessment report (Dixon, 2013) recorded no evidence of arboreal feeding, terrestrial feeding, roosting, resting, stag tree or tree with a hollow entrance diameter large enough for Carnaby's, Baudin's or Forest red tailed cockatoo to nest in within the applied area (Dixon, 2013). However, it is noted that the survey was not undertaken in accordance with EPA Guidance Statement 56.

The vegetation within the area under application comprises of a dense understorey consisting predominately of veldt grass along with native species. The dense understorey may be suitable for Quenda (*Isodon obesulus fusciventer*). A site inspection of the applied area identified a large number of suspected Quenda diggings within the application area (DER, 2013). Clearing in a south to north direction will allow Quenda to move out of the clearing area and avoid being impacted upon from the clearing.

Approximately half of the application area is a completely degraded (Keighery, 1994) condition and does not provide significant habitat for indigenous fauna. The eastern half of the application area is in a good (Keighery, 1994) condition and provides potential foraging habitat for black cockatoos and habitat for Quenda. Given the relatively small area that provides potential habitat for indigenous fauna the proposed clearing may be at variance to this principle.

**Methodology**    References  
Cale (2003)  
DPaW (2007)  
DER (2013)  
Dixon (2012)  
Garnett et al (2011)  
Johnstone and Storr (1998)

Keighery (1994)  
Saunders (1990)  
Saunders and Ingram (1998)  
Valentine and Stock (2008)

**(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 two known rare flora species occurring within five kilometres of the area under application.

One of the rare species was recorded in an area with the same soil and vegetation type as the applied area. This species is known to occur in winter-wet swamps in shallow water (Brown et al, 1998).

The second species has been recorded within a different soil and vegetation type to the application area. The species is known to occur in sandy loams and seasonally inundated plains (Brown et al, 1998).

The area under application consists of open *Eucalyptus gomphocephala* (Tuart) woodland with a large amount of weed species present (DER, 2013) and does not comprise of suitable habitat for rare flora species.

The proposed clearing is not likely to be at variance to this principle.

**Methodology**

References  
Brown et al (1998)  
DER (2013)  
GIS Databases  
-SAC Bio Datasets - Accessed September 2013

**(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 at variance to this Principle**

There has been no threatened ecological community (TEC) mapped within five kilometres of the area under application. The closest known TEC occurs approximately seven kilometres northwest of the area under application and is described as 'Callitris preissii Forest and Woodlands of the Swan Coastal Plain'.

The vegetation under application consists of open *Eucalyptus gomphocephala* (Tuart) woodland (DER, 2013) and is not a representation of the known TEC.

The proposed clearing is not at variance to this principle.

**Methodology**

References  
DER (2013)  
GIS Databases  
-SAC Bio Datasets - Accessed September 2013

**(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 area under application is mapped as Beard Vegetation Associations 6 and 998 which have 25 and 38 percent respectively of their pre-European vegetation remaining in the Swan Coastal Plain IBRA bioregion (Government of Western Australia, 2013). Hedde Vegetation Complex, Karrakatta Complex Central and South, has also been mapped within the area under application. Approximately 30 per cent of its pre-European vegetation extent remains (Hedde et al, 1980).

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 Environmental Protection Authority (EPA, 2006) recognises the Perth metropolitan Region as a constrained area, providing for the reduction of vegetation complexes to a minimum of 10 per cent of the pre-European extent. The three mapped vegetation associations are all above this 10 per cent minimum, consistent with the EPA's recommendation.

The local area surrounding the application (five kilometre radius) retains approximately 35 per cent pre-European vegetation.

The application does not occur within an extensively cleared landscape and the mapped vegetation associations are all above the 10 per cent minimum as recommended by the EPA.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion Swan Coastal Plain	1,501,209	587, 889	39	33
Shire Town of Kwinana	9,663	1,109	38.3	9.2
Beard Vegetation Association in Bioregion 998	50,000	19,000	38.1	41.0
6	56,000	14,000	24.9	35.6
Hedde Vegetation Complex Karrakatta Complex (central and south)	49,912	14,729	29.5	-

**Methodology** References:  
Commonwealth of Australia (2001)  
EPA (2006)  
Government of Western Australia (2013)  
Hedde et al (1980)  
Shepherd et al (2001)

**(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 not at variance to this Principle**  
Numerous wetlands and watercourses have been recorded within five kilometres of the area under application with the nearest being a conservation wetland mapped approximately one kilometre away from the clearing area.  
  
A site inspection of the area under application did not identify any wetlands or watercourses (DEC, 2013). Considering this and the distance to the nearest wetland, the proposed clearing is not at variance to this principle.

**Methodology** References  
-DER (2013)  
GIS Databases  
-Geomorphic Wetland (Mgt Categories), Swan Coastal Plain  
-Hydrography, Linear

**(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 soils within the area under application are part of the Spearwood Dune System and are described as brown sands with associated siliceous sands and leached sands (Northcote et al, 1960-68). These sandy soils have a high risk of wind erosion however given the intended land use is for a hardstand area, it is unlikely to cause appreciable land degradation in the form of wind erosion.  
  
The proposed clearing is not likely to be at variance to this Principle.

**Methodology** References  
-Northcote et al (1960- -68)

**(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 may be at variance to this Principle**  
An unnamed conservation park exists approximately 1.7 kilometres west and the Harry Waring Marsupial reserve occurs 2.4 kilometres east of the proposed clearing. Bush Forever site 267 occurs approximately one kilometre south of the proposed clearing site.  
  
The vegetation under application may act as linkage to facilitate fauna movement between the conservation park, Harry Waring Marsupial reserve or Bush Forever site 267. However, the vegetation within the adjacent

road reserve will remain intact, therefore the linkage will not be severed.

The proposed clearing may be at variance to this principle.

**Methodology** GIS Databases  
- Bushforever  
- DPaW 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 is not likely to be at variance to this Principle**

The nearest wetland/watercourse to the area under application is a Conservation Category Wetland occurring approximately one kilometre southwest of the area under application.

The groundwater salinity within the application area ranges between 500 - 1000 total dissolved solids per milligram per litre which is considered to be marginally saline.

The clearing as proposed is not likely to significantly impact upon the quality of surface or underground water.

The proposed clearing is not likely to be at variance to this principle.

**Methodology** GIS Databases:  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
- Groundwater Salinity, Statewide  
- Hydrography, linear

**(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 at variance to this Principle**

The nearest wetland/watercourse to the area under application is a Conservation Category Wetland occurring approximately one kilometre southwest of the area under application.

Given the distance to the nearest wetland and that the soils present within the applied area, the proposed clearing will not cause, or exacerbate the incidence or intensity of flooding.

Therefore the proposed clearing is not at variance to this Principle.

**Methodology** GIS Databases  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
- Hydrography, Linear

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

**Comments**

The area under application is zoned Rural under the Metropolitan Region Scheme.

The applicant has received planning approval from the City of Kwinana for the proposed hard stand subject to conditions.

No submissions have been received for the application.

The City of Kwinana (2013) requests that:

- Efforts are made to identify and protect any threatened flora that may be present at the subject site
- A suitable fauna relocation program is implemented prior to commencement of clearing
- Any offsets, if required, are located within the City of Kwinana locality

**Methodology** References  
- City of Kwinana (2007)

GIS Databases  
- Cadastre  
- Metropolitan Regional Scheme

#### 4. References

- Cale, B (2003) Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan 2002- 2012. Department of Environment and Conservation. Wanneroo WA.
- City of Kwinana (2013) Comments received in relation to Clearing Permit Application CPS 5770/1 - Lunard Pty Ltd (DER Ref:A677391)
- DEC (2007 - ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed September 2013
- DER (2013) Site Inspection Report for Clearing Permit Application CPS 5770/1. Lot 572 Postans Road, Hope Valley. Site inspection undertaken 11 June 2012. Department of Environment Regulation, Western Australia (DER Ref:A
- Dixon (2012) Black Cockatoo *Calyptorhynchus Latirostris*, Short Bill. White Tail *Calyptorhynchus Baudinii*, Long Bill. White Tail *Calyptorhynchus Naso*. Red Tail. Black cockatoo assessment/report. Prepared for Stoneridge Quarries. Prepared by Alison Dixon Bsc biology
- EPA (2006) Guidance for the Assessment of Environmental Factors - Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.
- Garnett, S., Szabo, J. and Dutson, G. (2011). The Action Plan for Australian Birds 2010. CSIRO Publishing, Melbourne, Victoria. Government of Western Australia. (2013). 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- Hedde, 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.
- Johnstone, R.E. and Storr, G.M. (1998). Handbook of Western Australian Birds, Volume I, Non-passerines (Emu to Dollarbird). Western Australian Museum, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Saunders, D.A. (1990). Problems of survival in an extensively cultivated landscape: the case of Carnaby's cockatoo *Calyptorhynchus funereus latirostris*. *Biological Conservation*. 54: 277-290.
- Saunders, D.A. and Ingram, J.A. (1998). Twenty-eight years of monitoring a breeding population of Carnaby's cockatoo. *Pacific Conservation Biology*. 4: 261-270.
- 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.
- Valentine and Stock (2008) Food Resources of Carnaby's Black Cockatoo *Calyptorhynchus latirostris*) In the Gnangara Sustainability Strategy Study Area. Edith Cowen University and Department of Environment and Conservation.