Northern Beaches Council
PO Box 882
MONA VALE NSW 1660

Your reference: MOD2020/0473 (CNR-13425)
Our reference: DA20200505001568-S4.55-1

ATTENTION: Northern Beaches Council
ATTENTION:

Date: Wednesday 18 November 2020

Dear Sir/Madam,

Development Application
s4.14 – Infill – Single Dwelling - Alterations & Additions
2 Spicer Road Oxford Falls NSW 2100, (none)

I refer to your correspondence dated 14/10/2020 seeking advice regarding bush fire protection for the above Development Application in accordance with s4.55 of the *Environmental Planning and Assessment Act 1979*.

The New South Wales Rural Fire Service (NSW RFS) has considered the information submitted and provides the following recommended conditions:

Asset Protection Zones
The intent of measures is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting fire fighting activities. To achieve this, the following conditions shall apply:

1. From the start of building works, and in perpetuity to ensure ongoing protection from the impact of bush fires, the property around the building must be maintained as an inner protection area (IPA), in accordance with the requirements of Appendix 4 of *Planning for Bush Fire Protection 2019*, as follows:

- North to the property boundary
- East for a distance of 21 metres;
- South for a distance of 10 metres; and,
- West for a distance of 10 metres or to the property boundaries whichever comes first.

When establishing and maintaining an IPA the following requirements apply:
- tree canopy cover should be less than 15% at maturity;
- trees at maturity should not touch or overhang the building;
- lower limbs should be removed up to a height of 2m above the ground;
- tree canopies should be separated by 2 to 5m;

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- preference should be given to smooth barked and evergreen trees;
- large discontinuities or gaps in vegetation should be provided to slow down or break the progress of fire towards buildings;
- shrubs should not be located under trees;
- shrubs should not form more than 10% ground cover; and
- clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.
- grass should be kept mown (as a guide grass should be kept to no more than 100mm in height); and
- leaves and vegetation debris should be removed.

Siting and Design

Construction Standards
The intent of measures is that buildings are designed and constructed to withstand the potential impacts of bush fire attack. To achieve this, the following conditions shall apply:

2. New construction must comply with Sections 3 and 9 (BAL FZ) of Australian Standard AS3959-2018 *Construction of buildings in bush fire-prone areas* or NASH Standard (1.7.14 updated) *National Standard Steel Framed Construction in Bushfire Areas – 2014* as appropriate and Section 7.5 of *Planning for Bush Fire Protection 2019*.

Access Requirements

Access - Internal Roads

Access – Property Access
The intent of measures is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting fire fighting activities. To achieve this, the following conditions shall apply:

3. Property access roads must comply with the following requirements of Table 7.4a of *Planning for Bush Fire Protection 2019*:

- property access roads are two-wheel drive, allweather roads;
- the capacity of road surfaces and any bridges/causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes), bridges and causeways are to clearly indicate load rating.
- hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005;
- there is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available;
- at least one alternative property access road is provided for individual dwellings or groups of dwellings that are located more than 200 metres from a public through road;
- minimum 4m carriageway width;
- in forest, woodland and heath situations, rural property roads have passing bays every 200m that are 20m long by 2m wide, making a minimum trafficable width of 6m, at the passing bay;
- a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches;
- property access must provide a suitable turning area in accordance with Appendix 3;
- curves have a minimum inner radius of 6m and are minimal in number to allow for rapid access and egress;
- the minimum distance between inner and outer curves is 6m;
- the crossfall is not more than 10 degrees;
- maximum grades for sealed roads do not exceed 15 degrees and not more than 10 degrees for unsealed roads;

and
- a development comprising more than three dwellings has formalised access by dedication of a road and not by right of way.

Note: Some short constrictions in the access may be accepted where they are not less than 3.5m wide, extend for no more than 30m and where the obstruction cannot be reasonably avoided or removed. The gradients applicable to public roads also apply to community style development property access roads in addition to the above.

Water and Utility Services
The intent of measures is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting fire fighting activities. To achieve this, the following conditions shall apply:

4. The provision of water, electricity and gas must comply the following in accordance with Table 7.4a of *Planning for Bush Fire Protection 2019:*

- A 20,000 litre static water supply tank must be provided on site;
- a connection for firefighting purposes is located within the IPA or non-hazard side and away from the structure;
- 65mm Storz outlet with a ball valve is fitted to the outlet;
- ball valve and pipes are adequate for water flow and are metal;
- supply pipes from tank to ball valve have the same bore size to ensure flow volume;
- underground tanks have an access hole of 200mm to allow tankers to refill direct from the tank;
- a hardened ground surface for truck access is supplied within 4m;
- above-ground tanks are manufactured from concrete or metal;
- raised tanks have their stands constructed from non-combustible material or bush fire-resisting timber (see Appendix F of AS 3959);
- unobstructed access can be provided at all times;
- underground tanks are clearly marked;
- tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters;
- all exposed water pipes external to the building are metal, including any fittings;
- where pumps are provided, they are a minimum 5hp or 3kW petrol or diesel-powered pump, and are shielded against bush fire attack; any hose and reel for firefighting connected to the pump shall be 19mm internal diameter; and
- fire hose reels are constructed in accordance with AS/NZS 1221:1997, and installed in accordance with the relevant clauses of AS 2441:2005;
- A standard Static Water Supply (SWS) marker shall be obtained from the District NSW Rural Fire Service as part of the Static Water Supply Program once the tank water supply has been installed. The marker once issued is to be: (a) fixed in a suitable location so as to be highly visible; (b) positioned adjacent to most appropriate access for the static water supply; (c) fixed facing the roadway on a gatepost, fence or dedicated post, at the right hand side of the entranceway to the Static Water Supply; (d) fixed no less than 600mm from the ground surface to the base of the sign and not higher than 1200mm from the ground surface to the base of the sign; and, (e) fixed with suitable screws or nails. - where practicable, electrical transmission lines are underground;
- where overhead, electrical transmission lines are proposed as follows:
a) lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and
b) 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*.
- 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.

Landscaping Assessment

General Advice – Consent Authority to Note
The NSW RFS recognises that the site is constrained and that the proposed development falls within the Flame Zone. Flame Zone development is high risk development; consequently, in situations such as this, the NSW RFS seeks to improve the overall fire safety of the existing development. This requires greater emphasis on construction standards, landscaping, siting, and vegetation management practices to ensure improved levels of protection are afforded to the development, its occupants and fire fighters. The Service has undertaken a merit based assessment of the proposal and provides the above advice in accordance with *Planning for Bush Fire Protection 2019*.

This letter is in response to a request for a further assessment of the application and supercedes our previous advice dated 25/05/2020

For any queries regarding this correspondence, please contact Luc Roberts on 1300 NSW RFS.

Yours sincerely,

Kalpana Varghese
Team Leader, Dev. Assessment & Planning
Planning and Environment Services