



Building Code & Bushfire Hazard Solutions

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JOHNSTAFF
Email: priya.mekala@johnstaff.com.au

31st January 2023
Our Ref. 230390B

Attention: Priya Mekala

Re: **PROPOSED ANCILLARY WORKS AT NARRABEEN NORTH PUBLIC
SCHOOL WITHIN A COASTAL WETLANDS AREA
6 NAMONA ST, NORTH NARRABEEN
BUSHFIRE ASSESSMENT STATEMENT**

Dear Priya,

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

Narrabeen North Public School (NNPS) forms part of the Narrabeen Education Precinct.

The Designated Development (DD) seeks consent for the following works at NNPS within the mapped Coastal Wetlands area:

- Removal of eight (8) trees;
- New accessible pedestrian pathways;
- New substation on Namona Street frontage along with associated conduit connections;
- New fire hydrant booster and associated conduit connections;
- New hard and soft landscaping including planting of 12 new trees.

There will be no increase in student numbers as a result of the proposed works.

The subject site is known as Narrabeen North Public School and has street frontage to Namona Street and Narrabeen Sports High School to the south, abuts Warriewood Valley sportsground to the north and west, Northern Beaches Indoor Sports Centre to the west and residential allotments to the east.

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).

In this instance the subject site is depicted on Northern Beaches Council's Bushfire Prone Land Map (BPLM) as not containing any designated vegetation or vegetation buffer areas. The subject site is therefore not considered 'bushfire prone'.

As the site is not deemed to be Bush Fire Prone, a Bush Fire Safety Authority (BFSA) is not required under Section 4.14 of the Environmental Planning and Assessment Act – 1979 or S100B of the Rural Fires Act - 1997.

However a bushfire assessment has been requested by the NSW Rural Fire Service to accompany the State Significant Development Application (SSPA), although this particular application is for minor ancillary works and does not capture the full scope of the SSPA.

The purpose of this bushfire assessment is to provide the client (Johnstaff and NSW Government - Education School Infrastructure) 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 construction of the ancillary 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 new ancillary works located at the southern portion of the school within a mapped Coastal Wetlands area as part of the staged re-development of the school.

To accord with PBP the development is classified as Special Fire Protection Purpose development and assessed under section 6.4 'Development of existing SFPP facilities' of PBP.

Plans by DesignInc Project No: P22-024; Rev A; Sheets LA-SCM-P-1001; LA-SCM-P-1002; LA-SCM-P-1003 and LA-SCM-P-1004 Dated: 14 November 2022 have been referenced in the preparation of this assessment.

It is noted that section 6.5 of Planning for Bush Fire Protection 2019 addresses minor development in SFPP facilities and lists development types which do not have any influence on potential bush fire impacts and the bush fire protection of the building:

6.5 Minor development in SFPP facilities

Minor development includes the following:

- *Internal works;*
- *Flag poles;*
- *Aerials and antennas;*
- *Satellite dishes;*
- *Paved areas;*
- *Earth works and draining;*
- *Class 10a structures located further than 6m from a habitable building; and*
- *Minor non-structural building alterations (external) such as the following:*
 - *painting, plastering, cement rendering,*
 - *cladding, attaching fittings or decorative work;*
 - *the replacement of an external window, glazing areas or a door (however, the opening and/ or external glazed area of the window or door must not be increased in size);*
 - *the repair to or replacement of a non-structural wall or roof cladding;*
 - *the installation of a security screen or grill to a door or window or a security door;*
 - *the repair to or replacement of a balustrade; and*
 - *re-stumping or repairing structure foundations without increasing the height of the structure.*

The development types listed above do not have any influence on potential bush fire impacts and the bush fire protection of the building. For this reason, the NSW RFS does not consider that a BFSA is necessary for the development types listed above. Wherever applicable, the building elements concerned will need to comply with the requirements of AS 3959 or NASH Standard under the NCC.

In considering the above it is noted that a portion of the proposed works (access ramp) and landscaping are located within 6 metres of the existing buildings within the site.

The proposed works are located to the southern portion of the site adjacent to Namona Street and are located within an area of retained trees and new trees with a managed understorey.

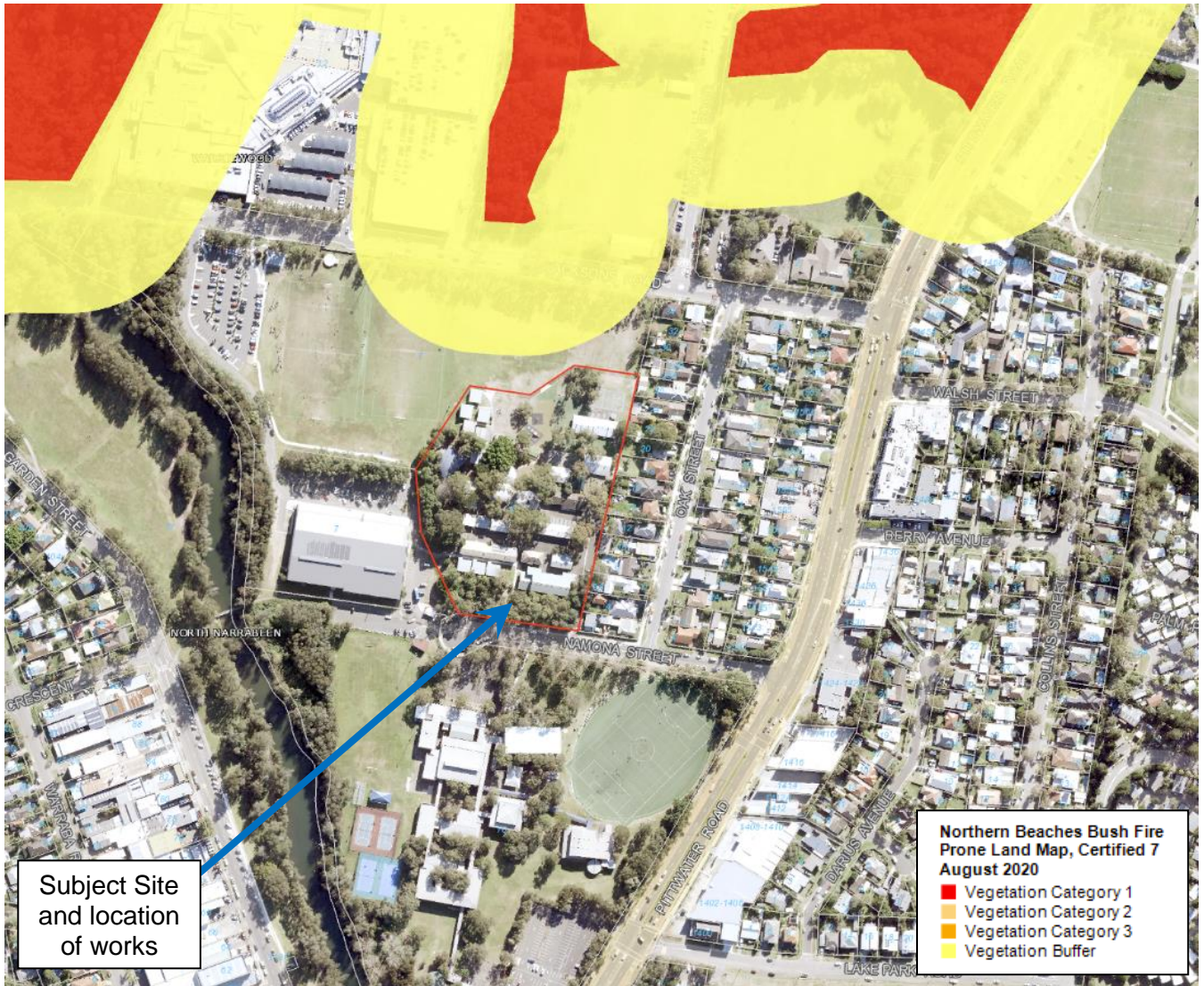


Image 01: Extract from Northern Beaches Council's Bushfire Prone Land Map



Image 02: Aerial view of the subject area – C/- nearmaps

Vegetation Identification:

The vegetation identified as being the hazard is within the vegetated allotment to the north of the subject site.

The closest classified vegetation within the 140 metre assessment area was found to be a narrow band (<50 metres wide variable) of unmanaged vegetation adjacent to Boondah Reserve to the north of the subject site. This vegetation was found to be >270 metres from the proposed ancillary works.

The vegetation posing a hazard was found to comprise of trees 15-20 metres in height having a 30-50% canopy foliage cover and an understorey of low trees, shrubs and is heavily weed infested.

The vegetation to the west of the proposed works associated with Mullet Creek (Not mapped as a Bush Fire Hazard) was found to be a narrow band of riparian vegetation varying from 5 metres to 40 metres in width >90 metres from the proposed works which is broken by managed areas and pathways. This vegetation is considered as not being of a level that would support the lateral spread of fire and is considered not to pose a bushfire risk to the subject site.

We are in agreement with the Bush Fire Prone Land Mapping for the area.

Slope Analysis:

The slope that would most significantly affect bushfire behaviour must be assessed for at least 100 metres from within the hazard.

As there was no bushfire hazard located within 100 metres of the subject works, no slope assessment is required.

Asset Protection Zones:

The predominant vegetation within the school grounds and neighbouring allotments was found to consist of landscaped gardens, mown lawns, playing fields and urban landscaping. The vegetation identified as being the hazard is within the vegetated allotment to the north of the proposed works.

The available Asset Protection Zone was measured to be 270 metres to the north of the ancillary works, consisting of maintained grounds within the existing school, carparks, urban landscaping and playing fields.

Recommendations on the maintenance of the APZ within the subject property will be included within the recommendations of this statement.

Fire Fighting Water Supply:

Hydrants are available throughout Namona Street and surrounding streets for the replenishment of fire service vehicles. Hydrants are also located within the subject property, with a new booster system being installed as part of the proposed works.

The existing water supply is considered satisfactory for the replenishment of attending fire services and will be supplemented as part of this application.

Property Access:

The subject property has street access to Namona Street to the south. Persons seeking to egress from the subject property can do so freely along the existing access drive and public road infrastructure.

Fire services have free access to the property and around the proposed works. Attending fire services can access the hazards via Jacksons Road to the north for hazard reduction or fire suppression activities.

Access to the school will be improved by the proposed works and the existing access to the hazard interface is considered satisfactory.

PBP – Development of existing SFPP facilities:

The proposal relates to an existing Special Fire Protection Purpose development (approved prior to August 2002) and therefore the application can be assessed under the provisions of section 6.4 ‘Development of existing SFPP facilities’ of PBP.

The objectives that apply to existing SFPP development and our comments are listed in the table below:

Objective	Comment
<i>provide an appropriate defensible space;</i>	<p>The proposed works will be located >270 metres from any identified bushfire hazard.</p> <p>The Asset Protection Zone consists of maintained land within the subject property, playing fields, car parks and neighbouring allotments.</p> <p>An appropriate defensible space is provided.</p>
<i>site the building in a location which ensures appropriate separation from the hazard to minimise potential for material ignition;</i>	<p>The proposed works are located >270 metres from any identified bushfire hazard.</p> <p>The existing APZ minimises potential for material ignition.</p>
<i>provide a better bush fire protection outcome for existing buildings;</i>	<p>The proposed works in our opinion will enhance the existing bushfire protections measures within the subject site.</p> <p>This assessment has included a recommendation to maintain the site as an APZ.</p> <p>In consideration of the scope of works proposed it is not considered reasonable to apply measures to the existing buildings.</p>
<i>new buildings should be located as far from the hazard as possible and should not be extended towards or situated closer to the hazard than the existing buildings (unless they can comply with section 6.8);</i>	<p>The proposed works are located no closer to the bushfire hazard than the existing building footprints within the subject site.</p>
<i>ensure there is no increase in bush fire management and maintenance responsibility on adjoining land owners without their written confirmation;</i>	<p>The proposal does not result in any increased bushfire management or maintenance on adjoining land owners.</p>

<p><i>ensure building design and construction enhances the chances of occupant and building survival; and</i></p>	<p>No new habitable buildings are proposed as part of this application.</p>
<p><i>provide for safe emergency evacuation procedures including capacity of existing infrastructure (such as roads).</i></p>	<p>The proposal includes new pedestrian and vehicular access to the school.</p> <p>The existing road network provides an appropriate operational environment for emergency service personnel</p>

Recommendations

Asset Protection Zones

1. That all grounds within the subject property are to 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' and Appendix 4 of *Planning for Bush Fire Protection 2019*. Plans by DesignInc Project No: P22-024; Rev A; Sheets LA-SCM-P-1001; LA-SCM-P-1002; LA-SCM-P-1003 and LA-SCM-P-1004 Dated: 14 November 2022 have been reviewed and have the ability to comply with this requirement.

Construction

2. N/A

Landscaping

3. That any new landscaping is to comply with Section 3.7 'Landscaping' under *Planning for Bush Fire Protection 2019*.

Conclusion:

Given that the property is not deemed bushfire prone under Northern Beaches Council's Bush Fire Prone Land Map. 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.

Narrabeen North Public School (NNPS) forms part of the Narrabeen Education Precinct.

The Designated Development (DD) seeks consent for the following works at NNPS.

- Removal of eight (8) trees;
- New accessible pedestrian pathways;
- New substation on Namona Street frontage along with associated conduit connections;
- New fire hydrant booster and associated conduit connections;
- New hard and soft landscaping including planting of 12 new trees.

No bushfire hazard was identified within 140 metres of the proposed works.

The proposed access and supplemented water supply provisions are considered adequate for this development.

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

We are therefore in support of the development application.

Should you have any questions please do not hesitate to contact the undersigned.

Prepared by
Building Code & Bushfire Hazard Solutions P/L



Ian Tyerman

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Planning for Bushfire Prone Areas - UTS Sydney
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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.