



# Building Code & Bushfire Hazard Solutions

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Family Home  
9 / 28 Barcoo Street  
ROSEVILLE NSW 2069

24<sup>th</sup> March 2022  
Our Ref. 220822

Attn: Branco Jaric

**Re: PROPOSED MINOR ALTERATIONS & ADDITIONS – INTERNAL WORKS, GLAZED DOORS TO DECK & EXTERNAL STAIRS  
LOT 31 DP 549467 / 27 SORLIE ROAD, FRENCHS FOREST NSW  
BUSHFIRE ASSESSMENT STATEMENT**

Dear Branco,

We thank you for engaging us to undertake this assessment for you.

It is of our understanding that the proposed development application relates to the internal alterations and additions and glazed doors to a deck and external stairs to an existing dwelling within an existing allotment known as 27 Sorlie Road, Frenchs Forest (Lot 31 DP 549467).

The vegetation identified as being the hazard is to the southeast within Frenchs Forest Reserve.

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 - 2019' (PBP).

Northern Beaches Council's Bushfire Prone Land Map identifies that the subject property as containing the 100 metre buffer from Category 1 Vegetation, therefore PBP is applicable in this instance.

The purpose of this bushfire assessment is to provide the owners and Council with an independent bushfire assessment together with appropriate recommendations for both building construction and bushfire mitigation measures considered necessary having regard to construction within a designated 'bushfire prone' area.

The scope of this statement is limited to providing a bushfire assessment and recommendations for the proposed works within the subject site. Where reference has been made to the surrounding lands, this statement does not purport to directly assess those lands; rather it may discuss bushfire impact and/or progression through those lands and possible bushfire impact to the subject property.

The proposed development relates to the internal alterations and additions and glazed doors to a deck and external stairs to an existing dwelling within an existing residential allotment (s4.14 application). To accord with PBP the development is classified as infill development and Chapter 7 'Residential Infill Development' applied.

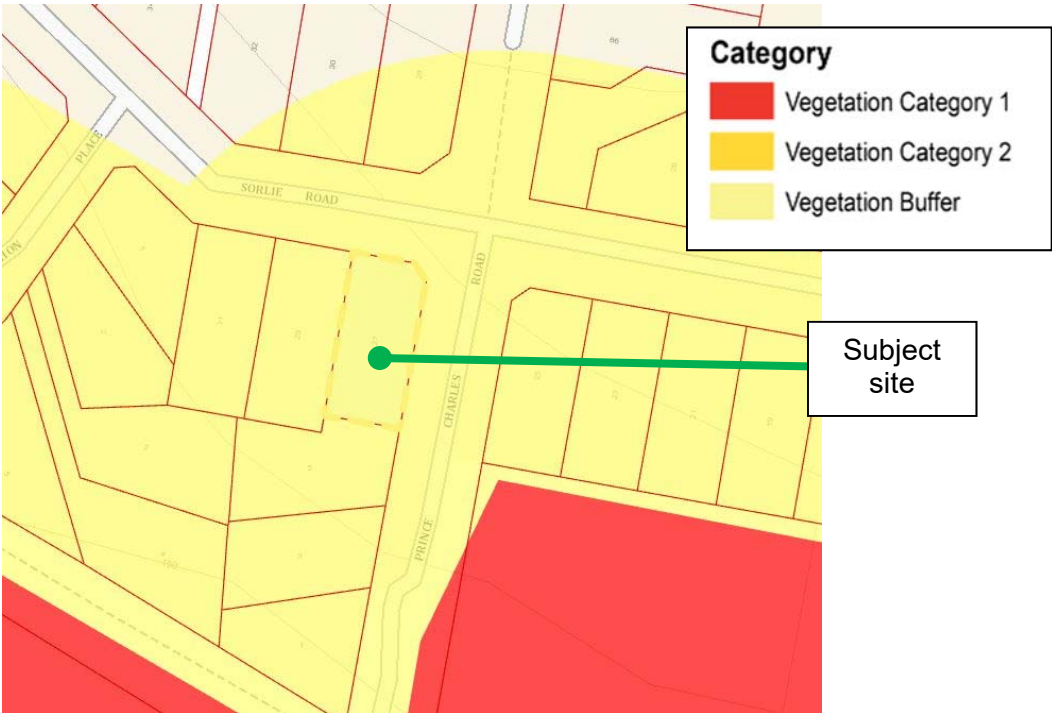


Image 01: Extract from Northern Beaches Council's Bushfire Prone Land Map



Image 02: Aerial view of the subject property C/- Nearmap – December 2021



## Vegetation Identification:

The vegetation identified as being the hazard is to the southeast within Frenchs Forest Reserve.

The vegetation posing a hazard was found to consist of trees 10 - 30 metres in height with 30 - 70% foliage cover, the understorey consisted of low trees, exotics and ferns.

For the purpose of assessment under PBP we have conservatively determined the vegetation posing a hazard to the southeast to be Forest.

## Slope Analysis:

The slope that would most significantly influence bushfire behaviour must be assessed for a distance of 100 metres from within the hazard. The most significant bushfire impact from the southeast is expected to be a bushfire travelling up slope toward the subject property.

The slope that would **most significantly** influence bushfire impact was determined onsite using an inclinometer and verified from topographic imagery to be:

- 10 - 15 degrees down slope within the hazard to the southeast



Image 03: Extract from ELVIS – Geoscience Australia (1 m Contours)

## Asset Protection Zones:

The vegetation identified as being the hazard is to the southeast within Frenchs Forest Reserve.

The available Asset Protection Zone (APZ) was measured to be >42 metres from the proposed glazed doors onto the deck and >45 metres to the proposed external stairs to the hazard interface to southeast. The APZ consists of maintained grounds within the subject property and land equivalent to an APZ within Prince Charles Road and mown lawns within Frenchs Forest Reserve.

## Fire Fighting Water Supply:

Hydrants are available throughout Sorlie Road and surrounding roads for the replenishment of fire service vehicles. The most distant external point of the subject dwelling is within 70 metres of a public road that supporting a hydrant network and therefore a Static Water Supply is not required under section 7.4 of PBP.

The existing water supply is considered adequate and is not being altered as part of this development.

## Property Access:

The subject property has street frontage to Sorlie Road to the north and Prince Charles Road to the east. Persons seeking to egress from the subject property are able to do so via the existing access drive and public roads. The most distant external point of the proposed footprint is less than 70 metres from a public road supporting the operational use of fire fighting vehicles and therefore the Access requirements detailed in Table 7.4a of PBP are not applicable.

Access to the hazard is available via Prince Charles Road for hazard reduction for fire suppression activities. The existing access is considered adequate.

## Summary:

	<b>Southeast</b>
<b>Vegetation Structure</b>	Forest
<b>Slope</b>	10 - 15 degrees down
<b>Door Asset Protection Zone</b>	>42 metres
<b>Stair Asset Protection Zone</b>	>45 metres
<b>Significant landscape features</b>	Maintained grounds / Prince Charles Road
<b>Required Door Construction Level</b>	BAL 40
<b>Required Stairs Construction Level</b>	BAL 29

The highest Bushfire Attack Level to the proposed glazed doors determined from Table A1.12.5 of PBP to be 'BAL 40'. The proposed new doors are required to comply with BAL 40 section 8 under AS 3959 – 2018 and the additional construction requirements under section 7.5 of PBP. The proposed new stairs were found to be >45 metres from the hazard to the southeast and are required to comply with BAL 29.

## Recommendations

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### Asset Protection Zones

1. That all grounds within the subject property continue to be maintained as an Asset Protection Zone as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones' and Appendix 4 of Planning for Bush Fire Protection 2019.

### Construction

2. That the new glazed doors shall comply with Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" Sections 3 & 8 (BAL 40) & Section 7.5 of *Planning for Bushfire Protection 2019*.
3. That the new external stairs shall comply with Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" Sections 3 & 7 (BAL 29) & Section 7.5 of *Planning for Bushfire Protection 2019*.

### Landscaping

4. That any new landscaping is to comply with section 3.7 and Appendix 4 under Planning for Bush Fire Protection 2019.

## 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*' 2019 and of the construction requirements of Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2018. 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 property is a residential allotment within an area of similar properties. The vegetation identified as being the hazard is to the southeast within Frenchs Forest Reserve. The vegetation posing a hazard was determined to be Forest.

The available Asset Protection Zone (APZ) was measured to be >42 metres from the proposed glazed doors onto the deck and >45 metres to the proposed external stairs to the hazard interface to southeast. The APZ consists of maintained grounds within the subject property and land equivalent to an APZ within Prince Charles Road and Frenchs Forest Reserve.

The highest Bushfire Attack Level to the proposed glazed doors was determined from Table A1.12.5 of PBP to be 'BAL 40'. The proposed new doors are required to comply with BAL 40 section 8 under AS 3959 – 2018 and the additional construction requirements under section 7.5 of PBP.

The highest Bushfire Attack Level to the proposed external stairs was determined from Table A1.12.5 of PBP to be 'BAL 29'. The proposed new stairs are required to comply with BAL 29 section 7 under AS 3959 – 2018 and the additional construction requirements under section 7.5 of PBP.

Hydrants are available throughout Sorlie Road and surrounding streets for the replenishment of attending fire services. The existing access and water provisions are considered satisfactory for attending fire services.

In accordance with the bushfire safety measures contained in this report, and consideration of the site specific bushfire risk assessment it is my opinion that the recommendations made herein will provide a reasonable level of bushfire protection to the subject development.

I am therefore in support of the development application.

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

Prepared by  
Building Code & Bushfire Hazard Solutions



**Duncan Armour**  
Bushfire Consultant

Reviewed and endorsed by  
Building Code & Bushfire Hazard Solutions



**Andrew Muirhead**  
Bushfire Consultant  
Graduate Certificate in Bushfire Protection  
Diploma of Engineering.  
FPA Australia BPAD Level 2 Accredited Practitioner  
BPAD Accreditation No. BPAD46966





Quote from Planning for Bush Fire Protection 2019, 'While the material within this publication is current at the time of writing changes in circumstances after the time of publication may impact on the accuracy of the material. Individuals are responsible for ensuring they have the most current version of this publication.'

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Similarly, the interpretations and opinions provided by Building Code and Bushfire Hazard Solutions in regard to bushfire design, protection and mitigation 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:	27 Sorlie Road, Frenchs Forest
DESCRIPTION OF PROPOSAL:	Internal alterations & additions and Glazed Doors and External Stairs
PLAN REFERENCE: (relied upon in report preparation)	Plans by Family Home, Job No. 2201, Issue A, Dated 18/02/2022.
BAL RATING:	BAL 40 & BAL 29
BUSHFIRE ASSESSMENT REPORT REFERENCE:	220822
REPORT DATE	24 <sup>th</sup> March 2022
CERTIFICATION NO/ACCREDITED SCHEME	BPAD46966

I, Alvin, 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 Bush Fire Protection 2019*.

Signature: Alvin Date: 24<sup>th</sup> March 2022

