

BUSHFIRE REZONING REPORT

**5 Anderson Rd
Glenning Valley**



Prepared by:



DECEMBER 2010

PEAK LAND MANAGEMENT

Land management consulting services:

-Bushfire-	-Ecological-	-Agricultural-
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AUTHOR DETAILS

Ted Smith is the director of PEAK LAND MANAGEMENT. He is a qualified Land Management Consultant with a Bachelor of Science Honours Degree in Physical Geography. He has over 20 years experience commercially consulting with PEAK LAND MANAGEMENT PTY LTD and working within government (Department of Land and Water Conservation).

Ted has completed a Graduate Diploma in Design for Bushfire Prone Areas from the University of Western Sydney and is a member of the Fire Protection Association (FPA), being a BPAD-A Certified Bushfire Practitioner, and PEAK LAND MANAGEMENT PTY LTD is a certified business (17671) with the FPA. PEAK LAND MANAGEMENT PTY LTD is qualified to carry out bushfire threat assessments.

1.0 INTRODUCTION AND BACKGROUND

PEAK LAND MANAGEMENT PTY LTD has been engaged by Andrews Neil on behalf of Pyoand Pty Ltd to prepare a Bushfire Rezoning Report for a proposed residential subdivision rezoning on land located at Lot 8 DP 816552/ 5 Anderson Road, Glenning Valley (Figures 1,2 and 3).

Under the *Environmental Planning and Assessment Act, 1979* (and its regulations), and the *Rural Fires Act 1997* (and its regulations), councils are required to assess and control new developments in Bushfire Prone Areas. This land has been assessed as being part of a Bushfire Prone Area and is therefore subject to this legislation. LEP amendments in bushfire prone areas need to address the planning principles of Planning for Bushfire Protection (PBP) ,2006. These are:

- a) Provision of a perimeter road with two way access which delineates the extent of the proposed development;*
- b) Provision, at the urban bushland interface, for the establishment of adequate Asset Protection Zones for future housing;*
- c) Specifying minimum residential lot depths to accommodate Asset Protection Zones for lots on perimeter roads;*
- d) Minimizing the perimeter of the area of land interfacing the hazard, which may be developed;*
- e) Introduction of controls which avoid placing inappropriate developments in hazardous areas; and*
- f) Introduction of controls on the placement of combustible materials in Asset Protection Zones.*

It should be noted that Section 117 Direction Number 19 of the EP&A Act requires councils in regard to LEP amendments/rezoning to :

- *Consult with the Commissioner of the Rural Fire Service under Section 62 of the EP&A Act , and to take into account any comments by the commissioner; and*
- *Have regard to the planning principles of PBP below.*

If a council does not comply with these provisions it must obtain written advice from the Rural Fire Service Commissioner that the Rural Fire Service does not object to that non compliance.

This report aims to address PBP, 2006 requirements so consideration may be shown by Council/Rural Fire Service to allow rezoning approval.

Figure 1: Aerial photo of subject site (from Lands Department , imagery 2006).



Figure 2: Recent aerial photo of subject site (from Nearmap , imagery 2010).



2.0 REZONING SPECIFICATIONS AND SITE DETAILS

Wyong Shire Council has requested a Bushfire Rezoning report before it enters the Gateway rezoning process (30th Sept,2010). This report is needed due to “changes in best practice and various legislative changes” that have occurred since the last reports were prepared in 2003 for this site.

The subject site is located near Wyong Road, a major thoroughfare on the central coast. The site is 1.91Ha , and is mainly cleared grassland and vacant. It is accessed by Anderson Road, a sealed through road with overhead electricity and reticulated town water. A fire hydrant is located next to this site. Residential housing occurs alongside the subject sites northern boundary (Zoned 2 (a)), and rural residential land (Zoned Scenic Protection : Small holdings 7(c))to the east and south. Land to the west is also privately owned (Zoned 7(a) conservation land), with vegetation remaining over it presenting a hazard to this lot.

This rezoning proposal is for a proposed residential subdivision over the cleared parts of the land as shown in Figures 1 & 2. The existing landuse comprises grazing/vacant use. It is zoned Scenic Protection: Small Holdings 7(c) under Wyong LEP 1991 as amended.

This modern subdivision will have sealed roads, fire hydrants, reticulated town water, underground power, rolltop or no gutters, and easy access/egress for fire services/residents. Anderson Road provides a separation from the hazard, along with recommended Asset Protection Zones. A draft 15m (part of required 25m Asset Protection Zone) Asset Protection Zone (from Table A2.4 PBP,2006) has been delineated around the development (Figure 5) to show that it can be incorporated into the design and planning provisions for the proposed subdivision.

The subject site is already cleared to allow the residential subdivision and required Asset Protection Zones to be accommodated, subject to council approval.

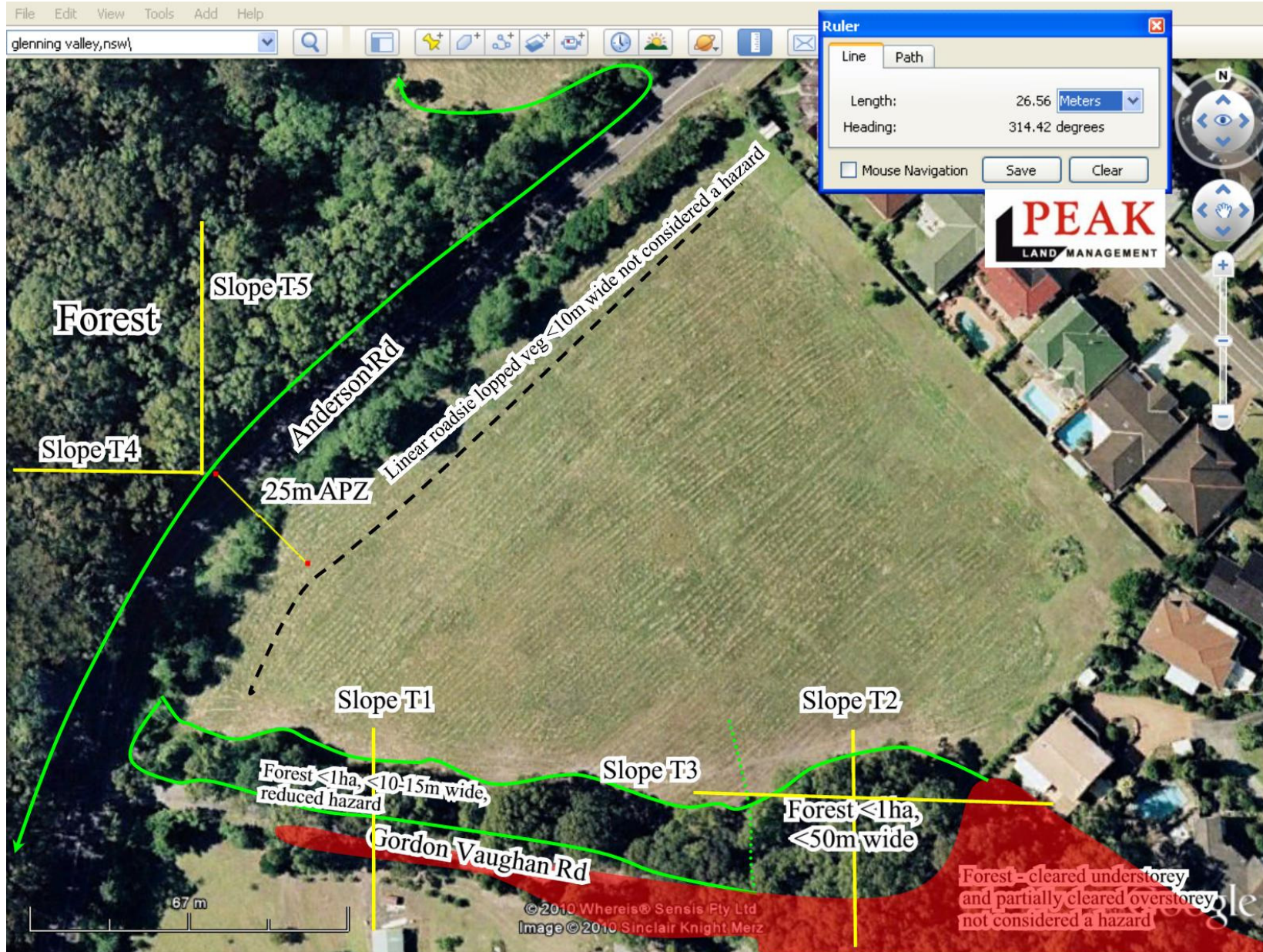
3.0 SLOPE

Slope assessment has been carried out under flammable vegetation within 100 metres of the dwelling as specified under the Guidelines Assessment Procedure. The angles have been measured in the field by an inclinometer, and measure the slope under the vegetation. Slope measurement points were located as shown in Figure 3.

Table 1: Slope

DIRECTION TO BUSHFIRE HAZARD	MOST SIGNIFICANT GRADIENT
West (T4)	0-5 ⁰ downslope
North (T5)	Flat
South (T1)	0-5 ⁰ upslope
South transect (T2)	0-5 ⁰ upslope
East (T3)	5-6 ⁰ upslope

Figure 3: Slope transect locations of subject site



4.0 VEGETATION AND ECOLOGY

The hazardous vegetation type within 140m is Forest (Figure 4). This vegetation type is classified according to AS 3959-2009*.

Wet Sclerophyll Forest with a rainforest understorey to 30m in height occurs on land adjacent to the subject site to the west, and a very narrow 5-15m wide roadside linear strip along both Anderson Road and Gordon Vaughan Roads (Figures 1, 2 & 4 and photos Appendix 1). The Anderson road strip of vegetation is only around 5-7m wide, less than 15m in height – (mainly only 3-5m high), is lopped by Electricity company as a low powerline occurs along this road, and has no Eucalypt trees present at all. It is not considered a hazard.

The Gordon Vaughan Road linear strip consists of old growth forest with trees to 25m in height, shrubby understorey, and varies in width from 5-15m over the lower half of the subject site. It has been assessed as a hazard, but downgraded to equivalent to Rainforest (as per PBP, 2006) due to its reduced area and fuel load.

Dry sclerophyll forest is located over the subject site at a higher elevation, occurring over the south-eastern corner of the site. It is restricted to approximately a small 0.1-0.2 hectare patch of Forest, around 30-35m wide, which is connected to the Wet Sclerophyll Forest occurring along Gordon Vaughan Road. For this reason it is regarded as a hazard, but equivalent to Rainforest (as per PBP, 2006) due to its reduced area and fuel load.

Ecological investigations have occurred (PEAK LAND MANAGEMENT, Dec 2010), which has found a threatened flora species (*Melaleuca biconvexa*) over parts of the narrow vegetated patches on the site (Figure 5). The remnant vegetation over the site is not considered an Endangered Ecological Community, but is habitat for threatened fauna, forms part of an important wildlife corridor along Gordon Vaughan Road and is recommended for retention.

* Note: AS 3959-2009 has an updated vegetation classification which is currently used for Section 79BA Bushfire Threat Assessment applications. This vegetation classification has been used rather than PBP, 2006.

5.0 BUSHFIRE THREAT ASSESSMENT

Table 2: Bushfire Threat Assessment

DIRECTION TO BUSHFIRE HAZARD	MOST SIGNIFICANT GRADINE TUNDER VEGATTION	PREDOMINANT VEGETATION TYPE	DISTANCE TO VEGETATION	Asset Protection Zone (as per PBP, 2006)
West (T4)	0-5 ⁰ downslope	Forest	15m	25m
North (T5)	Flat	Forest	15m	20m
South (T1)	0-5 ⁰ upslope	Forest <1Ha assessed as equiv. to Rainforest	On site	10m
South transect (T2)	0-5 ⁰ upslope	Forest <1Ha assessed as equiv. to Rainforest	On site	10m
East (T3)	5-6 ⁰ upslope	Forest <1Ha assessed as equiv. to Rainforest	On site	10m

Figure 4: Vegetation and Asset Protection Zone allowances

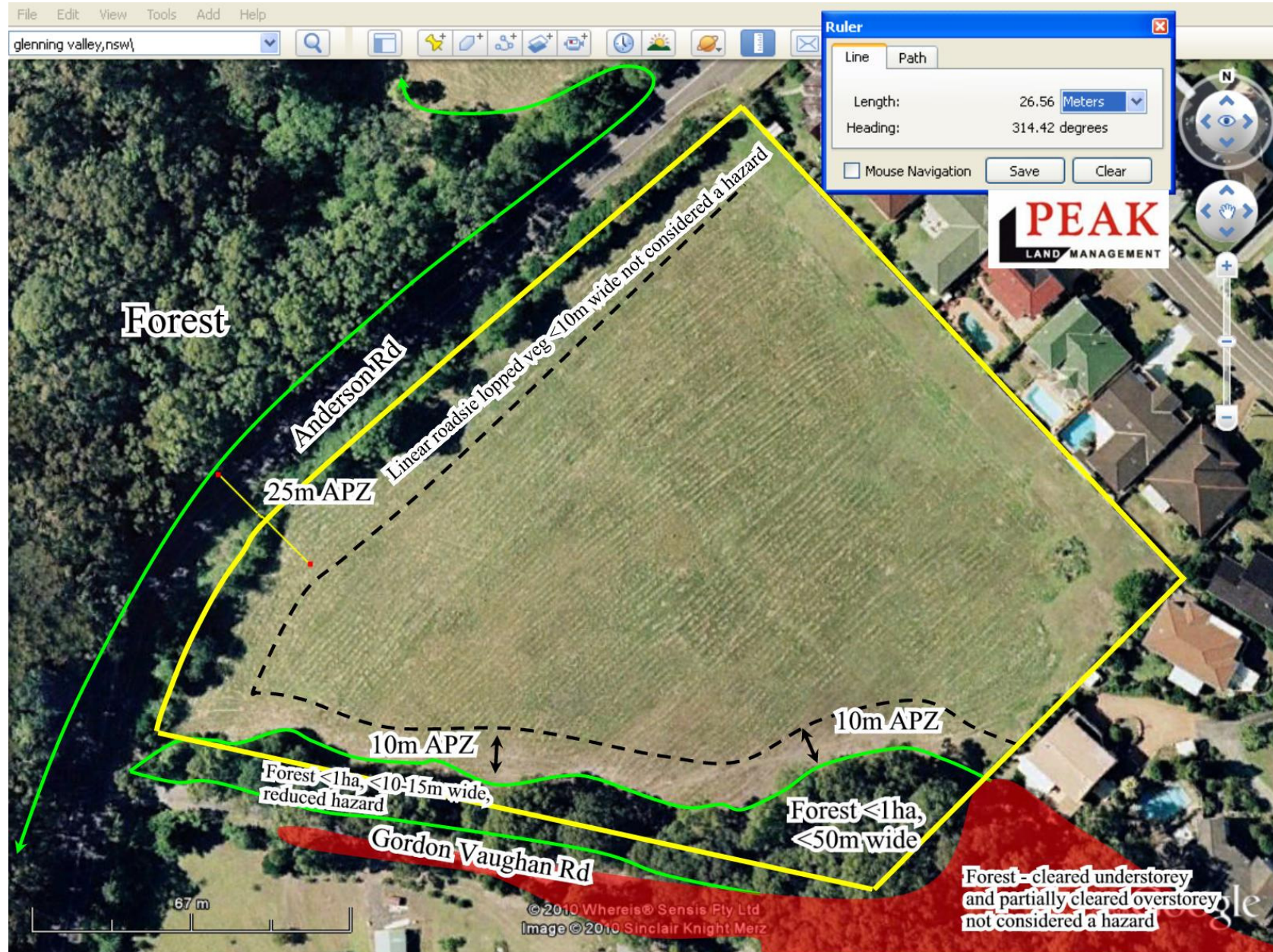
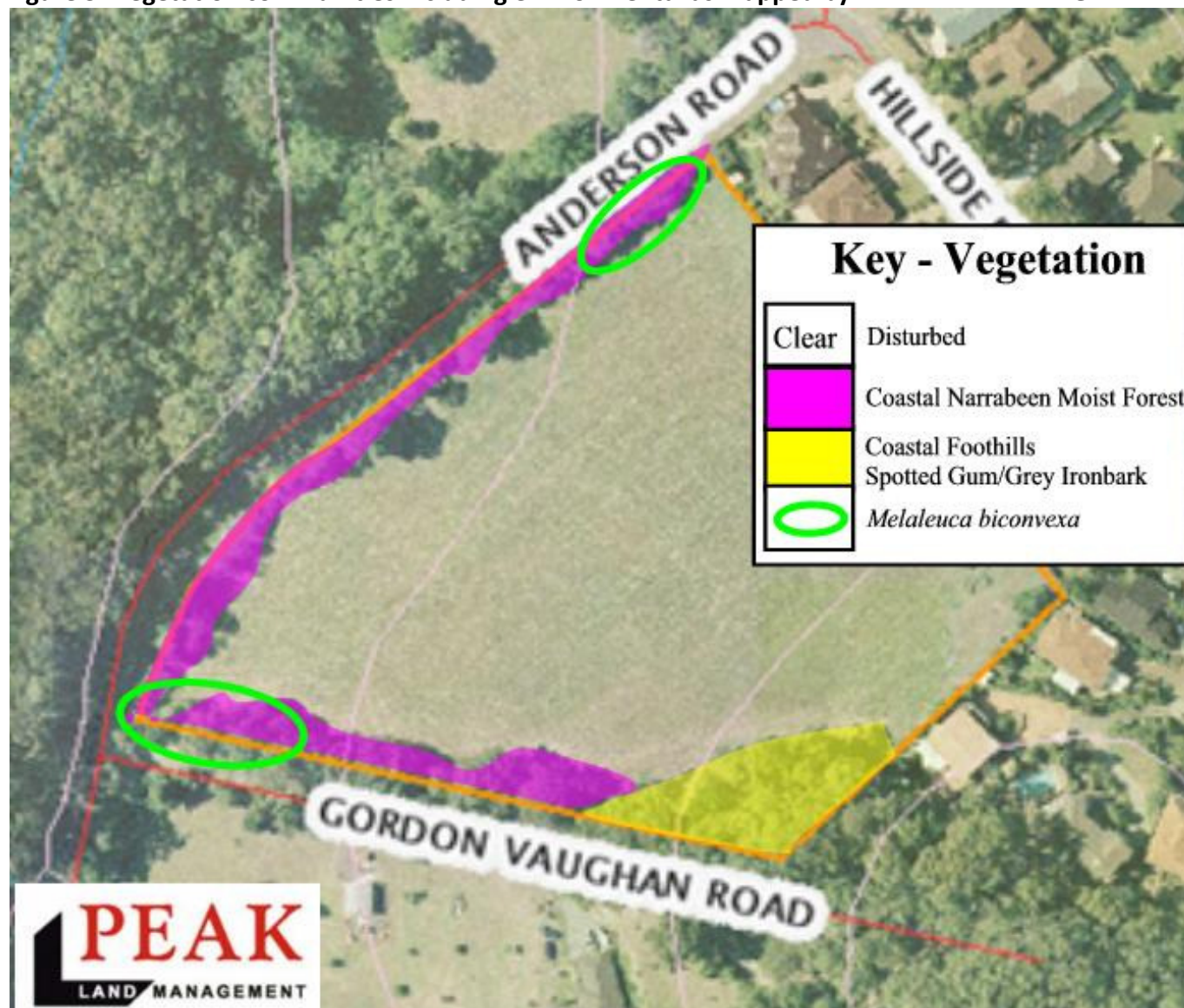


Figure 5: Vegetation communities including environmental as mapped by PEAK LAND MANAGEMENT



6.0 BUSHFIRE RECOMMENDATIONS

The proposed residential subdivision rezoning has adequate provision for all bushfire planning principles (as stated in Section 1). These include:

- Asset Protection Zones – between 10m and 25m (Figure 4), with 25m Asset Protection Zone including Anderson Road leaving approximately 10-15m Asset Protection Zone required over the subject site;
- Will conform to PBP requirements regarding road requirements; but does not require a perimeter road due to Anderson Rd and Gordon Vaughan public roads already in existence providing this function separating the hazard from the proposed residential subdivision site;
- Acceptable lot depths should be provided for (min 25-26m depth allowing adequate building envelopes and setbacks to bushfire prone vegetation where relevant);
- Modern services including underground power and reticulated water services;
- The subdivision will comply with subdivision requirements as per PBP, 2006 and all dwellings will also be subject to AS 3959-2009, and comply with those requirements.

The bushfire risk is considered to be adequately managed through the planning provisions designed for the development as shown above. The proposed rezoning development can meet the intent of PBP, 2006.

Thankyou for considering this report.

Report Prepared by:

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PEAK LAND MANAGEMENT PTY LTD

DISCLAIMER: Whilst every effort is made to present clear and factual information based on fieldwork and current scientific knowledge no guarantee is made that the development is safe from bushfire, or will be approved to the BAL Level recommended, as this is in the hands of the approving statutory authorities. Consequently no liability is accepted for losses, expenses or damages occurring as a result of information presented in this document.

6.0 REFERENCES

Brooker M.I.H. and Kleineg D.A. 2006. Field Guide to Eucalypts – South Eastern Australia, Volume 1. Blooming Books.

Building Code of Australia, 2010.

Fairley, A and Moore, P. 2000. Native Plants of the Sydney District. Kangaroo Press

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NSW Rural Fire Service, 2010. Planning for Bushfire Protection Guidelines Addendum: Appendix 3, 2010.

Standards Australia AS 3959-2009. Construction of buildings in bushfire prone area.

Websites

www.rfs.nsw.gov.au

Google Earth

Nearmap

Wyong Shire Council

APPENDIX 1: Photos of site and surrounds

Cleared site – existing residential development to the north.



Cleared land to the south of subject site.



Anderson Road providing separation from hazard.



Wet sclerophyll forest hazard to the west of subject site.



Narrow strip of vegetation along Gordon Vaughan Road considered a reduced hazard.



Mainly cleared understorey over subject site (Forest patch in southeast corner) with cleared garden in background of adjoining residential house to the east.

