



1. Application details

1.1. Permit application details

Permit application No.: 1169/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: City of Albany

1.3. Property details

Property: PLANTAGENET LOCATION 7375 (Lot No. 7375 FRENCHMAN BAY TORNDIRRUP 6330)
LOT 8100 ON PLAN 195300 (FRENCHMAN BAY 6330)
Local Government Area: City Of Albany
Colloquial name: Plantagenet Location 8100

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.5		Mechanical Removal	Road widening and realignment

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
<p>Beard vegetation associations:</p> <p>128 - Bare areas; rock outcrops</p> <p>22 - Low woodland; <i>Agonis flexuosa</i></p> <p>423 - Shrublands; <i>Acacia</i> scrub-heath unknown</p> <p>49 - Shrublands; mixed heath</p> <p>(Hopkins et al., 2001; Shepherd et al., 2001)</p> <p>Connell and ATA Environmental (2001) vegetation complexes:</p> <p>Agonis scrub - Low <i>Agonis flexuosa</i> woodland on low calcareous plains (<15m elevation)</p> <p>Acacia Mallee-Heath E - <i>Acacia</i> shrublands and heath on low tertiary plains (<15m elevation)</p> <p>Acacia Mallee-Heath D - <i>Acacia</i> shrublands and heath on low plains (<15m elevation)</p> <p>Heath C - Mixed coastal heath on low plains (<15m elevation)</p> <p>Rock outcrop - A poorly map vegetation complex consisting mostly of small outcrops scattered throughout the study area. Vegetation consists of dwarf heath species.</p>	<p>This application is for the upgrade and widening of Frenchman Bay Road from Quaramup Road to Frenchman Bay locality with up to 2.5ha of clearing proposed along 6.28km of road. Most of the proposed clearing is within 2m of the existing maintenance zone, however in some places it will reach to 6m. The road running surface does not lie within the road reserve for much of its length. As such, the road runs through the Torndirrup National Park and consequently is listed as an Environmentally Sensitive Area.</p> <p>Torndirrup National Park has mostly coastal heathland vegetation communities known as the Torndirrup System. Some of the species noted along Frenchman Bay road within the proposed road works area consist of; <i>Banksia attenuata</i>, <i>Banksia illicifolia</i>, <i>Taxandria parvicep</i>, <i>Adenanthos sericeus</i>, <i>Adenanthos cuneatus</i>, <i>Eucalyptus megacarpa</i>, <i>Spyridium globulosum</i>, <i>Agonis flexuosa</i> and <i>Dryandra formosa</i>, including a variety of grasses and sedges associated with coastal heath land areas (OPUS, 2006).</p> <p>Vegetation changes along</p>	<p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)</p>	<p>The roadside vegetation which is covered by this application is in excellent condition with little evidence of weed invasion. The vegetation structure and health appeared slightly disturbed compared with the rest of the national park, this is likely to be the result of adjacent road use for over 20 years (DEC site visit, 31/5/2006).</p>

the road from being Agonis sp. dominated closer to Quaramup Road, then more Banksia spp. and eventually heath lands closer to Frenchman Bay locality (DEC site visit, 31/5/2006).

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 vegetation covered by this application is diverse and in excellent condition (Keighery, 1994; DEC site visit, 31/5/2006). It has a similar diversity to the Torndirrup National Park through which it runs. The vegetation is adjacent to an existing road and the application covers a small area of up to 2.5ha spread over 6.28km of road. It is not likely that the proposed clearing will impact significantly upon the high biodiversity value of the area provided that adequate measures are taken to avoid the spread of *Phytophthora* and the introduction of weeds. To this end, conditions requiring measures to restrict the spread of dieback and the introduction and management of weeds have been included in the clearing permit.

Methodology DEC site visit (2006)
Keighery (1994)
GIS Database:
-CALM Managed Lands and Water - CALM 1/07/05

(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**

Threatened species Bilby (*Macrotis lagotis*), Chuditch (*Dasyurus geoffroii*), Dibbler (*Parantechinus apicalis*), Western Archaeid Spider (*Austrarchaea mainae*), Western Ringtail Possum (*Pseudocheirus occidentalis*), the Specially Protected Carpet Python (*Morelia spilota imbricata*) and the Priority species Water-rat or Rakali (*Hydromys chrysogaster*) and Quenda (*Isodon obesulus fusciventer*) are recorded from within the local area.

This proposal is not likely to be at variance to Principle b as being significant habitat for fauna given that the area proposed to be cleared has suffered a degree of disturbance through its proximity to the road and it is also relatively small in size. The road passes through shrublands and mixed heath and large habitat trees do not appear to be present. Notable fauna values of the Warren Bioregion include its relictual Gondwanan arachnid fauna including Torndirrup's *Austrarchaea mainae* (Dept of CALM Biodiversity Audit 2002 Warren subregion).

Methodology OPUS (2006)
DEC site visit (2006)
DEC Biodiversity Advice

(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**

This application is to clear along Frenchman Bay Road (Quaranup Bay Road to Frenchman Bay locality) adjacent to the existing maintenance zone for the purpose of road widening.

The Torndirrup area has a high diversity of vascular plants, and there are many records of Declared Rare Flora and Priority Flora within a 10km radius of the proposed clearing along Frenchman's Bay Road. According to the DEC databases several populations of the DRF species *Banksia verticillata* (DRF) occur in close proximity to the proposed clearing however Regional DEC officers have indicated that these populations are not on the verge but on granite exposures set back from the road. As outlined in the Environmental Management Plan, these populations should be protected from any disturbance by vehicles by closing off the tracks to them.

The DEC database shows priority species *Adenanthos x cunninghamii* (P4) on the road verge within the proposed clearing area however DEC officers have been unable to relocate this population this year. *Amperea protensa* (P3) is also shown to occur on the road verge however the population is described as occurring north east of the Gap Road and Frenchman's Bay Road junction. Supporting documentation provided with this application states that a thorough search of the extent of the proposed clearing revealed that none of the above priority flora species is present. (Opus EMP Frenchman Bay Road 2006 page 8).

Given that the DRF species *Banksia verticillata* occurs on granite outcrops set back 60m from the proposed road works (Opus EMP page 7) and will not be directly impacted by the road works this proposal is not likely to be at variance to Principle (c).

A condition to close off access to the *Banksia verticillata* population has been included in the clearing permit.

Methodology OPUS (2006)
 DEC site visit (2006)
 Flora advice (TRIM ref DOC2602)
 GIS Database:
 -Declared Rare and Priority Flora List - CALM 01/07/05

(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 are known to occur in the local area (10km radius). It is therefore not likely that this proposal is at variance with this Principle.

Methodology GIS Database:
 -Threatened Ecological Communities - CALM 12/4/05

(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**
 The National Objective and Targets for Biodiversity Conservation 2001-2005 (AGPS, 2001) recognises a target retention of 30% or more of the pre-clearing extent of each ecological community.

The area under application has above 30% representation for the IBRA Bioregion, for the local government area and for all of the vegetation associations and complexes that occur within it (Shepherd et al., 2001; Hopkins et al., 2001; Connell and ATA Environmental, 2001). The least represented vegetation type is Beard vegetation association 49 which has 40.4% remaining, which classes it as depleted in reference to conservation status (Department of Natural Resources and Environment 2002).

	Pre-European area (ha) *	Current extent (ha) *	Remaining % *	Conservation status **	% in reserves *
IBRA Bioregion-Warren		851529739273		86.8	Least concern
City of Albany	383843		149341	38.9	Depleted
Beard vegetation associations					
	128 412121	325830	79.1	Least concern	12.3
		22 4915	3232	65.8	Least concern
45.7		423 32108	20115	62.6	Least concern
45.2		49 59113	23904	40.4	Depleted
45.5					
Connell & ATA Environmental vegetation complexes (Albany Hinterland)					
	Agonis scrub	927.3	634.1	68.4	Least concern
5.1			2315.8	1931.7	83.4 Least
concern	19.9				
	Acacia Mallee-Heath E		15301.9	13130.6	85.8 Least
concern	32.7				
	Heath C		7924.6	7357.2	92.8 Least
concern	48.9				
	Rock outcrop	3052.6	2383.2	78.1	Least concern
45.4					

* (Shepherd et al. 2001 or Connell and ATA Environmental, 2001)

** (Department of Natural Resources and Environment 2002)

Given the above, it is considered that this application to clear 2.5ha of vegetation is not at variance with this Principle.

Methodology Shepherd et al. (2001)

Connell and ATA Environmental (2001)
Department of Natural Resources and Environment (2002)
AGPS (2001)
EPA (2000)
Hopkins 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 likely to be at variance to this Principle

Within 5km of the area under application there are two wetlands that are considered significant within the South Coast. The closest of these is found 500-600m north and east of Frenchman Bay Road and is classified as Paluslope on granite and is part of the Frenchman Bay Suite. This waterbody is unlikely to be impacted upon by the small amount of clearing proposed.

A minor, non-perennial watercourse crosses the area under application between Blowholes Road and Frenchman Bay locality. As the proposed works for which the clearing is necessary involves road widening, the existing culverts at this point will be widened and as such no additional impact to the watercourse will result from the clearing.

Additionally, the clearing will take place during summer to reduce the spread of dieback (OPUS, 2006) and as such minimal flows should be present within the non-perennial watercourse.

Given the above information, it is considered that this application is unlikely to be at variance to this Principle.

Methodology OPUS (2006)
GIS Databases:
-Hydrography, linear - DOE 1/2/04
-South Coast Significant Wetlands - DOE 4/8/03

(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

Erosion with respect to land degradation is likely to be minimal, as only 2.5ha of vegetation will be removed along a 6.28km section of Frenchman Bay Road.

Erosion and subsequent sedimentation as it relates to the Public Drinking Water Source Protection Area will be managed by the City of Albany with respect to its legal obligations relating to Limeburners Creek catchment as outlined in Principle (i).

This coastal area is not at risk of salinisation and the proposed clearing is small (2.5ha) and spread out over a large area (6.28km).

As such, the land degradation relating to the clearing of native vegetation is likely to be minimal.

Methodology OPUS (2006)
GIS Databases:
-Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06
-Salinity Mapping LM 25m - DOLA 00
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(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

Much of the area under application is within the Torndirrup National Park as the road along which the clearing will take place does not follow its designated road reserve. The rest of the area under application is within the road reserve which runs through the Torndirrup National Park. OPUS (2006) have consulted with the Department of Environment and Conservation extensively on this project to avoid impacts on the environmental values of the National Park.

A survey for *Phytophthora cinanmoni* was conducted in January 2006 to map and survey the vegetation for 20 metres either side of the proposed road works (OPUS, 2006). The outcome of this survey was that an uninfected area was identified within the proposed works area. OPUS has prepared a *Phytophthora* Management Plan. Dieback management conditions have been included in the clearing permit.

The benchmark of 15% representation in conservation reserves (JANIS, 1997) has not been met for Beard association 128 (Hopkins et al., 2001) or Connell and ATA Environmental complex - *Agonis* scrub with 12.3%

and 5.1% in reserve respectively (Shepherd et al., 2001; Connell and ATA Environmental, 2001). All other associations present within the area under application have above 15% representation.

The small area proposed to be cleared (2.5ha) is mostly made up of the vegetation types which have above 15% representation and the two vegetation associations with low representation in CAR reserves both have above 60% remaining.

The Conservation Commission has provided written approval to allow the City of Albany to clear in an area for road widening in accordance with a clearing permit.

Provided conditions relating to dieback and spread of weeds are attached to the permit it is considered that the small clearing area of 2.5ha over 6.28km will not significantly impact the environmental values of the Torndirrup National Park.

Methodology Shepherd et al. (2001)
Connell and ATA Environmental (2001)
JANIS (1997)
Hopkins et al. (2001)
OPUS (2006)

(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

Some of the area under application occurs within Limeburners Creek Catchment Area, which is a small surface water catchment. OPUS has consulted with the Water Corporation and the Department of Water to ensure that the proposed works have nil effects on the Limeburners Creek (OPUS, 2006). A number of recommendations have been made by OPUS (2006) and include:

- use on-site human effluent disposal through portable toilets supplied for workers to utilise at all times;
- ensure that hydrocarbons are not stored on site or any associated works do not occur on or adjacent to the worksite area;
- machines are managed such that they are not stored on or adjacent to the worksite overnight, are in good condition and only turn around on bituminised surfaces;
- sediment traps are strategically located to ensure that during road works off-site sedimentation does not occur into the creek catchment and that work is limited to dry days.

The Department of Water has approved the content of this section of the report (TRIM DOC1791).

Issues relating to the management of water quality are not caused by the clearing of native vegetation but will be managed through the Rights in Water and Irrigation Act 1914.

Methodology OPUS (2006)
Department of Water email (TRIM ref DOC1791)

(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 area under application is small, 2.5ha, and spread over a large area (6.28km). The drainage of the road shall remain the same (OPUS, 2006). As such, the proposed clearing will not impact upon peak flood height or duration.

Methodology OPUS (2006)

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

Comments

No objections have been raised for this proposed clearing activity. There are no other RIWI Act Licence, Works Approval or EP Act Licence that will affect the area that has been applied to clear.

The proposed clearing along Frenchman Bay Road will occur on Crown Reserve 24258 vested with the Conservation Commission. It is likely that native title has been extinguished as the reserves were vested prior to 1975 (Crown Reserve 24258 vested in 1955, Reserve 21337 vested in 1935). In addition, DEC's advertising of the application in the West Australian newspaper constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road widening and realignment	Mechanical Removal	2.5	Grant	<p>The application has been assessed and the clearing as proposed is either not likely or not at variance with the Principles.</p> <p>The assessing officer recommends that the permit be granted with conditions attached to prevent the spread of dieback and weeds during clearing and a condition to close off access to the Banksia verticillate population.</p>

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- Connell and ATA Environmental (2001) Vegetation survey of the Albany Hinterland. Unpublished. City of Albany and Natural Heritage Trust.
- Department of Environment and Conservation (2006) site visit conducted by Mieke Bourne. Report 31/5/2006. DEC TRIM ref AD298.
- 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.
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.
- FloraBase (2006) Descriptions by the Western Australian Herbarium, Department of Environment and Conservation. Text used with permission (<http://florabase.calm.wa.gov.au/help/copyright>). Accessed on Wednesday, 2 August 2006.
- 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.
- JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- OPUS (2006) Environmental Management Plan, Frenchman Bay Road Upgrade - Quaranup Road to Frenchman Bay, prepared for the City of Albany, Western Australia.
- 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.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DoE)