



AUSTRALIAN BUSHFIRE CONSULTING SERVICES



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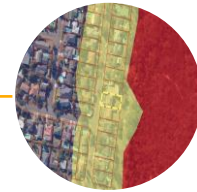
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**BRONZE
MEMBER**
Fire Protection
Association Australia

ABN 23 622 676 493
PO Box 212 Berowra Heights 2082

Bush Fire Assessment Report



Residential alterations and additions:

**18 Westmeath Avenue,
Killarney Heights, NSW 2087.**

7th December 2018
Revised 27th June 2020
Reference 18-295-2

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Abbreviations:

| | |
|---------------|---|
| ABCS | Australian Bushfire Consulting Services Pty Ltd |
| APZ | Asset Protection Zone |
| AS2419.1 2017 | Fire hydrant installations System design, installation and commissioning |
| AS3959 - 2018 | Australian Standard 3959 – 2018 Construction of buildings in bushfire prone areas |
| BAL | Bushfire Attack Level |
| BCA | Building Code of Australia |
| BPMs | Bushfire Protection Measures |
| BPLM | Bushfire Prone Land Map |
| Council | Northern Beaches Council |
| DA | Development Application |
| EP&A Act | Environmental Planning and Assessment Act - 1979 |
| ESD | Ecologically Sustainable Development |
| FR NSW | Fire & Rescue NSW |
| IPA | Inner Protection Area |
| LGA | Local Government Area |
| NCC | National Construction Codes |
| NP | National Park |
| NSP | Neighbourhood Safer Place |
| OPA | Outer Protection Area |
| PBP 2019 | Planning for Bush Fire Protection – 2019 |
| ROW | Right of Way |
| RF Act | Rural Fires Act - 1997 |
| RFS | NSW Rural Fire Service |
| SEARs | Planning Secretary's Environmental Assessment Requirements |
| SEPP | State Environmental Planning Policy |
| SFPP | Special Fire Protection Purpose |
| SWS | Static Water Supply |
| URA | Urban Release Area |

1.0 Introduction.

The development application relates to the alterations and additions to an existing sole occupancy residential dwelling within an existing allotment at 18 Westmeath Avenue, Killarney Heights, NSW. The proposed works include internal modifications, a rear extension, new covered deck and pool. The works are subject to an approved development application Ref DA2019/0232 and this amendment is required to address a revised design.

The subject site is mapped as bushfire prone land and was previously assessed under *Planning for Bush Fire Protection 2006*, however the application of the more current version *Planning for Bush Fire Protection 2019* (PBP 2019) is relevant to the amended development proposal.

The aims of PBP 2019 is to *provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment*. This is achieved by determining and, where applicable, applying the required asset protection zones, applying the relevant construction requirements, ensuring satisfactory access and egress has been incorporated into the design and providing safe service supply and adequate water provisions for occupants and attending emergency services.

The development is classified as infill development and assessed as a section 4.14 application under the Environmental Planning and Assessment Act 1979 (EP&A Act).

2.0 Property details.

Address: 18 Westmeath Avenue, Killarney Heights NSW 2087
 Lot/DP: Lot 425 DP 216441
 Zoned: R2 Low density residential
 LGA: Northern Beaches Council

The site has street frontage to Westmeath Avenue to the west and abuts similar private and developed residential allotments to the north and south and Garigal National Park to the remaining eastern aspect.

3.0 Legislative context.

The development is classified as infill development and assessed under section 4.14 of the Environmental Planning and Assessment Act 1979 (EP&A Act). Under Section 4.14 of the EP&A Act, Council can determine a development application on bushfire prone land providing;

Council is satisfied that the development conforms to the specifications and requirements of Planning for Bush Fire Protection that are relevant to the development or

Council has been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements Planning for Bush Fire Protection.

If the Council is satisfied that the development does not conform to the relevant specifications and requirements of Planning for Bush Fire Protection Council may grant consent but only if it has consulted with the Commissioner of the NSW Rural Fire Service concerning measures to be taken with respect to the development to protect persons, property and the environment from danger that may arise from a bush fire.

The highest bushfire attack level (BAL) to the proposed development has been determined to be BAL 19. Suitable recommendations have been made herein to enable Council to issue development consent inclusive of conditions required to ensure compliance with both AS3959 – 2018 and PBP 2019.

The proposal meets the aims and objectives of PBP 2019 by means of compliance with the deemed to satisfy provisions of that document. I am a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment and I have attached a certificate to this report satisfying the requirements of s4.14. As such Council can approve the application without referral to the NSW Rural Fire Service.

4.0 Referenced documents and people.

The following documents have been referenced in the preparation of this report;

- Northern Beaches Council's Bushfire Prone Land Map,
- AS3959 – 2018 Construction of buildings in bushfire prone areas,
- Planning for Bush Fire Protection 2019,
- Warringah Pittwater Bush Fire Management Committee's Bush Fire Risk Management Plan 2010
- Rural Fires Act 1997,
- Rural Fires Regulation 2013,
- 10/50 Vegetation Clearing Code of Practice,
- NSW RFS Guide for bush fire prone land mapping V5b Nov 2015,
- Ocean Shores to Desert Dunes – David Andrew Keith 2004.

The plans by Nikki Mote Architect DWG AR, DA 1/00, 1/01, 1/02, 2/00, 2/001, 3/00, 3/001, 4/00, 4/01, 4/02, 5/00, 5/01, 5/02 & 5/03 dated 04.05.17 Issue E have been reviewed and relied upon in preparation of this report. I undertook an inspection of the property on 3/12/18 and again on 23/06/2020, at that time free access was available within the subject site and Garigal National Park to the east of the subject site. Aerial imagery and 1 metre topographic data have been relied upon to confirm the site inspection.

5.0 Copyright, scope and disclaimer.

This assessment of possible bushfire impact (including smoke, ember, radiant heat and flame contact) and compliance with other matters such as access and service supply is pertinent to the subject site only. Where reference has been made to the surrounding lands, this report does not assess impact to those lands rather it is an assessment of possible bushfire progression and impact on or from those lands towards the subject site.

Apart from any use permitted under the Copyright Act 1968 no part of this document, including any wording, images, or graphics, can be modified, changed or altered in any way without written permission from Australian Bushfire Consulting Services Pty Ltd. This report may only be referenced, distributed or forwarded to other parties in its original format.

This report has been prepared as a submission document in support of a development application to Council and cannot be relied upon for commencement of works or construction until it has been included within the consent conditions issued by Council as part of the DA determination. **The onus is on the applicant to cross reference this document with any conditions of consent issued by Council or any requirements supplied by the NSW Rural Fire Service following development approval.** I can review and cross reference these documents however the onus is on the applicant / client to provide them to me and request this review.

Where any difference between this document and the development consent (or the NSW Rural Fire Service requirements) is found, the conditions of consent always take precedence until an application to review, amend or vary those conditions is approved.

The statements and opinions contained in this report are given in good faith and in the belief that such statements and opinions are correct and not misleading. AS3959 – 2018 states that “...*there can be no guarantee that a building will survive a bushfire event of every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions*”. The NSW RFS state “*Homes are not designed to withstand fires in catastrophic conditions*”. Correspondingly any representation, statement of opinion, or advice expressed or implied in this document is made on the basis that Australian Bushfire Consulting Services Pty Ltd is not liable 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 made by Australian Bushfire Consulting Services Pty Ltd.

6.0 Assessment summary table.

| Aspect | North | East | South | West |
|---|--|--------------------------------------|--|------------------|
| Vegetation Structure | Maintained property | Tall Heath / Scrub | Maintained property | Maintained land |
| Slope | n/a | 0° & upslope | n/a | n/a |
| Asset Protection Zone | n/a | ≥ 26 metres | n/a | n/a |
| Features that may mitigate the impact bush fire on the proposed development. | The separation from the hazard interface includes maintained land wholly within the subject property and land considered to be equivalent to an asset protection zone being maintained land (mown lawns) within Garigal National Park. The land relied upon as an APZ within Garigal National Park is mapped as an APZ within the Warringah Pittwater Bushfire Risk Management Plan, with a Risk Rating of Extreme 1A, and therefore maintenance of the APZ is assured by that plan of management. | | | |
| Noteworthy landform & environmental features. | Maintained curtilage / private residential allotment | APZ variable width within Garigal NP | Maintained curtilage / private residential allotment | Westmeath Avenue |
| Threatened Species / Aboriginal Relics | n/a | Not known APZ Existing | n/a | n/a |
| Bushfire Attack Level | n/a | BAL 19 | n/a | n/a |
| Proposed Construction Level | The highest Bushfire Attack Level to the proposed works was determined from Table A1.12.6 PBP 2019 to be 'BAL 19' from the eastern aspect. The proposed new roof and new works facing north, east and south are required to comply with section 3 and 6 BAL 19 of AS 3959 – 2018. Any new works facing west can be downgraded one BAL level due to shielding provided by the dwelling itself and are required to comply with section 3 and 5 BAL 12.5 of AS 3959 – 2018. The additional construction requirements detailed within section 7.5.2 of PBP 2019 are also applicable. | | | |

| Guideline Ref. | Proposed Development Determinations |
|-------------------------|---|
| Property Access | The most disadvantaged point of the existing dwelling and proposed new works will be within 70 metres of a road that supports the operational use of fire appliances (hydrants) and the access requirements of Table 7.4a within PBP 2019 are not applicable. Free pedestrian access is available around the building footprint. Access to the hazard interface for fire suppression or hazard reduction activities is available from the eastern end of Starkey Street without the need to enter the subject site. |
| Water Supply | The subject site is connected to reticulated water mains for domestic needs. Hydrants are located along Westmeath Avenue available for the replenishment of fire fighting appliances. The most disadvantaged point of the existing dwelling and proposed new works will be less than 70 metres from a public road that supports the operational use of fire appliances (hydrants) and a static water supply is not required. |
| Electrical & Gas Supply | Existing above ground electrical supply is available to the subject site and reticulated gas mains is available in this area and already connected to the subject dwelling. There are no new electrical service connections or gas installations proposed as part of this development. |
| Evacuation | Occupants are encouraged to complete a Bush Fire Safety Plan addressing "Prepare, Act, Survive" as advocated by the NSW RFS http://www.rfs.nsw.gov.au/ under publications / bushfire safety . |

7.0 Images and maps.



Image 01: Aerial image NSW Gov Dept Planning Property Information

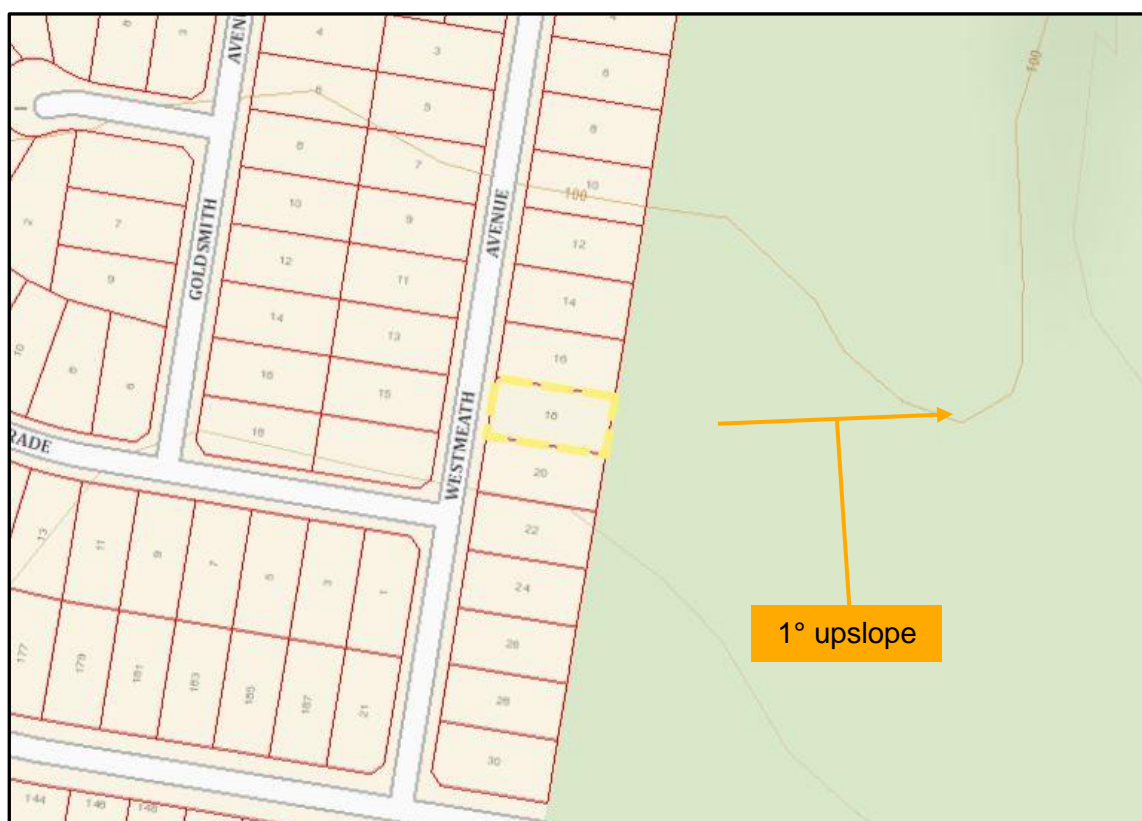


Image 02: 10m contour data from NSW Gov Dept Planning Property Information



Image 03: 1m contour data from image NSW Gov. Elevation Foundation Data



Image 04: Bushfire Prone Land Map from Dept Planning Property Information

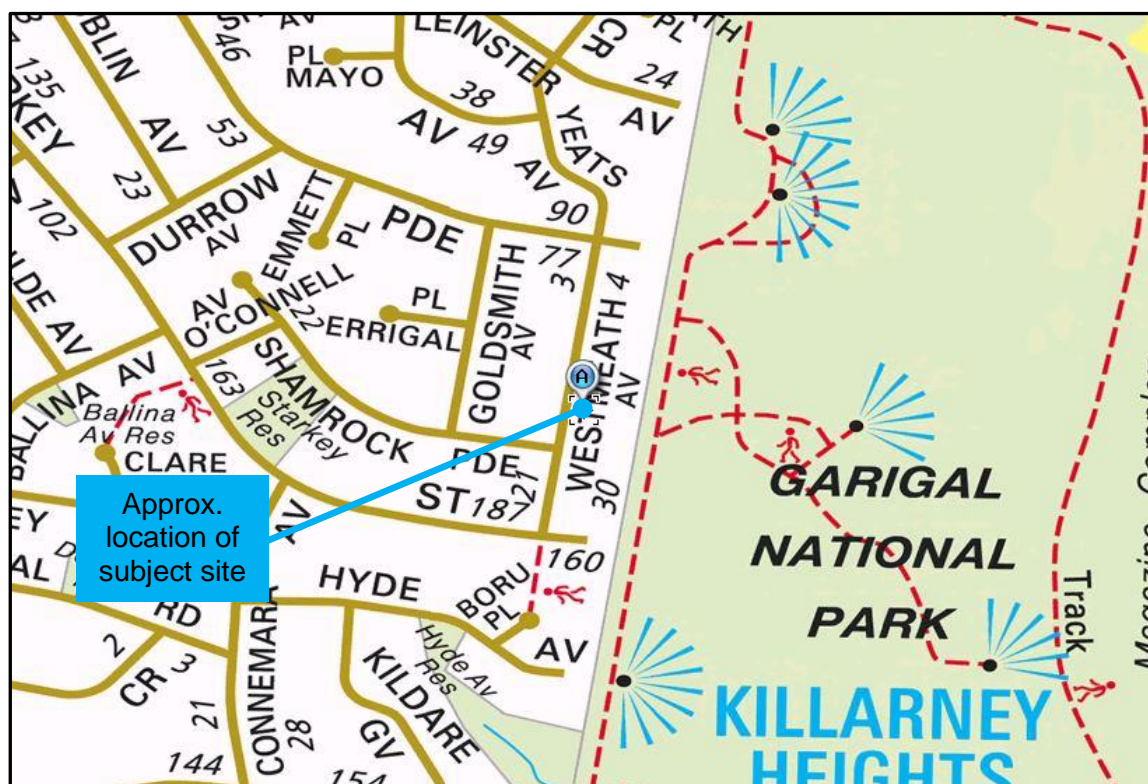


Image 05: Extract from Street-directory.com.au



Image 06: Warringah LEP Zone Map from Dept Planning Property Information

8.0 Bushfire hazard assessment

Properties considered to be bushfire prone land are identified on Councils Bushfire Prone Land Map as being:

- *within or within 100 m of Category 1 (high) hazards or,*
- *within or within 30 m of Category 2 (low) hazards or,*
- *within or within 30 m of Category 3 (medium) hazards.*

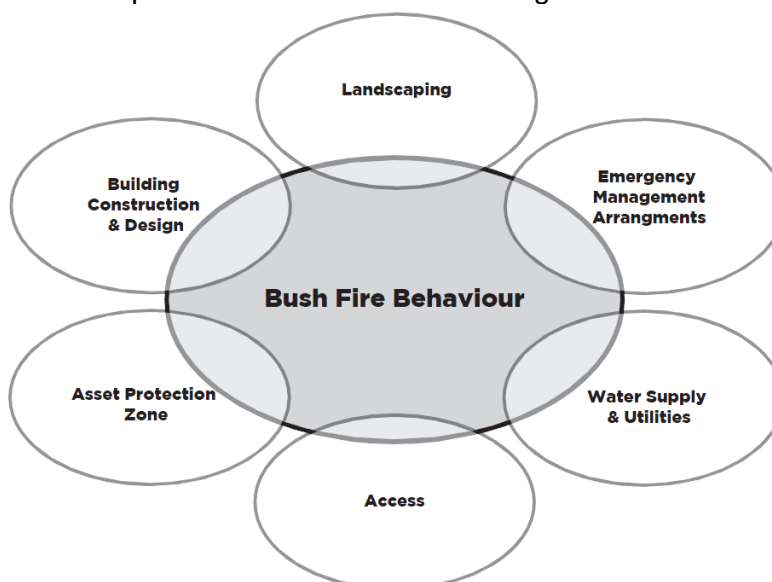
The NSW RFS document PBP – 2019 is applicable to all development on bushfire prone land, this includes an assessment of the proposals adequacy in providing an appropriate combination of bushfire protection measures in terms of asset protections zones, landscaping, access and service supply. This document also provides a means of determining the necessary level of building construction under AS3959 - 2018. Infill development proposals on BFPL must be accompanied by bush fire assessments and reports demonstrating compliance with PBP 2019.

In particular, the following must be addressed:

- a statement that the site is BFPL;
- the location, extent and vegetation formation of any bushland on or within 140 metres of the site;
- the slope and aspect of the site and of any BFPL within 100 metres of the site;
- any features on or adjoining the site that may mitigate the impact of a bush fire on the proposed development;
- a statement assessing the likely environmental impact of any proposed BPMs;
- a site plan showing access, water supplies, APZs, BAL requirements and building footprint in relation to the bush fire hazards; and
- calculated BAL construction levels.

By incorporating bush fire protection measures into a development, the six objectives of PBP 2019 are addressed:

1. afford buildings and their occupants protection from exposure to a bush fire;
2. provide for a defendable space to be located around buildings;
3. provide appropriate separation between a hazard and buildings which, in combination with other measures,
4. prevent the likely fire spread to buildings;
5. ensure that appropriate operational access and egress for emergency service personnel and occupants is available;
6. provide for ongoing management and maintenance of BPMs; and ensure that utility services are adequate to meet the needs of firefighters.



8.1 Site

The site has street frontage to Westmeath Avenue to the west and abuts similar private and developed residential allotments to the north and south and Garigal National Park to the remaining eastern aspect. Councils Bushfire Prone Land Map identifies this property as containing the 100 metre buffer zone from Category 1 Vegetation and therefore it is appropriate to apply PBP 2019.



Photograph 01: View east towards the subject site from Westmeath Avenue.

8.2 Vegetation

The subject site and neighbouring private allotments are currently maintained as an asset protection zone around the existing assets. The vegetation considered to pose a bushfire threat is within Garigal National Park to the east of the subject site.

The vegetation to the east was found to consist of a dominance of short she-oaks, shrubby banksia's, wattles, tea trees and shrubs greater than 2 metres in height with a distinct lack of grasses and groundcovers. The vegetation was typical of Hawkesbury Sandstone vegetation on shallow soils with scattered overstorey of trees and predominantly healthy understorey and coastal heath.

For the purpose of assessment under Appendix 1 of PBP 2019 a Tall Heath classification has been applied to the eastern aspect.



Photograph 02: View east within Garigal NP taken east of the subject site

8.3 Topography

The slope must be assessed over a distance of 100m from the existing property boundary (or building footprint) towards the various vegetation communities constituting the hazard. In assessing the slope, it may be found that there are a variety of slopes covering different distances. The gradient within the hazard (vegetation) which will most significantly influence the fire behaviour must be determined.

The most significant bushfire impact from within the hazard to the east is expected to be from a bushfire travelling downslope from the east and towards the subject site. The slope was determined onsite and verified by 1 metre topographic mapping to be;

- 1 degree upslope to the east.

8.4 Asset Protection Zones

An Asset Protection Zone (APZ) is a buffer zone between a bush fire hazard and buildings, which is managed progressively to minimise fuel loads and reduce potential radiant heat levels, flame, ember and smoke attack. A fuel-reduced, physical separation between buildings and bush fire hazards is the key element in the suite of bushfire protection measures.

The existing available asset protection zones were measured onsite and verified from plans and aerial imagery to be;

- ≥ 23 metres to the east

The separation from the hazard interface includes maintained land wholly within the subject property and land considered to be equivalent to an asset protection zone being maintained land (mown lawns) within Garigal National Park. The land relied upon as an APZ within Garigal National Park is a designated treatment and listed for management under Warringah Pittwater Bushfire Risk Management Plan (BFRMP).



Image 07: Extract from Warringah Pittwater BFRMP showing Asset Protection Zone location

Within the BFRMP the risk for the area is assigned as Extreme 1A. The Bush Fire Risk Management Policy 1/2008 dictates that the treatments identified by the Bush Fire Risk Management Committee (BFRMC) and assigned an importance level of Extreme must be treated as a priority. These asset protection zones must then be included in an annual works program to be recorded 5 days after the end of each calendar month and reported annually.

Bush Fire Risk Management Policy 1/2011 emphasises a land managers duty of care under s63 of the Rural Fires Act 1997 and that a priority for funding allocation to be directed towards the aforementioned APZ treatments in Extreme risk areas. The reserve is maintained constantly in a uniform manner with clearly defined management boundaries. Failure for this management to occur would be a breach of the BFRMC responsibilities and the landowners duty of care under the Rural Fires Act.

I am familiar with this area and had inspected this APZ many times over a lengthy period in excess of 10 years. The area has always found to be well managed in a consistent manner. It is considered that reliance of the managed land to the east of this property within the adjacent NP as an asset protection zone is reasonable in this instance.

Recommendations will be included within this report to ensure that at the commencement of construction and in perpetuity all land not built upon within the subject site is continued to be maintained as an Asset Protection Zone / Inner Protection Area in accordance with the requirements detailed within Appendix 4 of *Planning for Bush Fire Protection 2019* and the NSW RFS document *Standards for an Asset Protection Zone*.

The APZ are existing and no tree removal or other vegetation modification is necessary to create the APZ and as such there is no environmental impact of the proposed bushfire protection measures. The site is located within a designated 1050 vegetation entitlement clearing area and any works required to maintain the APZ are permissible under this code.



Photograph 03: View north within Garigal National Park taken southeast of the subject site

8.5 Access & egress

The subject property has street frontage to Westmeath Avenue to the west and persons seeking to egress the subject site will be able to do so via the existing access and surrounding road infrastructure. It is encouraged that the occupants complete a Bush Fire Safety Plan addressing “Prepare, Act, Survive” as advocated by the NSW RFS <http://www.rfs.nsw.gov.au/> under publications / bushfire safety.

The most disadvantaged point of the existing dwelling and proposed new works will be within 70 metres of a road that supports the operational use of fire appliances (hydrants) and the access requirements of Table 7.4a within PBP 2019 are not applicable. Free pedestrian access is available around the building footprint. Access to the hazard interface for fire suppression or hazard reduction activities is available from the eastern end of Starkey Street without the need to enter the subject site.

8.6 Services

The subject dwelling is connected to the reticulated town's water main for its domestic needs. Existing in ground hydrants are available along Westmeath Avenue and other surrounding streets available for the replenishment of attending fire services. The nearest hydrant is located within the nature strip to the southwest of the subject site.

The most disadvantaged point of the existing dwelling and proposed new works will be less than 70 metres from a public road that supports the operational use of fire appliances (hydrants) and a static water supply is not required.

Existing above ground electrical supply is available to the subject site and reticulated gas mains is available in this area and already connected to the subject dwelling. There are no new electrical service connections or gas installations proposed as part of this development.

8.7 Construction

Australian Standard 3959 – 2009 'Construction of buildings in bushfire-prone areas' provides for six (6) levels of building construction these being BAL - Low, BAL - 12.5, BAL - 19, BAL - 29, BAL - 40 and BAL - FZ. The Australian Standard 3959 specifies construction standards for buildings within various Bushfire Attack Levels as determined by the Planning for Bushfire Protection – 2006 document. The NSW Rural Fire Service will not accept deemed to satisfy provisions for BAL Flame Zone and the NCC requires consultation with the RFS during a development application process. This is further enforced under s4.14 of the EPA Act 1979.

The highest Bushfire Attack Level to the proposed works was determined from Table A1.12.6 PBP 2019 to be 'BAL 19' from the eastern aspect. The proposed new roof and new works facing north, east and south are required to comply with section 3 and 6 BAL 19 of AS 3959 – 2018.

Any new works facing west can be downgraded one BAL level due to shielding provided by the dwelling itself and are required to comply with section 3 and 5 BAL 12.5 of AS 3959 – 2018.

The additional construction requirements detailed within section 7.5.2 of PBP 2019 are also applicable.

PBP 2019;

Fences and gates in bush fire prone areas may play a significant role in the vulnerability of structures during bush fires. In this regard, all fences in bush fire prone areas should be made of either hardwood or non-combustible material.

However, in circumstances where the fence is within 6m of a building or in areas of BAL-29 or greater, they should be made of non-combustible material only.

Any new fencing within the subject site should be made from hardwood except in circumstances where the fence is within 6m of a building they should be made of non-combustible material only.

8.8 Risk

The level of risk is determined using the combination of likelihood and consequences. The purpose of analysing risk is to establish an understanding of the level of bushfire threat and will help to evaluate the appropriateness of bushfire protection measures recommended for a development application.

This section of the report is a predictive risk evaluation only and assumes development consent includes the recommendations contained within this report. This is for risk evaluation only and has been based on an abridged version of the assessment process detailed within the Bush Fire Risk Management Planning Guidelines for Bushfire Risk Management Committees. This evaluation does not reflect the Bushfire Attack Level determined under PBP 2006 or AS3959 - 2009.

The likelihood of a bush fire occurring can be determined using fire history data or local knowledge. The likelihood must be considered in the context of long term planning and not simply if a bush fire is likely to occur during the next five years. The consequences of a bush fire event can be determined by considering the vulnerability of the asset. Vulnerability is related to the capacity of an asset to cope with or recover from the impacts of a bush fire.

| Likelihood Rating | Description and indicative probability |
|-------------------|---|
| Almost certain | Expected to occur, many recorded incidents, strong anecdotal evidence, high opportunity, reason or means to occur; may occur or be exceeded once in every 5 years. |
| Likely | Will probably occur; consistent record of incidents and good anecdotal evidence; considerable opportunity, reason or means to occur; may occur or be exceeded once in every 10 years. |
| Possible | Might occur; a few recorded incidents in each locality and some anecdotal evidence; some opportunity, reason or means to occur; may occur or be exceeded once in every 20 years. |
| Unlikely | Is not expected to occur; isolated recorded incidents in this community, anecdotal evidence in other communities; little opportunity, reason or means to occur; |

| Consequence Rating | Description and indicative result |
|--------------------|---|
| Minor | Inconsequential or no damage. Little or no disruption to occupation. Little or no financial loss. |
| Moderate | Localised damage that is rectified by routine arrangements. Normal functioning with some inconvenience. Localised displacement of people who return within 24 hours. Personal support satisfied through local arrangements. |
| Major | Significant damage that requires external resources. Displacement for more than 24 hours duration. Extensive resources required for personal support. |
| Catastrophic | Extensive damage. Extensive personal support. General and widespread displacement for extended durations. |

| Consequence Likelihood | Minor | Moderate | Major | Catastrophic |
|---------------------------|---------------|---------------|---------|--------------|
| Almost certain | Medium | High | Extreme | Extreme |
| Likely | Low | Medium | High | Extreme |
| Possible | Insignificant | Low | Medium | High |
| Unlikely | Insignificant | Insignificant | Low | Medium |

The bushfire risk to this development is determined to be medium and the package of bushfire protection measures recommended in section 9 of this report are considered satisfactory.

9.0 Recommendations

9.1 Asset Protection Zones / landscaping

1. That all grounds within the subject property continue to be maintained as an Asset Protection Zone / Inner Protection Area in accordance with the requirements detailed within Appendix 4 of *Planning for Bush Fire Protection 2019* and the NSW RFS document *Standards for an Asset Protection Zone*.

9.2 Construction

2. That any new roof and all new works facing north, east and south are constructed in accordance with section 3 and 6 BAL 19 of *AS3959 – 2018 Construction of buildings in bushfire prone areas*.
3. That new works facing west are constructed in accordance with section 3 and 5 BAL 12.5 of *AS3959 – 2018 Construction of buildings in bushfire prone areas*.
4. That the proposed new dwelling is also constructed to that of the 'Additional Construction Requirements' detailed within section 7.5.2 of *Planning for Bush Fire Protection 2019*.
5. That any new fencing within the subject site should be made from hardwood except in circumstances where the fence is within 6m of a building they should be made of non-combustible material only.

10.0 Conclusion

The National Construction Code 2019 (NCC) Volume 2 requires that a Class 1 building or a Class 10a building or deck associated with a Class 1 building that is constructed in a designated bushfire prone area must, to the degree necessary, be designed and constructed to reduce the risk of ignition from a bushfire, appropriate to the potential for ignition caused by burning embers, radiant heat or flame generated by a bushfire; and intensity of the bushfire attack on the building.

The subject property is determined to be bushfire prone land and the proposal must achieve compliance with the NCC by meeting the aims and objectives of PBP 2019. This is achieved by providing construction measures to mitigate against the impacts from bush fire including smoke, embers, radiant heat and flame contact and including suitable access, services supply and means of maintaining the bushfire protection measures for the life of the development.

This bushfire hazard and determination has been made on a site-specific basis which includes an assessment of the local bushland area and its possible impact to the subject property. The highest Bushfire Attack Level to the proposed new works was determined to be 'BAL 19'. Suitable recommendations have been made herein to enable Council to issue development consent inclusive of conditions required to ensure compliance with all requirements of AS3959 – 2018 and PBP 2019.

The proposal meets the aims and objectives of PBP 2019 by means of compliance with the deemed to satisfy provisions of that document. I am a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment and I have attached a certificate to this report satisfying the requirements of s4.14. As such Council can approve the application without referral to the NSW Rural Fire Service.

In consideration of the bushfire risk posed to the proposed development in combination with the recommended bushfire protection measures contained within this report I am satisfied they will provide a reasonable and satisfactory level of bushfire protection to the proposed development.

I am therefore in support of the development application.

Australian Bushfire Consulting Services Pty Ltd




Wayne Tucker

Managing Director
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
Ass Dip Applied Science
FPA Australia BPAD Level 3 Accredited Practitioner
BPAD Accreditation No. BPAD9399

List of attachments

Attachment 01: 4.14 Certificate



AUSTRALIAN BUSHFIRE CONSULTING SERVICES



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PO Box 212 Berowra Heights 2082

BUSH FIRE RISK ASSESSMENT CERTIFICATE

Issued in accordance with Section 4.14 of the Environmental Planning Act 1979 No.203

| | | | | | |
|----------------------------------|--|--|-------------------|-------------|----------------------------|
| PROPERTY DETAILS | 18 Westmeath Avenue, Killarney Heights NSW 2087 | | Lot 425 DP 216441 | | |
| DEVELOPMENT TYPE | Infill – alterations and additions to existing dwelling | | | | |
| PLAN REFERENCE | Site Plans, Detail Plans, Floor Plans and Elevations by Nikki Mote Architect DWG AR, DA 1/00, 1/01, 1/02, 2/00, 2/001, 3/00, 3/001, 4/00, 4/01, 4/02, 5/00, 5/01, 5/02 & 5/03 dated 04.05.17 Issue E | | | | |
| BAL RATING | BAL 19 & 12.5 | NOTE - If BAL FZ the application is to be referred to the NSW RFS. | | | |
| ARE ALTERNATE SOLUTIONS REQUIRED | No | NOTE - If YES the application is to be referred to the NSW RFS. | | | |
| IS REFERRAL TO NSW RFS REQUIRED | No | ABCS REF. | 18-295-2 | Issue date: | 27 th June 2020 |

I *Wayne Tucker*, of Australian Bushfire Consulting Services Pty. Ltd., hereby certify in accordance with Section 4.14 of the Environmental Planning Act 1979 No.203 that –

1. I am a person recognized by the NSW Rural Fire Service as a qualified consultant in bushfire risk assessment and
2. Subject to the recommendations contained in the Bush Fire Assessment Report, the proposed development conforms to specifications and requirements of the document entitled *Planning for Bush Fire Protection* (prepared by the NSW Rural Fire Service in co-operation with the Department of Planning) and any other documents as prescribed by Section 4.14 of the Environmental Planning and Assessment Act 1979 No.203.

Further, I am aware that the Bush Fire Assessment Report prepared for the abovementioned site is to be submitted in support of a Development Application for this site. This report will be relied upon by Council as the basis for ensuring that the bushfire risk management aspects of the proposed development have been addressed in accordance with the document entitled *Planning for Bush Fire Protection 2019*.

Australian Bushfire Consulting Services:



Wayne Tucker

Managing Director.
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
Ass Dip Applied Science
FPA Australia BPAD Level 3 Accredited Practitioner
BPAD Accreditation No. BPAD9399