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Bushfire Hazard Report

For proposed new habitable building at 75 Blyth Parade, Great Bay, v2.1

Clients: *Judith and Matthew Bailey-Lawrence*

Prepared by: *Jim Mulcahy (BFP 159)*

Date: *September 2024*

Executive Summary

This bushfire hazard report for 75 Blyth Parade, Great Bay has been developed in support of a building application for a proposed new habitable building. The land is within the boundary of the bushfire-prone area overlay of the Kingborough Interim Planning Scheme 2015 (the Scheme).

The report comprises the bushfire attack level (BAL) assessment, as defined by the Director of Building Control's Determination - Requirements for building in bushfire-prone areas v2.3 (2024) - transitional (Director's Determination) and includes provisions for property access and water supply for fighting fires.

The attached Bushfire Hazard Management Plan (BHMP), as required by Building Regulations 2016, indicates the management and protection measures required to be implemented.

The assessment has determined the proposed new habitable building can comply with **BAL-29** standards provided the following conditions are met.

- The new habitable building must comply with construction standards for **BAL-29** as defined in AS3959-2018 (Sections 3 and 7).
- Property access, which is greater than 30 m long and less than 200 m long, must meet design and construction specifications as per Section 3.2 of this report and Table 4.2 Element B of the Director's Determination.
- A compliant static firefighting water supply and associated hardstand must be provided which meets the specifications in Section 3.3 of this report and Table 4.3 Element B of the Director's Determination.
- A Hazard Management Area (HMA) must be established and maintained which provides minimum separation distances between the habitable building and surrounding bushfire prone vegetation as set out in Table 1 of this report and the BHMP at Attachment 1.

Subject to implementing the above conditions and the BHMP, the proposed new habitable building will satisfy the requirements of the Director's Determination.

Disclaimers

Bushfire hazard management

All reasonable steps have been taken to ensure that the information and advice contained in this report is an accurate reflection of the fire hazard affecting the proposed development at the time of the assessment and the hazard management measures necessary to meet the standards prescribed in the Director of Building Control's Determination - Requirements for building in bushfire-prone areas v2.3 (2024) - transitional (Director's Determination) and Australian Standard AS 3959-2018 (AS3959).

The prescribed hazard management measures are designed to reduce bushfire risk to the habitable building on the site. The effectiveness of these measures relies on their implementation in full and their maintenance for the life of the development. No liability can be accepted for actions by landowner or third parties that undermine or compromise the integrity of prescriptions and recommendations contained in this report.

Due to the unpredictable nature of bushfires, particularly under extreme weather conditions, landowners should be aware that implementation and maintenance of the hazard management measures outlined in this report cannot guarantee that a building will survive a bushfire event.

Planning Scheme provisions

This report and the attached Bushfire Hazard Management Plan (BHMP) address the requirements of the Director's Determination. It is the owner' responsibility to address any other planning requirements relating to the use and development of the subject land. Nothing in this report or the attached BHMP should be taken to suggest or imply that the proposed development will satisfy any other planning requirements.

Jim Mulcahy
ACCREDITED BUSHFIRE ASSESSOR (BFP-159)
CERTIFICATE No: JM_BHR_018
DATE: 17/09/2024
Signed

Contents

1 Introduction

This bushfire hazard report for 75 Blyth Parade, Great Bay has been written to accompany a building application for a proposed new habitable building. The site is within the bushfire-prone area overlay of the Kingborough Interim Planning Scheme 2015 (the Scheme).

Under the Director of Building Control's Determination - Requirements for building in bushfire-prone areas v2.3 (2024) - transitional (Director's Determination) and Building Regulations 2016, a Bushfire Attack Level (BAL) assessment and Bushfire Hazard Management Plan (BHMP) are required at the building application stage for a new habitable building.

This report provides an assessment of the BAL and outlines protective features and controls that must be incorporated into the design and construction to ensure compliance with the Director's Determination, AS3959-2018 Construction of buildings in bushfire-prone areas, and the National Construction Code 2019 (Vol. 2). Additional information for planning and building in bushfire-prone areas is available on the Tasmania Fire Service (TFS) website.

1.1 Site Details

Landowner:	Judith and Matthew Bailey-Lawrence
Location:	75 Blyth Parade, Great Bay
Title reference:	CT 11511/20 (PID 5055190)
Municipality:	Kingborough Council
Zoning:	Low Density Residential – Kingborough Interim Planning Scheme 2015
Scheme Overlays:	Bushfire-Prone Area (whole site), Biodiversity Protection Area (whole site), Landslide Hazard Area – Low (steep slopes to the west).
Type of Development:	New habitable building (Class 1a building)
Date of Assessment:	22nd March 2022, 5th April 2022 and 17th August 2024
Assessment Number:	JM_BHR_018

1.2 Site Description

The location and context of the subject lot are illustrated in Figure 1 and Figure 2. Illustrative photos of the site and surrounds can be found in Appendix 1.

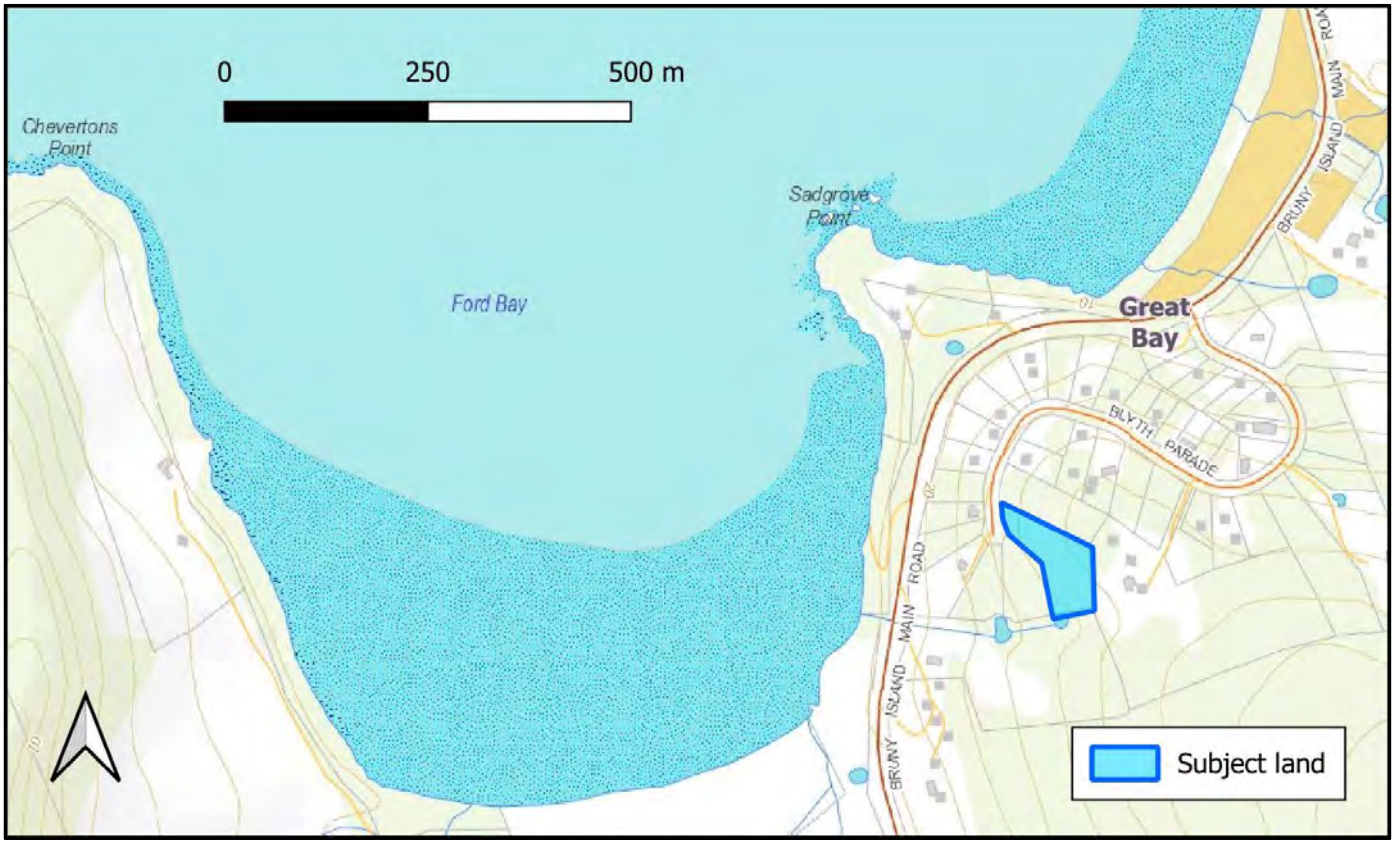

Figure 1 – Site location plan (Image source: LISTmap 2024)

Figure 2 – Site context and zoning map (Image source: LISTmap 2024)

The subject land is +/- 7840 m^2 in a single title located at the end of Blyth Parade at Great Bay on North Bruny Island. The property has a westerly aspect, descending from approximately 62 m above sea level (asl) in the north-eastern corner to approximately 43 m asl in the north-western corner, with grades varying from 6 - 11^0. Most of the property is wooded, although understorey has recently been cleared along the eastern boundary. The site is currently not serviced with power or reticulated water.

The subject land is bound to the west by Blyth Parade, beyond which lie low density residential lots that have recently been developed. To the south-west are two low density residential lots which are undeveloped but subject to some vegetation management around established campsites. To the south is a larger rural resource lot which is forested where it adjoins the subject land. To the east is a larger environmental living lot on which vegetation is managed where it adjoins the subject land. To the north are low density residential lots that have all been developed.

1.3 Building Proposal

It is proposed to construct a new habitable building and associated outbuildings in the northwest of the property, to be serviced by a driveway approximately 85 m long running along the southwestern boundary. The proposed carport is within 6 m of the proposed dwelling and must be considered part of the habitable building for the purposes of this bushfire hazard assessment.

It is proposed that a dedicated firefighting water tank be located behind a storage shed southeast of the habitable building, with a remote offtake providing a firefighting water point adjacent to the 'Y' turning area at the end of the driveway.

A site plan for the proposed new habitable building (Owners, August 2024) is shown in Figure 3.

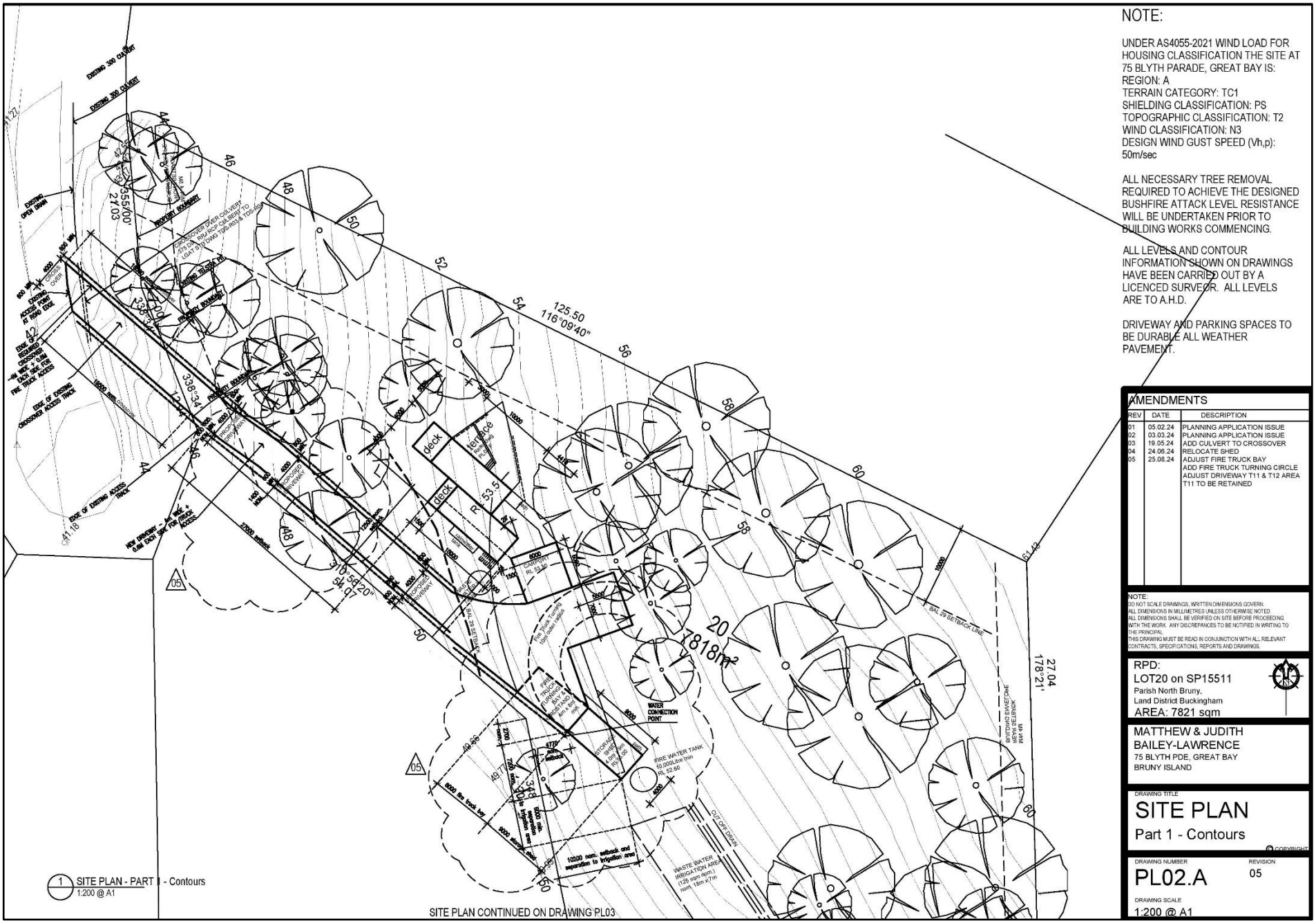

Figure 3 – Site Plan, 1:200 (Owners, August 2024)

2 Bushfire Attack Level Assessment

The following is a summary of the bushfire risk at the property.

Bushfire Hazard

Slope, fuel loads and bushfire-prone vegetation in the form of A. Forest and B. Woodland all contribute to bushfire hazard at this site.

Bushfire Attack Mechanisms

Radiant heat, ember attack, wind, direct flame and smoke are all mechanisms potentially relevant to this site.

Bushfire Threat

The highest bushfire threat to the proposed dwelling is from the forest vegetation downslope to the south and south-west, although extreme fire weather conditions are unlikely from this direction.

The fire history layer on theLIST indicates no history of bushfire on the subject land or immediate surrounds. The closest recorded bush fire was 900 m to the east in 1967 (theLIST, 2024).

Fire Danger Index

An FDI of 50 applies across Tasmania.

Vegetation classification

Bushfire-prone vegetation on and surrounding the subject land is classified as follows (as per Clause 2.2.3.2, Table 2.3 and Figure 2.3 of AS3959):

- relatively undisturbed vegetation on the subject land and to the south and west has been classified as A. Forest.
- vegetation around the northern and eastern margins of the subject land and on the adjoining properties to the northeast, which features scattered large trees over an understorey which is managed to some extent but retains native shrubs and / or ground cover, has been classified as B. Woodland.

Significant Natural Values

Vegetation in the area is mapped on TASVEG4.0 as black peppermint (*Eucalyptus amygdalina*) dry forest on dolerite (DAD).

Although there are pockets of sandy substrate and surface mudstone / sandstone near the road frontage, there is dolerite surface rock evident over much of the land and the vegetation is floristically consistent with dry black peppermint forest (DAD). This community is well reserved

at both a statewide and bioregional level and constitutes a low priority biodiversity value under Tabler E10.1 of the Scheme.

Most of the trees on the property are large black peppermints which meet Council's working definition of 'high conservation value trees' because they have a diameter at breast height (DBH) of 700 mm or more. There are also several white gums on the block with a DBH over 250 mm, which also meet Council's working definition of high conservation value trees. These high conservation value trees constitute a moderate priority biodiversity value under Table E10.1 of the Scheme.

Bushfire Hazard Assessment

The subject land and surrounds were surveyed by the author on 22nd March 2022, 5th April 2022 and 17th August 2024 with reference to successive versions of the site plan for the proposed development.

Information and images were collected which allowed assessment of Bushfire Attack Level (BAL) using Method 1 (Simplified Procedure) of AS3959.

Refer to Table 1 and Figure 4 on the following pages for a summary of the Bushfire Hazard Assessment for the proposed new habitable building.

Note: anywhere the slope under the same classified vegetation varies over 40 m or less it has been averaged for the purposes of the bushfire hazard assessment.

Table 1. BAL assessment of proposed habitable building footprint (BA)

Direction	Vegetation Classification[#]	Effective Slope under vegetation	Distance from BA (m)	Current BAL rating	Separation for BAL-29 (m)	Prescribed HMA separation
North	B. Woodland	+/- flat across slope	0 – 25	BAL-FZ	10 - < 15	To boundary (10 m +)
	Low threat (lawn & garden) *	-	25 - 100	-	-	
Northeast	B. Woodland	Upslope	0 – 65	BAL-FZ	10 - < 15	10 m
	Low threat (lawn & garden) *	-	65 - 100	-	-	
East	B. Woodland	Upslope	0 – 70	BAL-FZ	10 - < 15	10 m
	Low threat (lawn & garden) *	-	70 - 100	-	-	
South - southeast	A. Forest	+/- flat across slope	0 - 100	BAL-FZ	16 - < 23	16 m+
Southwest	A. Forest	Downslope 9^0	0 - 11	BAL-FZ	24 - < 34	To boundary (11 m)
	Low threat (drive & 'bush camp') *	-	11 - 30	-	-	
	A. Forest	Downslope 14^0	30 - 75	BAL-29	30 - < 41	
	B. Woodland	Downslope 14^0	75 - 100	BAL-12.5	-	
West	A. Forest (within boundary)	Downslope 11^0	0 - 17	BAL-FZ	30 - < 41	To boundary (17 m)
	A. Forest	Effectively flat	17 - 35	BAL-FZ	16 - < 23	
	Non-veg. & low threat (road & verge) *	-	35 - 55	-	-	
	A. Forest	Downslope 14^0	55 - 100	BAL-19	-	
West - northwest	A. Forest	Downslope 11^0	0 - 43	BAL-FZ	30 - < 41	30 m
	Non-veg. & low threat (road, buildings & gardens) *	-	43 - 100	-	-	

* Exclusion under AS3959-2018 2.2.3.2 [A] Classification as per AS3959-2018, Table 2.3 and Figures 2.4(A) - 2.4(G)

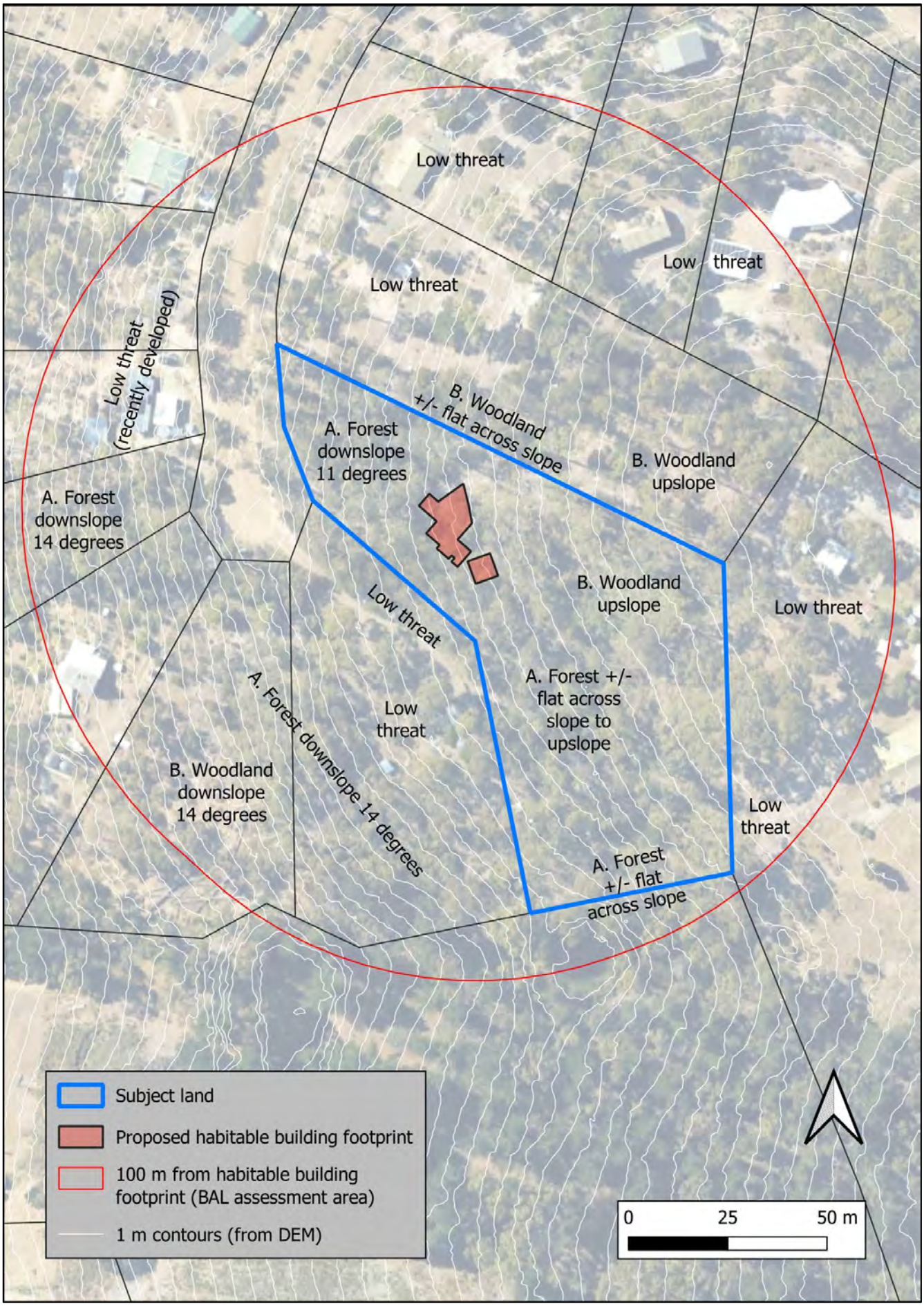

Figure 5. Bushfire Hazard Assessment Map

3 Bushfire Protection Measures

The site is within a designated bushfire-prone area as shown on the Kingborough Interim Planning Scheme 2015 overlay. As such, to construct a new habitable building on a lot not provided with a BAL at the time of subdivision, minimum standards must be met. The Deemed-to-Satisfy Requirements are set out under Clause 4 and Tables 4.1 to 4.5 of the Director's Determination.

The proposed new habitable building must comply with the following clauses of the Director's Determination. Subject to implementing the BHMP, the proposal has been determined to comply with the shaded clauses in Table 2.

Table 2 – Compliance with requirements for building in bushfire-prone areas

CLAUSE		**ISSUE (brief summary only)**
2.		**Application**
3.		**Performance Requirements**
4.		**Deemed-to-satisfy provisions**
	4.1	Construction Requirements
	4.2	Property Access
	4.3	Water Supply for Firefighting
	4.4	Hazard Management Areas
	4.5	Emergency Plan

3.1 Design and construction (Clause 4.1)

The BHMP requires that the proposed new habitable building be constructed to BAL-29 standards in accordance with AS3959-2018 (Sections 3 and 7) or standards for Steel Framed Construction in Bushfire Areas (NASH, 2014).

Subject to implementing the BHMP, the proposal will comply with Deemed-to-Satisfy (DtS) requirements of Clause 4.1.

3.2 Property access (Clause 4.2)

The vehicular property access from a public road is required to be within 90 m of the furthest part of the habitable building, measured as a hose-lay, and include access to a compliant hardstand area located within 3 m of a firefighting water point.

Deemed-to-Satisfy (DtS) Requirements

The following summarises the requirements for property access pursuant to Clause 4.2 and Table 4.2 element B of the Directors Determination for a property access greater than 30 m long and less than 200 m long which is required to access a firefighting water point:

- all- weather construction,
- load capacity of at least 20 t, including for bridges and culverts,
- minimum carriageway width of 4 m,
- minimum vertical clearance of 4 m,
- minimum horizontal clearance of 0.5 m from the edge of the carriageway,
- cross falls of less than 3 degrees (1:20 or 5%),
- dips less than 7 degrees (1:8 or 12.5%) entry and exit angle,
- curves with a minimum inner radius of 10 m,
- maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads, and
- terminate with a turning area for fire appliances provided by one of the following:
  - a turning circle with a minimum outer radius of 10m, or
  - a property access encircling the building, or
  - a hammerhead “T” or “Y” turning head 4 m wide and 8 m long

Current conditions and proposed construction

- Blyth Parade is a Council-maintained gravel road +/- 6 m wide where it fronts the subject land.
- There is an existing formed crossover in the northwest of the lot and a rough vehicle track into the subject land.
- It is proposed that the existing crossover be upgraded, and that a gravel driveway approximately 85 m long be constructed along the southwestern boundary of the land between the road frontage and the proposed habitable building.

Compliance

- The BHMP at Attachment 1 requires the site must be provided with a compliant property access as per the requirements section above.
- The BHMP demonstrates a proposed property access and associated ‘Y’ turning area and hardstand which can comply with Table 4.2 element B of the Director’s Determination.

- The owners must ensure that the final design and construction of the property access are compliant with Table 4.2 element B prior to occupation of any habitable buildings.

Subject to implementing the BHMP requirements, the proposal will comply with Deemed-to-Satisfy Clause 4.2.

3.3 Water supply for Firefighting (Clause 4.3)

An adequate, accessible and reliable water supply for firefighting purposes must be supplied for the protection of life and property from the risks associated with bushfire.

Deemed-to-Satisfy (DtS) Requirements

The lot is in an area that is not serviced by reticulated water therefore a static water supply for firefighting must be provided as per the following requirements from Clause 4.3 and Table 4.3B of the Director's Determination.

Distance requirements between building area to be protected and water supply:

- Building area to be protected must be located within 90 m of the firefighting water point of a static water supply, and
- The distance must be measured as a hose lay, between the firefighting water point and the furthest part of the building area.

Static water supply requirements:

- May include a remotely located off-take connected to the static water supply,
- May be a supply for combined use (firefighting and other uses) but the specified minimum quantity of firefighting water must be available at all times,
- Must be a minimum of 10,000 litres per building area to be protected and this volume of water must not be used for any other purpose including firefighting sprinkler or spray systems,
- Must be metal, concrete or lagged by non-combustible materials if above ground, and
- If a tank can be located so it is shielded in all directions in compliance with Section 3.5 of AS3959-2018, the tank may be constructed of any material provided that the lowest 400 mm of the tank exterior is protected by: metal, non-combustible material, or fibre-cement a minimum of 6 mm thickness.

Fittings, pipework and accessories associated with static firefighting water point (including stands and tank supports) must:

- Have a minimum nominal internal diameter of 50 mm,

- Be fitted with a valve with a minimum nominal internal diameter of 50 mm,
- Be metal or lagged by non-combustible materials if above ground,
- Where buried, have a minimum depth of 300 mm (compliant with AS/NZS 3500.1-2010 Clause 5.23),
- Provide a DIN or NEN standard forged Storz 65 mm coupling fitted with a suction washer for connection to firefighting equipment,
- Ensure the coupling is accessible and available for connection at all times,
- Ensure the coupling is fitted with a blank cap and securing chain (minimum 220 mm length),
- Ensure underground tanks have either an opening at the top of not less than 250 mm diameter or coupling compliant with these requirements, and
- Where a remote offtake is installed, ensure the offtake is in a position that is: visible, accessible to allow connection by firefighting equipment, at working height of 450 – 600 mm above ground level, and protected from possible damage, including damage by vehicles.

Signage for static water connections requirements

- The water connection point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location which:
    - Complies with water tank signage requirements within AS 2304-2011, or
    - Complies with the Tasmania Fire Service Water Supply Signage Guideline available on the TFS website at Guideline for Water Signage in Bushfire Prone Areas (TFS 2017).

Hardstand area for fire appliances required must:

- Be no more than 3 m from water connection point, measured as a hose-lay (including the minimum water level in dams, swimming pools and the like),
- Be no closer than 6 m from the building area to be protected,
- Have a minimum width of 3 m constructed to the same standard as the carriageway,
- Be connected to the property access by a carriageway equivalent to the standard of the property access.

Current conditions and proposed construction / installation

- The site is not within a reticulated water supply area. There is currently no firefighting water supply on site.
- It is proposed that a 10,000-litre water tank dedicated for firefighting be located behind a storage shed southeast of the habitable building, with a remote offtake providing a firefighting water point adjacent to the 'Y' turning area at the end of the driveway.

Compliance

- The BHMP at Attachment 1 requires the site be provided with a static firefighting water supply as per the requirements section above. The proposed installation of a water tank with a minimum 10,000 litre supply will provide the most straightforward compliant solution.
- The BHMP demonstrates an indicative firefighting water tank, remote offtake and firefighting water point, along with an associated hardstand provided by the turning area at the end of the driveway, which can comply with Table 4.3 element B of the Director's Determination.
- The owners must ensure that the final design and installation of a static water supply for firefighting are compliant with Table 4.3 element B prior to occupation of any habitable building.

Subject to implementing the BHMP requirements, the proposal will comply with Deemed-to-Satisfy Clause 4.3.

3.4 Hazard Management Areas (Clause 4.4)

As defined by the Director's Determination, a hazard management area (HMA) is 'the area, between a habitable building or building area and the bushfire-prone vegetation, which provides access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire'.

Requirements

The HMA provides a cleared space, or separation distance, between the building and the bushfire hazard. Any vegetation in this area needs to be strategically modified and maintained in a low fuel state to protect buildings from direct flame contact and intense radiant heat thereby allowing them to be defended from lower intensity bushfires. Fine fuel loads must be minimal to reduce the quantity of windborne sparks and embers reaching buildings, reduce the radiant heat at the building, and halt or check direct flame attack.

The Deemed to Satisfy HMA requirements are outlined under Element B of Table 4.4 in the Director's Determination for the proposed building type. Performance requirements in relation to HMAs are outlined in Clause 3. (1) (d) of the Director's Determination.

Current conditions

Vegetation within 100 m of the proposed habitable building site has been classified as follows (as per section 2.2.3 of AS3959 2018).

- Relatively undisturbed vegetation on the subject land and to the south and west has been classified as A. Forest.
- Vegetation around the northern and eastern margins of the subject land and on the property to the north contains scattered large trees over an understorey which is managed to some extent but retains native shrubs and / or ground cover. This vegetation has been classified as B. Woodland.

Compliance

An HMA with separation distances between the proposed new habitable building and surrounding bushfire prone vegetation meeting the requirements of **BAL-29** is to be established and maintained as set out in Table 1 and the BHMP (Attachment 1).

- Fuels within the HMA must be reduced sufficiently, and other hazards removed, such that the fuels and other hazards do not significantly contribute to the bushfire attack.
- All groundcover vegetation within the HMA is to be kept short i.e., less than 100 mm tall.
- The owners propose to retain most of the mature trees on the site. Trees can be retained or established within the HMA without compromising bushfire hazard management outcomes provided:
    - branches do not overhang habitable buildings,
    - there is horizontal separation between tree canopies of at least 5 m,
    - low branches are removed to create vertical separation between the canopy and any underlying vegetation of at least 2 m, and
    - all surrounding groundcover vegetation is maintained as low threat vegetation.
- Small clumps of shrubs can be retained or planted within the HMA provided they are further than 10 m from the habitable building and there is at least 10 m separation between clumps.
- Non-combustible elements including driveways, paths and short cropped lawns are recommended where practical within the HMA.

- Fine fuels (leaves bark, twigs) should be removed from the ground periodically (e.g. leading into summer or any other period of elevated fore hazard).

The owner must ensure that a compliant HMA is provided prior to occupation of any habitable building.

HMA maintenance

The HMA must be always maintained in a minimal fuel state for bushfire protection mechanisms to be effective. The need to maintain an effective HMA into the future must be considered when planting gardens and landscaping. An annual inspection and maintenance of the HMA should be conducted prior to the bushfire season. It is particularly important that any flammable fine fuels at ground level such as leaves, litter and wood piles are suitably managed. Any additional fire protection measures implemented by the owner such as fire pumps and sprinkler systems must be tested regularly to ensure functionality.

4 Conclusions

The assessment has determined the proposed new habitable building can comply with **BAL-29** standards provided the following conditions are met.

- The new habitable building must comply with construction standards for **BAL-29** as defined in AS3959-2018 (Sections 3 and 7).
- Property access, which is greater than 30m long and less than 200m long, must meet design and construction specifications as per Section 3.2 of this report and Table 4.2 Element B of the Director's Determination.
- A compliant static firefighting water supply and associated hardstand must be provided which meets the specifications in Section 3.3 of this report and Table 4.3 Element B of the Director's Determination.
- A Hazard Management Area (HMA) must be established and maintained which provides minimum separation distances between the habitable building and surrounding bushfire prone vegetation as set out in Table 1 of this report and the BHMP at Attachment 1.

Subject to implementing the above conditions and the BHMP, the proposed new habitable building will satisfy the requirements of the Director's Determination.

5 Limitations of Plan

The protection measures outlined in the Bushfire Hazard Management Plan (Attachment 1) are based on a Fire Danger Index of 50 (FDI 50) which relates to a fire danger rating of 'very high'. Defending the property or sheltering within a structure constructed to AS3959-2018 on days when the fire danger rating is greater than 50 (i.e. 'severe' or higher) is not recommended.

Due to the unpredictable nature of bushfire behaviour and the impacts of extreme weather no structure built in a bushfire-prone area can be guaranteed to survive a bushfire. The safest option in the event of a bushfire is to leave the area early and seek shelter in a safe location.

6 Glossary and Abbreviations

AS – Australian Standard

BAL – Bushfire Attack Level – A means of measuring the severity of a building's potential exposure to ember attack, radiant heat, and direct flame contact, using increments of radiant heat expressed in kilowatts per metre squared, and the basis for establishing the requirements for construction to improve protection of building elements from attack by bushfire (AS3959-2018).

BFP – Bushfire Practitioner – An accredited practitioner recognised by Tasmania Fire Service.

BHMP – Bushfire Hazard Management Plan – A plan for an individual habitable building or subdivision identifying separation distances required between a habitable building(s) and bushfire-prone vegetation based on the BAL for the site. The BHMP also indicates requirements for construction, property access and firefighting water.

Class 1a building – A single habitable building, being a detached house, or one of a group of attached habitable building being a town house, row house or the like (NCC 2022).

FDI – fire danger index – Relates to the chance of a fire starting, its rate of spread, its intensity, and the difficulty of its suppression, according to various combinations of air temperature, relative humidity, wind speed and both the long- and short-term drought effects (AS3959-2018).

ha – hectares.

HMA – Hazard Management Area – The area, between a habitable building or building area and the bushfire-prone vegetation, which provides access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire.

m – metres

NCC – National Construction Code

NASH – National Association of Steel Framed Housing

7 References

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TFS 2020. Building for Bushfire. Planning and Building in Bushfire-Prone Areas for Owner and Builders, July 2020. Tasmania Fire Service, Tasmania.

Appendix 1 Illustrative photos of the site and surrounds

Image 1 – Junction of Blyth Parade with Bruny Island Main Road

Image 2 – Transition from sealed section of Blyth Parade to gravel

Image 3 – Gravel section of Blyth Parade on approach to the subject land

Image 4 – Cul-de-sac turning area at the terminus of Blyth Parade with existing crossover to the subject land at left.

Image 5. Existing crossover to be upgraded for access to the subject land.

Image 6. Alignment of lower section of proposed driveway

Image 7. Alignment of middle section of proposed driveway

Image 8. Location of the proposed 'Y' turning area at the end of the driveway, with the proposed carport site out of picture at left and the proposed storage shed site out of picture at right.

Image 9. Location of proposed carport (centre foreground)

Image 10. Location of proposed habitable building (foreground), when viewed from the northwest.

Image 11. Forest directly northwest of the proposed habitable building site

Image 12. Woodland directly east of the proposed habitable building site

Image 13. Forest directly south of the proposed habitable building site

Image 14. Forest directly west of the proposed habitable building site

Image 15. Woodland on the adjoining property north of the proposed habitable building site

Image 16. Woodland on the adjoining property east of the proposed habitable building site

Image 17. Woodland along the eastern boundary southeast of the proposed habitable building site

Image 18. Managed land (non veg. & low threat) on the adjoining property east-southeast of the proposed habitable building site

Image 19. Managed land (non veg. & low threat) on the adjoining property southeast of the proposed habitable building site

Image 20. Woodland and forest along the southern boundary south of the proposed habitable building site

Image 21. Forest on the adjoining property to the south of the proposed habitable building site

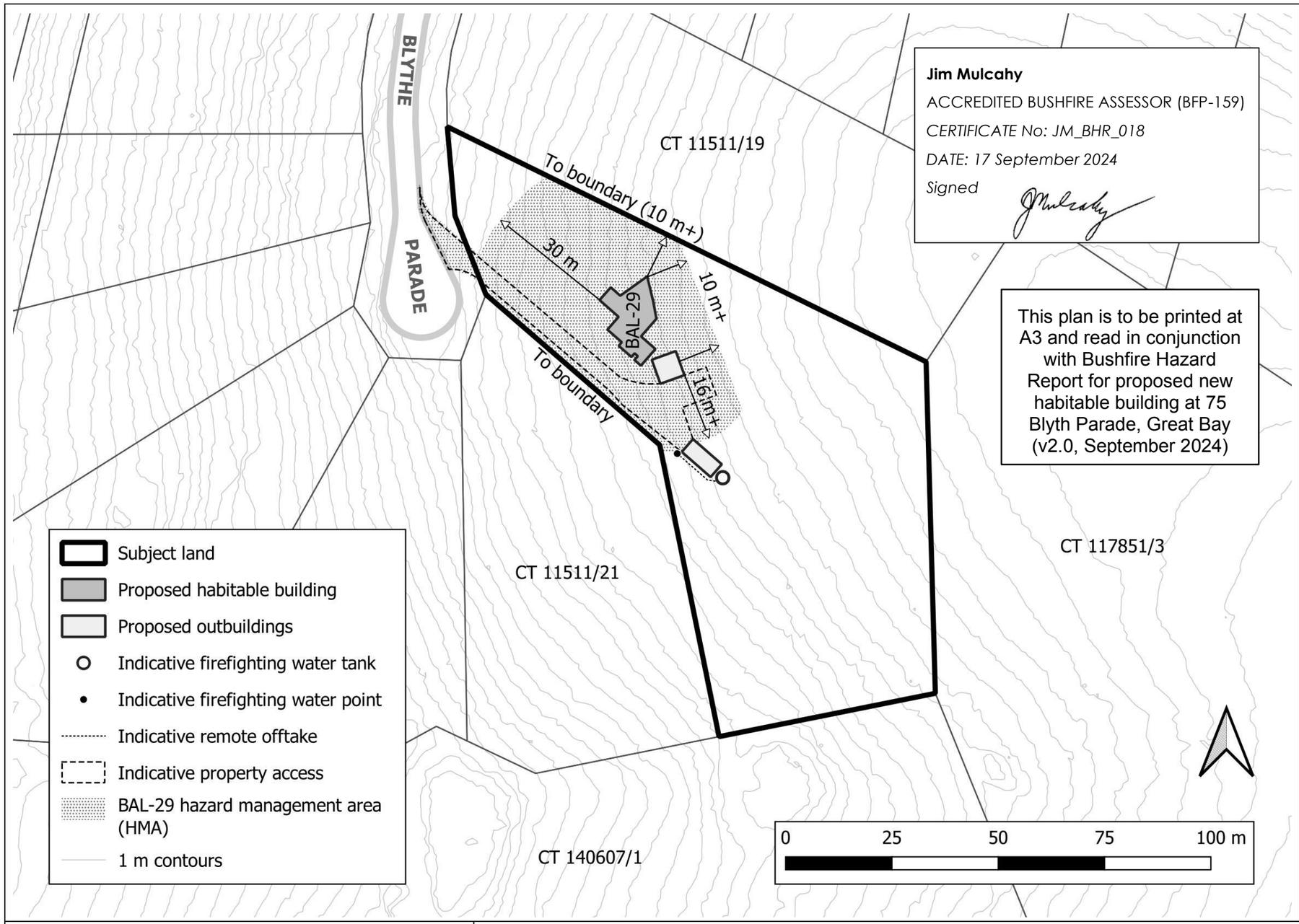
Image 22. Managed land (non veg. & low threat) on the adjoining property to the south of the proposed habitable building site

Image 23. Forest on the adjoining properties to the west of the proposed habitable building site

Image 24. Managed land (non veg. & low threat) on the neighbouring property across Blyth Parade to the northwest of the proposed habitable building site

Image 25. Managed land (non veg. & low threat) on the adjoining property to the north and northwest of the proposed habitable building site

ATTACHMENT 1 – Bushfire Hazard Management Plan - new habitable building at 75 Blyth Parade, Great Bay, v2.1 – September 2024



Jim Mulcahy
ACCREDITED BUSHFIRE ASSESSOR (BFP-159)
CERTIFICATE No: JM_BHR_018
DATE: 17 September 2024
Signed

This plan is to be printed at A3 and read in conjunction with Bushfire Hazard Report for proposed new habitable building at 75 Blyth Parade, Great Bay (v2.0, September 2024)

For: Judith and Matthew Bailey-Lawrence
Address: 75 Blyth Parade, Great Bay
Title: CT 11511/20
Date: September 2024
Assessment #: JM_BHR_018

MULCAHY PLANNING AND PROPERTY SERVICES
410 Nelson Road Mt Nelson TAS 7007
email: jimsplanning@outlook.com
Mobile: 0424 505 184

1. Construction Standards
   a) The proposed new habitable building (Class 1a building) must be constructed to comply with BAL-29 as per AS3959-2018 (Sections 3 and 7) or standards for Steel Framed Construction in Bushfire Areas (NASH, 2014).
2. Public and Firefighting Access
   a) This plan shows a proposed property access 4 m wide and approximately 85 m long which terminates in a compliant 'Y' turning area.
   b) The owners must ensure that a property access is established prior to the occupation of the habitable building which is compliant with Table 4.2 Element B of the Director's Determination.
3. Water Supply for Firefighting
   a) This plan shows an indicative water tank for firefighting to service the proposed habitable building located within 3 m of a suitable hardstand, more than 6 m from the proposed habitable building, and within 90 m hose lay of the furthest parts of the proposed habitable building.
   b) The owners must ensure that a dedicated static water supply for firefighting with a minimum volume of 10,000 litres is established prior to the occupation of the habitable building which is compliant with Table 4.3 Element B of the Director's Determination.
4. Hazard Management Area (HMA)
   a) The HMA must be established prior to the occupation of the habitable building.
   b) To be effective, HMAs must be maintained as 'low threat vegetation' or 'non-vegetated land' (Clause 2.2.3.2 of AS3959) for the life of the development.
   c) No tree branches should overhang habitable building.
   d) Trees & shrubs should be separated to create discontinuous 'clumps' and a minimum 10 m separation should be maintained between clumps.
   e) Horizontal separation of at least 5 m should be maintained between tree canopies and low branches should be removed to create at least 2 m vertical separation between tree canopy and underlying shrubs or ground cover.
   f) Grassland, pasture & lawn must be kept short (< 100 mm).
   g) Fine fuels such as leaves, bark and twigs should be removed from the ground periodically, particularly leading into summer or any other identified period of high fire risk.
   h) Flammable vegetation should not be retained or planted under or directly adjacent to habitable building (particularly decks, flammable cladding and glazed elements) or in corridors which can act as a 'wick' to channel fire to habitable building.
   i) Flammable material such as firewood, building materials, organic mulch and fuel should not be stored under nor directly adjacent to decks or habitable building.

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form 55

To: Judith and Matthew Bailey-Lawrence *Owner /Agent*

5 Taronga Way *Address*

Faulconbridge NSW 2776 *Suburb/postcode*

Qualified person details:

Qualified person: Jim Mulcahy

Address: 410 Nelson Road

Mount Nelson 7007

Phone No: 0424 505 184

Fax No:

Licence No: BFP-159

Email address: jimsplanning@outlook.com

Qualifications and Insurance details: Accredited Person Under Part 4A of the *Fire Service Act* 1979

Profession Indemnity ($1 m) and Public Liability ($5 m) – Austbrokers BGA

(description from Column 3 of the Director of Building Control's Determination)

Speciality area of expertise: Bushfire Hazard Assessment

(description from Column 4 of the Director of Building Control's Determination)

Details of work:

Address: 16 Blyth Parade

Great Bay 7150

Lot No: 20

Certificate of title No: 11511

The assessable item related to this certificate: New Class 1a building

(description of the assessable item being certified)
Assessable item includes –
- *a material.*
- *a design*
- *a form of construction*
- *a document*
- *testing of a component, building system or plumbing system*
- *an inspection, or assessment, performed*

Certificate details:

Certificate type: Bushfire Hazard

(description from Column 1 of Schedule 1 of the Director of Building Control's Determination)

This certificate is in relation to the above assessable item, at any stage, as part of - *(tick one)*

building work, plumbing work or plumbing installation or demolition work: ☐

or

a building, temporary structure or plumbing installation: X

In issuing this certificate the following matters are relevant –

Documents:	Bushfire Hazard Report for proposed new habitable building at 75 Blyth Parade, Great Bay, v2.1 (Jim Mulcahy, September 2024) Bushfire Hazard Management Plan (BHMP) for proposed new habitable building at 75 Blyth Parade, Great Bay, v2.1 (Jim Mulcahy, September 2024) Site Plan for proposed new habitable building at 75 Blyth Parade, Great Bay (Owners, August 2024)
Relevant	BAL assessed as per AS3959-2018 for building area identified in the BHMP
References:	Building Regulations 2016 Director's Determination – Requirements for building in bushfire prone areas v2.3 (2024) - transitional National Construction Code (NCC) – Vol. 2 AS3959-2018 Construction of Buildings in Bushfire Prone Areas

Substance of Certificate: (what it is that is being certified)

Subject to implementation of the abovementioned BHMP, the development can meet the requirements of the Director's Determination.

Design and construction of the Class 1a building must be to a minimum standard of BAL-29 (Sections 3 and 7 of AS3959-2018).

- *Scope and/or Limitations*

Scope

The bushfire hazard assessment was undertaken at the site to determine whether there is sufficient risk to the proposed dwelling from bushfire to warrant specific bushfire hazard management measures. The bushfire hazard management measures in the aforementioned documents demonstrate the capacity for the proposed dwelling to comply with Building Regulations 2016, the Director's Determination, the NCC (vol. 2) and AS3959-2018 for a BAL-29 rating.

Limitations

- The assessment relates to bushfire hazard only.
- The assessor has taken all reasonable steps to ensure that the information provided in this assessment is accurate and reflects the conditions on and around the site and allotment on the date of this assessment.
- The recommendations made in the bushfire hazard assessment are based on the conditions of the site at the time of the assessment. No liability will be accepted by the assessor for actions undertaken by the owner or others that compromise the effectiveness of the measures outlined in this assessment.
- The effectiveness of the Bushfire safety measures outlined in the assessment are reliant on their implementation and ongoing maintenance.

I certify the matters described in this certificate.

	Signed:	*Certificate No:*	*Date:*
Qualified person:		JM_BHR_018	17/09/2024