



APPENDIX C

Appendix C

Review of Previous Flora and Fauna Reports - Seaforth

Report by Hayes Environmental dated 18th February 2003



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20th May 2003

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Dear Robert,

RE: Review of Bushfire Protection Assessment report – Seaforth Precinct A1

I have reviewed the Bushfire Protection Assessment for the proposed subdivision of Precincts A1 and A2, Wakehurst Parkway, Seaforth, prepared by Conacher Travers in April 2003.

The Bushfire Protection Assessment raises some issues with regard to protection of threatened species on the Precinct A1 site. The report identifies that the whole of the Bushland Preservation Area on the site should be managed as an Inner Protection Zone for bushfire hazard reduction. This is illustrated on Schedule 1.

In general, an Inner Protection Zone should be managed as an almost fuel-free zone. This is usually achieved through a combination of access tracks and roadways, and mown lawn. This management would clearly impact upon the Duffy's Forest ecological community, and also upon the threatened plant species known or potentially present.

More specific details for management of an Inner Protection Zone are provided in Appendix 1 of the Bushfire Protection Assessment report. Trees are permitted within an Inner Protection Zone if the canopy does not form a link with the shrub layer, and at maximum densities specified in Table 2.

I have roughly calculated the densities of existing trees in the Bushland Preservation Area (based on the trees illustrated on Schedule 1, and the boundary of the APZ indicated on Schedule 1), and compared these with densities specified in Table 2:

- there are no trees within the first 5m of the asset protection zone, this being the area from the building zone to the proposed access track. This is consistent with requirements in Table 2;
- there are approximately 3 trees in the next 5m of the APZ (ie between 5-10m from Lots 3, 4 and 5), within an area of approximately 480sqm. This is less than 1 tree per 100sqm;
- there are approximately 6 trees in the next 10m of the asset protection zone (ie between 10-20m of Lots 3, 4 and 5), within an area of approximately 960sqm. This is less than 10 trees per 400sqm.

It appears that no trees will need to be removed from the Bushland Preservation Area for asset protection. However, the actual number and arrangement of trees depends on an individual assessment being undertaken (page 5 of Appendix 1).

Shrubs are also permitted within an Inner Protection Zone, where cover is 10-15%, and in some cases up to 30%. Again, this must be specifically assessed by an experienced bushfire protection manager. There are currently few shrubs present on the site, and these are generally more than 20m from the building zones. It is likely that the majority of shrubs present could be retained on the site, mainly where these are not linked to tree canopies.

In general, the understorey/grass layer should be mown. This poses a particular threat to *Pimelea curviflora* ssp *curviflora*, a threatened plant species known to occur on the site. *Pimelea curviflora* ssp *curviflora* is a small woody plant which grows up to 0.5m in height, and flowers from September to January (Robinson 1991; Fairley & Moore 1995). Plants present on the site are generally 5-15cm in height, and have regenerated from woody rootstock (James 2002).


Pimelea curviflora ssp *curviflora* is known to be regenerating in only a few parts of the Bushland Preservation Area, all west of the proposed walking track. This species could be protected if grassland areas to the west of the proposed walking track were slashed to no less than 0.4 to 0.5m in height. Grassland to the east of the proposed walking track could be mown regularly. It may be possible to identify a few areas west of the proposed walking track which are particularly important for the species, and retain these as 'bush gardens', whilst mowing or slashing the majority of the Bushland Preservation Area.

A second threatened plant species, *Microtis angusii*, is considered possibly occurring on the site (James 2002). This plant would be present as underground tubers for most of the year, producing leaves and flower in late winter and spring (James 2002). This plant would be less susceptible to mowing and slashing, if the Bushland Preservation Area was not mown or slashed during its reproductive season. This reproductive season is outside of the normal bushfire danger season.

In summary, it appears possible that the Bushland Preservation Area could be maintained for the dual purposes of asset protection and threatened species protection. However, this will need to be achieved through specific on-site discussions between an ecologist and an experienced bushfire protection manager. Responsibility for on-going maintenance of the area will need to be addressed.

Please do not hesitate to contact me to discuss these issues further.

Regards,



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