



AUSTRALIAN BUSHFIRE CONSULTING SERVICES



0438 668 203

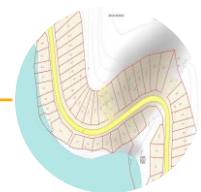
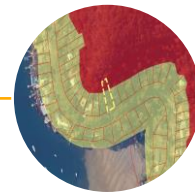
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ABN 23 622 676 493
PO Box 212 Berowra Heights 2082

Bush Fire Assessment Report



New residential dwelling:

**918 Barrenjoey Road
Palm Beach, NSW 2108.**

1st September 2021
Reference 21-423

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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 seeks approval for construction of a new sole occupancy dwelling and detached garage within an existing residential allotment at 918 Barrenjoey Road, Palm Beach, NSW. The existing dwelling and detached granny flat within the subject site will be demolished as part of this development.

The subject site is mapped as bushfire prone land and therefore the application of *Planning for Bush Fire Protection 2019* (PBP 2019) is relevant to the 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.

2.0 Property details.

Address: 918 Barrenjoey Road, Palm Beach NSW, 2108
Lot/DP: Lot 16 DP 650061
Zoned: E4 Environmental Living
LGA: Northern Beaches Council

The site has street frontage to Barrenjoey Road to the south, abuts McKay Reserve to the north and abuts private & developed E4 allotments to the remaining west and east aspects.

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.

Maintained curtilages

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 40. 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.

4.0 Referenced documents and people.

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

- AS3959 – 2018 Construction of buildings in bushfire prone areas,
- Planning for Bush Fire Protection 2019,
- Northern Beaches Council's Bushfire Prone Land Map,
- 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 site plan, floor plans and elevations by Matt Goodman Architecture Office Job No A072/Barrenjoey-Rd/2018 Dwg's DA001 – DA027 inclusive have been reviewed and relied upon in the preparation of this report.

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	Southeast	West	East
Vegetation Structure	Forest	Remnant Forest	n/a	n/a
Hazard slope	>10° upslope	15-20° downslope	n/a	n/a
Asset protection zone to dwelling	≥ 22 metres	≥ 62 metres	n/a	n/a
Asset protection zone to Garage	≥ 47 metres	≥ 57 metres	n/a	n/a
Features that may mitigate the impact of bush fire on the proposed development.	The separation from the hazard interface includes maintained land wholly within the subject site. The asset protection zones are existing, and no tree removal or other vegetation modification is necessary to establish them, as such there is no impact on the environment of the proposed bushfire protection measures.			
Noteworthy landform & environmental features.	McKay Reserve	Barrenjoey Road	Maintained curtilage	Maintained curtilage
Threatened Species / Aboriginal Relics	Not known / APZ Existing			
Bushfire Attack Level Table A1.12.5 PBP 2019 Dwelling	BAL 40	BAL 12.5	n/a	n/a
Bushfire Attack Level Table A1.12.5 PBP 2019 Garage	BAL 12.5	BAL 12.5	n/a	n/a
Required Construction Level	The highest Bushfire Attack Level to the proposed new dwelling was determined from Table A1.12.5 PBP 2019 to be 'BAL 40' from the northern aspect. The proposed new dwelling is required to comply with section 3 and 8 BAL 40 of AS 3959 – 2018 <i>Construction of buildings in bushfire prone areas</i> or NASH Standard (1.7.14 updated) <i>National Standard Steel Framed Construction in Bushfire Areas 2014</i> as appropriate for BAL 40 construction. The southern façade of the dwelling can be downgraded to BAL 29 requirements due to shielding provided by the dwelling itself. The highest Bushfire Attack Level to the proposed new garage was determined from Table A1.12.5 PBP 2019 to be 'BAL 12.5' from the southern aspect. The proposed new garage is required to comply with section 3 and 5 BAL 12.5 of AS 3959 – 2018 <i>Construction of buildings in bushfire prone areas</i> or NASH Standard (1.7.14 updated) <i>National Standard Steel Framed Construction in Bushfire Areas 2014</i> as appropriate for BAL 12.5 construction. The additional construction requirements detailed within section 7.5.2 of PBP 2019 are also applicable to both the garage and dwelling construction. The proposed pool is a free standing prefabricated pool located on a slab within the approx. area of the existing cutting and new retaining walls. There are no specific bushfire construction requirements applicable to the pool and retaining wall structures.			

Guideline Ref.	Proposed Development Determinations
Property Access	The most disadvantaged point of the proposed new dwelling and garage 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 dwelling footprint.
Water Supply	The subject site is connected to reticulated water mains for domestic needs. Hydrants are located along Barrenjoey Road and are available for the replenishment of firefighting appliances. The most disadvantaged point of the proposed new dwelling and garage 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. Recommendations will be included to ensure that that any new electrical services or gas supply is provided in accordance with Table 7.4a of PBP 2019.
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.

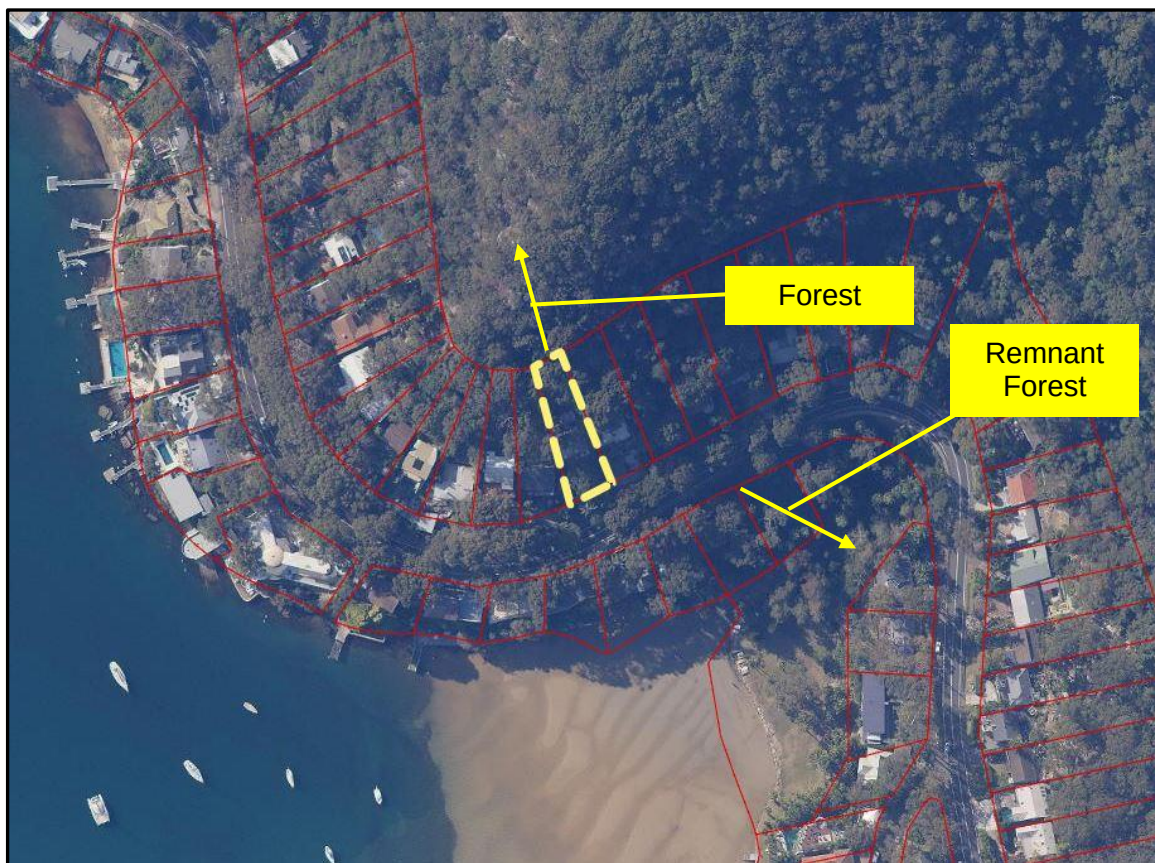


Image 01: Aerial image from NSW Government Planning Portal Property Information

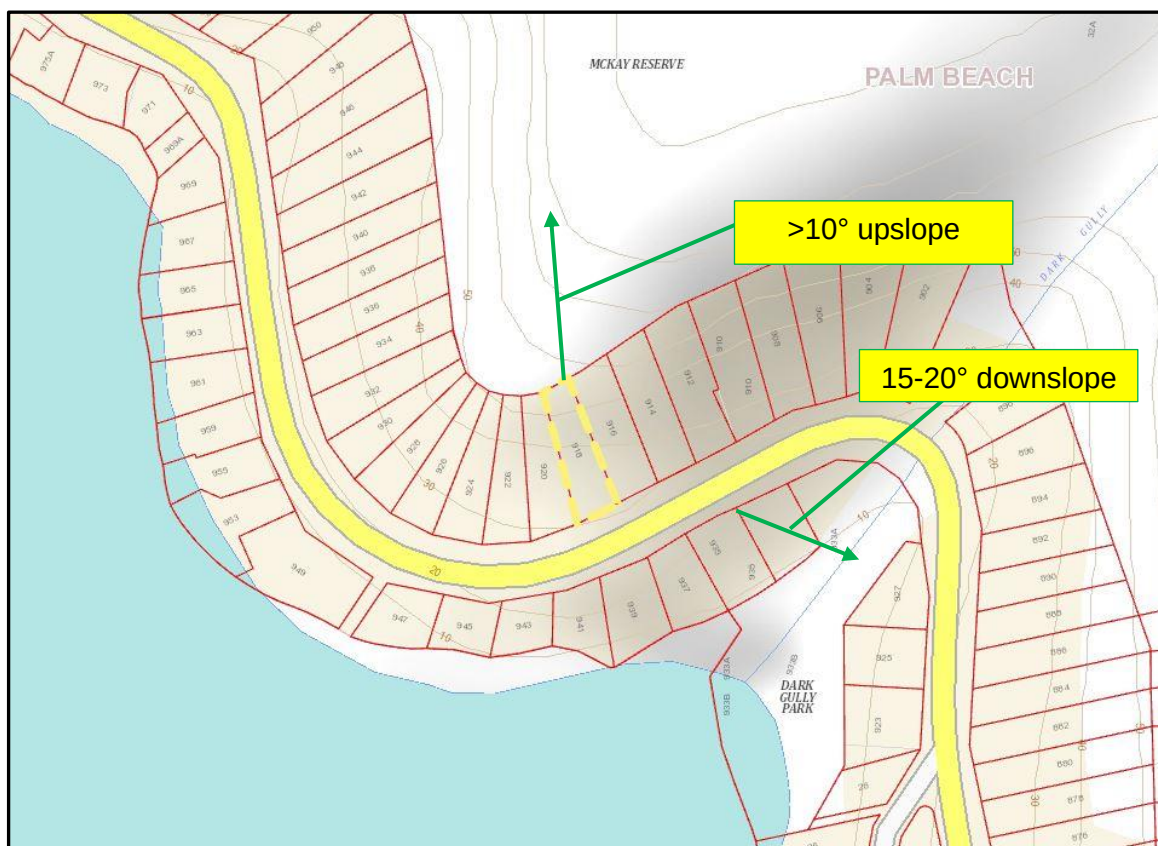


Image 02: 10 m contour topographic image from NSW Government Planning Portal Property Information

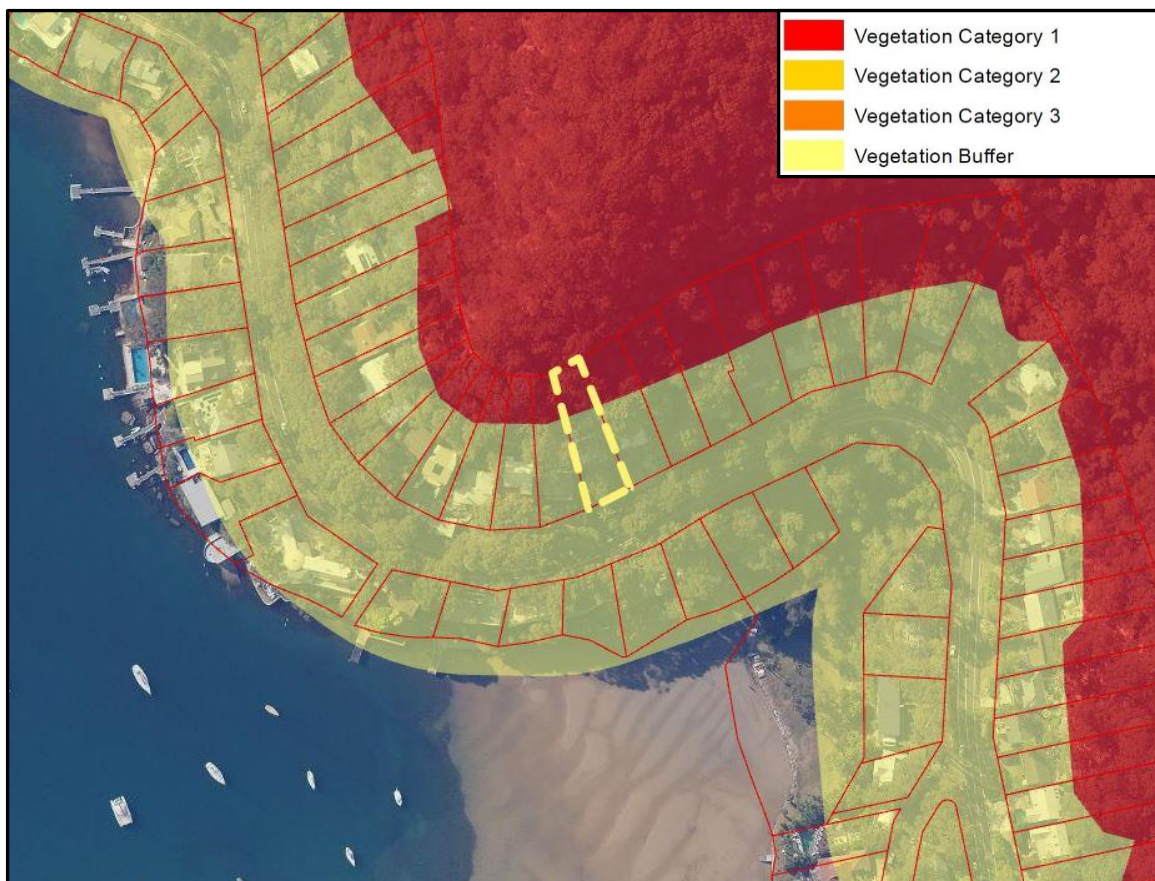


Image 03: Bushfire Prone Land Map from NSW Government Planning Portal Property Information

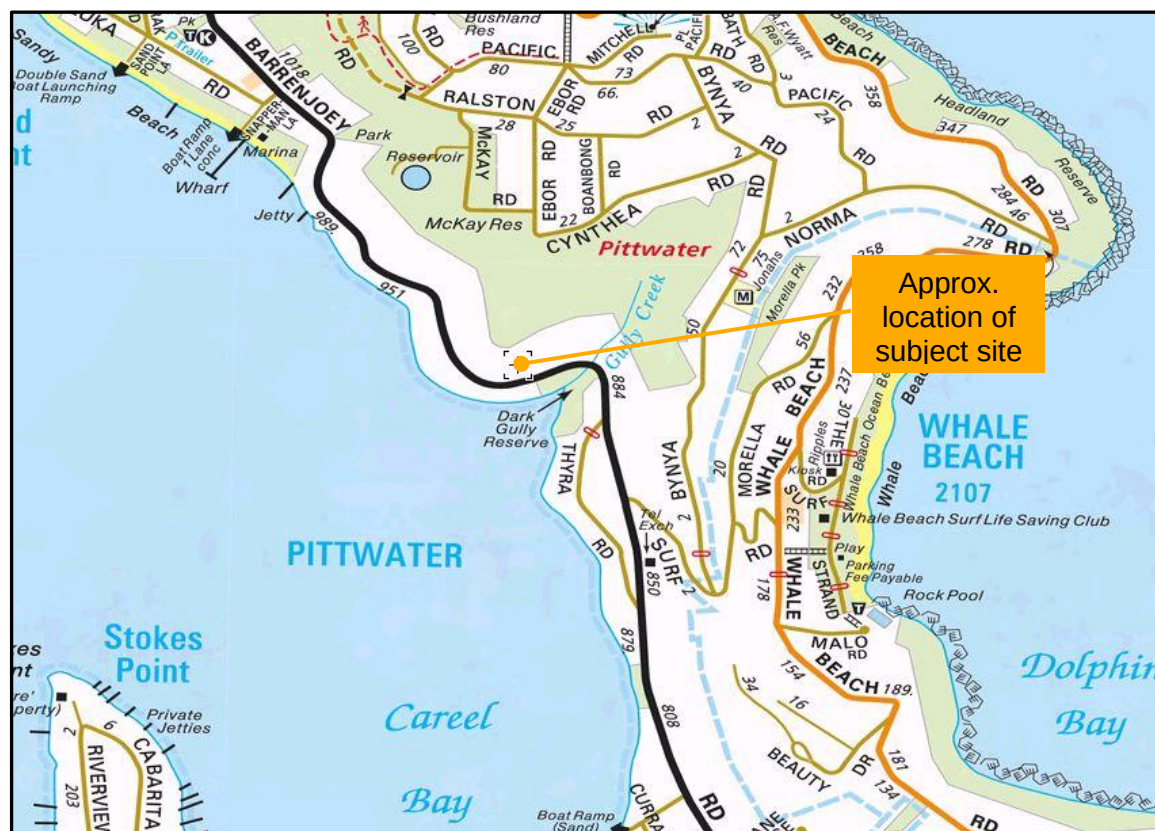
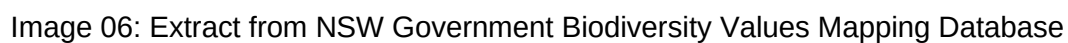


Image 04: Extract from streetdirectory.com.au



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.*

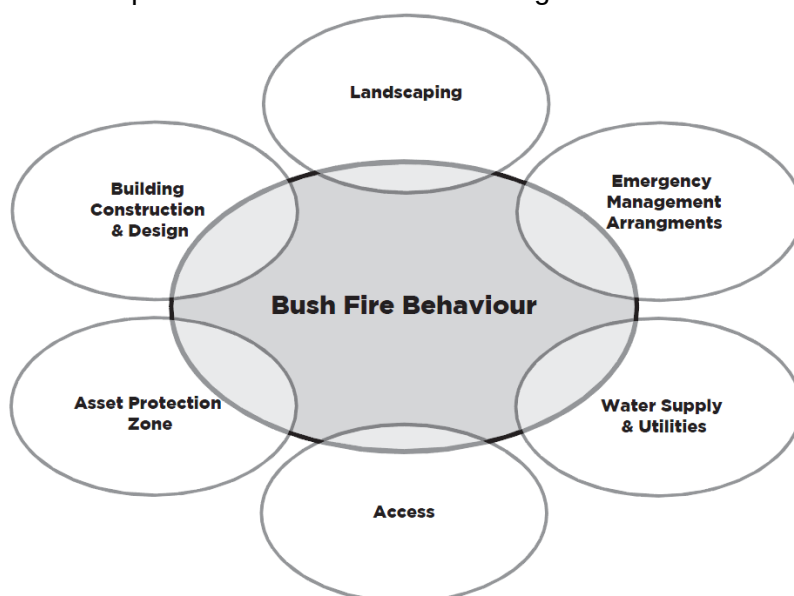
The NSW RFS document PBP – 2019 is applicable to all development on bushfire prone land, this includes an assessment of the proposals adequacy in providing an appropriate combination of bushfire protection measures in terms of asset protections zones, landscaping, access and service supply. This document also provides a means of determining the necessary level of building construction under AS3959 - 2019. 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 Barrenjoey Road to the south, abuts McKay Reserve to the north and abuts private & developed E4 allotments to the remaining west and east aspects.

Councils Bushfire Prone Land Map identifies this property as containing Category 1 Vegetation and the 100 metre buffer zone from a Category 1 Vegetation. Therefore, it is appropriate to apply PBP 2019 to the development proposal.



Photograph 01: View west from Barrenjoey Road along the access drive to the subject site.

8.2 Vegetation

PBP 2019 requires a classification of the vegetation on and surrounding the property out to a distance of 140 metres from property boundary (or building footprint). The surrounding neighbouring private allotments are managed as an asset protection zone around the built assets.

The vegetation identified as being the hazard is within McKay Reserve to the north and Dark Gully Reserve to the southeast of the subject property.

The vegetation posing a hazard within McKay Reserve was found to consist of trees 10 - 30 metres in height with a 50-70% foliage cover and an understorey of low trees, shrubs, ferns and grasses. For the purpose of assessment under *Planning for Bush Fire Protection 2019* the vegetation posing a hazard to the north has been determined to be Forest.

The vegetation within Dark Gully Reserve was found to consist of an isolated pocket of rainforest species and is less than 1 ha in size. For the purpose of assessment under *Planning for Bush Fire Protection 2019* the vegetation posing a hazard to the southeast has been determined to be Remnant. This allows for the area to be assessed as if it was a Rainforest regardless of the actual floristic structure present.

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 slope was assessed onsite with an inclinometer and verified by using 1 metre contour mapping to be:

- 0° degrees upslope within the hazard to the north
- 15-20° degrees downslope within the hazard to the southeast

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;

- ≥ 22 metres to the north (dwelling)
- ≥ 47 metres to the north (garage)
- ≥ 62 metres to the southeast (dwelling)
- ≥ 57 metres to the southeast (garage)

The separation from the hazard interface includes maintained land wholly within the subject site. The APZ onsite is mutually supported by maintained land with in neighbouring private allotments. The asset protection zones are existing, and no tree removal or other vegetation modification is necessary to establish them, as such there is no impact on the environment of the proposed bushfire protection measures.



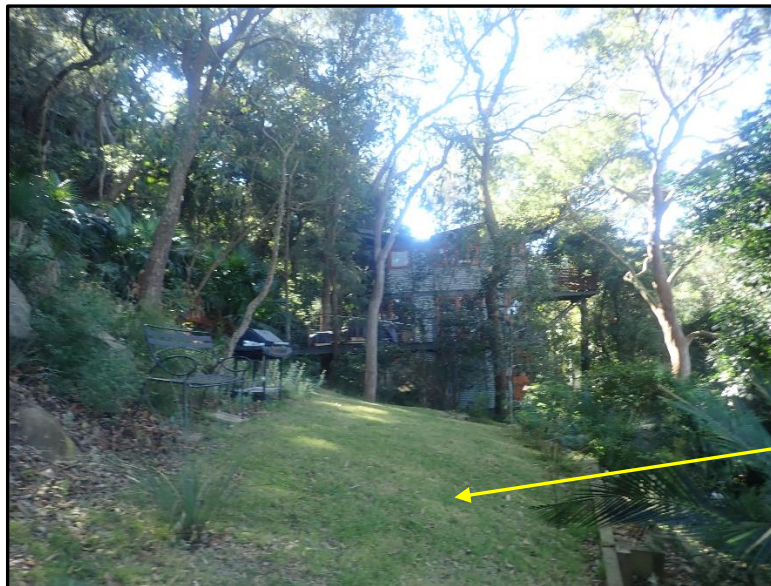
Photograph 02: View south taken within the rear portion of the subject site.



Photograph 03: View south taken within the rear portion of the subject site.



Photograph 04: View north taken within the front yard of the subject site.



Photograph 05: View east taken within the rear portion of the subject site.

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 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*.

8.5 Access & egress

The subject property has street frontage to Barrenjoey Road to the south. Persons seeking to egress the subject site will be able to do so via the existing access drive and the existing 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 proposed dwelling 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 will be available around the dwelling footprint.

8.6 Services

The subject site is connected to reticulated water mains for domestic needs. Hydrants are located along Barrenjoey Road and are available for the replenishment of firefighting appliances. The most disadvantaged point of the proposed new dwelling and garage 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. Recommendations will be included to ensure that any new electrical services or gas supply is provided in accordance with Table 7.4a of PBP 2019.

8.7 Construction

Australian Standard 3959 – 2018 '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 Bush Fire Protection – 2019 document.

The highest Bushfire Attack Level to the proposed new dwelling was determined from Table A1.12.5 PBP 2019 to be 'BAL 40' from the northern aspect. The proposed new dwelling is required to comply with section 3 and 8 BAL 40 of AS 3959 – 2018 *Construction of buildings in bushfire prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas 2014* as appropriate for BAL 40 construction. The southern façade of the dwelling can be downgraded to BAL 29 requirements due to shielding provided by the dwelling itself.

The highest Bushfire Attack Level to the proposed new garage was determined from Table A1.12.5 PBP 2019 to be 'BAL 12.5' from the southern aspect. The proposed new garage is required to comply with section 3 and 5 BAL 12.5 of AS 3959 – 2018 *Construction of buildings in bushfire prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas 2014* as appropriate for BAL 12.5 construction.

The additional construction requirements detailed within section 7.5.2 of PBP 2019 are also applicable to both the garage and dwelling construction.

The proposed pool is a free standing prefabricated pool located on a slab within the approx. area of the existing cutting and new retaining walls. There are no specific bushfire construction requirements applicable to the pool and retaining wall structures.

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 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 Bush Fire Risk Management Committees. This evaluation does not reflect the Bushfire Attack Level determined under PBP 2019 or AS3959 - 2018.

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 low 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 at the commencement of construction and in perpetuity all land not built upon within the subject site is 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 the proposed new dwelling roof and the northern, western and eastern facades are constructed in accordance with section 3 and 8 BAL 40 of AS 3959 – 2018 *Construction of buildings in bushfire prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas 2014* as appropriate for BAL 40 construction.
3. That the proposed new dwelling southern facade is constructed in accordance with section 3 and 7 BAL 29 of AS 3959 – 2018 *Construction of buildings in bushfire prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas 2014* as appropriate for BAL 29 construction.
4. That the proposed new garage is to be constructed in accordance with section 3 and 5 BAL 12.5 of AS3959 – 2018 *Construction of buildings in bushfire prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas 2014* as appropriate for BAL 12.5 construction.
5. That the proposed new dwelling and garage is also constructed to that of the 'Additional Construction Requirements' detailed within section 7.5.2 of *Planning for Bush Fire Protection 2019*.
6. That any new fencing within the subject site is made from non-combustible materials only.

9.3 Services

Electricity

7. That electricity supply is to comply with Table 7.4a of Planning for Bush Fire Protection 2019, in particular;
 - where practicable, electrical transmission lines are underground; and
 - where overhead, electrical transmission lines are proposed as follows:
 - lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and
 - no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 *Guideline for Managing Vegetation Near Power Lines*.

Gas

8. That gas supply is to comply with Table 7.4a of Planning for Bush Fire Protection 2019, in particular;
 - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used;
 - all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;
 - connections to and from gas cylinders are metal; polymer-sheathed flexible gas supply lines are not used; and
 - above-ground gas service pipes are metal, including and up to any outlets.

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 40'. Suitable recommendations have been made herein to enable Council to issue development consent inclusive of conditions required to ensure compliance with all requirements of 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.

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
Graduate Member Institute of Fire Engineers

11.0 List of attachments

Attachment 01: s4.14 Certificate



AUSTRALIAN BUSHFIRE CONSULTING SERVICES



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wayne@australianbushfire.com.au

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ABN 23 622 676 493
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	918 Barrenjoey Road, Palm Beach NSW, 2108 Lot 16 DP 650061		
DEVELOPMENT TYPE	Infill – Proposed new sole occupancy dwelling and detached garage		
PLAN REFERENCE	Site plan, floor plans and elevations by Matt Goodman Architecture Office Job No A072/Barrenjoey-Rd/2018 Dwg's DA001 – DA005, DA100-DA104, DA200-DA206, DA300-DA301 inclusive		
BAL RATING	BAL 40 & 29 (dwelling) BAL 12.5 (garage)	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.	
ABCS REF.	21-423	Issue date:	1 st September 2021

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