



Building Code & Bushfire Hazard Solutions

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Meriton Group
Level 11, Meriton Tower
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Sydney NSW 2000

20th June 2013
Our Ref. 131029

Attn: Mr Joe Bevacqua

**Re: MIXED USE DEVELOPMENT (RESIDENTIAL AND CHILDCARE)
14-18 BOONDAH ROAD, WARRIEWOOD NSW
AMENDMENT TO APPROVED CHILDCARE
BUSHFIRE ASSESSMENT STATEMENT**

Dear Joe,

The purpose of this statement is to provide an independent bushfire assessment of the proposed modification to the Concept Approval issued by the NSW Department of Planning and Infrastructure for mixed used development at 14-18 Boondah Road, Warriewood on 18th January 2011.

The proposed modifications relate to a change to the building footprint of the childcare centre to accommodate up to 100 childcare places and an amendment of the car parking layout including providing for 25 car parking spaces.

The approved Concept Plan building and subsequent Development Application approval can only accommodate for 32 childcare spaces.

The NSW Rural Fire Service issued recommended conditions for the Concept Approval on 25th May 2010, which included the childcare centre.

It is understood that the previous modification to the Concept Approval was accompanied by a Bushfire Assessment prepared by Planning for Bushfire Protection Pty Ltd dated 11th August 2010.

The aforementioned Bushfire Assessment addressed the approved childcare centre and the relevant specifications and requirements under Planning for Bush Fire Protection 2006. Two key summary points of this assessment pertinent to the subject modification are:

1. *Asset Protection Zones, access and egress paths, internal road design, water, gas and electricity supplies, landscaping and construction standards for the development have been designed in accordance with the requirements of PBP.*
7. *The proposed child care centre is not within the 100m buffer zone for the hazards to the south and east and on site Asset Protection Zones for this centre are in excess of the requirements of Table A.2.6 of PBP.*

As part of the subject modification the NSW Department of Planning and Infrastructure has requested that the applicant provide detail on how the childcare centre satisfies the Planning for Bush Fire Protection requirements of the NSW Rural Fire Service.

Childcare development is considered Special Fire Protection Purpose development under Planning for Bush Fire Protection 2006 (PBP) and as such is assessed under section 4.2.7.

The following summary details the ability of the proposed modifications to the approved childcare centre to satisfy the relevant specifications and requirements of Planning for Bush Fire Protection 2006 as detailed in section 4.2.7. This detail will be included in the future Bushfire Assessment Report to accompany the DA submission.

Asset Protection Zones:

Asset Protection Zones (APZs) are to be provided to ensure that radiant heat levels of greater than 10kW/m^2 are not experienced by occupants or emergency services workers entering or exiting a building. This Performance Criteria has been modified since the formal adoption of Planning for Bush Fire Protection 2006 by the NSW Rural Fire Service to no part of the building is to be exposed to $>10\text{kW/m}^2$.

To determine the minimum required Asset Protection Zones to ensure no part of the childcare building is exposed to greater than 10kW/m^2 an assessment against Table 2.6 of PBP was undertaken.

While it is noted that the riparian corridor along Fern Creek to the southwest of the subject site is not identified as being a bushfire hazard on Council's Bush Fire Prone Land Map, in consideration of the proposed riparian planting within the subject site (comprising of a Core Riparian Zone, Public Riparian Zone and respective buffers) a precautionary assessment has been undertaken – assessing this area as a hazard.

The planting within the subject site will ultimately connect the vegetation along the existing riparian corridor (Fern Creek) adjacent Bandicoot Close through the site to Warriewood Wetlands. This corridor will vary in width from 40 metres (Core Riparian Zone), to 50 metres (Public Riparian Zone) widening to the existing corridor being approximately 60 metres wide.

The following table sets out the childcare centres compliance with *Planning for Bush Fire Protection – 2006* for **Special Fire Protection Purpose** as dictated by **Appendix 2 Planning for Bush Fire Protection 2006**.

	South	Southwest
Vegetation Structure	Forested Wetlands	Forested Wetlands
Slope	0 – 5 degrees down	0 degrees across
Required Asset Protection Zone	70 metres	60 metres
Asset Protection Zone	>100 metres	>75 metres
Bushfire Attack Level (AS3959-2009)	BAL Low	BAL 12.5

As demonstrated above the childcare centre exceeds the minimum required Asset Protection Zones as determined from Table A2.6 of Planning for Bush Fire Protection 2006 for Special Fire Protection Purpose development.

Access:

The proposed access arrangements are consistent with the original concept approval. The childcare centre will have direct frontage to Macpherson Street and an internal road which was design and constructed in accordance with Planning for Bush Fire Protection 2006.

The existing access arrangements allow for evacuation in two separate directions, to the northwest and east, which are either parallel or away from the Forested Wetland hazard.

These access arrangements are considered adequate and satisfy the requirements for Special Fire Protection Purpose development.

Water Supply:

The proposed childcare centre will be connected to the existing reticulated towns water for its commercial needs. Existing hydrants were found to be located along Macpherson Street and throughout the residential development at 14-18 Boondah Road for the replenishment of attending fire services.

The water supply is considered adequate and satisfies the requirements for Special Fire Protection Purpose development.

Emergency Management:

Given the significance on appropriate evacuation it would not be unreasonable to include in consent conditions a requirement for a Bushfire Evacuation Plan (BEP) or Emergency Management Plan (EMP) to be provided.

A Bush Fire Evacuation Plan would be expected to include the following:

- (1) under what circumstances will the centre be evacuated.
- (2) where will all persons be evacuated to.
- (3) roles and responsibilities of persons coordinating the evacuation.
- (4) roles and responsibilities of persons remaining with the centre after evacuation.
- (5) a procedure to contact the NSW Rural Fire Service District Office and Fire & Rescue NSW and inform them of the evacuation and where they will be evacuated to.

This BEP or EMP would be established prior to occupancy of the centre and would reflect the NSW Rural Fire Service policy of 'Leave Early or Stay and Defend'.

Construction:

The highest Bushfire Attack Level was determined from Table 2.4.2 of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2009 to be BAL 12.5. The proposed childcare centre must therefore be constructed to BAL 12.5 under section 5 of AS3959 – 2009 and include the additional construction provisions detailed in the Addendum to Appendix 3 of Planning for Bush Fire Protection 2006.

Summary:

In summary it is of our opinion that the proposed design modification to the approved childcare centre at 14-18 Boondah Road, Warriewood as detailed in the plans prepared by Architex, job no. 2069, dwg no DA01-05, issue P1, dated 19.02.13 satisfies the relevant specifications and requirements of Planning for Bushfire Protection 2006.

We are therefore in support of the proposed amendment.

Should you have any further questions please do not hesitate in contacting myself.

Prepared by
Building Code & Bushfire Hazard Solutions

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Disclaimer:

Quote from Planning for Bushfire Protection 2006, 'Any representation, statement opinion, or advice expressed or implied in this publication is made in good faith on the basis that the State of New South Wales, the NSW Rural Fire Service, its agents and employees are not liable (whether by reason of negligence, lack of care or otherwise) to any person for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement or advice referred to above.'

Similarly the interpretations and opinions provided by Building Code and Bushfire Hazard Solutions in regard to bushfire protection are also given in the same good faith.