



# Building Code & Bushfire Hazard Solutions

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Unity NSW Pty Ltd  
PO Box 284  
MONA VALE NSW 1660

30<sup>th</sup> September 2019  
Our Ref. 200278

Attn: Peter Gurtner

**Re: PROPOSED NEW PERGOLA  
1 NARRABEEN PARK PARADE, NORTH NARRABEEN  
BUSHFIRE ASSESSMENT STATEMENT**

Dear Peter,

We thank you for the opportunity of undertaking this assessment for you.

The development application relates to the construction of a new pergola onto an existing commercial building within an existing residential allotment, (zoned R2 – Low Density Residential), known as 1 Narrabeen Park Parade, North Narrabeen (Lot 1 DP 1005148). The subject site has street frontage to Narrabeen Park Parade to the west and abuts private residential allotments to the north and east and a Council Reserve and carpark to the south. The subject site is within Northern Beaches Council's local government area.

The purpose of this statement is to ascertain compliance or otherwise with Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2009 and *Planning for Bush Fire Protection* 2006. The proposal relates to redevelopment within an existing residential allotment and therefore is considered infill development and is assessed under section 4.14 of Environmental Planning and Assessment Act 1979.

Properties considered to be affected by possible bushfire impact are determined from local Bushfire Prone Land Map's as prepared by Council and or the Rural Fire Service. All property development within affected areas is subject to the conditions detailed in the document '*Planning for Bush Fire Protection* 2006' (PBP).

Set back distances for the purpose of creating an Asset Protection Zones (APZ) and / or determining separation distance from a hazard interface must be assessed and any buildings must then conform to corresponding regulations detailed in Australian Standard 3959 'Construction of buildings in bushfire prone areas' 2009.

The most appropriate method of determining the site bushfire hazard under the terms of PBP is to consider the site in a singular form.

*Bushfire prone areas are defined as those areas;*

- *containing or within 100m of Category 1 Vegetation; or*
- *containing or within 30m of Category 2 or 3 Vegetation.*

The subject property is identified on Council's Bushfire Prone Land Map as partially containing the 100 metre buffer zone from Category 1 Vegetation. As the subject property is identified as being bushfire prone land a merit based assessment against compliance with *Planning for Bush Fire Protection* 2006 and Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2009 must be undertaken.

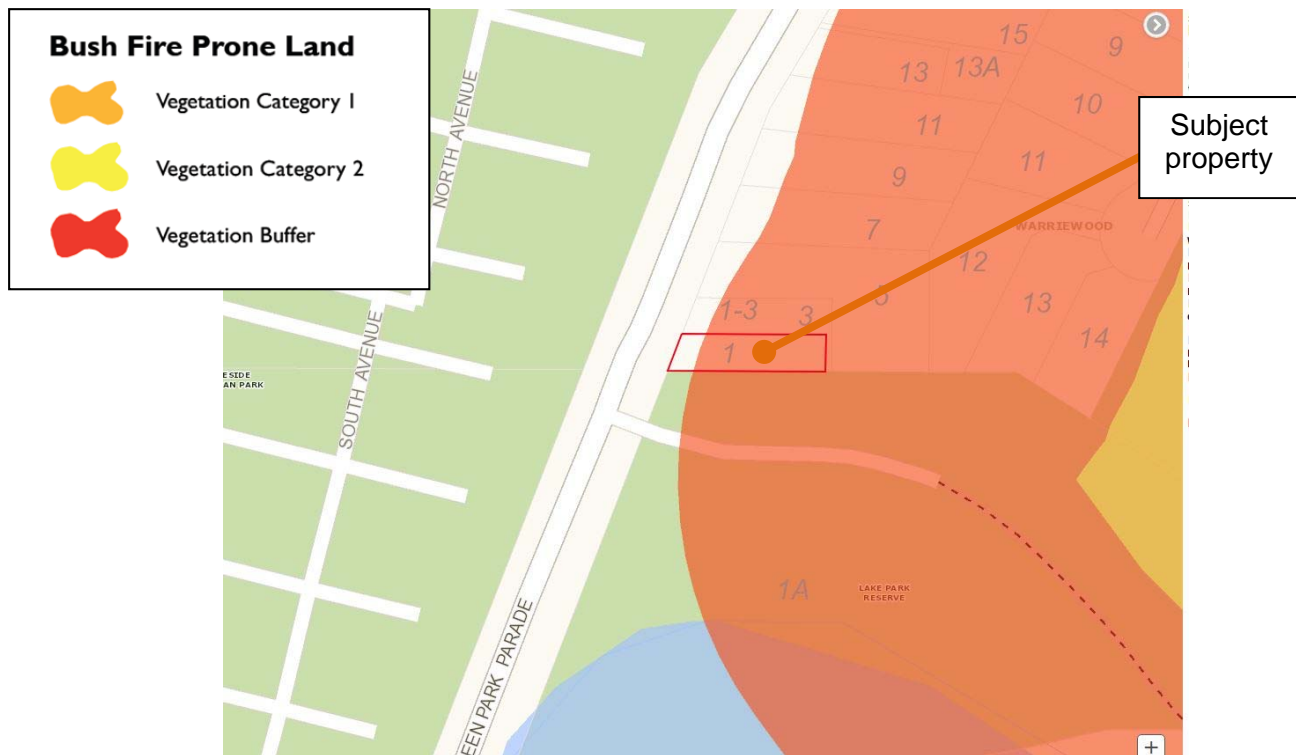


Image 01: Extract from Northern Beaches Council's Bushfire Prone Land Map



Image 02: Aerial view of the subject area from Sixmaps

## Vegetation Identification:

The predominant vegetation within the subject property and neighbouring residential allotments was found to consist of maintained lawns and gardens.

The vegetation identified as being the hazard is within North Narrabeen Headland Reserve to the east of the subject site. The predominate vegetation within North Narrabeen Headland Reserve grounds was found to consist of shrubs >2 metres in height.

For the purpose of assessment under PBP the vegetation posing a hazard to the east within North Narrabeen Headland Reserve has been determined to be Scrub.

## Slope Analysis:

The slope that would most significantly affect bushfire behaviour must be assessed for at least 100 metres from within the hazard. The most significant bushfire impact from the east is expected to be a bushfire burning down slope toward the subject site.

For the purpose of determining the possible bushfire impact to the subject site the slope that would **most significantly** influence bushfire impact within the 100 metre assessment area was determined to be:

- 10 degrees up slope within the hazard to the east

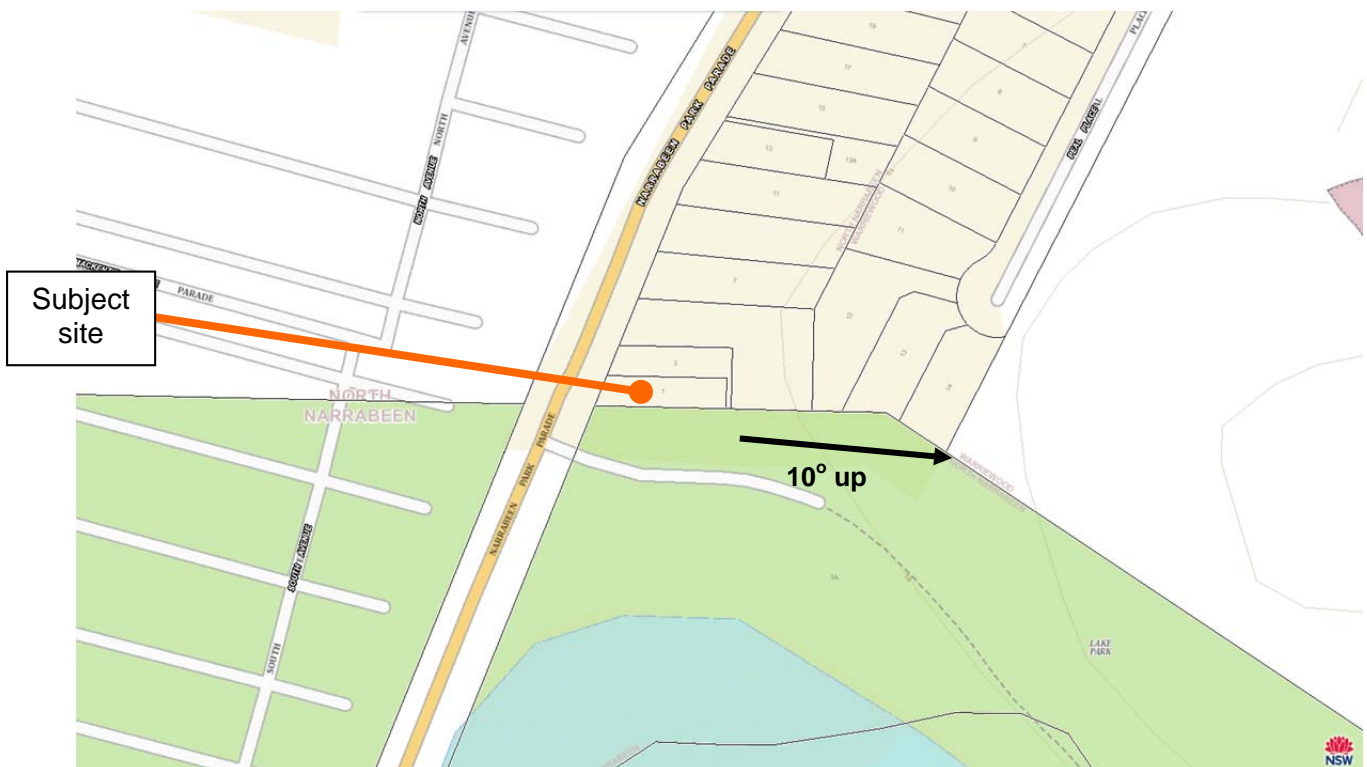


Image 04: Extract from Land and Property Management Authority Spatial Information Exchange



## Asset Protection Zones:

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The proposed pergola was found to be located 22 metres from the hazard interface to the east. The Asset Protection Zone includes maintained land within the subject property and land equivalent to an APZ within the Council Reserve and carpark to the south.

All grounds within the subject property not built upon must be maintained as an Asset Protection Zone as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones'. This will allow for gardens (including native trees and shrubs) in the APZ managed as clumps or islands, covering no more than 20% of the area.

## Fire Fighting Water Supply:

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The subject building is connected to the reticulated town's water main in Narrabeen Park Parade for its needs. Existing in ground hydrants are available along Narrabeen Park Parade and surrounding streets for the replenishment of attending fire services.

The most distant external point of the building footprint is less than 70 metres from a public road supporting a hydrant network and therefore a Static Water Supply is not required.

The existing water supply is considered adequate for the replenishment of attending fire services.

## Property Access:

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The subject site has street frontage to Narrabeen Park Parade to the west and has vehicle access via the existing carpark to the south. Persons seeking to egress the building are able to do so via existing road infrastructure.

The most distant external point of the proposed pergola will be less than 70 metres from a public road supporting the operational use of fire fighting vehicles and therefore the Property Access requirements detailed in section 4.1.3 (2) of PBP are not applicable.

Attending fire crews can access the hazard via the Council carpark or Pearl Place for hazard reduction or fire suppression activities without the need to enter the subject site.

Access for fire services and opportunities for occupant evacuation are considered adequate for the subject site.

## Construction Method:

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The objectives of Planning for Bush Fire Protection – 2006 are for the protection of life including fire fighters. Provided these objectives can be met the construction of buildings is feasible and both the Rural Fire Service and Council should be in a position to consider such applications.

The highest Bushfire Attack Level to the proposed pergola was determined from Table 2.4.2 of AS3959 - 2009 to be 'BAL 19'. The proposed pergola is therefore required to be constructed to that of BAL 19 under section 3 and section 6 of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2009. The additional construction detail contained within Addendum Appendix 3 of PBP will also apply.

## Summary:

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### Eastern Aspect:

- a) Vegetation Structure Scrub
- b) Slope 10 degrees up
- c) A 22 metre APZ is available
- d) The Bushfire Attack Level was determined to be 'BAL 19'

## Recommendations

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### Asset Protection Zones

1. That all grounds within the subject property not built upon be maintained in accordance with an Asset Protection Zone as detailed within Appendix 2 of Planning for Bush Fire Protection 2006 and the NSW Rural Fire Service document Standards for Asset Protection Zones.

Note: There is no tree removal or vegetation modification necessary to achieve the aforementioned APZ.

### Construction

2. That the pergola shall comply with section 6 (BAL 19) Australian Standard AS3959-2009 "Construction of buildings in bush fire-prone areas" and section A3.7 Addendum Appendix 3 of "Planning for Bush Fire Protection".

## Conclusion

Given that the property is deemed bushfire prone under Northern Beaches Council's Bushfire Prone Land Map any development would need to meet the requirements of 'Planning for Bush Fire Protection' – 2006 and of the construction requirements of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' – 2009. The determination of any bushfire hazard must be made on a site-specific basis that includes an assessment of the local bushland area and its possible impact to the subject property.

The subject site has street frontage to Narrabeen Park Parade to the west and abuts a private residential allotment to the north and east and a Council carpark to the south. The vegetation identified as being the hazard is within North Narrabeen Headland Reserve to the east of the subject site.

The proposed pergola was found to be located 22 metres from the hazard interface to the east. The Asset Protection Zone includes maintained land within the subject property and land equivalent to an APZ within the Council Reserve and carpark to the south.

The highest Bushfire Attack Level to the proposed pergola was determined from Table 2.4.2 of AS3959 - 2009 to be 'BAL 19'. The proposed pergola is therefore required to be constructed to that of BAL 19 under section 3 and section 6 of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2009. The additional construction detail contained within Addendum Appendix 3 of PBP 2006 will also apply.

The existing access provisions and water supply are considered satisfactory.

In accordance with the bushfire safety measures contained in this statement, and consideration of the site specific bushfire risk assessment it is my opinion that when combined, they will provide a reasonable and satisfactory level of bushfire protection to the subject development.

I am therefore in support of the proposed development application.

Should you have any enquiries regarding this project please contact me at our office.

Prepared by  
Building Code & Bushfire Hazard Solutions P/L



**Duncan Armour**

Reviewed and endorsed by  
Building Code & Bushfire Hazard Solutions P/L



**Stuart McMonnies**

G. D. Design in Bushfire Prone Areas.  
Certificate IV Fire Technology  
Fire Protection Association of Australia BPAD – L3 Accredited Practitioner  
Accreditation number – BPAD 9400



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.



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## BUSHFIRE RISK ASSESSMENT CERTIFICATE UNDER PART 4 DIVISION 4.3 SECTION 4.14 OF THE EP&A ACT 1979 NO 203

PROPERTY ADDRESS:	1 Narrabeen Park Parade, North Narrabeen
DESCRIPTION OF PROPOSAL:	New Pergola
PLAN REFERENCE: (relied upon in report preparation)	Site Plan by O2 Architecture, Job No. 1610, Drawing No. DA-02, Revision B, Dated 12.06.19
BAL RATING:	BAL 19 <small>(If the BAL rating is FZ the application is to be referred to NSW RFS for assessment)</small>
DOES THE PROPOSAL RELY ON ALTERNATE SOLUTIONS:	YES <input checked="" type="radio"/> NO <input type="radio"/> <small>(Circle the relevant response)</small> <small>(If YES the application is to be referred to NSW RFS for assessment)</small>
BUSHFIRE ASSESSMENT REPORT REFERENCE:	200278
REPORT DATE:	30 <sup>th</sup> September 2019
CERTIFICATION NO/ACCREDITED SCHEME	BPAD9400

I Stuart McMonnies of Building Code and Bushfire Hazard Solutions Pty Ltd hereby certify, in accordance with Part 4 Division 4.3 Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*:

1. That I am a person recognised by the *NSW Rural Fire Service* as a qualified consultant in bushfire risk assessment; and
2. That subject to the recommendations contained in the Bushfire Risk Assessment Report the proposed development conforms specifications and requirements of the documents 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 Part 4 Division 4.3 Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*.

I am aware that the Bushfire Assessment Report, prepared for the above mentioned site is to be submitted in support of a development application for this site and 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 *Planning for Bushfire Protection 2006*.

Signature:  Date: 30<sup>th</sup> September 2019

