



NSW RURAL FIRE SERVICE



Director General
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Your Ref: SSD 7419
Our Ref: D16/2436

ATTENTION: Andy Nixey
26 October 2016

Dear Sir/Madam

Response to Submissions, State Significant Development - Proposed New Habitat and Ecotourist Facility at Taronga Zoo, 2a Bradleys Head Road, Mosman

I refer to your letter dated 12 October 2016 seeking final comments and recommended conditions for the above State Significant Development (SSD). The NSW Rural Fire Service (RFS) has previously provided recommended conditions for the SSD in our letter dated 10 August 2016.

The comments contained in the Response to Submissions Attachment J - '*Bushfire Assessment Consultant Response*' dated 6 October 2016 which seeks to amend/delete certain conditions outlined in our letter dated 10 August 2016, has been reviewed. The following comments are provided for the Department of Planning and Environments (DoPE) consideration in their final determination of this matter:

- Item 1(a) It is acknowledged that the existing internal site constraints inhibit vehicular access to/from the proposed accommodation buildings and as such, there is no objection to the amendment of condition 1(a) to remove the vehicular access requirement.
- Item 3 (a) and (b) Insufficient justification has been provided to support the removal of this condition. The NSW RFS document titled '*Ecotourism*' Fact Sheet 1/14, requires refuge buildings to be constructed in accordance with Bushfire Attack Level (BAL) 12.5 as per Australian Standard 3959-2009 '*Construction of buildings in bushfire-prone areas*'. However, in recognition that the proposed refuge is an existing building, certain ember upgrade works were required to be carried out in lieu of retrofitting the refuge building to BAL 12.5.

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It is noted that portions of the Taronga Zoo site are not managed strictly in accordance with the requirements of an Asset Protection Zone (APZ). During a bush fire, embers can travel hundreds of metres from a fire to impact on a building. Studies show that 85% of lost houses in previous bush fires were ignited by ember attack rather than direct flame contact.

For the above mentioned reasons, and in combination with the significant scope of works proposed under this application, the proposed refuge building should be provided with some level of ember upgrade works. Therefore the removal of condition number 3 (a) and (b) is not supported.

- Item 5 (b) and (c) There is insufficient certainty in the statement provided that '*Guests will be accompanied to the refuge buildings (if and when required) in a coordinated manner by site management*' to justify the removal of Items 5 (b) and (c).

During a bush fire emergency there is the risk that occupants of the Taronga Wildlife Retreat may egress from their accommodation building without accompaniment by management staff. Therefore the removal of the condition requiring pathways and refuge buildings to be signposted is not supported.

- Item 6 Landscaping around the Taronga Wildlife Retreat should incorporate the principles of Appendix 5 of *Planning for Bush Fire Protection* 2006. Specifically, the following principles should be included as part of any landscaping plan:
 - A species list of all plantings including estimated size at maturity and a preference for species with low flammability.
 - A maintenance regime that provides for ongoing adequate canopy separation between trees i.e thinning and regular pruning to avoid adjoining canopies, and provide for ongoing pruning of lower limbs of trees.
 - Adequate spacing between plantings to prevent continuous vegetation pathways resulting in potential '*fire paths*' leading towards buildings.
 - Regular removal of fine fuels to maintain a fuel reduced landscape.

No objection is made to the modification of Item 6, provided that the DoPE includes a condition for the landscaping plan to be approved by a suitably qualified professional, and includes the above referenced principles.

NOTE - The amendments contained within the Revised Fire Safety Statement, which are a result of the comments provided by NSW Fire and Rescue, are supported.

For any enquiries regarding this correspondence or to discuss the matters raised in this letter further please contact Martha Dotter on (02) 4472 0600.

Yours faithfully,



Nika Fomin

Manager Planning and Environment Services