

Building Code & Bushfire Hazard Solutions

SILVER MEMBER
Fire Protection
Association Australia

(Pty. Limited) ABN 19 057 337 774 PO Box 124, Berowra NSW 2081 Telephone: (02) 9457 6530 www.bushfirehazardsolutions.com.au

Evo Plan 29th April 2024 Email: evan@evoplan.com.au Our Ref. 240844

Attention: Evan Matthews

Re: TELECOMMUNICATIONS FACILITY

LOT 3 DP 205815 / 995 OXFORD FALLS ROAD, OXFORD FALLS

BUSHFIRE ASSESSMENT STATEMENT

Dear Evan.

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

The proposed development relates to the construction of a new telecommunications site within an existing allotment known as Lot 3 DP 205815 / 995 Oxford Falls Road, Oxford Falls. The subject site is located within Northern Beaches Council's Local Government Area.

The proposed site works include, but are not limited to a satellite antenna on a concrete footing, cable ladder and fenced compound.

Properties considered to be affected by possible bushfire impact are determined from local Bushfire Prone Land Map's as prepared by a Council and or the Rural Fire Service.

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 Category 3 Vegetation.

The subject site falls within Northern Beaches Council's local government area. Northern Beaches Councils Bushfire Prone Lands Map shows the subject site is mapped as containing Category 1 Vegetation and the Vegetation Buffer, therefore the subject site is identified as being 'bushfire prone'.

Typically, all development on bushfire prone land is subject to the application of '*Planning for Bush Fire Protection* - 2019' (PBP). The current version of PBP addresses telecommunication facilities in Section 8.3.7.



Image 01: Extract showing the land is Bushfire Prone C/- NSW Planning Portal

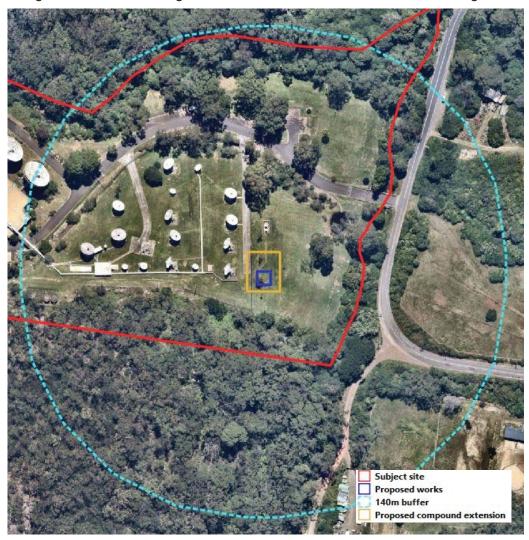


Image 02: Aerial view of the proposed site C/- Nearmap - March 2024

PBP 19, Section 8.3.7 Telecommunication Towers' states:

Telecommunication sites are sites that hold infrastructure associated with mobile phones, internet, microwave radio links, trunk mobile radio or private mobile radio.

Essential telecommunication infrastructure should be designed in such a way as to minimise the impact of bush fires and ensure that communications capabilities are not compromised during bush fire emergencies. BPMs should be commensurate with the bush fire risk and criticality of the infrastructure.

In order to determine the level of bush fire risk and to develop a suitable suite of protection measures, the NSW RFS should be consulted.

There should be a minimum APZ around the tower/buildings/associated infrastructure which will increase based on the assessed level of risk and criticality.

Telecommunication towers should be constructed from non-combustible materials, and designed to mitigate the risk of flame damage, ember attack and radiant heat.

The APZ is only concerned with the underlying infrastructure required to support telecommunication services. These are predominately structures and buildings. Infrastructure requiring APZs does not include:

- road access to the site:
- power to the site; and
- associated fencing.

The APZ must be managed to the standard of an IPA. The IPA must be free from surface fuel and elevated fuel with minimum canopy cover.

An access strategy should be prepared that details the access arrangements for firefighting and APZ maintenance.

The proposed site is currently mown and contains other telecommunication infrastructure.

The facility will be located within a new 20 metre by 24 metre fenced compound, adjacent to a larger compound, with mown lawn surrounding the new and existing compound. The closest hazard was found to be greater than 16 metres to the south of the proposed works.

The antenna and surrounding APZ's within the compound must be inspected prior to each fire season and corrective action or maintenance of the APZ and surrounding grasses can occur at that time. If it is deemed that more frequent maintenance is required, then adjustments in the inspection regime should be considered to ensure APZ is maintained by slashing and removing fuels.

In principle the location of any new electrical services should limit the possibility of ignition to surrounding bushland and ensure the ongoing operation of the tower during and following bushfire impact. We consider that protection should also be considered for the electrical wiring and therefore the cable gantry and all other exposed cabling should be protected (a.k.a. shrouded) by a non-combustible material.

Furthermore, the cables should be suitably insulated to mitigate the effects of flame contact, radiant heat (and conductive heat where applicable). This could be achieved with a sarking (having a flammability index of less than 5) and insulation (e.g. mineral wool batts or fire rated blanket (min FRL -/30/30)) or by wrapping the cabling with insulation and housing the cabling within a non-perforated cable trunking tray.

To satisfy the relevant specifications and requirements of Planning for Bush Fire Protection 2019 the following recommendations are made. Additional protections measures have also been applied where considered necessary:

Asset Protection Zones

- That all existing maintained grounds within the subject property shall continue to be maintained as an Asset Protection Zone (Inner Protection Area) as detailed in the NSW Rural Fire Service's document 'Standards for Asset Protection Zones'.
- 2. The Asset Protection Zone must be free of surface fuel and elevated fuel and should have minimum canopy.
- 3. That the compounds APZ be inspected prior to each fire season and corrective action or maintenance of the APZ and surrounding grasses occurs at that time as necessary.

Construction

- 4. That the cable gantry and all other exposed cabling be suitably rated and insulated to mitigate the effects of bushfire impact (radiant heat flame contact and conductive heat where applicable). This could be achieved by:
 - Insulated sarking (having a flammability index of less than 5) and protected (a.k.a. shrouded) by a non-combustible material or
 - wrapped with an insulation having a min FRL -/30/30 (e.g. fire rated blanket) or
 - using fire rated cable trays (min FRL -/30/30 protection to cables and trays)

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

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

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.



Property Details and Description of Works

Unit no

Street no



Lot/Sec/DP

Bush Fire Certificate

Certificate issued unders4.14(1)(b) of the *Environmental Planning & Assessment Act, 1979* and *Planning for Bush Fire Protection 2019*

This Certificate has been issued by a person accredited by Fire Protection Association Australia (FPA Australia) under the Bush Fire Planning and Design (BPAD) Accreditation Scheme and who is recognised by the NSW Rural Fire Service as a qualified consultant in bushfire risk assessment within the meaning of section 4.14(1)(b) of the *Environmental Planning and Assessment Act 1979* (NSW).

Street name

Address Details	995 Oxford Falls Road		;	3/-/205815		
	Suburb Oxford Falls			State NSW	Postcode 2100	
Local Government Area	Northern B	Beac	hes			
BCA class of the building Description of the proposal Development Application Reference	10					
	Telecommunications facility					
Bush Fire Assessment Report						
A detailed Bush Fire Assessment Report is attached, which includes the relevant submission requirements set out in <i>Appendix</i> 2 of <i>Planning for Bush Fire Protection</i> 2019 together with recommendations as to how the relevant specifications and requirements are to be achieved.				n dve	S NO	
Report Reference and date						
Bushfire Assessment Report 240844				29th	29th April 2024	
BPAD Certification						
Name Andrew Muirhead Company Details & A Bushfire Hazard So 19 057 337 774		 I hereby certify, in accordance with Section 4.14(1)(b) of the Environmental Planning and Assessment Act 1979 that: I am a person recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment; and the development conforms to the relevant specifications and requirements of Planning for Bush Fire Protection 2019 in accordance with section 4.14(1)(b) of the Environmental Planning and Assessment Act 1979 (NSW). 				
BPAD Accreditation	Number	Signa			Date	
46966	BPAD Bushfire Planning & Design Accredited Practitioner Level 2	A	Michael		29th April 2024	