

Kalpana Varghese
Supervisor Development Assessment & Planning
Built & Natural Environment
NSW Rural Fire Service
Locked Bag 17
Granville
NSW 2142

21 July 2023

Dear Kalpana,

Re: Development Application s4.14 – Other – Single Dwelling – Alterations & Additions 41 Milham Crescent Forestville NSW 2087, 4/42/DP239939

I refer to NSW RFS correspondence received on Thursday 6 July 2023 in relation to bush fire protection for the above development application.

This letter should be read in conjunction with the original Bushfire Assessment Report prepared by CR Bushfire Pty Ltd, dated 12 September 2022, updated 27 June 2023 and in response to the NSW RFS letter dated 6 July 2023.

The letter received from NSW RFS comments that there is a *"disparity in the separation distance from the northern elevation to the hazard to the north which will affect the bush fire attack level"*. The disparity appears to be caused by a difference in the way the NSW RFS have taken the measurement. The Bushfire Assessment Report prepared by CR Bushfire Pty Ltd measures the separation to a rocky ledge, the land within which is clearly managed. This is evident on recent Nearmap aerial imagery and in photographs taken on site. An extract from the Warringah Pittwater Bush Fire Risk Management Plan (BFRMP) showing the APZ marked is provided below.



The BFRMP mapping is not entirely clear and it is difficult to establish the numbering associated with the APZ shown. Location ID 30 in the BFRMP is Forestville Urban North and the Asset Location refers to Ferguson Street, which is in close proximity to the subject site. Northern Beaches Council confirmed that the land in question is owned by National Parks and Wildlife Service. The BFRMP refers to treatments including hazard reduction by way of mosaic burning program, which would occur within the vegetation north of the APZ shown.

Should the offsite APZ not be included within the calculations, the separation distance is reduced and the resultant Bushfire Attack Level (BAL) of the proposed works is altered. However, the proposed approach to bushfire protection through construction and other bushfire protection measures shown in my report does result in an overall better bushfire protection outcome for the dwelling and further detail on the Better Bushfire Outcome approach is shown below.

The proposed external building works are minor in nature in comparison with the size of the dwelling and constitute much less than 50% of the size of the building footprint, ember protection of the existing dwelling is therefore not strictly required but is included in the better bushfire protection outcome proposed. The following provides a comparison of the construction where strict compliance with the National Construction Code is applied and where the Better Bushfire Outcome approach under Section 7.8 of *Planning for Bush Fire Protection 2019 (PBP)* is applied. This demonstrates that the building is much better protected overall should building works proceed using the Better Bushfire Outcome approach.

BAL-40 under AS3959:2018 *"is primarily concerned with protection from ember attack, increased likelihood of flame contact and radiant heat greater than 29kW/m² up to and including 40kW/m²"* (AS3959:2018). Constructing the new works on the northern, eastern and western elevations to BAL-40, new works on the southern elevation to BAL-29, and upgrading the existing dwelling to protect against ember attack will provide a vastly improved bushfire protection outcome for the dwelling and occupants, compared to what currently exists.

The measures included in the proposed 'Better Bushfire Outcome' approach ensure the building has protection which is appropriate for the anticipated level of bushfire impact in this location:

- The entire property to be managed as an Inner Protection Area.
- A defendable space of 3 metres to be provided between the building and the boundary on the northern elevation (there should be no combustible material within the defendable space).
- Unobstructed pedestrian access around all elevations of the building.
- New works on the northern, eastern and western elevations of the dwelling to be constructed to BAL-40.
- New works on the southern elevation of the dwelling to be constructed to BAL-29.
- New roofing to be constructed to BAL-40.
- Existing building upgraded to ensure ember protection.
- Gutter guards around the entire dwelling.

| Existing | Better Bushfire Outcome |
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| <ul style="list-style-type: none">▪ Single pane windows and doors with no screens.▪ No roof protection.▪ No gutter guards.▪ No protection to window and door frames.▪ No requirement to screen or close any gaps which allow embers to penetrate.▪ No requirement to manage vegetation on the property. | <ul style="list-style-type: none">▪ Protection to all windows and doors – vastly improved protection against embers and radiant heat entering the building.▪ Full BAL-40 window and door protection on the entire northern, eastern and western elevation improving protection against radiant heat and ember attack on the hazard side of the building. |

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| <ul style="list-style-type: none">▪ Pedestrian access to the property to provide property protection not necessarily available. | <ul style="list-style-type: none">▪ Full BAL-29 window and door protection on the entire southern elevation.▪ New building materials to comply with BAL-40 standards on three elevations, including the elevation facing the hazard.▪ New building materials on southern elevation to comply with BAL-29 standard.▪ Infill of existing windows on northern, eastern and southern elevations with compliant wall materials.▪ Ember protection provided to the existing building – enclosing all openings (excluding roof tile spaces) or covering openings with a non-corrosive metal screen mesh with a maximum aperture of 2mm. Where applicable, this includes any subfloor areas, openable windows, vents, weep holes and eaves. External doors are to be fitted with draft excluders.▪ Gutter guards around the entire building.▪ IPA around the entire building and defendable space on southern, western and eastern elevations.▪ Unobstructed pedestrian access to be provided around all elevations of the dwelling. |
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As a whole, the bushfire protection to the building will be vastly improved by the Better Bushfire Outcome proposed. The proposal is compliant with Section 7.8 and the overall Aim and Objectives of *Planning for Bush Fire Protection 2019*.

Should you require any further information please do not hesitate to contact me.

Yours sincerely



Catherine Ryland

Director

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