



## BUSHFIRE MANAGEMENT CONSULTANTS

# BUSH FIRE ASSESSMENT REPORT

Bushfire Management Consultants

Lot 15 DP1225912 No.29 Allan Road,  
MULGOA NSW 2745

Report prepared for: - Adan Creative Designs

<i>Title</i>	Lot 15 DP1225912 No.29 Allan Road, MULGOA NSW 2745
<i>Date</i>	Date of Issue 23 January 2019
<i>Author(s)</i>	Bushfire Management Consultants
<i>The Client</i>	Adan Creative Designs
<i>Expiry</i>	The earlier of 23 January 2020 or if a new version of Planning for Bush Fire Protection is adopted. (Whichever occurs first)
<i>Job No.</i>	2019005
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**Date:** - 23 January 2019

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# BUSHFIRE ATTACK LEVEL (BAL)

<b>OUR REFERENCE</b>	<i>2019005</i>
<b>DATE OF THIS CERTIFICATE</b>	<i>23 January 2019</i>
<b>APPLICATION TYPE</b>	<input checked="" type="checkbox"/> <i>Development Application S4.14 (Previous s 79BA)</i>
<b>SUBJECT SITE</b>	<i>Lot 15 DP1225912 No.29 Allan Road, MULGOA NSW 2745</i>
<b>PROPOSED DEVELOPMENT</b>	<i>Single Storey Dwelling and Swimming Pool</i>
<b>PLAN REFERENCE</b>	<i>Site Plan / drainage concept plan / erosion control plan prepared by Adan Creative Designs, Drawing No. 2024-18Cb, Issue b dated: 17-12-18, Sheet 1 of 2, Plan Date: 17/12/2018</i>

A site assessment and investigation has been undertaken with reference to the above mentioned plans, Planning for Bush Fire Protection 2006 and Australian Standard AS3959 – 2009 (Amendment No 3). Based on the proposed plans and building setbacks indicated on the plans, it is recommended that the proposed residential building should be:-

**BAL 12.5 – All Elevations and Roof**

The construction requirements for BAL 12.5 are listed in Section 3 and 5 and of AS3959. Specific variations exist in NSW in the application of Section 3 and 5 (BAL 12.5) of AS3959-2009 Construction of Buildings in Bushfire Prone Areas. Refer to Section A3.7 – *Addendum Appendix 3 Planning for Bush Fire Protection*. NSW Rural Fire Service 2010 and Planning for Bush Fire Protection 2006.

This BAL Assessment is limited to the development and setbacks as indicated on the above plan. Should any amendments be made to the plans or setbacks or should the provisions in Planning for Bush Fire Protection change, this report and recommendations become void and a further Bushfire Attack Level Assessment will be required. This assessment does not authorise the commencement of any site works or clearing of vegetation of any kind and is not a BAL Certificate for the purposes of a Complying Development, as such the BAL is a recommendation only.

This BAL Assessment and the information contained in this BAL Assessment is valid for a maximum of 12 months from the date of this report (refer expiry date page 1) as vegetation and influencing factors change over time. Other recommendations are contained further in this report.

Yours faithfully

**Bushfire Management Consultants**



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## 1.0 PROPOSAL

The client proposes the construction of a Single Storey Dwelling on an existing vacant parcel of land. The land forms part of the existing Mulgoa residential release area in the recently developed Allanfields Estate. The proposal should be assessed under Section 4.14 previously S79BA of the Environmental Planning and Assessment Act and the provisions of Planning for Bush Fire Protection 2006.

*RFS have conducted a review of Planning for Bush Fire Protection 2006, which included a periods of targeted and full public consultation. Since that time, the NSW RFS has worked extensively with representatives from the NSW Department of Planning and Environment (DPE) and stakeholders to prepare a pre-release version of the document. It is anticipated that PBP 2018 will become legislated by mid – 2019, to coincide with the enactment of the National Construction Code 2019. Until then, PBP 2018 is in a ‘pre-release’ stage, also known as the transitional period.*

*Until PBP 2018 becomes legislated, PBP 2006 will remain the legally referenced document and PBP 2018 can be used on a performance basis in consultation with NSW RFS only.*

A simplified Bushfire Attack Level (BAL) Assessment has been prepared for this proposed development in recognition that this is a new subdivision and release area and as such water supply, access and services have recently been assessed by Council and RFS as part of the subdivision approval.

### 1.1 Positive Covenant and Restriction as to User

There are no restrictions as to user listed on the associated 88b provided by the client for this property. There is however a Restriction on the Use of Land and Positive Covenant numbered 8 and 9 respectively in the above mentioned plan relating to bushfire protection measures on other allotments. As such Positive Covenant 9 requires the rear of Lot 22 to be managed as an APZ which forms a separation between the dwelling proposed in Lot 15 and the ‘classified vegetation’ to the east. This APZ has been included in Table 1 in this report.

### 1.2 Water supply

Reticulated water supply has been provided to the subject site. A swimming pool is also proposed that can be utilised as a fire fighting water supply if required. As such a separate bushfire fire fighting water supply is not recommended as part of this report.

## 2.0 DETERMINING THE BUSHFIRE ATTACK LEVEL – BAL

### 2.1 Methodology

AS3959-2009 sets the methodology for assessment and determination of the applicable Bushfire Attack Level (BAL) for development. The method required the determination of the following:-

1. The relevant Fire Danger Index (FDI)
2. The classified vegetation types
3. The distance of the site from the classified vegetation



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4. The effective slope under the classified vegetation
5. The BAL level from the appropriate table

Table 1 addresses the method for determining the BAL for the subject site.

**Table 1 – BAL Assessment**

	North	South	East	West
Vegetation Structure	Riparian Corridor	NIL	Forest	N/A
Vegetation Width	<100m	N/A	>100m	N/A
Slope	Downslope 0-5°	Upslope	Downslope 5-10°	Downslope 5-10°
Asset Protection Zone	Residential New Subdivision	Rural/Residential Managed Properties	Road Reserve and New Residential Subdivision	Residential New Subdivision
Distance to vegetation	>100m	>100m	74.5m	>100m
Bushfire Attack Level	BAL LOW	BAL LOW	BAL 12.5	BAL LOW
Proposed Level of Construction	BAL 12.5	BAL 12.5	BAL 12.5	BAL 12.5

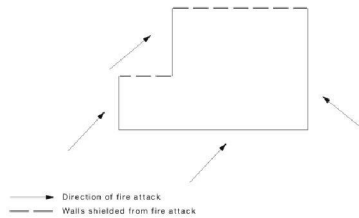
**FIGURE 1, ARIAL PHOTO (not to scale)**





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AS 3959 – 2009 Section 3.5 allows the lowering of one BAL level only where an elevation is deemed to be not exposed to the source of the bushfire attack. However the construction requirements for a shielded elevation shall not be less than that required for BAL-12.5. As such all elevations have been recommended as BAL 12.5.



## 3.0 RECOMMENDATION

The proposed building has been assessed as being required to comply with the construction methods outlined in AS3959- 2009 for BAL 12.5.

This assessment recommends that:-

- The proposed bushfire construction levels for the dwelling are recommend in the table below:-

	Main Dwelling
Elevation	
South	BAL 12.5
North	BAL 12.5
East	BAL 12.5
West	BAL 12.5
Roof	BAL 12.5

- The construction requirements for BAL 12.5 are listed in Section 3 and 5 of AS3959. Specific variations exist in NSW in the application of Section 3 and 5 (BAL 12.5) of AS3959-2009 Construction of Buildings in Bushfire Prone Areas. Refer to Section A3.7 – Addendum Appendix 3 Planning for Bush Fire Protection. NSW Rural Fire Service 2010 and Planning for Bushfire Protection 2006.
- Landscaping to the site is to comply with the principals of Appendix 5 of Planning for Bush Fire Protection.
- Above ground tanks if provided are to be manufactured of concrete or metal.
- To aid in fire fighting activities, unobstructed pedestrian access to the rear of the property shall be provided and is to be maintained at all times.
- All new fencing shall be non-combustible.
- Water, electricity and gas are to comply with Section 4.1.3 of Planning for Bush Fire Protection 2006. New lines to the building will be provided underground.



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- At the commencement of building works and in perpetuity the property shall be managed as an Inner Protection Area (IPA) as outlined within section 4.1.3 and appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones'.

The Inner Protection Area (IPA) shall comprise the following:

- Minimal fine fuel at ground level;
- Vegetation that does not provide a continuous path to the building for the transfer of fire;
- Shrubs and trees that do not form a continuous canopy;
- Vegetation that is cleared into clumps rather than continuous rows;
- Species that retain dead material or deposit excessive quantities of ground fuel are to be avoided;
- Shrubs and trees are pruned and removed so they do not touch or overhang the building (minimum 2.0m);
- Vegetation is located far enough away from the building so that the plants will not ignite the building by direct flame contact or radiant heat emission.

**FIGURE 2, SUBJECT SITE**



## **Planning for Bush Fire Protection**

*"no development in a bush fire prone area can be guaranteed to be entirely safe from bush fires"*

## **Australian Standard A.S 3959**

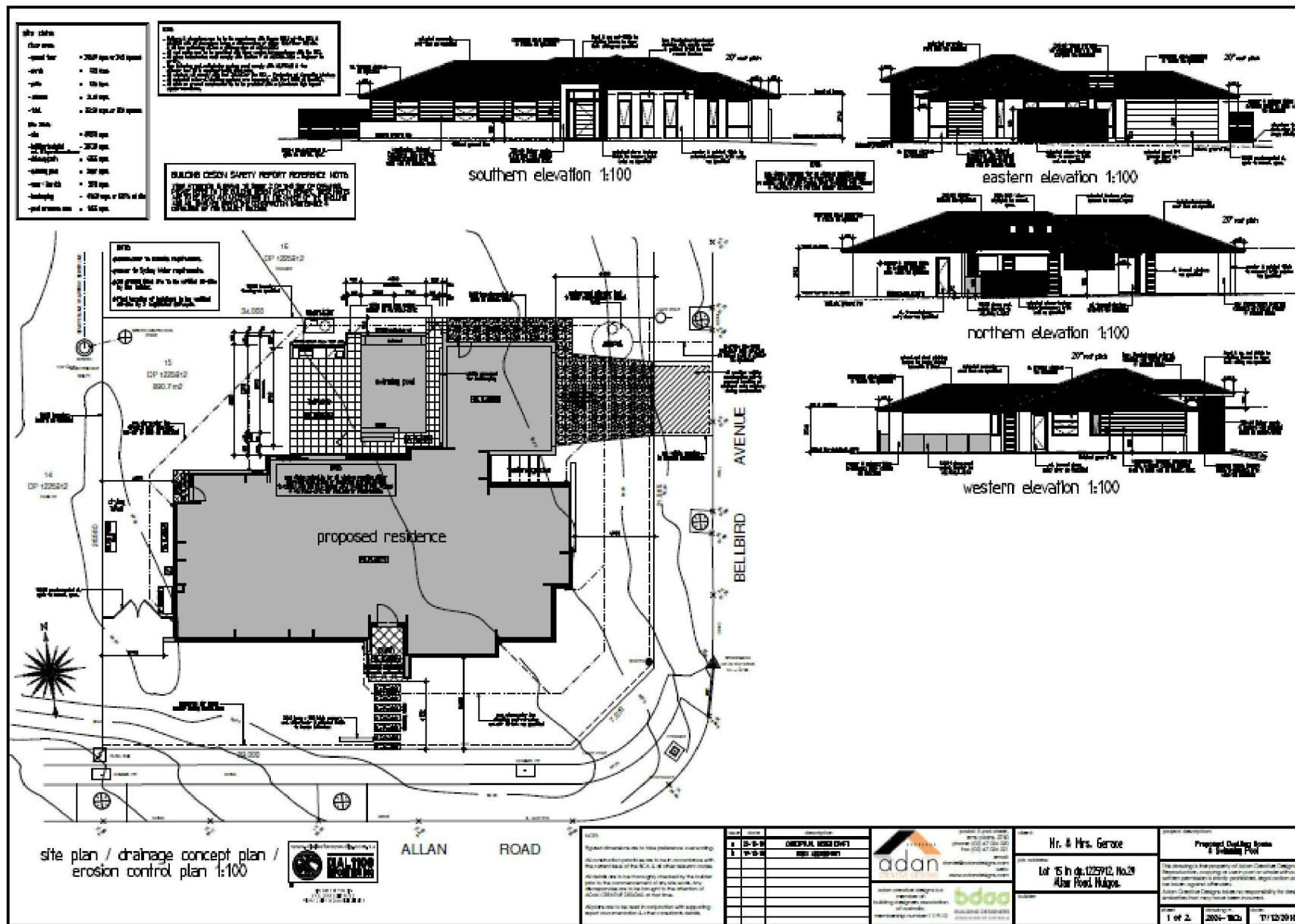
*"it should be borne in mind that the measures contained in this Standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions"*



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## REFERENCES

1. *Australian Standard AS 3959-2009 (Incorporating Amendment Nos 1,2 and 3)*
2. *Penrith City Council Website*
3. *Planning for Bush Fire Protection (2006)*
4. *Ocean Shores to Desert Dunes – David Keith*
5. *Google Maps*



<b>OWNER</b> Mr. & Mrs. Gerace	<b>PROJECT DESCRIPTION</b> Proposed Dwelling, Home & Swimming Pool
<b>SITE ADDRESS</b> Lot 15 in dp. 1225912, No.28 Allan Road, Nudge.	<b>DESIGNER</b> The drawing is the property of Adnan Creative Design & Architecture, copyright © under cover or unless written permission is already provided. Design content will not be used, copied, or otherwise disseminated without the written permission of Adnan Creative Design & Architecture.
<b>DATE</b> 1 of 2, 2008 - 2020	<b>SCALE</b> 1:100





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## *Photographic Record*



*Subject Site – Looking North*



*Subject Site – Looking South*



*East – Front (Forest)*



*Subject Site – Looking West*



*Forest to East*



*Basin to North > 100m from site*