

Agricultural and Natural Values Report

Report for: Furneaux Forest Cooperative Society Ltd

Property Location: North East River Road, Palana
Flinders Island.

Prepared by: Astrid Ketelaar & Scott Livingston
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Date: 30th July 2013



Summary

Client: Furneaux Forest Cooperative Society Ltd

Property identification: The 364 ha property is located at North East River, Palana, and is bisected by Edens Road. Current zoning is Rural, (*Flinders Island Planning Scheme 1994*).
CT 237440/1, CT 159958/1, PID 3068115.

The western areas of the property are within the “Visually sensitive” special area.


Proposal: A 24 lot subdivision is planned for land at North East River Road, Palana, Flinders Island.

Assessment comments: Under the *Flinders Island Planning Scheme 1994*, consideration of the impact on agriculture, natural values and under Planning Directive 5 an assessment of the bushfire risks is required. A field inspection was undertaken on the 25th June 2014 to confirm or otherwise the desktop study findings and determine the Bushfire Attack Level and Risk. This report summarises the agricultural and natural values findings of the desktop and field assessment, a separate report details the Bushfire Hazard Management Plan.

Conclusion: The title has no agricultural value now and no agricultural potential.
The title supports a threatened vegetation community (*Eucalyptus viminalis* - *Eucalyptus globulus* coastal forest and woodland (DVC) and may support some threatened fauna, however, none were identified on the site visit.

The subdivision will have minimal impact on the identified natural values if sufficient areas for building envelopes, including bushfire hazard management areas and clearing for access is provided outside the DVC community. A revision of the proposed lot boundaries has occurred to reflect these requirements. Title boundaries through the threatened community, should if possible remain uncleared to maintain connectivity.

Assessment by:



Scott Livingston,
Master Environmental Management,
Natural Resource Management Consultant.
Accredited Person under part 4A of the Fire Service Act 1979:
Accreditation # BFP-105

And

A. Ketelaar

Astrid Ketelaar, Natural Resource Management Consultant
Member, Australian Institute of Agricultural and Science and Technology now
Agricultural Institute Australia (current).



INTRODUCTION

The 376 ha property (two titles; CT 237440/1, CT 159958/1, PID 3068115) is located at North East River, Palana, on the eastern side of Flinders Island and is bisected by Edens Road. Current zoning is Rural, (*Flinders Island Planning Scheme 1994*). The western areas of the property are within the “Visually sensitive” special area.

Under the *Flinders Island Planning Scheme 1994*, consideration of the impact on agriculture, natural values and under Planning Directive 5 an assessment of the bushfire risks is required. A field inspection was undertaken on the 25th June 2014 to confirm or otherwise the desktop study findings and determine the Bushfire Attack Level and Risk. This report summarises the findings of the desktop and field assessment, a separate report details the Bushfire Hazard Management Plan.

DESCRIPTION

The title is bisected by Edens Road. The majority of the property south of Edens Road is recently harvested Radiata Pine plantation that will be regenerated to native forest. Land north of Edens Road and a small section south of the road near the junction with North East River Road is native vegetation, including forest and scrubland. Sections of the native forest particularly along the western boundary, north of Edens Road have been previously cleared and used for grazing.

Mean annual rainfall is 700mm (DPIPWE). Underlying geology is granite and soils have a coarse sandy surface horizon. Published Land Capability shows the area to be Class 5, with small areas of Class 6

There a single threatened flora species and no threatened fauna species recorded on the title (Department of Primary Industry, accessed 10/7/14).

The title is bound by the North East River Game Reserve on the coast to the east, private freehold titles to the north, south and west.

See Appendix 1 for maps and Appendix 2 for photos.

AGRICULTURAL VALUE

There are no irrigation water resources associated with the title (DPIPWE 2013) and there is no capacity to develop irrigation on the title as there are no surface water sources and groundwater is likely to be too saline for irrigating. The closest irrigation water rights are more than 3km to the west on farming land in the vicinity of Palana. There is no agricultural activity in proximity to the subject title.

Soils have been mapped by Dimmock (1957) as Quoin (Q). Dimmock (1957) describes Quoin soils as follows;

Quoin (Q) – Strongly acidic granite based soils, unattractive for agricultural development because of restricted drainage, acidity and low natural fertility.

Published Land Capability shows the area to be Class 5, with small areas of Class 6. Soils on the title are considered not suitable for agricultural development and this combined with steeper slopes on the south western portion and significant areas of poor drainage, the sandy nature of the soils leading to a high risk of erodibility, as well as the saline nature of the coastal environment indicates the agricultural limitations are more severe than is commonly associated with Class 5 Land. The majority of the land is considered to be Class 6 with poorly drained sites considered Class 7. Class 6 land is not suitable for cultivation and should be retained under its native vegetation cover; at best this can support some grazing and Class 7 land is unsuitable for agriculture (Grose, 1999). There is no agricultural activity in the vicinity of the title.

The majority of the site is recently harvested pine plantation. This plantation, while commercially harvested after a very long rotation, has proven problematic in obtaining sales for the products given the absence of processing capability on the island. Re-establishment of plantation on the site is considered uneconomic.

The title is considered to have no agricultural value currently and no agricultural potential.

NATURAL VALUES

VEGETATION

The majority (240ha) of the property is *Pinus radiata* plantation that has been harvested over the past 5 years and is now regenerating to native forest. The northern section of the property has had some clearing and use as grazing in the past and small remnants of grassland remain. *Eucalyptus viminalis* - *Eucalyptus globulus* coastal forest and woodland (DVC) which is a threatened forest community forms a 33ha patch north of Edens Road. Other native vegetation is predominately *Leptospermum scoparium* heathland and scrub (SLS)(74ha), with small patches of *Allocasuarina verticillata* forest (NAV)(6ha). Surrounding land is composed of similar vegetation types, with larger areas of agricultural land to the west and the North East River estuary to the east.

The site visit assessment refined mapping of vegetation communities with some changes of mapped boundaries, including reclassification of plantation and portions of the DVC area to regenerating cleared land.

FLORA

The Natural Vales Atlas has records of threatened flora sightings and Table 1 lists records within the subject titles.

Species Name	Preferred Common Names	State Schedule	National Schedule	Last recorded sighting
Cyrtostylis robusta	large gnat-orchid	rare		1999 (+-100m)

Table 1. Threatened flora species recorded in the Natural Values Atlas within 500m of the subject titles.

No specimens of this species were located during the site inspection, which was undertaken during the flowering season for this species. No other threatened species flora were found

FAUNA

The Natural Vales Atlas has records of threatened fauna sightings in the vicinity of the titles and there is a single sighting within 1km of the title of Fairy Tern (*Sternula nereis subsp. nereis*) which is listed as vulnerable on both State and National Schedules. This sea bird is unlikely to use the property.

It is possible that the subject title provides habitat for tussock skink, although the habitat is limited to the foreshore and only approximately 0.1ha occurs on the title. The proposed building envelope does not effect this area.

Table 2. Threatened fauna recorded or with suitable habitat within 1km of the subject titles from the Natural Values Atlas

Species Name	Preferred Common Names	State Schedule	National Schedule	Recorded with 1km	Habitat suitability on subject titles	Notes
<i>Antipodia chaostola</i>	chaostola skipper	e	EN	no	unlikely	Not previously recorded on FI
<i>Galaxiella pusilla</i>	eastern dwarf galaxias	v	VU	no	Nil	No waterways
<i>Limnodynastes peroni</i>	striped marsh frog	e		no	unlikely	No permanently wet areas
<i>Litoria raniformis</i>	green and gold frog	v	VU	no	unlikely	No permanently wet areas
<i>Pardalotus quadragintus</i>	forty-spotted pardalote	e	EN	no	low	Suitable habitat but not previously recorded on FI
<i>Prototroctes maraena</i>	australian grayling	v	VU	no	none	No waterways
<i>Pseudemoia pagenstecheri</i>	tussock skink	v		no	low	Prefers native tussock grassland, tussock within previously cleared areas provide small habitat area only.
<i>Pseudomys novaehollandiae</i>	new holland mouse	e	VU	no	low	Prefers dry/sandy heathland, Not previously recorded on FI

CONCLUSIONS

The title has no agricultural value now and no agricultural potential.

The title supports a threatened vegetation community (*Eucalyptus viminalis* - *Eucalyptus globulus* coastal forest and woodland (DVC) and may support some threatened fauna, however, none were identified on the site visit.

The subdivision will have minimal impact on the identified natural values if sufficient areas for building envelopes, including bushfire hazard management areas and clearing for access is provided outside the DVC community. A revision of the proposed lot boundaries has occurred to reflect these requirements. Title boundaries through the threatened community should if possible remain uncleared to maintain connectivity.

REFERENCES

- Department of Primary Industry, P. W. (accessed 10/7/14). *Natural Values Report, Derived from the Natural Values Atlas, online database.*
- Dimmock, D. M. (1957). *Soils of Flinders Island.* University of Melbourne.
- DPIPWE. (2009, August). Cadastral Parcels Dataset. TASMAR Department of Primary Industries, Parks, Water and Environment.
- DPIPWE. (2007, November). Land Capability of Tasmania Dataset. Department of Primary Industries, Parks, Water and Environment.
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- DPIPWE. (n.d.). *Tasmanian Register of Water Licences and Dam Permits Spatial data.* Retrieved November 15, 2010, from Water Information Management System: <http://water.dpiw.tas.gov.au/>
- DPIPWE. (2013). Tasmanian Vegetation Monitoring and Mapping Program TASVEG 3.0. Department of Primary Industries, Parks, Water and Environment.
- Flinders Island Council. (1994). *Flinders Island Planning Scheme.*
- Grose, C. J. (1999). *Land Capability Handbook. Guidelines for the Classification of Agricultural Land in Tasmania.* (Second Edition ed.). Tasmania, Australia: Department of Primary Industries, Water and Environment.

APPENDIX 1 – MAPS

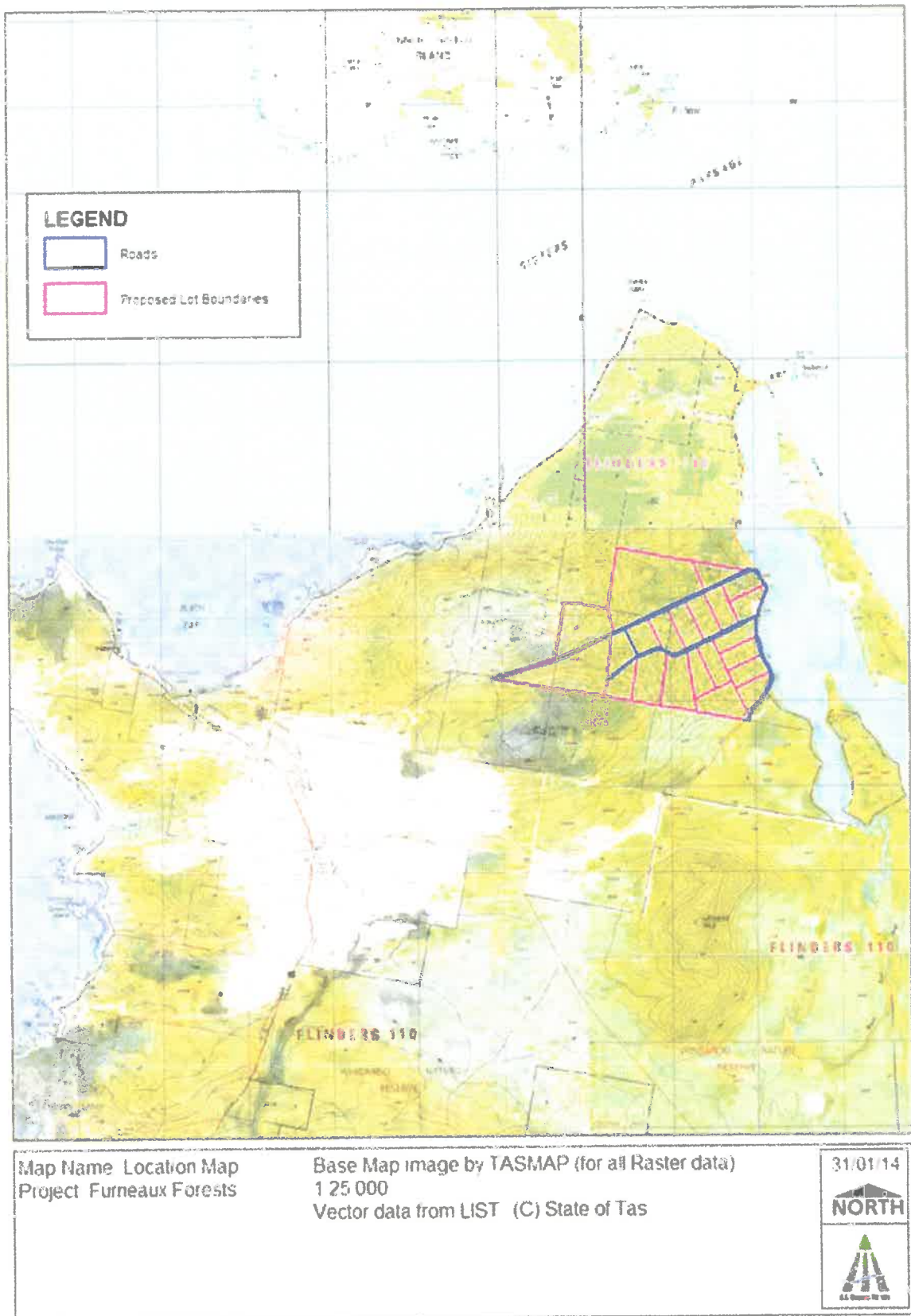
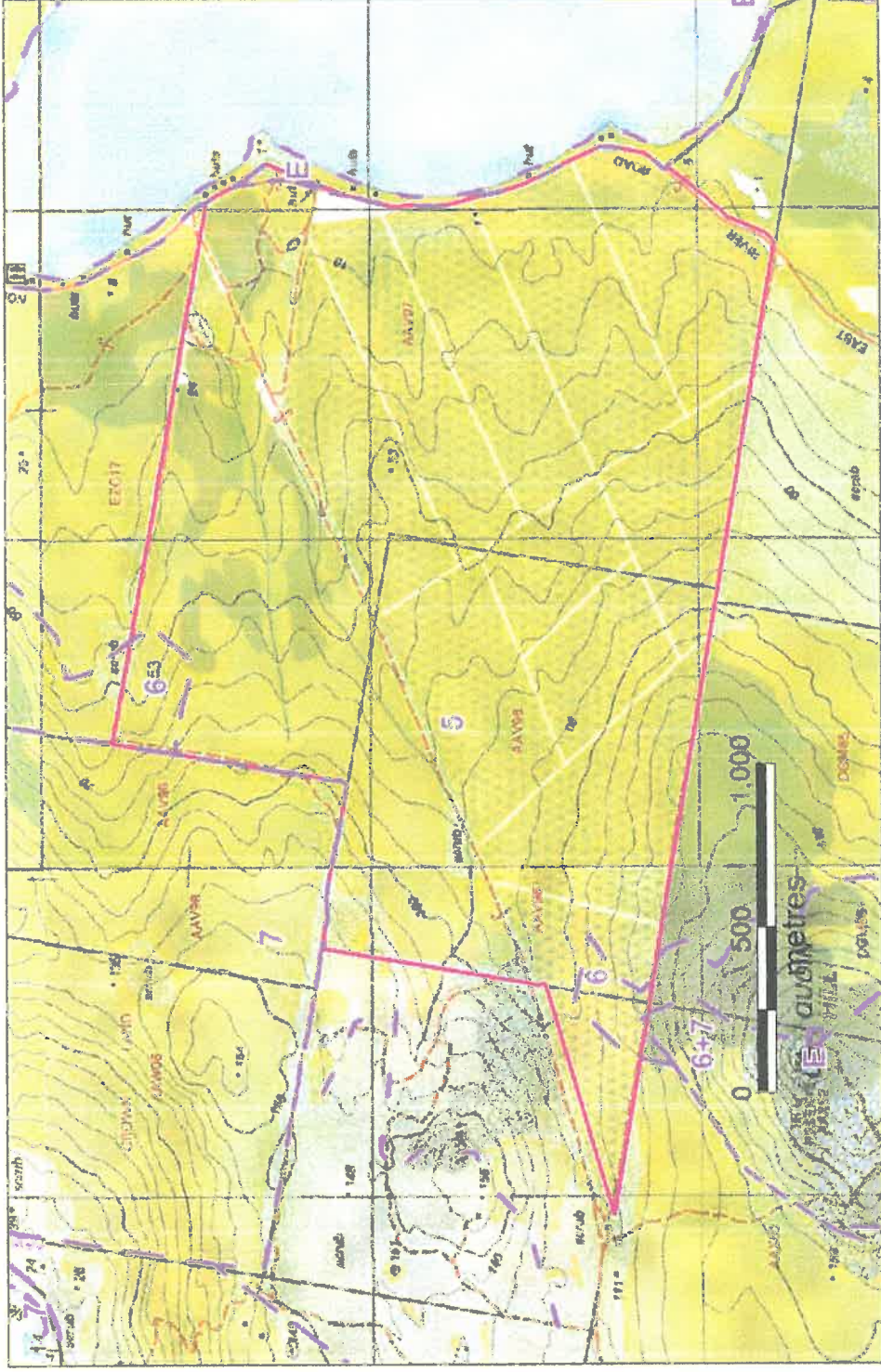


Figure 1. Location



Mapped Land Capability

Figure 2. Published Land Capability

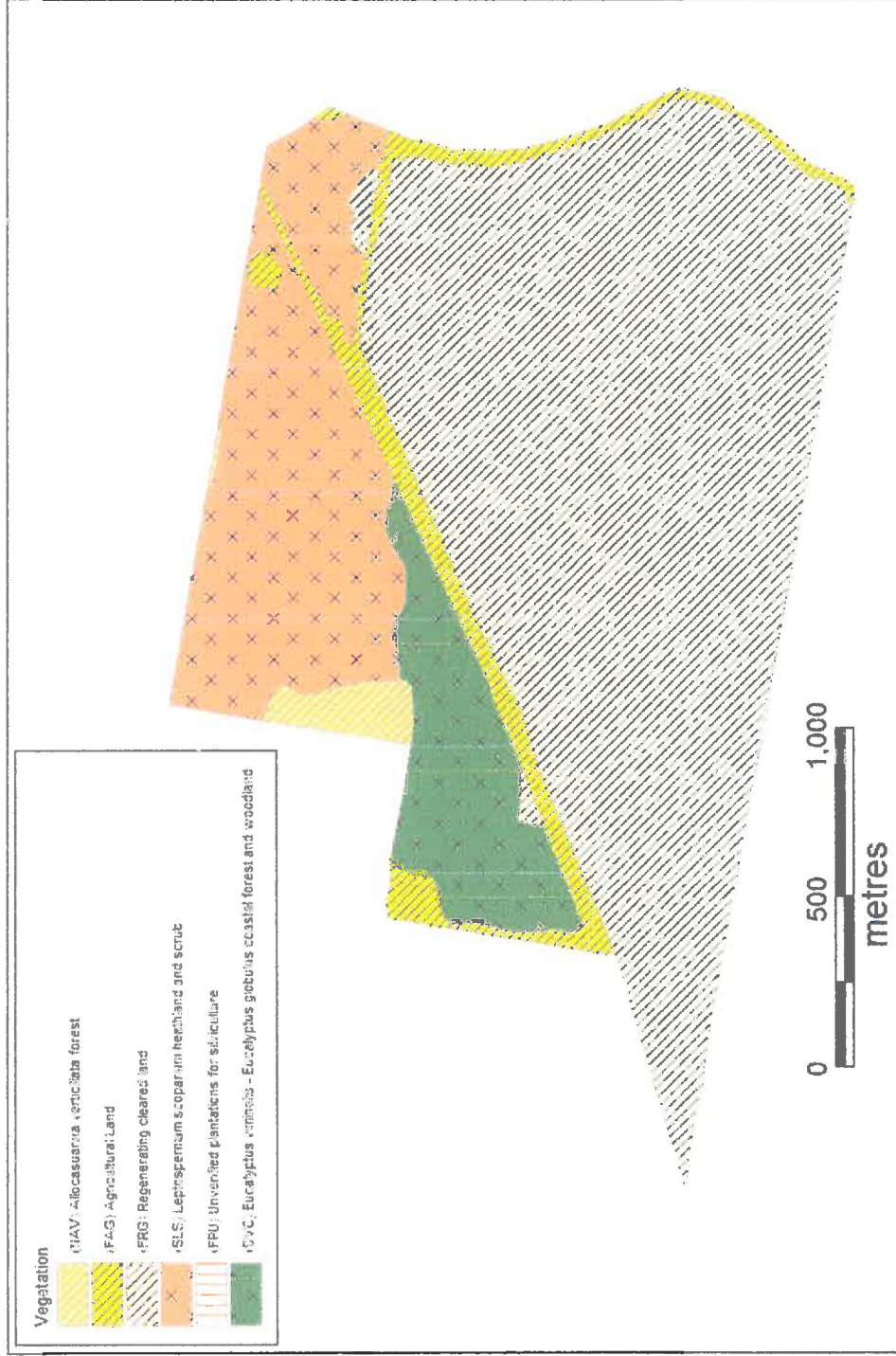


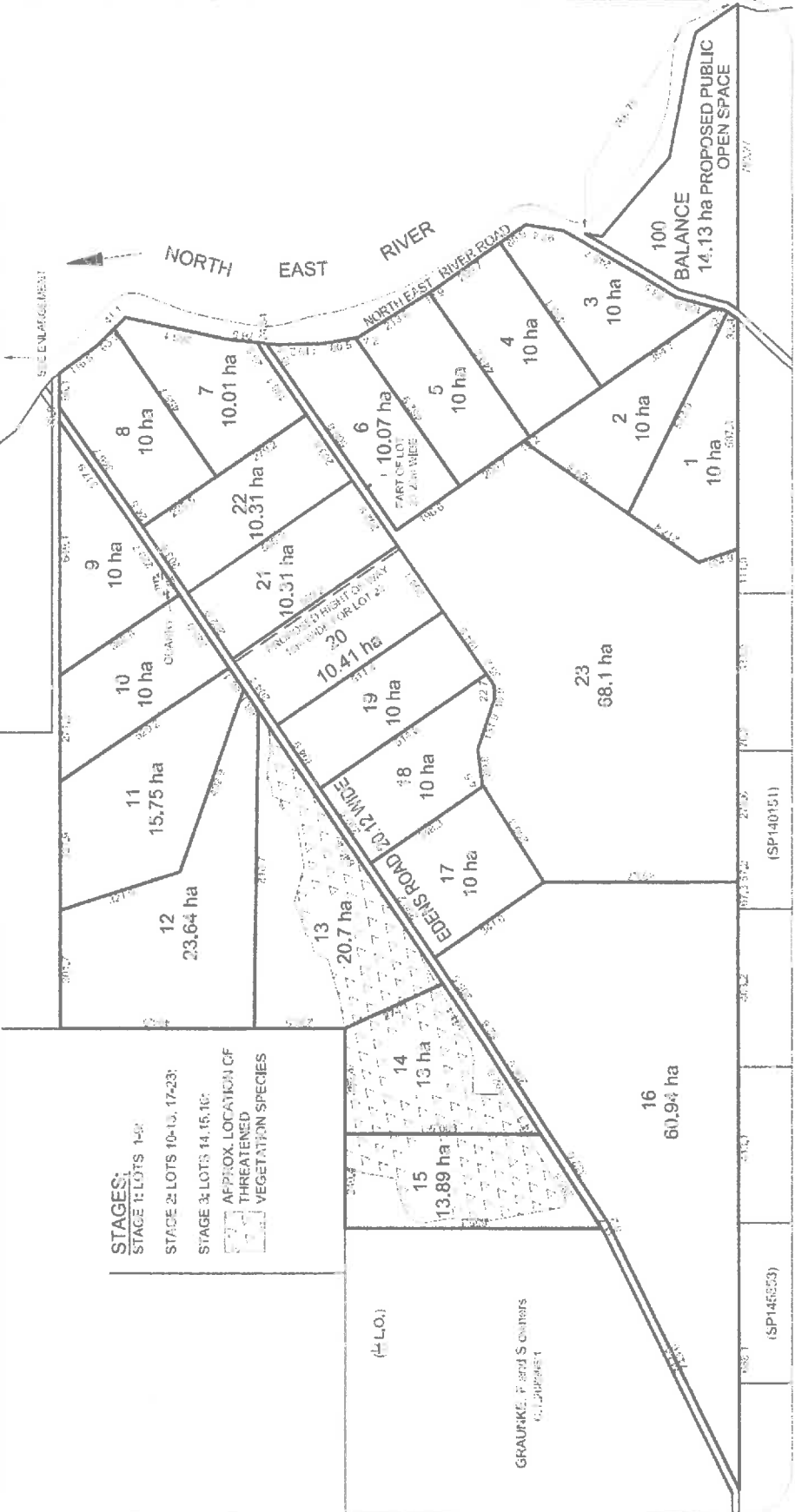
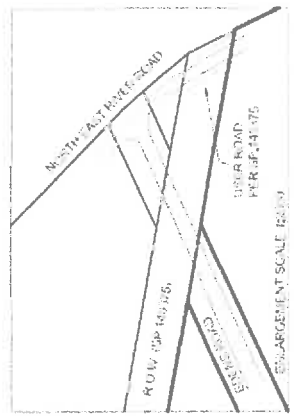
Figure 3. Assessed Vegetation
 Modified from TasVeg 3.0 following field inspection

PLAN OF SUBDIVISION

NICK GRIGGS & CO
 100 ...
CLIENT: FURNEAU FORESTS CO-OPERATIVE SOCIETY
 C.T. 2303881, 2274381 & 2373351
LOCATION: NORTH EAST RIVER ROAD
MUNICIPALITY: FUNDERS
SCALE: 1:10,000 @ A3 **CONTOUR: N/A**
DATE: 1-03/2014 **FILE NO: 3735**

This plan is prepared in accordance with the provisions of the Planning Act and the Planning Regulations. It is a preliminary plan and does not constitute an offer of land. It is subject to the approval of the Planning Commission and the Minister of Municipal Affairs and Housing. The Planning Commission may require the applicant to provide additional information and to revise the plan. The Planning Commission may also require the applicant to provide a copy of the plan to the public for review. The Planning Commission may also require the applicant to provide a copy of the plan to the public for review. The Planning Commission may also require the applicant to provide a copy of the plan to the public for review.

STAGES:
 STAGE 1: LOTS 1-9
 STAGE 2: LOTS 10-13, 17-23
 STAGE 3: LOTS 14, 15, 16
 APPROX. LOCATION OF THREATENED VEGETATION SPECIES



(F.L.O.) (SP145553) (SP140151) (SP140151)

APPENDIX 2 – PHOTOS

Taken by Scott Livingston 25th June 2014



Plate 1. View from north along Edens Road, harvested pine plantation to left (west) and native forest to right (east).



Plate 2. *Eucalyptus viminalis* - *Eucalyptus globulus* coastal forest and woodland (threatened vegetation community).