

# Bushfire Assessment

Proposed dwelling

Lot 5 Section 9 DP 242127  
29 Thomas Road, Seal Rocks

June 2025  
Final

**Prepared for**  
**Petrana Lorenz c/- Bourne Blue Architecture**

Project No:25057

**ABAC Group Pty Ltd t/a**

ABAC Australian Bushfire Assessment Consultants

ABN: 75 630 374 060

Email: office@accuplan.com.au

Telephone: 02 6555 5522

PO Box 34 Forster NSW 2428



**Document Details**

Document Name: 25057\_BTA\_29ThomasRoadSeal Rocks\_Rev0

File No. 25057

Date: June 2025

Revision: Final

Prepared for: Petrana Lorenz c/- Bourne Blue Architecture

**Authors**

Simon Carroll

A handwritten signature in black ink that reads "Simon Carroll".

*Registered Planner (RPIA)*

*Graduate Diploma in Urban & Regional Planning*

*Graduate Diploma in Design for Bushfire Prone Areas*

*Master of Environmental & Local Government Law*

*Graduate Diploma in Building Fire Safety & Risk Engineering*

*Bushfire Planning and Design Accredited Practitioner: Level 3 – NSW (Accreditation Number BPAD9326)*

**Report History**

Date	Revision	Comment
June 2025	Final (Rev 0)	Issue to client

© This document is copyright.

It is a breach of copyright for this document to be used to support a development application for any persons/entities other than those for whom this document was prepared. Other than for the purpose for which this document has been prepared and subject to conditions prescribed under the Copyright Act no part of this document may in any form nor by any means be reproduced or stored in a retrieval system or transmitted without the prior written permission of ABAC Group Pty Ltd t/a ABAC Australian Bushfire Assessment Consultants.

## TABLE of CONTENTS

<b>1. INTRODUCTION</b>	<b>3</b>
<b>2. PROPOSED DEVELOPMENT</b>	<b>3</b>
<b>3. SITE DESCRIPTION</b>	<b>5</b>
3.1 Vegetation Classification	11
3.2 Slope Assessment	11
<b>4. BUSHFIRE ASSESSMENT</b>	<b>12</b>
4.1 Bushfire Attack Levels	12
4.2 Bushfire Protection Measures	14
<b>5. CONCLUSION</b>	<b>17</b>
<b>6. RECOMMENDATIONS</b>	<b>18</b>
<b>7. REFERENCES</b>	<b>20</b>
<b>ANNEXURE</b>	<b>21</b>

Table 4.1: Performance Criteria (Re: Table 7.4a-c) of PBP .....	15
---	----

Figure 2.1: Extract of site plan .....	4
--	---

Figure 3.1: Site Locality and Bushfire Prone Land Map .....	6
---	---

Figure 3.2: Extract of the FMS showing SFAZ and fire trails south of the site .....	10
---	----

## **1. INTRODUCTION**

This Bushfire Assessment has been prepared in relation to a proposed dwelling on land at Lot 5 Section 9 DP 242127, 29 Thomas Road, Seal Rocks.

The land within the site and surrounds is mapped as bushfire prone land for the purposes of Section 10.3 of the *Environmental Planning & Assessment Act 1979* (EP&A Act).

As the land within the site is mapped as bushfire prone land, the purpose of this Bushfire Assessment is to assist in the planning process, to identify the proximity of the proposed development to any potential bushfire threat and to determine what, if any, level of construction is required in accordance with the New South Wales Rural Fire Service guideline entitled *Planning for Bush Fire Protection 2019* (PBP).

## **2. PROPOSED DEVELOPMENT**

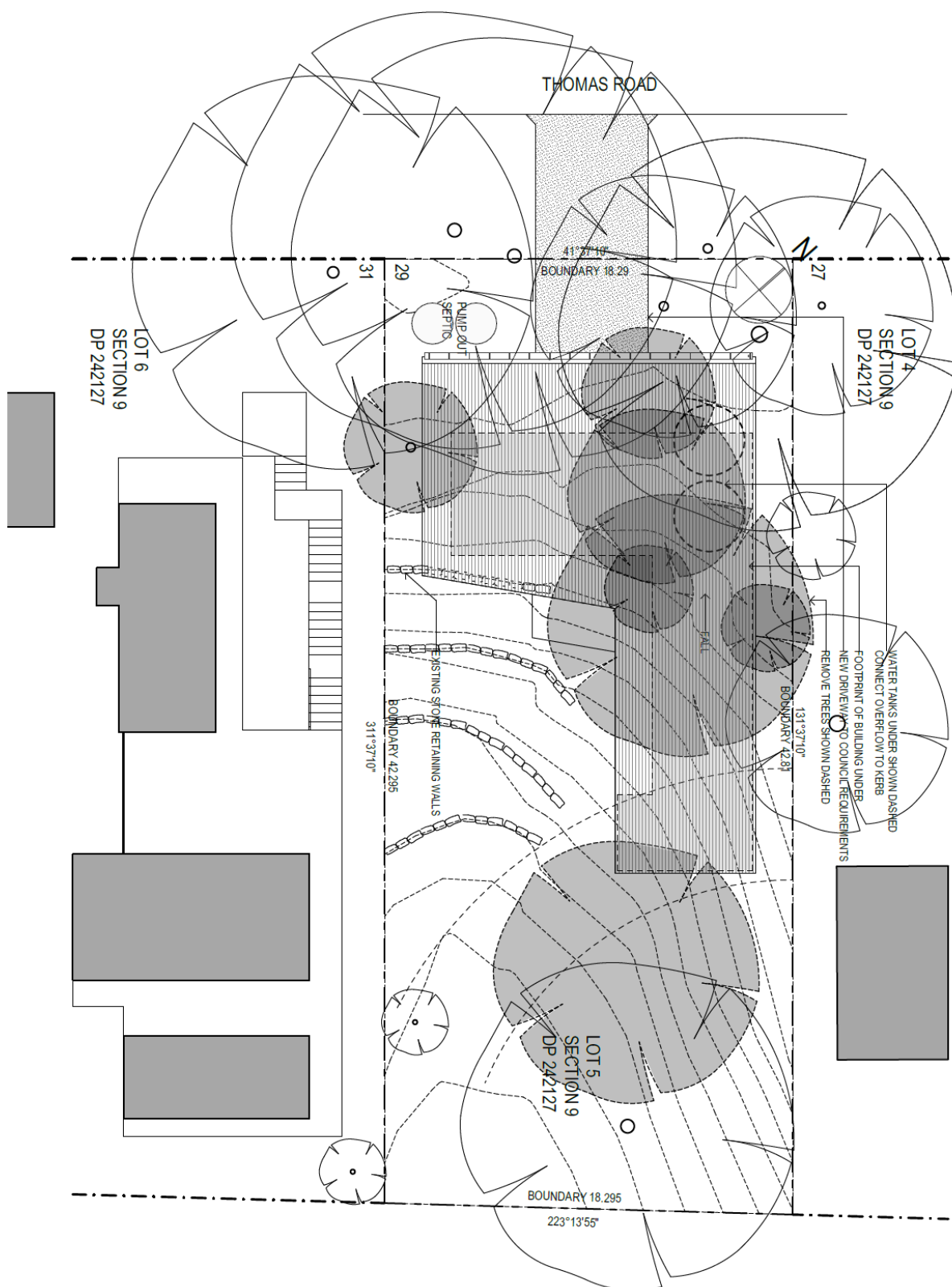
The proposed development involves the construction of a dwelling on the land.

The proposed dwelling is shown on plans prepared by Bourne Blue Architecture (project no. 647), *Lorenz, 29 Thomas Road, Seal Rocks, NSW* (Issue A, dated 08/04/25).

An extract of the site plan is at Figure 2.1 on the following page.

The proposed dwelling will be setback approximately 15.187 metres from the south-eastern/rear boundary of the site with Lot 1 DP 1194661, which contains tracts of forest vegetation (although the adjoining part of the land in Lot 1 is cleared for about 10 metres from the site boundary but does not appear subject to a formal maintenance regime).

Vehicular access to the site will be via a proposed concrete driveway off Thomas Road.



**Figure 2.1: Extract of site plan**  
(Source: Bourne Blue Architecture) Not to scale.

### 3. SITE DESCRIPTION

The site comprises land described as Lot 5 Section 9 DP 242127, 29 Thomas Road, Seal Rocks. The site is on the south-eastern side of Thomas Road, about 315 metres south-west of the intersection with Kinka Road.

The site has an area of about 778.5m<sup>2</sup> and is currently vacant.

Residential allotments containing existing residential buildings are to the north-east and south-west of the site.

Land adjoining the south-eastern (rear) boundary of the site comprises a parcel of vacant land (Lot 1 DP1194661) that separates the site from the gazetted part of the Myall Lakes National Park (MLNP) located approximately 165 metres further south-east. It is understood that land within Lot 1 is owned by the Local Aboriginal Land Council (LALC) but managed in conjunction with the surrounding parts of MLNP.

Lot 1 contains areas of forest vegetation. Vegetation extends up to the eastern corner of the site and extends north-east along the rear boundary of the adjoining residential allotment at 27 Thomas Road. Apart from this area, the adjoining part of Lot 1 exists as a strip of cleared land for about 10 metres from the boundary with the subject site. While it is unclear whether there is any formal maintenance regime in relation to the strip of cleared land in the adjoining part of Lot 1, the strip of cleared land extends south-west for at least 70 metres from the southern corner of the subject site, through the area along the rear boundary of other residential allotments along the same side of Thomas Road (31-45 Thomas Road).

The nearest areas of vegetation that are likely to present a potential bushfire hazard in relation to development of the site are on land within adjoining parts of Lot 1 DP 1194661 outside the south-eastern/rear site boundary, and on land on the north-western (opposite) side of Thomas Road from the site.

Land immediately to the north-west of the site (opposite side of Thomas Road), and most of the land within Lot 1 DP 1194661 to the south-east, is mapped as containing Category 1 potential bushfire hazard vegetation. The land within the site, and the strip of cleared land in the parts of Lot 1 DP 1194661 which adjoin the south-eastern/rear site boundary, are mapped as being in the vegetation buffer on the bushfire prone land map extract overlaid in Figure 3.1.

The site is not serviced by reticulated water. Overhead electricity exists in Thomas Road.

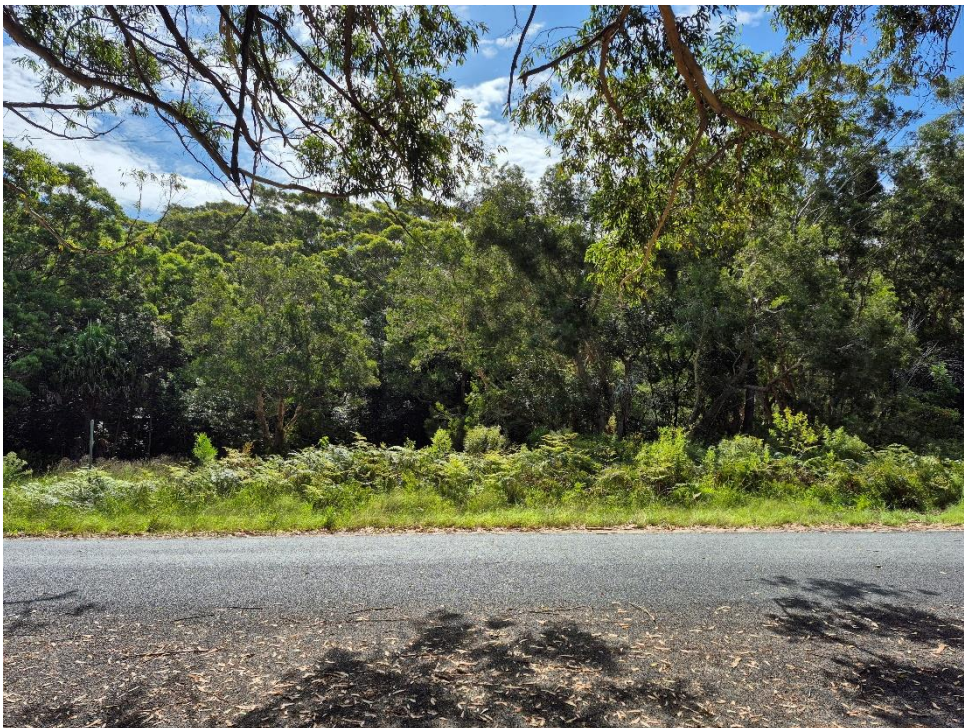


**Figure 3.1: Site Locality and Bushfire Prone Land Map**

The following photos show the condition of land on and around the site.



**Photo 3.1: View of the site looking south-east from Thomas Road.**



**Photo 3.2: Vegetation on land on the western/north-western (opposite) side of Thomas Road.**



**Photo 3.3:** The condition of land in the adjoining part of Lot 1 DP 1194661, looking from the south-eastern/rear boundary of the site.



**Photo 3.4:** The condition of land in the adjoining part of Lot 1 DP 1194661, looking south-west from the southern corner of the site along the rear boundary of the land at 31 Thomas Road.



**Photo 3.5: Looking north-east along the south-eastern/rear boundary of the site, showing the area where vegetation extends to the area adjacent to the eastern corner of the subject site and extends along the south-eastern (rear) boundary of the adjacent residential allotment at 27 Thomas Road.**

As mentioned previously, it is understood that land within Lot 1 DP 1194661 is owned by the LALC but managed in conjunction with the surrounding parts of MLNP.

Land within the part of MLNP to the south/south-east of the site (south/south-east of the land within Lot 1 DP 1194661, which directly adjoins the site) is subject to management by NSW National Parks and Wildlife Service (NPWS) via the *Myall Lakes National Parks and Island Nature Reserves – Fire Management Strategy* (FMS).

The FMS identifies land within MLNP to the south/south-east of the site (and the adjoining Lot 1) as a *Strategic Fire Advantage Zone* (SFAZ). As described in the FMS, the objective of SFAZs is *to reduce fire intensity across larger areas by maintaining overall fuel hazard at high or below* (subject to any guidelines for biodiversity).

With reference to Figure 3.2, part of Township Fire Trail West is shown dotted pink as forming a loop with Thomas Road for the extent of the LALC owned land in Lot 1 DP 1194661. The site is about where the circled 'WV' is shown in Figure 3.2, with Township Fire Trail West traversing the part of Lot 1 DP 1194661

to the south-east of the site. The FMS also identifies the Township Fire Trail as a 'Category 9, Important' fire trail.

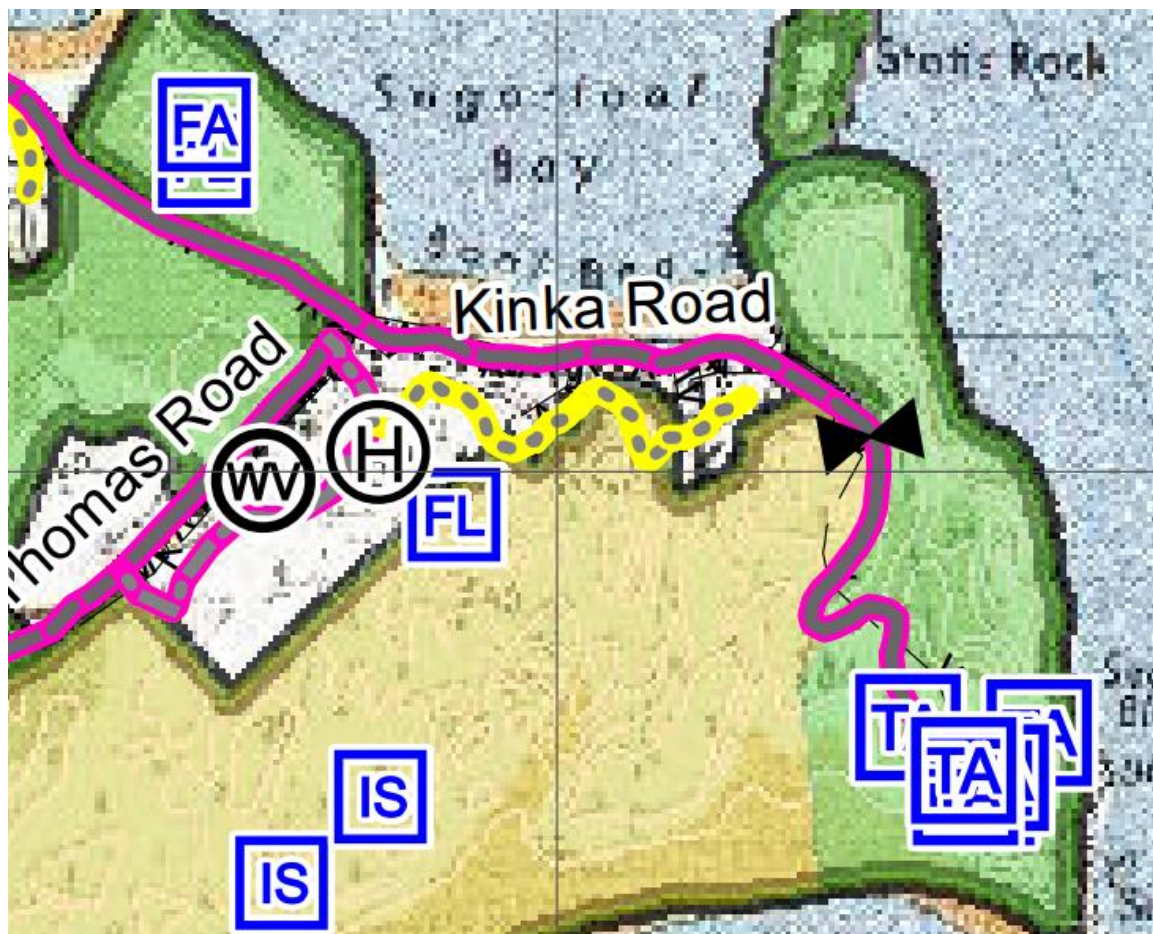


Figure 3.2: Extract of the FMS showing SFAZ and fire trails south of the site

Areas of vegetation within Lot 1 DP 1194661 exist between Township Fire Trail West and the south-eastern (rear) boundary of the site with Lot 1. That said, the existing clearing (approximately 10 metres wide) within the adjacent part of Lot 1 DP 1194661 appears suitable to provide some vehicular access from the south-west via the Township Fire Trail to the south-eastern (rear) boundary of the site (and the south-eastern/rear boundary of the other residential allotments at 31-45 Thomas Road to the south-west of the site).

### 3.1 Vegetation Classification

The nearest areas of unmanaged/potential bushfire hazard vegetation are on:

- adjacent land to the south-east of the site (within parts of Lot 1 DP1194661); and
- land on the opposite (north-western) side of Thomas Road.

The vegetation within the parts of Lot 1 to the south-east of the site, and within land on the north-western side of Thomas Road, is characteristic of native dune forest vegetation with a low canopy of Blackbutt (*Eucalyptus pilularis*) on higher elevations.

For the purposes of determining Asset Protection Zones (APZs) and Bushfire Attack Levels (BALs), the predominant vegetation formation has been classified in accordance with Appendix 1 of PBP as *forest* (dry sclerophyll forest with shrubby formation).

### 3.2 Slope Assessment

The assessment of slope has been undertaken in accordance with the methodology in Section A1.5 of PBP. The assessment of slope was undertaken via analysis of 1 metre resolution Digital Elevation Model (DEM) and through field analysis using a hand-held inclinometer and range finder.

The slope of land under potential bushfire hazard vegetation most likely to influence bushfire behaviour in relation to the proposal has been assessed as:

- Upslope to the south-east, towards a low ridge to the south-east; and
- Relatively flat to the north-west.

## **4. BUSHFIRE ASSESSMENT**

### **4.1 Bushfire Attack Levels**

The proposed dwelling is a Class 1 building for the purposes of Volume 2 of the National Construction Code (Building Code of Australia, the NCC/BCA). The site is in the North Coast fire (weather) area and is subject to a Fire Danger Index (FDI) of FDI 80.

Appendix 1 of PBP provides the site assessment methodology for determining the applicable Bushfire Attack Level (BAL). Once the BAL is determined, construction requirements for the corresponding BAL apply subject to AS3959-2018: *Construction of buildings in bushfire-prone areas* subject to Section 7.5 of PBP.

As some vegetation in the adjoining part of Lot 1 DP 1194661 extends up to the eastern corner of the site, the south-eastern (rear) site boundary with Lot 1 has been considered as the nearest potential bushfire hazard vegetation in relation to the proposed dwelling.

The separation distance between the south-eastern (rear) elevation of the proposed dwelling and the south-eastern (rear) site boundary with Lot 1 is 15.187 metres. According to Table A1.12.6 of *Planning for Bush Fire Protection 2019* (PBP), the applicable BAL will be BAL-40.

The proposal involves a performance-based solution in relation to:

- (i) the south-western elevation of Beds 2, 3 and the bath/laundry area;
- (ii) areas of external deck along the south-western elevation of Beds 2, 3 and the bath/laundry area;
- (iii) the south-east facing elevation of the dining/living and WFH areas; and
- (iv) the south-east facing deck off the south-east facing elevation above.

The performance-based solution seeks to assess and justify the construction requirements for the elements of the building identified in (i)-(iv) being reduced to BAL-29. In this regard, the proposal has been modelled to determine what the radiant heat flux (RHF) for the various building elements is likely to be at the line of the south-eastern (rear) site boundary.

In relation to (i) and (ii) above, and noting that the south-western side elevation of Bed 1 will be subject to BAL-40 (as it is perpendicular to the south-eastern/rear elevation of the dwelling), the design basis for the performance-based solution is that a blade wall (also constructed to BAL-40 requirements) is proposed

to extend forward (towards the north-west) from the western corner of Bed 1 to perform a shielding function for the south-western elevation of Beds 2, 3 and the bath/laundry area (and the parts of the deck adjacent to the south-western elevation of Beds 2, 3 and the bath/laundry area).

In relation to a performance-based approach to the proposed construction of the building elements at (i)-(iv) above to BAL-29:

- The land within the site is at a lower level than the land under any vegetation within the adjoining part of Lot 1 DP 1194661.
- The south-western side elevation of Bed 1 and the blade wall which will extend forward (towards the north-west) from the western corner of Bed 1 will be constructed to BAL-40 requirements.
- The distance from the north-western end of the (BAL-40) blade wall to any part of the south-eastern (rear) site boundary with Lot 1 DP 1194661 is 19.445 metres. Due to the angle of line of sight (to the south-eastern/rear site boundary) created by the section of blade wall, the blade wall will physically shield most of the south-western elevation of Bed 1 and the section of deck behind the blade wall.
- In relation to (iii) and (iv) above, the distance between any part of:
  - the south-east facing elevation of the dining/living and WFH areas is  $\geq 29.5$  metres from any part of the south-eastern (rear) site boundary with the land in Lot 1 DP 1194661; and
  - the south-east facing deck off the south-east facing elevation above is  $\geq 25.184$  metres from any part of the south-eastern (rear) site boundary with the land in Lot 1 DP 1194661.
- The proposal has been modelled to determine what the radiant heat flux (RHF) in relation to the vegetation to the west of the site is likely to be at a line 19.445 metres from the south-eastern (rear) site boundary with Lot 1 DP 1194661 (noting that this is the distance from the north-western end of the blade wall to any part of the south-eastern (rear) site boundary with Lot 1 DP 1194661).
- The modelled radiant heat is  $27.74 \text{ kWm}^2$  (within BAL-29 based on the modelled RHF).

The output of the modelling is at the Annexure to this assessment. On this basis, the performance-based approach outlined above supports the proposition that the construction requirements for the elements of the building identified in (i)-(iv) can be reduced to BAL-29.

According to Section A1.8 (Shielding) of PBP, *where an elevation is shielded from direct radiant heat arising from bush fire attack, then the construction requirements for that elevation can be reduced to the next lower BAL.*

For the purposes of Section A1.8 of PBP, the front (north-western) elevation (and deck to that elevation) of the proposed dwelling has no line of sight to any vegetation on land to the south-east (rear) of the site.

The separation distance between the front (north-western) elevation (and deck to that elevation) of the proposed dwelling and the nearest vegetation on the north-western (opposite) side of Thomas Road is ~24 metres. Based on the provisions in Section A1.8 (and Table A1.12.6 in relation to separation distance) of PBP, the construction for the front (north-western) elevation of the proposed dwelling (and the deck to that elevation) can also be to the requirements for BAL-29.

## **4.2 Bushfire Protection Measures**

The proposal is for the erection of a new dwelling on an existing lot and is residential infill development. Residential infill development refers to the development of land by the erection of, or alteration or addition to, a dwelling which does not require the spatial extension of services including public roads, electricity, water or sewerage and is within an existing lot (PBP, 2019).

Infill development is assessed in accordance with the acceptable solutions and performance criteria in Chapter 7 (Residential Infill Development) of PBP. The Bushfire Protection Measures for residential infill development include provisions relating to APZs, access, water supply, electricity and gas services, construction standards, landscaping and emergency evacuation.

Table 4.1 considers the proposal in relation to the acceptable solutions contained in Chapter 7 (Residential Infill Development) of PBP.

Table 4.1: Performance Criteria (Re: Table 7.4a-c) of PBP

PERFORMANCE CRITERIA	RELATIONSHIP OF PROPOSAL TO ACCEPTABLE SOLUTIONS
<b>ASSET PROTECTION ZONES</b>	
<ul style="list-style-type: none"> <li>➤ <i>APZs are provided commensurate with the construction of the building; and</i></li> <li>➤ <i>A defensible space is provided</i></li> </ul>	<p>The proposed dwelling constitutes infill development on an existing residential allotment. All land within the site is to be maintained as an APZ, consistent with the standard for an Inner Protection Area (IPA). Any available defensible space will be limited to the land within the site boundaries.</p> <p>The distance between the proposed building and the land within Lot 1 DP 1194661 (to the south-east) is &gt;15 metres, with the highest assessed BAL for the south-eastern end of the building being BAL-40. The performance-based solution has identified that the construction requirements for the elements of the building identified in (i)-(iv) in Section 4.1 of this assessment can be reduced to BAL-29, as can the north-west facing elevation (and deck to that elevation) which both face towards Thomas Road.</p>
<ul style="list-style-type: none"> <li>➤ <i>APZs are managed and maintained to prevent the spread of a fire to the building.</i></li> </ul>	<p>The proposed dwelling will involve excavation and clearing of vegetation within the site. Minimal vegetation will remain within the site boundaries following completion of the proposed new work and it is recommended that all land within the site be established and maintained to the standard of an IPA (in accordance with the requirements of Appendix 4 of PBP) in perpetuity.</p>
<ul style="list-style-type: none"> <li>➤ <i>The APZ is provided in perpetuity. APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.</i></li> </ul>	<p>The land to be maintained (and to continue to be maintained) as an APZ is within the boundaries of the development site. APZ maintenance appears practical.</p>
<b>ACCESS</b>	
<ul style="list-style-type: none"> <li>➤ <i>Firefighting vehicles are provided with safe, all-weather access to structures.</i></li> </ul>	<p>Vehicular access to the site is proposed via a driveway to be constructed from Thomas Road.</p> <p>Part of the Township Fire Trail West is to the south-east of the rear boundary of the site, although no constructed vehicular access is available directly to the site via that fire trail. An existing clearing (approximately 10 metres wide) within the adjacent part of Lot 1 DP 1194661 appears suitable to provide informal vehicular access from the south-western end of the Township Fire Trail (through the area along the south-eastern/rear boundary of the developed residential allotments at 45-31 Thomas Road) to the south-eastern (rear) boundary of the site.</p>
<ul style="list-style-type: none"> <li>➤ <i>The capacity of access roads is adequate for firefighting vehicles.</i></li> </ul>	<p>Public roads serving the site appear to have apparent capacity to carry fully loaded firefighting vehicles.</p>
<ul style="list-style-type: none"> <li>➤ <i>There is appropriate access to water supply.</i></li> </ul>	<p>Reticulated water is not available to the site.</p> <p>Rainwater tank(s) are proposed at the dwelling site.</p>

PERFORMANCE CRITERIA	RELATIONSHIP OF PROPOSAL TO ACCEPTABLE SOLUTIONS
➤ <i>Firefighting vehicles can access the dwelling and exit the property safely.</i>	As per the first row under 'Access' above in this table.
<b>WATER SUPPLIES</b>	
➤ <i>Adequate water supplies are provided for firefighting purposes.</i>	No reticulated water supply is available. Rainwater tanks are proposed at the dwelling site and will be available for firefighting purposes. Any tank(s) to be of metal construction and fitted with a 65mm Storz fitting.
➤ <i>Water supplies are located at regular intervals; and</i> ➤ <i>The water supply is accessible and reliable for firefighting operations.</i>	N/A. The site is not serviced by reticulated water.
➤ <i>Flows and pressure are appropriate.</i>	N/A. The site is not serviced by reticulated water.
➤ <i>The integrity of the water supply is maintained.</i>	Recommendations are made in relation to above-ground water services and pipes to be metal.
➤ <i>A static water supply is provided for firefighting purposes in areas where reticulated water is not available.</i>	As per Table 5.3d of PBP, not less than 5,000 litre static water supply is to be provided on site. Any tank(s) to be of metal construction and fitted with a 65mm Storz fitting. All tank penetrations and above-ground pipes should be metal, including any fittings.
<b>ELECTRICITY SERVICES</b>	
➤ <i>Location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.</i>	Existing overhead electricity supplies are located in Thomas Road.
<b>GAS SERVICES</b>	
➤ <i>Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings</i>	Any proposed bottled gas installation(s) are to be consistent with the relevant acceptable solutions of PBP.
<b>CONSTRUCTION STANDARDS</b>	
➤ <i>The proposed building can withstand bush fire attack in the form of embers, radiant heat and flame contact.</i>	The distance between the proposed building and the land within Lot 1 DP 1194661 (to the south-east) is >15 metres, with the highest assessed BAL for the south-eastern end of the building being BAL-40. The performance-based solution has identified that the construction requirements for the elements of the building identified in (i)-(iv) in Section 4.1 of this assessment can be reduced to BAL-29, as can the north-west facing elevation (and deck to that elevation) which both face towards Thomas Road.
➤ <i>Proposed fences and gates are designed to minimise the spread of bush fire</i>	Any fences and/or gates to be of non-combustible material.

PERFORMANCE CRITERIA	RELATIONSHIP OF PROPOSAL TO ACCEPTABLE SOLUTIONS
➤ <i>Proposed Class 10a buildings are designed to minimise the spread of bush fire.</i>	No Class 10a buildings are proposed.
LANDSCAPING	
➤ <i>Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.</i>	All land within the site is to be maintained as an APZ, consistent with the standard for an Inner Protection Area (IPA). Any available defendable space will be limited to the land within the site boundaries.

## 5. CONCLUSION

The site comprises land described as Lot 5 Section 9 DP 242127, 29 Thomas Road, Seal Rocks.

The proposed development involves the erection of a new dwelling on the land.

The proposed dwelling constitutes infill development on an existing residential allotment. All land within the site is to be maintained as an APZ, consistent with the standard for an Inner Protection Area (IPA). Any available defendable space will be limited to the land within the site boundaries.

The distance between the proposed building and the land within Lot 1 DP 1194661 (to the south-east) is >15 metres, with the highest assessed BAL for the south-eastern end of the building being BAL-40.

The performance-based solution set out in this assessment has identified that the construction requirements for the elements of the building identified in (i)-(iv) in Section 4.1 of this assessment can be reduced to BAL-29, as can the north-west facing elevation (and deck to that elevation) which both face towards Thomas Road.

Recommendations are also made in relation to Asset Protection Zones, services and upgrading of access to existing water supplies.

## 6. RECOMMENDATIONS

The following recommendations are made in relation to the bushfire protection measures for the proposed dwelling on land at Lot 5 Section 9 DP 242127, 29 Thomas Road, Seal Rocks:

- A. All land within the site boundaries is to be managed as an Asset Protection Zone (APZ). APZs are to be maintained in accordance with the requirements of an Inner Protection Area (IPA) as described in Appendix 4, Section A4.1.1 of *Planning for Bush Fire Protection 2019* (PBP) and any grassy vegetation within the IPA is to be maintained to a height <100mm. A clear area of low-cut lawn or pavement is to be maintained adjacent to the dwelling and proposed additions.
- B. Subject to (A), construction of new building work is to comply with the construction requirements as per AS 3959-2018 (*Construction of buildings in bushfire-prone areas*) and any additional construction requirements/variations as outlined in Section 7.5 of *Planning for Bush Fire Protection 2019* or corresponding provisions of the NASH Standard for:
  - (i) BAL-40 to:
    - a) The roof of the dwelling.
    - b) The south-eastern (rear) elevation of the dwelling facing the south-eastern (rear) boundary of the site with the adjoining land in Lot 1 DP 1194661.
    - c) The south-western (side) elevation of Bed 1.
    - d) The section of blade wall which extends north-west from the western corner of Bed 1.
    - e) The north-eastern (side) elevation (and any openings therein).
  - (ii) BAL-29 to:
    - a) The north-western elevation (facing Thomas Road) and the deck to that elevation.
    - b) The south-western elevation of Beds 2, 3 and the bath/laundry area.
    - c) Areas of external deck along the south-western elevation of Beds 2, 3 and the bath/laundry area.
    - d) The south-east facing elevation of the dining/living and WFH areas.

- C.** Non-combustible leafless guttering and/or metal leaf guard is to be installed in the gutters and/or roof valleys of the proposed dwelling and maintained to reduce the potential build-up of flammable material.
- D.** A static water supply of not less than 5,000 litres is to be provided/available on site for firefighting purposes. Any new tank(s) are to be of concrete or metal construction.
- Any tank(s) is to be provided with a 65mm Storz fitting.
- Access to the static water supply should be clearly identified with an SWS marker supplied by or approved by the RFS.
- E.** All above-ground water service pipes external to the dwelling are to be metal, including and up to any taps.
- F.** Any new fences and/or gates should be made of non-combustible material.
- G.** Where bottled gas is proposed:
- i. It is to be installed and maintained in accordance with AS 1596 and the requirements of relevant authorities.
  - ii. All fixed gas cylinders are to be kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side of the installation.
  - iii. If gas cylinders need to be kept close to the buildings, the release valves are to be directed away from the buildings and at least 2 metres away from any combustible material, so that they do not act as a catalyst to combustion.
  - iv. Connections to and from gas cylinders are to be metal.
- H.** Occupants are advised to prepare a Bush Fire Survival Plan which is revised annually prior to the bushfire season. *A Guide to Making a Bush Fire Survival Plan* has been developed by the NSW RFS to assist residents in the preparation of their plan and can be found at the NSW RFS website - [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au). On days of catastrophic fire weather, the NSW RFS recommends leaving early as the only safe option.

## NOTES & DISCLAIMER:

- (i) *This assessment relates only to the development described in Section 2 of this assessment.*
- (ii) *This assessment has been based on bushfire protection guidelines as outlined in the document entitled Planning for Bush Fire Protection 2019 (PBP).*
- (iii) *Notwithstanding the precautions recommended, it should always be remembered that bushfires burn under a range of conditions and an element of risk, no matter how small, always remains.*
- (iv) *This assessment does not imply or infer any approval for the removal and/or thinning of vegetation for Asset Protection or other purposes. It is the responsibility of the client/landowner to obtain all necessary approvals in this regard.*

## 7. REFERENCES

NSW National Parks and Wildlife Service (2014), *Myall Lakes National Parks and Island Nature Reserves – Fire Management Strategy*

NSW Rural Fire Service (2019)  
*Planning for Bush Fire Protection 2019*

Standards Australia (2018)  
*AS 3959-2018 Construction of buildings in bushfire-prone areas*

## ANNEXURE

**NBC Bushfire Attack Assessment Report V4.1**

AS3959 (2018) Appendix B - Detailed Method 2

**Print Date:** 23/06/2025**Assessment Date:** 4/06/2025**Site Street Address:** 29 Thomas Road, Seal Rocks**Assessor:** Simon Carroll; ABAC Group Pty Ltd**Local Government Area:** Mid-Coast**Alpine Area:** No**Equations Used**

Transmissivity: Fuss and Hammins, 2002

Flame Length: RFS PBP, 2001/Vesta/Catchpole

Rate of Fire Spread: Noble et al., 1980

Radiant Heat: Drysdale, 1985; Sullivan et al., 2003; Tan et al., 2005

Peak Elevation of Receiver: Tan et al., 2005

Peak Flame Angle: Tan et al., 2005

**Run Description:** 1**Vegetation Information****Vegetation Type:** Forest (including Coastal Swamp Forest)**Vegetation Group:** Forest and Woodland**Vegetation Slope:** 1 Degrees**Vegetation Slope Type:** Upslope**Surface Fuel Load(t/ha):** 22**Overall Fuel Load(t/ha):** 36.1**Vegetation Height(m):** 2

Only Applicable to Shrub/Scrub and Vesta

**Site Information****Site Slope:** 1 Degrees**Site Slope Type:** Downslope**Elevation of Receiver(m):** Default**APZ/Separation(m):** 19.445**Fire Inputs****Veg./Flame Width(m):** 100**Flame Temp(K):** 1090**Calculation Parameters****Flame Emissivity:** 95**Relative Humidity(%):** 25**Heat of Combustion(kJ/kg)** 18600**Ambient Temp(K):** 308**Moisture Factor:** 5**FDI:** 80**Program Outputs****Level of Construction:** BAL 29**Peak Elevation of Receiver(m):** 7.37**Radiant Heat(kW/m2):** 27.74**Flame Angle (degrees):** 64**Flame Length(m):** 17.14**Maximum View Factor:** 0.432**Rate Of Spread (km/h):** 1.97**Inner Protection Area(m):** 10**Transmissivity:** 0.844**Outer Protection Area(m):** 9**Fire Intensity(kW/m):** 36766