



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4805/1
Permit Holder:	DBNGP (WA) Nominees Pty Limited
Duration of Permit:	23 April 2012 – 23 April 2017

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 purposes of access for pipeline construction.

2. Land on which clearing is to be done

Section 91 Licence 00264-2011-02-203 being within Lot 287 on Plan 210981, Brown Range 6701

3. Area of Clearing

The Permit Holder must not clear more than 0.3 hectares of native vegetation within the area shaded yellow on attached Plan 4805/1.

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.

5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the power to clear native vegetation for those activities under the *Land Administration Act 1997* or any other written law.

6. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

7. Avoid, minimise etc 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:

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

8. 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*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

PART III - RECORD KEEPING AND REPORTING

9. Records must be kept

The Permit Holder must maintain the following records for activities 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;
- (b) the date that the area was cleared; and
- (c) the size of the area cleared (in hectares).

10. 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 9 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 23 January 2017 the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.

Definitions

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

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;

weeds means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.



Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

29 March 2012

Plan 4805/1



LEGEND

Clearing Restrictions

- Areas Approved to Clear
- Road Centrelines
- Local Government Authorities
- Towns

- A
- B
- C

Cadastral_1

Carmarvon 1:4m Orthomosaic - Landgate 2002



Scale 1:4000

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.

[Signature] Date 29/3/12

K Faulkner

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

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Department of Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 4805/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: DBNGP (WA) Nominees Pty Limited

1.3. Property details

Property: LOT 287 ON PLAN 210981 (BROWN RANGE 6701)
Local Government Area: Shire of Carnarvon

1.4. Application

Clearing Area (ha) 0.3	Method of Clearing Mechanical Removal	For the purpose of: Access for pipeline construction
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1.5. Decision on application

Decision on Permit Application: GRANT
Decision Date: 29 March 2012

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
Mapped Beard vegetation association: 308 - Mosaic: Shrublands; Acacia sclerosperma sparse scrub / succulent steppe; saltbush and bluebush.	Astron (2009) described the neighbouring vegetation in the proposed power station and gas pipeline easement as comprising 'high open shrubland of Acacia sclerosperma, Acacia tetragonophylla, Santalum lanceolatum (Eremophila maitlandii) over shrubland of Acacia ramulosa, Rhagodia eremea, Enchyleana tomentosa over mixed open herbland of Sida rohlenae, Sida sp. Carnarvon, Corchorus parviflorus over Tussock grassland of 'Cenchrus ciliaris' with associated species of 'Exocarpus aphyllus, Scaevola sericophylla, Ptilotus obovatus, Pityrodia loxocarpa' on deep red sand dunes.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994) To Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition confirmed through aerial imagery (Carnarvon 1.4m Othomosaic – Landgate 2002) and adjacent vegetation survey (Astron, 2009).
	The vegetation condition was recorded as 'poor' (Kaesehagen, 1995) and partially 'degraded' (Keighery, 1994) with disturbance from weed infestation, particularly Cenchrus ciliaris, vehicle tracks and rubbish dumping (Astron, 2009). Aerial imagery shows vegetation to be in a similar condition in the area currently under application.		

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 likely to be at variance to this Principle**
The proposal is to clear up to 0.3 hectares of native vegetation within Lot 287 on Plan 210981, Brown Range, for the purposes of "access for pipeline construction" (DBP, 2012).

Fifteen priority flora species have been recorded within the local area (40km radius) of the applied clearing area, including Schoenia filifolia subsp. arenicola (priority 1), which has been recorded on the same mapped vegetation and soil types to the area under application. Although a flora survey was undertaken by Astron Environmental Services in 2009 of the adjacent power station and pipeline interconnect sites, Schoenia filifolia subsp. arenicola is an annual herb flowering in August to September (WA Herbarium, 1998-) and therefore is not likely to have been observed during the survey which was conducted from the 25-27 October. Therefore, this species may inhabit the applied clearing area however, the most recent record of this species in the local area is from 1977 with the closest record being approximately 3.9km away. Given this and the poor and partially degraded condition of much of the vegetation in this area (Astron, 2009) the potential for this species to occur is low.

Many of the other priority species are either known from only one record, old records or are shrub species that should have been able to be identified by a qualified botanist outside of the flowering period if present. If these species were not found directly adjacent to the area under application then it is also unlikely that they inhabit the area under application.

The closest priority ecological communities to the applied clearing area are the Lake McLeod Invertebrate Assemblages (priority 4, the buffer to these communities extends into 40km radius but not close to the applied clearing area) and the Hamelin Stromatolite community (priority 4, approximately 76km south to the buffer of this community from the applied clearing area). The proposed clearing is not likely to impact upon these communities.

Three weed species, *Cenchrus ciliaris* (Buffel grass), *Malvastrum americanum* (Spiked Malvastrum) and *Prosopis glandulosa* (Mesquite, priority 1 declared plant (DAFWA, 2011)), were recorded in the site set aside for the power station and gas pipeline easement (Astron, 2009). Given that these species occur directly adjacent to the area under application and there is clearing already, and proposed, along three sides of the applied clearing area, increasing edge effects on this portion of vegetation, it is highly likely that these weed species occur in the area under application. Appropriate weed hygiene and control measures will be required to reduce the risk of introduction and spread of weeds into neighbouring remnant vegetation.

The applicant has advised that any unused areas will be restored and rehabilitated in accordance with the DBP Generic CEMP Rehabilitation Protocol including re-contouring to match surrounding land form, construction of erosion controls where required, respread of topsoil and vegetation and reseedling or revegetation using local native species to restore vegetation cover (Preston Consulting, 2011). Rehabilitation is proposed to commence within one year and further revegetation and rehabilitation works will be able to commence when seasonal conditions are most favourable after construction is complete (Preston Consulting, 2011).

Given the small scale and 'degraded' to 'good' condition (Keighery, 1994) of the vegetation proposed to be cleared in the context of large areas of remnant vegetation in the local area in better condition, the vegetation is considered not likely to comprise a high level of biological diversity. Therefore the proposed clearing is not likely to be at variance to this principle.

- Methodology** References:
- Astron (2009)
 - DAFWA (2011)
 - DBP (2012)
 - DEC (2007-) – NatureMap Accessed 6 March 2012
 - Keighery (1994)
 - Preston Consulting (2011)
 - WA Herbarium (1998-)
- GIS Databases:
- Carnarvon 1.4m Orthomosaic - Landgate 2002
 - SAC Biodatasets - Accessed 27 February 2012

(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**
- Eleven threatened and priority fauna have been recorded within the local area (40km radius) of the applied clearing area with the closest records being Eastern Curlew (*Numenius madagascariensis*, priority 4), Peregrine Falcon (*Falco peregrinus*, other specially protected fauna), Australian Bustard (*Ardeotis australis*, priority 4), *Falco hypoleucos* (Grey Falcon, priority 4) and *Macronectes giganteus* (Southern Giant Petrel, listed under Schedule 1 - as rare or likely to become extinct under the Wildlife Conservation Act 1950 and Endangered under the Environment Protection and Biodiversity Conservation Act 1999) (DEC, 2007-).

A reconnaissance survey of the area adjacent and west of the applied clearing area for the proposed power station and gas pipeline alignment was undertaken by Astron Environmental Services from 25 to 27 October 2009 (Astron, 2009). *Falco peregrinus* and *Merops ornatus* (Rainbow bee-eater) were the only two species of conservation significance recorded within approximately 1km from the survey area (Astron, 2009) however, no fauna trapping work was undertaken and therefore mammal, reptile and amphibian species that may be in the area may not have been recorded.

Although it is likely that the proposed clearing will provide habitat suitable for indigenous fauna, some of the avian species are migratory and given the scale of the proposed clearing in a local and regional area that retains remnant vegetation in similar or better condition, the applied clearing area is not likely to be considered significant habitat for indigenous fauna.

- Methodology** References:
- Astron (2009)
 - DEC (2007-) - NatureMap Accessed 27 February 2012
- GIS Databases:
- Carnarvon 1.4m Orthomosaic - Landgate 2002

(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

One record of a species, *Tecticornia* aff. *bulbosa* has been recorded within a 40km radius of the applied clearing area. *Tecticornia bulbosa* is listed as Vulnerable under the Environment Protection and Biodiversity Conservation Act 1999 and declared rare under the Wildlife Conservation Act 1950.

Tecticornia bulbosa (Large-articed samphire) is known to inhabit saline sandy clay or areas containing red/brown loam soils (WA Herbarium, 1998-). The landscape mapped for this area comprises isolated sand dunes aligned along the coast and related to dunes of unit AB10 (undulating sand dune formations generally underlain by aeolianite and with a few marl swamps nearer the coast: chief soils are red earthy sands and red and brown sands with loamy soils occurring in swamps) with chief soils of red earthy sands (Northcote et al, 1960-68). Astron (2009) noted that the sandy dunes of the site adjoining the area currently under application are not likely to support *Tecticornia bulbosa*.

No rare flora were observed during a flora and vegetation survey undertaken 26-27 October 2009 of the adjacent power station and gas pipeline alignment areas (Astron, 2009).

It is therefore not likely that the area under application will provide habitat for rare flora species and is not likely to be at variance to this principle.

Methodology

References:

- Astron (2009)
- DEC (2007-) - NatureMap Accessed 6 March 2012
- Northcote et al (1960-68)
- WA Herbarium (1998-)

GIS Databases:

- Carnarvon 1.4m Orthomosaic - Landgate 2002
- SAC Biodatasets - Accessed 27 February 2012
- Soils, Statewide - DA

(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 likely to be at variance to this Principle

No threatened ecological communities have been recorded within the local area (40km radius) of the applied clearing area.

The closest threatened ecological community is the Cape Range Remipede Community approximately 275km north of the area under application. The proposed clearing is not likely to comprise, or is necessary for the maintenance of, a threatened ecological community.

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

Methodology

GIS Databases:

- SAC Biodatasets - Accessed 27 February 2012.

(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 vegetation under application falls within the Carnarvon IBRA region within the Shire of Carnarvon which have approximately 99.6% and 99.7% of their pre-European vegetation extents remaining respectively (Shepherd, 2009).

The vegetation is mapped as Beard vegetation association 308 which is described as a "mosaic: shrublands; *Acacia sclerosperma* sparse scrub / succulent steppe; saltbush and bluebush" (Beard, 1980). This vegetation association had 100% of its pre-European extent remaining in 2009 (Shepherd, 2009).

The local and regional areas are highly vegetated and given the scale (0.3ha) and overall 'degraded' to 'good' (Keighery, 1994) condition of the vegetation under application, the vegetation is not considered significant as a remnant in an extensively cleared area.

	Pre-European (ha)	Current Extent Remaining (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Carnarvon	8,382,609	8,349,861	99.61	11.15

Shire*				
Shire of Carnarvon	4,638,090	4,623,098	99.68	7.00
Beard Vegetation Association in Bioregion* 308	446,977	446,962	100	0.61

* Shepherd (2009)

Methodology

References:
- Beard (1980)
- Keighery (1994)
- Shepherd (2009)
GIS Databases:
- Carnarvon 1.4m Orthomosaic - Landgate 2002
- IBRA Australia - DEH
- Local Government Authority Boundaries
- Pre-European Vegetation - DA

(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 likely to be at variance to this Principle

There are no mapped watercourses or wetlands within the applied clearing area. It is therefore not likely that any riparian vegetation will be impacted as a result of this proposal.

The closest surface water areas to the area under application are Nicol Bay (a non-perennial lake) approximately 760m east, a minor river and flood channel approximately 860m south and a tidal flat area in association with the estuarine environment to the west approximately 1.4km south-west.

The closest major watercourse is Lewers Creek part of the Gascoyne River System which runs approximately 4.4km north of the area under application.

A number of nationally recognised wetlands occur in the local area (40km radius) including the McNeill Claypan System approximately 700m east, which is in rapid decline as a result of grazing, increased fragmentation and remnant vegetation loss, vehicle disturbance and pollution (DSEWPC, 2009).

Given the scale of the proposed clearing and the distance of the applied clearing area to watercourses and wetlands in the local area, the native vegetation is not growing in association with a wetland or watercourse nor is the proposed clearing likely to cause deterioration to these environments. The proposed clearing is therefore not likely to be at variance to this principle.

Methodology

References:
- DSEWPC (2009)
GIS Databases:
- ANCA, Wetlands - DEWHA
- Carnarvon 1.4m Orthomosaic - Landgate 2002
- Hydrology, linear - DoW
- Hydrology, linear (hierarchy) - DoW
- Geodata, Lakes - AUSLIG

(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 vegetation under application occurs on isolated sand dunes aligned along the coast with chief soils being red earthy sands (Northcote et al., 1960 - 1968). There is therefore the potential for wind erosion to occur given the sandy soils however given the scale of the proposed clearing and the use of the site for vehicle access, which is likely to result in some soil compaction, the potential for wind erosion is considered to be minor.

The groundwater salinity in this area ranges from 3000-7000 mg/L total dissolved solids. The closest watercourses and wetlands to the applied clearing area are a minor river and flood channel approximately 860m south, Nicol Bay (a non-perennial lake) approximately 760m east and the McNeill Claypan System approximately 715m east. Given the distance to watercourses and wetlands, the scale of the proposed clearing and the low to medium relief of the site, the risk of erosion as a result of water flows through the area is likely to be minor.

In addition, should any localised erosion occur post clearing, the applicant has advised that specific management measures will be put in place including restoration and rehabilitation of any unused areas in accordance with the DBP Generic CEMP Rehabilitation Protocol; including re-contouring to match surrounding land form, construction of erosion controls where required, respread of topsoil and vegetation and reseeding or revegetation to restore vegetation cover (Preston Consulting, 2011).

It is therefore not likely that the proposed clearing will cause any appreciable land degradation and therefore is not likely to be at variance to this principle.

- Methodology** **References:**
- Northcote et al (1960-68)
 - Preston Consulting (2011)
- GIS Databases:**
- ANCA, Wetlands - DEWHA
 - Geodata, Lakes - AUSLIG
 - Groundwater Salinity, Statewide - DoW
 - Hydrology, linear - DoW
 - Hydrology, linear (hierarchy) - DoW
 - Soils, Statewide - DA

(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**
- Two nature reserves, Chinamans Pool and One Tree Point, occur within the local area (40km radius) of the applied clearing area approximately 5.1km north west and approximately 6.9km north west respectively.
- The Shark Bay Area, listed on the Register of National Estate and also includes the Shark Bay Marine Park, is approximately 4km south. This area overlaps with the Wooramel Seagrass Bank, a system 9 conservation reserve and also listed on the Register of National Estate, approximately 1.2km south of the applied area.
- Given the scale of the applied area, its distance to conservation areas as well as the highly vegetated local and regional area, the proposed clearing of 0.3ha at this location is not likely to impact the environmental values of conservation areas in the local area. The proposed clearing is therefore not likely to be at variance to this principle.

- Methodology** **GIS Databases:**
- DEC Tenure - DEC
 - Carnarvon 1.4m Orthomosaic - Landgate 2002
 - Register of National Estate - EA
 - System 1-5 and 7-12 Conservation Reserves - DEC

(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 applied clearing area lies within the Gascoyne River Catchment and Basin. The ground water salinity in this area ranges from 3000-7000mg/L total dissolved solids.
- The closest watercourses and wetlands to the applied clearing area are a minor river and flood channel approximately 860m south, Nicol Bay (a non-perennial lake) approximately 760m east and the McNeill Claypan System approximately 715m east.
- Given the distance to surface water resources in the area and the scale of the proposed clearing, the proposed clearing is not likely to result in the deterioration of water resources in the local area. Therefore the proposed clearing is not likely to be at variance to this principle.

- Methodology** **GIS Databases:**
- Groundwater Salinity, Statewide - DoW
 - Hydrography, linear - DoW
 - Hydrography, linear (hierarchy) - DoW
 - Hydrographic Catchments, Catchments - DoW

(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 likely to be at variance to this Principle**
- The closest watercourses and wetlands to the applied clearing area are a minor river and flood channel approximately 860m south, Nicol Bay (a non-perennial lake) approximately 760m east and the McNeill Claypan System approximately 715m east.

The vegetation under application ranges from 'degraded' to 'good' (Keighery, 1994) condition and is 0.3ha within an area that retains large areas of remnant vegetation. Given the scale of proposed clearing, distances to watercourses and wetlands and low to medium relief of the area, the proposed clearing is not likely to increase the incidence or intensity of flooding and therefore is not likely to be at variance to this principle.

- Methodology** References:
- Keighery (1994)
- GIS Databases:
- Hydrology, linear - DoW
 - Hydrology, linear (hierarchy) - DoW

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

Comments

The proposal is to clear up to 0.3 hectares of native vegetation within Lot 287 on Plan 210981, Brown Range, for the purposes of "access for pipeline construction" (DBP, 2012).

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

Department of Regional Development and Lands have granted a section 91 Occupational Licence to DBNGP (WA) Nominees Pty Limited providing authority for the company to enter upon a portion of Lot 287 on Deposited Plan 210981 in the Carnarvon Brown Range area (DRDL, 2012), the land subject of this clearing application. The licence has been granted subject to conditions including, but not limited to, 'the land shall not be used for any purpose other than "access for gas pipeline construction" adjacent to the DBNGP Corridor' (DRDL, 2012). The area for which access has been provided is a 25m wide area adjacent to and parallel with the DBNGP Corridor (DRDL, 2012).

The applied clearing area lies within the Gascoyne River and Tributaries surface water area and Gascoyne groundwater area proclaimed under the Rights in Water and Irrigation Act 1914 administered by the Department of Water (DoW). Any construction of bores or obstruction or interference with bed or banks of a watercourse or taking of surface or groundwater in these areas will require approval from the DoW.

The area lies within the Gnulli Native Title claimant area. Notification pursuant to the Native Title Act has been provided to the claimant and representative body via correspondence dated 6 February 2012. No comments or advice have been received to date from the claimant or representative body on the claimant's behalf.

Department of Environment and Conservation has been advised that an Ethnographic Heritage Survey was conducted for Horizon Power for the adjacent power station and pipeline interconnect sites which provided heritage clearance subject to recommendations (Preston Consulting, 2011). An additional Aboriginal Heritage Survey is being conducted within the area currently under application and the applicant is aware of their obligations under the Aboriginal Heritage Act (Preston Consulting, 2011).

A submission on the clearing application was received on the 26 February 2012 advising that as the clearing of this vegetation is considered necessary for the construction of Carnarvon's new electric power plant there is no particular reason why this proposal should not go ahead. The submission also advised that the land has no recognised particular and outstanding conservation value (Submission, 2012).

- Methodology** References:
- DBP (2012)
 - DRDL (2012)
 - Preston Consulting (2011)
 - Submission (2012)
- GIS Databases:
- Native Title Claims - Registered with the National Native Title Tribunal - Landgate
 - RiWI Act, Areas - DoW
 - RiWI Act, Groundwater Areas - DoW
 - RiWI Act, Surface Water Areas, Irrigations Districts - DoW
 - Town Planning Scheme Zones - MFP

4. References

- Astron (2009) Horizon Power Carnarvon Power Station, Gas Pipeline Easement and Transmission Line Flora, Vegetation and Fauna Habitat Survey October 2009. Prepared for Horizon Power. Astron Environmental Services, Leederville, Western Australia. DEC ref A333081.
- DAFWA (2011) Agriculture and Related Resources Protection Act 1976 - Declared Plants. Department of Agriculture and Food Western Australia. Accessed at http://www.agric.wa.gov.au/obitwr/imported_assets/content/pw/weed/decp/dec_plants_list.pdf.
- DBP (2012) Email Correspondence: Request for Amendment to Purpose of Clearing - 20 March 2012. DBNGP (WA) Nominees Pty Limited, Perth, Western Australia. DEC ref A485720.

- DEC (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 27/02/2012 (Fauna) and 6/3/2012 (Flora).
- DRDL (2012) Occupation Licence 00264-2011-02-203 for Vehicular Access - Shire of Carnarvon under section 91 of the Land Administration Act 1997. Department of Regional Development and Lands, Perth, Western Australia. DEC ref A485720.
- DSEWPC (2009) Australian Natural Resources Atlas. Department of Sustainability, Environment, Water, Population and Communities, Australian Government. Accessed 2 March 2012 at <http://www.anra.gov.au/topics/vegetation/assessment/wa/libra-car-imp-wetlands.html>.
- 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.
- Kaesehagen, DB. 1995. Bushland condition mapping. In Burke, G. (ed) *Invasive Weeds and Regenerating Ecosystems in Western Australia Conference Proceedings*. Murdoch University, Perth, pp. 33-39.
- 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.
- Shepherd, D.P. (2009) Adapted from: 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.
- Submission (2012) Email correspondence: Submission for CPS 4805/1 - Application to clear native vegetation under the Environmental Protection Act 1986. Western Australia, DEC ref A478210.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 2/03/2012).

5. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DA	Department of Agriculture (now DAFWA)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
MFP	Ministry for Planning
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DoW)