



1. Application details

1.1. Permit application details

Permit application No.: 1031/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Alinta Network Services PTY LTD

1.3. Property details

Property: LOT 800 ON DIAGRAM 97554 (WAIKIKI 6169)

Safety Bay Road Reserve (WAIKIKI 6169)

Mandurah Road Reserve (BALDIVIS 6171)

Safety Bay Road Reserve (BALDIVIS 6171)

City Of Rockingham

Local Government Area:

Colloquial name:

1.4. Application

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

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>Heddlle vegetation complexes:</p> <ul style="list-style-type: none"> - Quindalup complex - coastal dune complex consisting mainly of two alliances - the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of <i>M.lanceolata</i> - <i>Callitris preissii</i> and the closed scrub of <i>Acacia rostellifera</i>. - Cottesloe complex - central and south - Mosaic of woodland of <i>E.gomphocephala</i> and open forest of <i>E.gomphocephala</i> - <i>E.marginata</i> - <i>E.calophylla</i>; closed heath on the Limestone outcrops. - Karrakatta complex - central and south - Predominantly open forest of <i>E.gomphocephala</i> - <i>E.marginata</i> - <i>E.calophylla</i> and woodland of <i>E.marginata</i> - <i>Banksia</i> species. <p>Beard vegetation associations:</p> <ul style="list-style-type: none"> - 998 - Medium woodland; tuart - 3048 - Shrublands; scrub-heath on Swan Coastal Plain 	<p>The proposal includes the clearing of 2.1 hectares within the Safety Bay Road Reserve between Mandurah Road and Arpentuer Drive, Baldivis. The clearing is upto 6 metres wide and ~3.5km long.</p>	<p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)</p>	<p>The vegetation description was obtained during a site visit on Thursday 27th April 2006 and from Woodman Environmental Consulting Pty Ltd November 2005. Vegetation ranged from Degraded to Completely Degraded over the length of the proposal.</p>

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 under application is in a degraded to completely degraded condition along the pipeline route, with little overstorey in most areas, and an overall low species diversity (Woodman Environmental Consulting 2005). Given this low species diversity and vegetation condition of the area under application it is not considered likely to have a high level of biodiversity.

Methodology Woodman Environmental Consulting (2005)
Site visit 27/04/2006

(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**

The site inspection of the area under application identified no mature trees along the proposed route that were suitable for providing any habitat and an understorey that was degraded to completely degraded that was limited largely to Acacia species for the majority of the route.

When taking into account the amount and condition of native vegetation within the Rockingham Lakes Regional Park immediately adjacent to area under application, it is not considered that the vegetation under application is representative of significant habitat for native fauna.

Methodology Site Visit 27/04/2006

(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**

The Flora Survey conducted during spring 2005 within the 3.5km route under application identified only 27 native plants. This was considered very low species diversity and was described as indicative of the fragmented nature of the road reserve. The CALM database and the spring survey conducted on behalf of the proponent did not identify any Declared Rare or Priority Flora.

Given the results of this survey and the highly modified environment under application, it is considered unlikely that the proposed clearing is at variance to this Principle.

Methodology Woodman Environmental Consulting (2005)

(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**

The CALM TEC database highlights 14 occurrences within the local area (5km Radius) of the floristic community type 19b 'Sedgelands in Holocene dune swales of the Southern Coastal Plain'. The flora survey conducted in spring 2005 identified that none of the vegetation mapping units identified could be aligned with a Floristic Community Types as defined by Gibson Et al due to the disturbed nature of the vegetation.

Based on the condition of the vegetation, and the species present within the area, it is not considered that this vegetation is likely to be representative of any TEC, and thus is not likely to be at variance to this Principle.

Methodology GIS Database: Threatened Ecological Communities - CALM 12/4/05
Woodman Environmental Consulting (2005)

(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**

Hedde et al. (1980) defines the vegetation under application as Quindalup complex - coastal dune complex consisting mainly of two alliances - the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of *M.lanceolata* - *Callitris preissii* and the closed scrub of *Acacia rostellifera*; Cottesloe complex - central and south - Mosaic of woodland of *E.gomphocephala* and open forest of *E.gomphocephala* - *E.marginata* - *E.calophylla*; closed heath on the Limestone outcrops; and Karrakatta complex - central and south - Predominantly open forest of *E.gomphocephala* - *E.marginata* - *E.calophylla* and woodland of *E.marginata* - *Banksia* species.

These complexes have representations of 47.1% (Depleted), 41.1% (Depleted) and 29.5% (Vulnerable) respectively. Although the Quindalup, Karrakatta and Cottesloe complex - central and south complex's have a conservation status of depleted and vulnerable (Department of Natural Resources and Environment 2002), the vegetation condition is in degraded to completely degraded condition, and it is not likely to be considered representative of this community.

Methodology Site visit 27/4/06
Department of Natural Resources and Environment (2002)
EPA 2000
Heddle et al. 1980

(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

The area under application is between Ennis Ave and Mandurah Rd is located within the shoulder of Safety Bay Road, which was historically constructed through a Conservation Category Wetland (CCW). The wetland mapping demonstrates that the proposed route is within the CCW. Although the proposed route is within the CCW boundary, the gas pipeline is to be installed approximately 2 metres from the edge of the road within the fill material used to raise Safety Bay Road.

As such the proposed clearing will not occur within the wetland proper and therefore is unlikely to impact on the hydrology of the wetland or any wetland dependent vegetation.

There is also a portion (100m long) of the application between Mandurah Road and Arpentuer Drive that is located within the mapped boundary of a Resource Enhancement Wetland. The site inspection identified that the area under application did not contain any wetland dependent vegetation and is separated from the wetland vegetation by a private driveway and a firebreak.

Given the vegetation under application and the limited amounts clearing required is unlikely to effect any vegetation growing in or in association with a wetland.

Methodology Site visit 27/4/06
GIS Database: Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE

(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

Soils within the area under application comprise of Vasse, Quindalup and Spearwood soil systems. Given the pipeline route is within the fill material used to raise Safety Bay Road it would be unlikely that land degradation associated with the Acid Sulphate Soil potential of the Vasse soil complex would result.

Given the clearing is only 3- 6 metres in width over a 3.5km stretch the remainder of the area under application that is within Spearwood and Quindalup soil systems is unlikely cause appreciable wind or water erosion.

Methodology Agmaps (2005)
GIS Database: Acid Sulfate Soil Risk Map, SCP - DOE 04/11/04

(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 area under application is between Ennis Avenue and Mandurah Rd is located within Bush Forever site 356 and there is also a nature reserve 3.7km to the south west. Although it is within a Bush Forever site it is also along the side of Safety Bay Road within the road reserve. The vegetation within the road reserve is degraded to completely degraded.

Given the condition of the vegetation and that the road already dissects the Bush Forever site it is considered unlikely that the limited width of the clearing will have an impact on the environmental values of adjacent conservation reserve.

Methodology GIS Databases:
Bushforever - MFP 07/01
CALM Managed Lands and Waters - CALM 1/07/05

(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 area under application is not located within a Public Drinking Water Source Area (PDWSA), but does run through a Conservation Category Wetland immediately north of Lake Walyungup. Given the clearing is restricted to a thin strip of vegetation over a 3.5 km length it is considered unlikely that there will be substantial alteration or deterioration of the water table or wetland water quality as a result of the clearing. Furthermore the proponent will be revegetating along the length of the pipeline following the completion of the works.

Methodology GIS Databases:
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE
Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06

(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

Although a portion of the proposal does pass through an Conservation Category Wetland the pipeline route is within the fill material used to raise Safety Bay Road which is well above annual maximum groundwater levels and therefore no areas of flooding were identified within the area under application. Given this, and the well-drained nature of the soils identified in the remainder of the area under application (Agmaps 2005), the clearing as proposed is not considered likely to cause or exacerbate the incidence of flooding.

Methodology Agmaps (2005)
GIS Database: Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE

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

Comments Approval has been provided by the City of Rockingham

The gas pipeline that is to be installed is to provide gas supply to the Baldivis area that experience low gas flows last winter. Given the substantial growth of residential properties in the area since last winter gas outages are possible if there are further delays in construction of the additional infrastructure.

Methodology

4. Assessor's recommendations

Purpose	Method Applied	Decision	Comment / recommendation
Miscellaneous: Mechanical Removal	2.1 area (ha)/ trees	Grant	Assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit should be granted. for the installation of a gas pipeline in road reserve.

5. References

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.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, 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.

Woodman Environmental Consulting Pty Ltd (2005). Proposed Alinta Gas DN225 Distribution Pipeline Safety Bay Road, Baldivis. Flora and Vegetation Assessment.

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)