

Planning For Bushfire Protection Pty Ltd




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Reference: 733
25/02/2013

Bushfire Risk Assessment

In relation to proposed development at:

North Curl Curl Surf Club

<i>This Assessment has been prepared and Certified by: Ronald Coffey BPAD – A Certified Practitioner FPAA Cert. No: BPD-PA 09328</i>	
Can this proposal comply with AS3959, 2009 + addendum to Appendix 3 of PBP?	AS3959, 2009 does not apply as a DTS Provision
What is the recommended level of compliance AS3959, 2009?	AS3959, 2009 does not apply as a DTS Provision
Does this development comply with the requirements of PBP?	<u>YES</u>
Does this development comply with the Aims and objectives of PBP?	<u>YES</u>
Is referral to the NSW RFS required?	<u>No</u>
<u>Architectural Plans</u>	Provided by: LKS Design & Construction Drawing Ref No: DA 04 Revision A Dated: February 2013

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Introduction

The purpose of this report is to determine the category of bushfire attack and subsequent construction standard for the proposed development of a new IRB storage and maintenance shed and alterations and additions and to the existing North, Curl Surf Club building at Huston Parade North Curl Curl.

The site is identified as 'bush fire prone land' for the purposes of Section 146 of the *Environmental Planning and Assessment Act 1979* and the legislative requirements for building on bushfire prone lands are applicable.

The proposed development is an infill development as defined within Chapter 4.3.5 of *Planning for Bushfire Protection 2006* and this report has been prepared in accordance with the requirements of section 79BA of the *Environment Planning and Assessment Act*.

The Building Code of Australia [BCA] does not provide for any bushfire specific performance requirements for the proposed development and as such AS3959, 2009 does not apply as a deemed to satisfy provision. PBP accepts the general fire safety construction provisions of the BCA are taken as acceptable solutions; however, the aims and objectives of PBP must be considered.

This assessment includes an analysis of the hazard, threat and subsequent risk to the development proposal and provides recommendations that satisfy the Aims and Objectives of *Planning for Bushfire Protection 2006* [PBP].

The site was inspected: 25/02/2013

1) Location

North Curl Curl Surf Life Saving Club, Huston Parade North Curl Curl

UBD Page 178 Reference H 12

Crown Reserve 84882

LGA - Warringah

2) Development Proposal and Building Classifications

The proposal includes:

- Enclose an existing balcony and provide a new first floor balcony on the southern elevation and south-east corner of the existing building;
- Internal renovations;
- Construct a new class 10a building for IRB/ATV storage and maintenance adjacent to and south-west corner of the existing Gym and Boatshed.

The proposal does not include renovations, alterations or additions to the existing caretakers flat.

Building Classifications:

9b – Assembly Building

4 – Caretakers Unit

10a – Maintenance and IRB storage building

3) Description of the Subject

Property

The development site is a Crown Land Reserve with an existing Surf Club building.

The following sections 4-8 describe in detail the vegetation, slope, access and egress, availability of water supplies and environmental considerations for the site.

The adjacent image is the bushfire prone land map for the area.



4) Classification of the Vegetation on and surrounding the Site

The site is developed and maintained and there is no threat from bushfire attack on the site.



The Crown Land to the east of the surf club is 'Low Coastal Heath' and is considered a remnant. There is no threat of bushfire attack from the north, south or west.

With reference to PBP and the bushfire prone land map for the area this area of bushland is a remnant and a low hazard and with reference to AS3959, 2009 the vegetation structure is 'C' low coastal scrub.

Distance to hazard:

The proposed Surf Cub development – 15m

The proposed storage and maintenance shed – 25m

5) Assessment of Effective Slope

Effective slope away from the development site:

- North: No hazard for >140m
- South: No hazard for >140m
- East: 5-10 degrees upslope
- West: No hazard for >140m

6) Access and Egress

The site has direct access to Huston Parade, which is a public road, and access and egress for emergency vehicles and evacuation appears adequate.

7) Adequacy of water supply

The area has reticulated water supply and the nearest street hydrant is within the minimum required distance from the most distant point of the subject site in accordance with the requirements of PBP and AS2419.1 2005

8) Environmental Considerations

The scope of this assessment has not been to provide an environmental assessment; however, the subject site is cleared and managed as an APZ and it appears that the proposed development will have no adverse environmental effect.

9) Bushfire Risk Assessment

Table 1; Reference AS3959, 2009 Table 2.4.2

Determination of category of bushfire attack for the site and subsequent required building standards

Direction	Distance of APZ	Vegetation Classification	Assessment of Effective Slope	Anticipated Radiant heat	Bushfire Attack Level (BAL)
North	>140m	Developed sites	n/a	-	-
South	>140m	Developed sites	n/a	-	-
East	15-25m	'C' Low Shrub-land	5-10 degrees upslope	<12.5kw/m ²	<BAL 12.5
West	>140m	Developed sites	n/a	-	-

Summary: Based upon the relevant provisions of PBP the anticipated radiant heat attack is for the site is <12.5kw/m².
The distance to the hazard, the slope of the hazard and the vegetation structure of the hazard equate to a low level of anticipated bushfire attack and the aims and objectives of PBP have been satisfied.

10) Assessment of the extent to which the construction conforms or deviates from the Aims and Objectives of 'Planning for Bushfire Protection 2006'

Aim	Meets Criteria	Comment
The aim of PBP is to use the NSW development assessment system to provide for the protection of human life [including firefighters] and to minimise impacts on property from the threat of bushfire, while having due regard to development potential, onsite amenity and the protection of the environment.	Yes	The threat assessment has determined that the category of bushfire attack for the site is not within the flame zone. Landscaping, defensible space, access and egress, emergency risk management and construction standards are in accordance with the requirements of PBP and the aims of PBP have been achieved
Objectives	Meets Criteria	Comment
Afford occupants of any building adequate protection from exposure to a bushfire	Yes	The maximum exposure to a bushfire for the area where the development is proposed is <12.5kw/m2.
Provide for defensible space to be located around buildings	Yes	Defensible space is provided on all sides of the existing building, the proposed additions and the proposed 10a building.
Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition.	Yes	The entire site is managed as an asset protection zone and appropriate separation has been provided by a combination of the onsite APZ and adjoining public roads and pathways.
Ensure that safe operational access and egress for emergency service personnel and occupants is available	Yes	The site has direct access to public roads, and access and egress for emergency vehicles and evacuation appears adequate.
Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads, in the asset protection zone	Yes	The entire site where not built on is an APZ and there are no fuel loads to consider. The building is continually maintained by an active club membership.
Ensure that utility services are adequate to meet the needs of firefighters [and others assisting in bushfire fighting]	Yes	The existing surf club building has been designed and built to BCA requirements and fire protection measures in accordance with the requirements of the BCA are provided and maintained.

11) Recommendations

The following recommendations are made for the bushfire protection measures for the proposed development of a new IRB Storage and maintenance shed and alterations and additions and to the existing North, Curl Surf Club building at Huston Parade North Curl Curl and are based upon the relevant provisions of the NSW Rural Fire Service guideline entitled *Planning for Bushfire Protection 2006*.

Construction Standard: No specific construction requirements for building in bushfire prone areas have been recommended.

12) Summary

This report consists of a bushfire risk assessment for the proposed development of a new IRB Storage and maintenance shed and alterations and additions and to the existing North, Curl Surf Club building at Huston Parade North Curl Curl.

The report concludes that the proposed development is on designated bushfire prone land and the legislative requirements for development in bushfire prone areas are applicable.

The alterations and additions are minor, are on an elevation of the existing building completely shielded from the hazard to the east, the hazard is considered a remnant and the proposed development does not include any alterations, additions or renovations to the existing caretakers unit.

The proposed development will be constructed to the minimum standards required in accordance with the guidelines of *Planning for Bushfire Protection 2006*.

This report has considered all of the elements of bushfire attack it is my considered opinion that the development satisfies the *Aims and Objectives of Planning for Bushfire Protection 2006*.

This Report is a Bush Fire Hazard Assessment that provides the required information to assist Local Council in determining compliance in accordance with the aims and objectives of Planning for Bushfire Protection 2006. The Local Council is the Final Consenting Authority and the construction of the building must comply with the recommendations included in the Council's conditions of consent.



Ron Coffey – Bushfire Safety Engineer
Grad I Fire E [Institute of Fire Engineers - 1973]
Grad Cert Fire Safety Eng [UWS - 2003]
Grad Dip Building in Bushfire Prone Areas [UWS – 2005]
Ass Prof Cert in Expert Evidence in the Land & Environment Court [UTS – 2005]
Corporate Member - Institute of Fire Engineers
Member - Fire Protection Association Australia



Planning for Bushfire Protection Pty Ltd
Fire Protection Association of Australia
BPAD-A Certified Practitioner/Certified Business
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13) References

Australian Building Codes Board

Building Code of Australia
Volumes 1&2
Canprint

Australian Building Codes Board [2001]

Fire Safety Engineering Guidelines
Edition 2001
ABCB Canberra

D. Drysdale D. [1998]

Introduction to Fire Dynamics 2nd Edition
John Wiley & Sons Ltd

NSW Government Environmental Planning and Assessment Act [1979]

Part 79BA – Consultation and development Consent – Certain Bushfire Prone Land
NSW Government Printer

Planning NSW [2006]

Planning for Bushfire Protection 2006

A Guide for Councils, Planners, Fire Authorities, Developers and Home Owners

This document provides the necessary planning considerations when developing areas for residential use in residential, rural residential, rural and urban areas when development sites are in close proximity to areas likely to be affected by bushfire events and replaces Planning for Bushfire Protection 2001.

[This document is essential reading: Download a copy from the RFS website or purchase a copy through the NSW Government Online Shop or phone 9228 6333](#)

Ramsay C & Rudolph L [2003]

Landscape and Building Design for Bushfire Prone Areas
CSIRO Publishing

Standards Australia [2009]

Australian Standards 3959
Australian Building Code Board

Planning For Bushfire Protection



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Reference: 733-S96
13/06/2014

The General Manager
Warringah Council

Subject:

Section 96 application for a variation to the approved development of alterations and additions at North Curl Curl Surf Lifesaving Club, Huston Parade, North Curl Curl

Reference:

- Bushfire Risk Assessment: Reference 733, Dated 25/02/2013
- DA Number: DA2013/0538, Notice of Determination 20/08/2013
- Revised Plans Submitted by: LKS Design & Drafting
Reference Number's: DA 01-07 Rev B, Dated: 30/05/2014

Bushfire risk assessment reference No 733, Dated 25/02/2013 was submitted by Planning for Bushfire Protection Pty Ltd for the development of alterations and additions at North Curl Curl Surf Club, Huston Parade, North Curl Curl.

I have received a copy of revised plans for the proposed development and have determined that the conditions recommended in relation to bushfire mitigation measures are appropriate for the proposed variations to the development.

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