



1. Application details

1.1. Permit application details

Permit application No.: 205/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **North East Equity Pty Ltd**
Postal address: P.O. Box 63 Tuart Hill WA 6060
Contacts: Phone:
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1.3. Property details

Property: LOT 3909 ON PLAN 210000 (MIMEGARRA 6507)

Local Government Area: Shire Of Dandaragan & Shire Of Gingin
Colloquial name: Nilgen Road, 15km from Lancelin, Dandaragan

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
56		Mechanical Removal	Horticulture

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 1029: Shrublands; scrub-heath <i>Dryandra-Calothamnus</i> assoc. with <i>B. prionotes</i> on limestone. (Hopkins <i>et al.</i> 2001, Shepherd <i>et al.</i> 2001)	The site is open Banksia woodland that has been subject to grazing by domesticated animals and to frequent fires. Severe weed infestation (<i>Ehrharta</i> , <i>Bromus</i> , <i>Arctotheca</i> , <i>Lupinus</i> , <i>Trifolium</i> , <i>Avena</i>) is present in the south of the area under application. The site drains to an internal drainage depression in the centre (Smith <i>et al.</i> 2004)	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994).	Vegetation condition assessed by Smith <i>et al.</i> (2004).

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 is not at variance to this Principle**
Proposal is not at variance to this principle since the area to be cleared has lower biodiversity than nearby areas of reserved vegetation. It has been the subject of frequent fires and grazing, and severe weed infestation is present. The area to be cleared is approximately 2km long by 250-800m wide (60ha) and thus has significant edge effects.

Methodology Smith *et al.* (2004); GHD (2004a).

(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**
It is likely that there are populations of the Schedule 1 fauna species *Calyptorhynchus latirostris* (Carnaby's black cockatoo) in the area. The clearing under application is not expected to impact on the population given that cockatoos breed in mature Eucalypt trees and there are none of these in the area under application, and

that the cockatoos feed on Banksia and other Proteaceae which are well represented in the nearby reserves and other remnant vegetation (GHD, 2004b).

The vegetation does not provide significant habitat for fauna species in the local area. The vegetation does not provide ecological linkages or habitat for assemblages or meta-populations (GHD, 2004b)..

Methodology GIS database: CALM Threatened and Priority Fauna Database
GHD (2004b).

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, significant flora.

Comments Proposal is not likely to be at variance to this Principle

A search of the CALM Threatened Flora and WA Herbarium Databases for significant flora in the local region revealed that ten significant flora were known from within a 15km radius of the project site. None of those listed were found during the survey within the project area and are considered highly unlikely to be present as habitats present do not favour the majority of the species listed' (Smith et al., 2004, p9). Systematic field traverses found one priority three taxon, *Dryandra lindleyana* ssp *pollostata* in the area to be cleared. This taxon is described as locally uncommon but widespread (Smith et al 2004, p10). More individual plants of this taxon are likely to be located within the area proposed for conservation covenant and thus the proposal is likely to reserve a population of the taxon. The initial flora survey found specimens believed to be a previously undescribed species of *Goodenia* which was subsequently identified by WA Herbarium staff as *Scaevola phlebopetala* and thus of no particular conservation status.

Methodology GIS database: Declared Rare and Priority Flora List - CALM 13/08/03;
Smith et al. (2004); GHD (2004a).

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significant ecological community.

Comments Proposal is not at variance to this Principle

Proposed clearing is not expected to impact on listed Threatened Ecological Communities or any significant or priority ecological communities.

'A search of the CALM Threatened Flora and WA Herbarium Databases for significant flora in the local region revealed that ten significant flora were known from within a 15km radius of the project site. None of those listed were found during the survey within the project area and are considered highly unlikely to be present as habitats present do not favour the majority of the species listed' (Smith, et al., 2004).

Methodology GIS database: Threatened Ecological Communities - CALM 15/7/03.
Smith et al. (2004).
GHD (2004c).

(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 at variance to this Principle

Proposal is not at variance to this principle.

The area is within the Swan Coastal Plain bioregion, 43% remains uncleared. The area is within the Shire of Dandaragan, 48.8% remains uncleared. The vegetation in the proposed area is Beard veg association 1029, 75.4% remains uncleared and 32.6% is in IUCN Class I-IV reserves.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	Reserves/CALM-managed land, %veg
IBRA Bioregion –					
Swan Coastal Plain	1,529,235	657,450	43	Depleted	
Shire – Dandaragan	668,507	326,283	49	Depleted	
Beard veg type – 1029	82,795	62,440	75	Least concern	32.6

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

Methodology GIS database: Pre-European Vegetation - DA 01/01;
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

There are no watercourses or wetlands in the area subject to clearing. There is an 'internally drained depression which is not regarded as a true wetland or dampland' to the west of the property (Smith, et al., 2004 p1) and which 'does not have a hardpan base and therefore does not become inundated in winter' (Smith, et al., 2004 p2).

There is a seasonally inundated swamp in adjacent Bashford Nature Reserve. The swamp and dampland consist of isolated near-surface lens of low permeability clay creating locally perched groundwater (Parsons Brinkerhoff, 2004).

Clearing is unlikely to cause any rise in groundwater levels (Inter Departmental Committee Meeting, 11 Dec 2003).

Methodology GIS database: Hydrography, linear - DOE 1/2/04;
Smith et al. (2004); Parsons Brinkerhoff (2004); Inter Departmental Committee (11 Dec 2003).

(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 risks of wind erosion, waterlogging and secondary salinity, nutrient export, and agricultural chemical impact on vegetation have been outlined in correspondence between DAWA, CSLC and DoE. Management strategies outlined by the proponent have been assessed as appropriate by the CSLC DAWA (2004); GHD (2004a).

Methodology DAWA (2004); GHD (2004a)

(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

The vegetation to be cleared does not contribute to the environmental values of, or provide a buffer or ecological linkage to, the conservation area. The vegetation to be cleared is a degraded representation of that reserved on the conservation land.

The land to be cleared is on a property adjacent to Bashford Nature Reserve, Melbourne Location 1978, Crown Reserve 39221, vested in Conservation Commission of WA. The area to be cleared is approximately 800m NE of the reserve.

The applicant proposes to establish a conservation covenant over an area of property 140-160ha, immediately to the west of Bashford Nature Reserve. This area will link Bashford Nature Reserve with the vegetated land to the west which is currently leased for Defense purposes. The proposed covenant would improve the conservation value of the reserve by increasing the amount of buffer vegetation between the horticultural land and the conservation reserve.

Methodology GIS database: CALM Managed Lands and Water - CALM 1/06/04;
GHD (2004a).

(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 at variance to this Principle

Proposed clearing is not expected to impact on groundwater. Area is not in a proclaimed, gazetted or declared water catchment.

Clearing is unlikely to cause any rise in groundwater levels (Inter Departmental Committee Meeting, 11 Dec 2003).

Methodology GIS databases: Salinity Risk LM 25m - DOLA 00, PDWSA Protection Zones - DOE 7/1/04;
Inter Departmental Committee Meeting (11 Dec 2003).

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Comments Proposal is not at variance to this Principle

Proposed clearing is not expected to exacerbate flooding. The area is not within a floodplain.

The subject land is not susceptible to rising watertables (and hence to flooding or waterlogging) due to landscape position, existing depth to the watertable, and the relative extent of the proposed clearing (Land Assessment Pty Ltd, 2003, P24).

Methodology GIS database: FMD 100 year ARI Floodplain Area - DOE 02/03;
Land Assessment Pty Ltd (2003).

Planning instrument or other matter.

Comments No comments

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	56	Grant	Digitised area is actually ~72ha but only 56ha will be cleared for irrigation pivots The assessable criteria have been addressed. Objections raised by interested parties have been addressed. The assessing officer recommends that the permit should be granted subject to conditions.

5. References

- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref CEO1391/04.
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales ; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- GHD (2004a) North East Equity Pty Ltd Boo Too Park (Lot 3909) Application for a Clearing Permit Supporting Information. GHD, Perth (ref 61/14057/45390).
- GHD (2004b) North East Equity Pty Ltd Fauna Survey Report. GHD, Perth (ref 61/15047/45632).
- GHD (2004c) Location 3909 – Proposed Pivot Irrigation Area Preliminary Karst Assessment. GHD, Perth (61/15047).
- 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.
- Inter Departmental committee (2003). Land clearing proposal advice. Advice to Commissioner, Soil and Land Conservation, Department of Agriculture. Inter Departmental Committee, 11 Dec 2003. DoE TRIM ref IN15702.
- Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Land Assessment Pty Ltd (2003) Site Assessment Report Loc 3909 Nilgen Rd Shire of Dandaragan. Land Assessment, Subiaco (ref Report No 0303).
- Parsons Brinkerhoff (2004). Hydrogeological Mechanisms – Bashford Reserve. North East Equity, Perth.
- 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.
- Smith, P.M., Smith, S.K. and Cockerton, G.T.B. (2004) Flora and Vegetation of Boo Too Park Stage 2 Development Portion of Location 3909 Nilgen Road Shire of Dandaragan. Western Botanical, Mundaring (ref WB212 Version 2).