



Holiday Coast Bushfire Solutions

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17th June 2010

Mr Mark Petersen
Petersen Consulting Group
petersenconsulting@bigpond.com

Dear Sir

SANDY BEACH MILL PROPOSED SUBDIVISION LOT 260 DP 1110719 GRAHAM DRIVE, SANDY BEACH

I refer to my Bushfire Hazard Assessment Report issued 11/6/2009, and provide this letter of advice as an addendum to that Report. The advice herein is in response to:

- proposed changes to the vegetation regeneration along the creek line to the north of the site; and
- the management of the land between the site and Graham Drive as APZ; and
- legislative changes to the Building Code of Australia, including *AS3959-2009 Construction of buildings in bushfire-prone areas*, Addendum Appendix 3 of Planning for Bushfire Protection 2006 (*PBP-2006*), and the NSW Rural Fire Service Fast Fact 02/10 - BCA 2010 Transition.

At the time of the original Bushfire Assessment there was little vegetation along the creek line to the north of the site. This riparian area allowed a concession for the vegetation to be assessed as if it were "rainforest", as quoted:

Riparian areas are those areas of vegetation which are no greater than 20 metres in width and are found on either bank of a river, creek or stream identified on a bush fire prone land map, and are treated the same as rainforests.

The plan on page 27 of my Report reflected the concession provided in *PBP-2006*. However, you have advised that this riparian area is to be revegetated as provided below in your e-mail dated 7/6/2010:

CHCC have agreed that revegetation of the 50m riparian buffer to Double Crossing Creek should generally be carried out such that the first 20m from top of bank is to be heavily vegetated, representative of vegetation located east and west of the site, the next 10m is to be less heavily vegetated, while the final 20m is to comprise isolated trees and shrubs with a turfed understorey.

The description of the revegetation above indicates that APZ-conditions (outer protection area) will exist at a distance of 20m from the top of the creek bank, therefore, the concession provided by **PBP-2006** will still apply. The attached plan reflects the impact the revegetation has on the construction level threshold across the site, and replaces the plan provided at page 27 of my original Report.

In relation to the wedge-shaped portion of land to the west of the site, an assumption was made that this land was to be managed as APZ. This assumption was made primarily based on the "Landscape Masterplan" prepared by Jackie Amos, Landscape Architect. This plan indicated that the wedge-shaped portion of land was to be landscaped so that it satisfied the APZ requirements (planted swales and mounds, discontinuous canopies).

It is anticipated that the wedge-shaped portion of land is to be transferred to the care, control and management of the Coffs Harbour City Council. This being the case, it is not unreasonable to assume that the CHCC will manage the land to ensure that it does not pose a bushfire hazard to the adjoining lands. This is consistent with the Council's existing management of road-side vegetation.

If the wedge-shaped portion of land is to be managed by CHCC in line with existing road-side vegetation management practices, rather than as an APZ, then the construction level thresholds as indicated on the Figure 14 of my Report will need to be amended.

The required separation was 17m, made up of 10m outer protection area (OPA) and 7m inner protection area (IPA), as provided by Appendix 2 of **PBP-2006**. Where the road-side vegetation is managed by the CHCC consistent with its existing management of road-side vegetation it will constitute the OPA. Therefore the Flame Zone will extinguish at 7m from the western boundary of the site.

The proposed subdivision was assessed against the provisions of **PBP-2006** prior to the changes to the BCA on 1/5/2010. The BCA at the time 'called-up' Appendix 3 of **PBP-2006**, and the construction standards provided in *AS3959-1999 Construction of buildings in bushfire-prone areas*. On 1st of May this year the BCA was amended, and *AS3959-2009* was adopted as the construction standard for bushfire-prone areas. These changes prompted the need to amend Appendix 3 of **PBP-2006**, which has resulted in Addendum Appendix 3 of **PBP-2006**. This legislative change has resulted in the subdivision being assessed in accordance with the pre-1/5/2010 versions of the BCA and **PBP-2006**, but the eventual construction of future dwellings being assessed against the post-1/5/2010 legislation.

Consequently, the NSW Rural Fire Service has issued "Fast Fact 02/2010" to clarify the RFS's position in relation to construction standards applicable under the circumstances described above. This "Fast Fact" is attached for your information. It should be noted however, this (or any) "Fast Fact" issued by the NSW Rural Fire Service does not form legislation, and is merely an advisory document.

Section 8.0 of my original Report should be amended as follows – replace SR4 with the following SR4:

SR4 The construction requirements of future dwellings should be determined in accordance with the plan attached as Figure 1 to this Addendum, and the NSW Rural Fire Service “Fast Fact 02/2010 – BCA 2010 Transition”.

Please feel free to contact me if you have any queries concerning this matter.

A handwritten signature in black ink, appearing to read 'S Ellis', written in a cursive style.

Steve Ellis

- ✓ Graduate Diploma in Design For Bushfire Prone Areas
- ✓ BPAD-A Certified Business and Practitioner – Fire Protection Association Australia “**Bushfire Planning and Design**” Certification Program



Source: Holiday Coast Bushfire Solutions,
Layout plan - RPS May 2010
Date: May 2010
1184-255 construction thresholds

Plan 1

CONSTRUCTION LEVEL THRESHOLDS

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Figure 1: construction level threshold plan - replaces plan on page 27 of original Report



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The aim of this Fast Fact is to provide clarification for certification in circumstances where a Construction Certificate is applied for after 1 May 2010 and DA consent has been issued prior to 1 May 2010. In these situations there could be a conflict between the levels of construction stated in the Development Consent and those required by the Building Code of Australia (BCA). This is intended to clarify those discrepancies.

Background

In NSW, the bush fire protection provisions of BCA 2010 are applied to Class 1, 2, 3 buildings, Class 4 parts of buildings, some Class 10 structures and Class 9 buildings that are Special Fire Protection Purposes (SFPPs).

BCA 2010 references AS3959-2009 as the deemed-to-satisfy (DTS) solution for construction requirements in bush fire prone areas, with a NSW variation excluding DTS requirements for construction in the Flame Zone.

In order to clarify the NSW development approval process, the RFS has prepared an addendum to *Planning for Bush Fire Protection 2006* (PBP) which replaces the existing Appendix 3. The addendum aligns PBP Appendix 3 with the BCA DTS separation distance requirements for the Bushfire Attack Levels (BAL) of AS3959-2009.

Implementation & Transition

The following table is provided to clarify the association between AS3959-1999 and AS3959-2009 for the purposes of conditions of consent issued prior to 1 May 2010.

The table below should be used as a guide for certification when a Construction Certificate is applied for after 1 May 2010 and DA consent was issued prior to 1 May 2010. In these circumstances, the table below identifies the Bushfire Attack Level (BAL) under AS3959-2009 which is considered to protect against similar bushfire attack parameters and provides an equivalent construction outcome to that intended by AS3959-1999. ***However, it is important to note that the additional construction requirements in section A3.7 of Addendum Appendix 3 also need to be applied for this to be the case.***

AS3959-1999	AS3959-2009
Level 1 Construction	BAL-12.5 + section A3.7 of Addendum Appendix 3
Level 2 Construction	BAL-19 + section A3.7 of Addendum Appendix 3
Level 3 Construction	BAL-29 + section A3.7 of Addendum Appendix 3

It should be noted that AS3959-2009 has introduced additional bushfire attack levels beyond those equivalent to Level 3 Construction under AS3959-1999.

It should be further noted that compliance with BCA 2010 may result in higher construction requirements than those deemed equivalent under the Development Consent. In these circumstances, compliance with the

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higher BAL along with the additional construction requirements in section A3.7 of Addendum Appendix 3 would be considered to satisfy the intent of the lower level of construction identified in the Development Consent.

All development on bush fire prone land in NSW should comply with the requirements of the Addendum Appendix 3 and other bush fire protection measures identified within PBP.

The Addendum Appendix 3 and associated supporting information is available online at http://www.rfs.nsw.gov.au/dsp_content.cfm?CAT_ID=518.

If you have any questions regarding this or any other matter regarding developing on Bush Fire Prone Land, please email development.assessment@rfs.nsw.gov.au or contact 8741-5175.

David Boverman

Manager Development Assessment and Planning

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