



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 8077/1
Permit Holder:	Richard Noble and Company
Duration of Permit:	2 December 2018 to 2 December 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 bulk earth works.
- 2. Land on which clearing is to be done**
Lot 37 on Plan 9781, Hammond Park
- 3. Area of Clearing**
The Permit Holder must not clear more than 1.5 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8077/1.
- 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 and Dieback 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 no known *dieback* or *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* and *dieback* 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* or delegated officer.

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*;

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

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



Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

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

2 November 2018

Plan - 8077/1

32.173747°S

32.173747°S








115.853489°E

115.857103°E

32.175548°S

32.175548°S

Legend

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



0 100m

1:1,806

(Approximate when reproduced at A4)
GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

M Gannaway Date ..2/11/2018.....
M Gannaway

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.: 8077/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Richard Noble and Company

1.3. Property details

Property: Lot 37 on Plan 9781, Hammond Park
Local Government Authority: Cockburn, City of
Localities: Hammond Park

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.5		Mechanical Removal	Bulk earthworks

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 2 November 2018

Reasons for Decision: The clearing permit application was received on 16 May 2018 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing may be at variance to principle (d) and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer determined that the proposed clearing may increase the risk of weeds and dieback being introduced or spread into adjacent native vegetation. Weed and dieback management measures will minimise impacts to adjacent native vegetation.

The Delegated Officer noted that the proposed clearing will impact on a small, degraded area of a Threatened Ecological Community (TEC) (Banksia woodlands of the Swan Coastal Plain) that occurs within the application area. Based upon the small size (0.13ha), and condition of the TEC occurrence within the application area, it is considered that the impacts to the TEC in the local area to be negligible. In making this determination, the Delegated Officer considered the applicants measures to avoid and minimise impacts to the TEC that occurs in the road reserve to the east, within the application area, and to the property south to the application area. In addition, the applicant has maintained a 10 metre vegetation buffer to the adjacent occurrences of the TEC.

Given the above, the Delegated Officer determined that the proposed clearing is not likely to lead to an unacceptable risk to the environment.

2. Site Information

Clearing Description: The application is to clear up to clear 1.5 hectare of native vegetation within Lot 37 on Deposited Plan 9781, Hammond Park, for the purpose of bulk earthworks.

Vegetation Description: The application area is mapped as Heddle vegetation complex:

- Bassendean Complex-Central And\South, described as vegetation that ranges from a low open forest and low open woodland of *Banksia* species, *Eucalyptus todtiana* (Pricklybark) to low woodland of *Melaleuca* species and sedgelands which occupy the moister sites (Heddle et al., 1980).

A vegetation assessment provided by the applicant (Strategen survey) identified three vegetation types within the application area:

- Shrubland of *Adenanthos cygnorum* over open shrubland of *Allocasuarina humilis*, *Scholtzia involucreta* and *Hibbertia hypericoides* with occasional *Banksia menziesii*, *B. attenuata* and *Allocasuarina fraseriana* (0.77ha);
- Shrubland of *Allocasuarina humilis* over open heath of *Scholtzia involucreta*, *Mesomelaena pseudostygia* and mixed shrubs with occasional *Banksia menziesii* (0.48); and
- Open woodland of *Banksia menziesii*, *Eucalyptus todtiana* and *B. attenuata* over isolated shrubs of *Adenanthos cygnorum* over mixed introduced species (Strategen, 2018).

Vegetation Condition: The application area has been mapped in Very Good to Completely Degraded condition, described as:

- Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994); to
- Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).

The Stragen (2018) vegetation assessment determined the vegetation condition to be made up of the following;

- Good to very good 0.77 hectares;
- Good 0.48 hectares;
- Degraded 0.13 hectares; and
- Completely degraded 0.09 hectares.

Soil and Landform Type: The application area is mapped as Bassendean B1 Phase (212Bs_B1) land subsystem which is described as extremely low to very low relief dunes, undulating sandplain and discrete sand rises with deep bleached grey sands sometimes with a pale yellow B horizon or a weak iron-organic hardpan at depths generally greater than two metres; *Banksia* dominant.

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

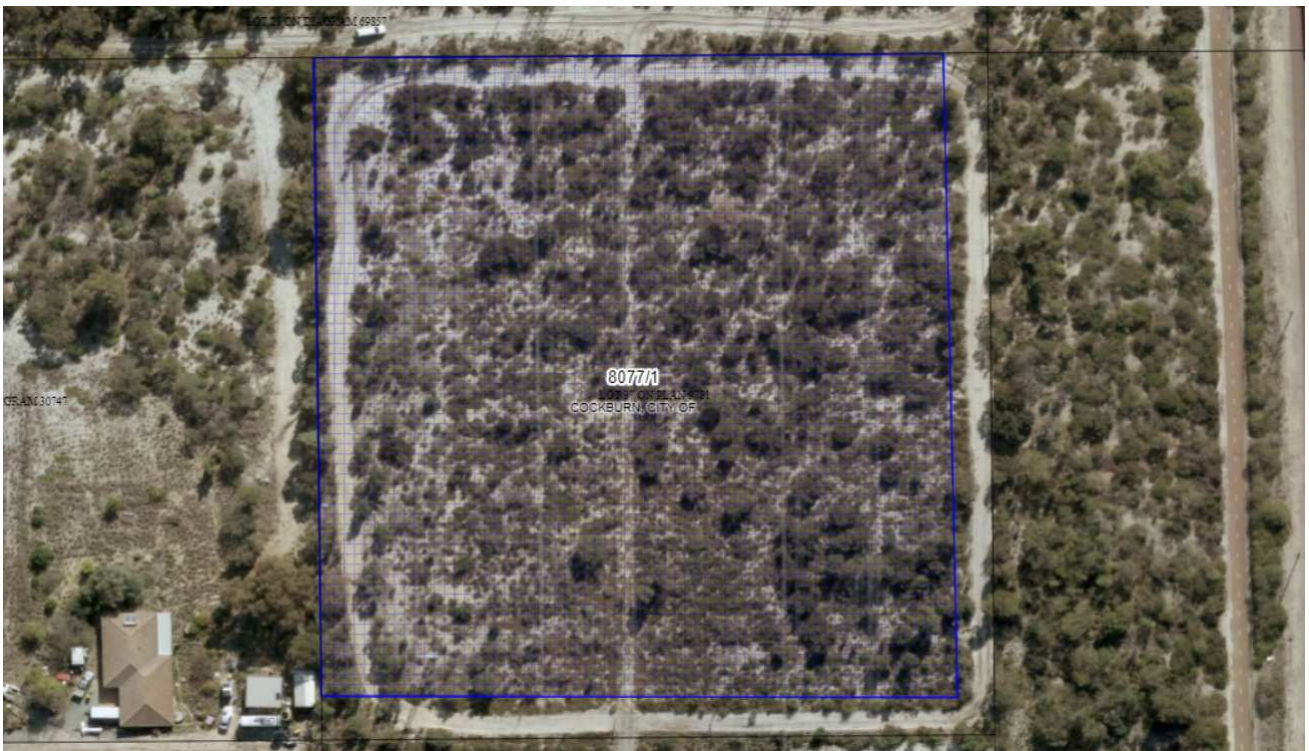


Figure 1: Map of application area



Photo 1



Photo 2

Figure 2: Photographs of vegetation within the application area

3. Assessment of application against clearing principles

The application is to clear 1.5 hectares of native vegetation within Lot 37 on Deposited Plan 9781, Hammond Park, for the purpose of bulk earthworks.

As discussed under section 2, three vegetation types have been identified within the application area, with the application area predominately consisting of shrubland of *Adenanthos cygnorum* over open shrubland of *Allocasuarina humilis*, *Scholtzia involucreta* and *Hibbertia hypericoides* with occasional *Banksia menziesii*, *B. attenuata* and *Allocasuarina fraseriana* (Strategen, 2018).

According to available databases received from the Department of Biodiversity Conservation and Attractions (DBCA), 22 priority flora species and five rare flora species have been recorded within the local area. Of these, one priority flora specie (*Dodonaea hackettiana* (P4)) has been mapped as occurring within the same vegetation and soil profile as the application area. A desktop assessment of the application area undertaken by Strategen (2018) considered preferred habitat for the two species, *Dodonaea hackettiana* (P4) and *Caladenia huegelii* (rare) within the application area. However, a vegetation and flora survey of the application area did not record the abovementioned flora species to be present within the application area (Strategen, 2018). No other flora species declared as rare or listed as priority was recorded during the survey (Strategen, 2018).

According to available databases, 16 fauna species listed as specially protected under the *Wildlife Conservation Act 1950*, 16 priority fauna and 29 fauna species protected under international agreement have been recorded within the local area (DBCA, 2007-). Based upon the vegetation present, the application area could provide habitat for the following conservation significant fauna species; lined skink (*Lerista lineata*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), Rainbow bee-eater (*Merops ornatus*) and southern brown bandicoot (*Isodon obesulus*). Whilst the application area may provide suitable habitat for the above mentioned species it is not considered significant.

The lined skink inhabits sandy coastal heath and shrubland, this includes *banksia / eucalypt* woodlands. This type of habitat is limited within the application area, comprising of a total of 0.13 hectares in a degraded to completely degraded (Keighery, 1994) condition (Strategen, 2018) as the area has been previously cleared from the construction of a firebreak. The rainbow bee-eater is one of the most common and widespread birds in Australia with a distribution that covers the majority of Australia. Noting this, its habitat appears widespread and not limited to the application area. The southern brown bandicoot on the Swan Coastal Plain (SCP) prefers dense vegetation cover of which the application has some limited habitat based on this description, however its preferred habitat on the SCP is generally associated with wetlands with dense vegetation where they feed on fruit, seeds, insects and fungi (Strategen, 2018). This type of habitat is not present within the application area.

Carnaby's cockatoo species nest in hollows in live or dead trees of tuart, jarrah, marri, *Eucalyptus diversicolor* (karri), *Eucalyptus wandoo* (wandoo), *Eucalyptus salmonophloia* (salmon gum), *Eucalyptus rudis* (flooded gum), *Eucalyptus loxophleba* (York gum), *Eucalyptus accedens* (powder bark), *Eucalyptus megacarpa* (bullich) and *Eucalyptus patens* (blackbutt) (Commonwealth of Australia, 2012). Their preference for foraging is habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia, 2012). A site inspection undertaken by Department of Water and Environmental Regulation (DWER) officers (DWER, 2018) and a vegetation survey undertaken by Strategen (2018), did not record any habitat trees suitable for breeding purposes for Carnaby's cockatoo nor was there any evidence of foraging occurring within the application area. Based on this and the relative small amount of foraging habitat (0.13 hectares) for Carnaby's cockatoo, the proposed clearing is not likely to impact on this species.

According to available databases, several occurrences of the ecological community 'Banksia woodlands of the Swan Coastal Plain' occurs within the local area, including being mapped as occurring within the application area. This ecological community is listed as Priority 3 by DBCA and as a Threatened Ecological Community (TEC) under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Approved Conservation Advice for the TEC states that to be considered representative of the TEC, a remnant in the Swan Coastal Plain bioregion must include at least one of four *Banksia* species being candlestick banksia, *Banksia menziesii* (firewood banksia), *Banksia prionotes* (acorn banksia) and/or *Banksia ilicifolia* (holly-leaved banksia); must include an emergent tree layer often including marri, jarrah, or tuart, and other medium trees including *Eucalyptus todtiana* (pricklybark), *Nuytsia floribunda* (WA Christmas tree), western sheoak, *Callitris arenaria* (sandplain cypress), *Callitris pyramidalis* (swamp cypress) or *Xylomelum occidentale* (woody pear); and must include an often highly species-rich understorey (Threatened Species Scientific Committee, 2016). Although occurrence mapping indicates the whole application area is likely to represent the TEC, a vegetation survey determined that approximately 0.13 hectares of the application area appears to be representative of the TEC, with the vegetation type considered to be in a degraded condition.

Condition thresholds provide guidance on when a patch of an ecological community retains sufficient conservation values to be considered a 'Matter of National Environmental Significance', as defined under the EPBC Act, and to be considered as part of the TEC. Minimum patch sizes by condition (Keighery, 1994) are 'pristine' – no minimum patch size applies; 'excellent' – 0.5 hectares; 'very good' – 1 hectare; and 'good' – 2 hectares (Threatened Species Scientific Committee, 2016).

Based upon the minimum patch size condition thresholds, the patch would not meet the requirements due to its small size and degraded condition (Strategen, 2018). However, this patch forms part of a broader area of *Banksia* woodland to the north and south of the application area (DWER, 2018). Noting the condition of the TEC within the application area and that this area has been previously cleared for the creation of a firebreak, the proposed clearing is not likely to significantly impact on the occurrence of this TEC in the local area.

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). In the Perth Metropolitan and Bunbury regions, the Environmental Protection Authority (EPA) has a modified objective to retain at least 10 per cent of the pre-clearing extent of vegetation complexes for defined constrained areas (intensely developed) (EPA, 2008). The remaining extents of native vegetation within the bioregion, and mapped vegetation association are above the 10 per cent threshold (Government of Western Australia, CPS 8077/1, 2 November 2018

2018). Aerial imagery indicates that the local area retains approximately 35 per cent native vegetation cover. Noting this, the application does not occur in an extensively cleared landscape.

According to available databases, no watercourses and wetlands occur with the application area. Noting this, and that the Strategen (2018) vegetation assessment and DWER (2018) site inspection did not identify any vegetation associated with a wetland or watercourse within the application area, the proposed clearing will not impact on vegetation growing in, or in association with, an environment associated with a watercourse or wetland.

According to available databases, there are a number of conservation areas (predominately Bush Forever Sites) 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, housing developments and transport infrastructure. Noting this, the proposed clearing is not likely to impact on the environmental values of these conservation areas. Although there is unlikely to be impacts to conservation areas from the proposed clearing, the disturbance caused by the proposed clearing is likely to increase the risk of weeds and dieback being introduced into adjacent areas of remnant vegetation. Weed and dieback management practices will assist in mitigating this risk.

As discussed under Section 2, the application area is mapped within Bassendean B1 Phase (212Bs_B1) land subsystems. This land subsystem is mapped at 70 per cent of the map unit having a high to extreme risk of wind erosion (Schoknecht et al., 2004). Noting this and the nature of the sandy soils, the application could potentially contribute to increased wind erosion. However, noting the size and purpose of the application, and that vegetation buffers will remain around the application area, the risk of wind erosion is likely to be short term and mitigated once the bulk earthworks has commenced.

According to available databases, no watercourses, wetlands have been mapped within the application area. Groundwater salinity within the application area is mapped at less than 500 total dissolved solids, milligrams per litre. This level of groundwater salinity is classified as 'fresh'. Noting this, the proposed clearing is unlikely to cause deterioration in the quality of surface or underground water.

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

Planning instruments and other relevant matters.

The application was advertised on DWER's website on 2 August 2017 for a 21 day submission period. No submissions were received during this period.

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

The City of Cockburn (2018) advises conditional approval for bulk earthworks within the subject property has been given.

The application was referred to the Department of the Environment and Energy and the proposal was deemed not a controlled action. The decision was made under Section 75 of the EPBC Act.

4. References

- City of Cockburn (2018) Advice received in relation to Clearing Permit Application CPS 8077/1 – Conditional Approval given on Lot 37, for bulk earthworks (DWER Ref:A1719424).
- 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 September 2018
- Department of Water and Environmental Regulation (2018) Site Inspection Report for Clearing Permit Application CPS 8077/1 - Richard Noble and Company (DWER Ref:A1732116)
- EPA (2008) Environmental Guidance for Planning and Development. Guidance Statement No. 33. Environmental Protection Authority. Western Australia.
- Government of Western Australia (2018). 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2017. WA Department of Parks and Wildlife, 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.
- Strategen (2018) Lot 37 Barfield Road, Hammond Park. Native Vegetation Supporting Documentation for Clearing Permit Application CPS 8077/1 (DWER Ref: A1675325).
- 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.

GIS Databases:

Aboriginal Sites of Significance

DBCA Estate

Groundwater salinity

Hydrography, Linear

CPS 8077/1, 2 November 2018

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Hydrography, Hierarchy
Remnant Vegetation
SAC bio datasets (accessed November 2017)
Soils, Statewide
Topographic contours