Andrew Sherwood (Carman Surveyors)

From: Jean Carman [jeanc@carmangroup.com.au]

Sent: Friday, 4 October 2013 2:05 PM

To: 'Andrew Sherwood (Carman Surveyors)'; evanc@carmangroup.com.au

Subject: FW: Medowie - Preliminary Bushfire Advice

Attachments: 2165-MASTER_7C (CURRENT 18-07-2013).pdf; Masterplan APZ markup 021013.pdf;

Vegetation mapping markup with contours.pdf

From: Stuart Greville [mailto:Stuart.Greville@rpsgroup.com.au]

Sent: Friday, 4 October 2013 11:19 AM

To: Jean [Carman Group]

Cc: Matt Doherty

Subject: Medowie - Preliminary Bushfire Advice

Hi Jean,

As requested we have completed a preliminary bushfire appraisal of the development of Lot 1 DP1019113. It is our understanding that the current proposed development is indicated in the plan 2165-Master_7C dated 18th July 2013 (attached).

Attached is a markup of the plan indicating potential APZ's and modifications that may be required by the Rural Fire Service.

Also attached is a vegetation mapping plan with 2m interval contours overlayed.

The following advice is based on our assessment of the proposed development in accordance with the RFS Planning for Bushfire Protection 2006 and AS3959-2009 Construction of buildings in bushfire prone areas.

Ziggy did mention that Council has shown some reluctance to support a perimeter road on the western boundary. Regardless of why Council are unlikely to support a perimeter road, the RFS will insist that we provide a permanent setback/defendable space on that boundary – particularly as it is a State Forest.

A couple of reasons for this:

- 1. There is unlikely to be any opportunity to obtain legal access for create and maintain an APZ in the State Forest; and
- 2. The RFS don't support fire trails in private properties and as a Torrens title subdivision (correct me if i'm wrong), Council are unlikely to accept the fire trail as an asset that Council are responsible for maintaining.

Asset Protection Zones (APZs)

See table below

Bushfire Attack Levels (BALs) – Construction Standards

Vegetation Classification	Average slope of land in degrees	APZ	Separation Distance from Threat	Bushfire Attack Level (BAL)	Construction Section
Forest	Upslope/Cross Slope	20m	<19m	BAL - FZ	
			19-<25m	BAL - 40	Sect 5, 6, 7, 8 & 9 of AS3959- 2009 and Sect A3.7 of PBP
			25-<35m	BAL - 29	Addendum Appendix 3.
			35-<48m	BAL - 19	

Vegetation Classification	Average slope of land in degrees	APZ	Separation Distance from Threat	Bushfire Attack Level (BAL)	Construction Section
			48-<100m	BAL - 12.5	
Forest	Downslope 0-5 degress	25m	<24m	BAL - FZ	
			24-<32m	BAL - 40	
			32-<43m	BAL - 29	
			43-<57m	BAL - 19	
			57-<100m	BAL - 12.5	
Forested Wetlands (Keith) Rainforest (AS3959-2009)	Upslope/Cross Slope	15m	<8m	BAL - FZ	
			8-<11m	BAL - 40	
			11-<16m	BAL - 29	
			16-<23m	BAL - 19	
			23-<100m	BAL - 12.5	
Forested Wetlands (Keith) Rainforest (AS3959-2009)	Down slope 0-5 degrees	15m	<10m	BAL - FZ	
			10-<14m	BAL - 40	
			14-<20m	BAL - 29	
			20-<29m	BAL - 19	
			29-<100m	BAL - 12.5	

Utilities

All utilities will need to comply with the Acceptable Solutions shown in 4.1.3 of Planning for Bushfire Protection 2006. These include (but not limited to):

- Reticulated water must provide a ring main and comply with AS2419.2005
- All above ground water and gas services pipes are metal
- · Electrical transmission lines are underground

Access

- Roads must be two way and capable of supporting a 15 tonnes
- Road carriageways are a minimum 8m kerb to kerb
- Additional design criteria apply regarding cross fall and grade, however it appears the slope of the site will
 not require any additional earthworks to comply with the RFS requirements.

Matt is on leave next week and return the following Monday.

In the meantime I am more than happy to discuss the above and provide advice on the layout.

Regards Stuart		
RPS		

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