BUSHFIRE HAZARD ASSESSMENT REPORT



PROPOSED GARAGE AND DRYING ROOM ADDITION MERRITTS LODGE THREDBO

13 MOUNTAIN DRIVE THREDBO NSW 2625 LOT 601 DP1118588

DATE: JULY 2023 REPORT NO: 22160

REVISION: 02

PREPARED FOR: PETER DAVIES

PREPARED BY: ACCENT TOWN PLANNING

- PREPARATION OF BUSHFIRE REPORTS FOR DEVELOPMENT IN BUSHFIRE PRONE AREAS
- BUSHFIRE ATTACK LEVEL (BAL) CERTIFICATES
- BUSHFIRE EVACUATION PLANS
- CONSTRUCTION SOLUTIONS & ADVICE FOR BUSHFIRE PRONE AREAS

BUSHFIRE HAZARD ASSESSMENT REPORT

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WRITTEN BY:

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Town Planner

DISCLAIMER

The recommendations provided in the summary of this report are a result of the analysis of the proposal in relation to the requirements of Planning for Bushfire Protection 2019. Utmost care has been taken in the preparation of this report however there is no guarantee of human error. The intention of this report is to address the submission requirements for Development Applications on bushfire prone land. There is no implied assurance or guarantee the summary conditions will be accepted in the final consent and there is no way Accent Town Planning Pty Ltd is liable for any financial losses incurred should the recommendations in this report not be accepted in the final conditions of consent.

This bushfire assessment provides a risk assessment of the bushfire hazard as outlined in the PBP 2019 and AS3959 2018. It does not provide protection against any damages or losses resulting from a bushfire event.

EXECUTIVE SUMMARY

Accent Town Planning has been engaged by Peter Davies to prepare a Bushfire Hazard Assessment Report (BHAR) in accordance with the *Planning for Bushfire Protection 2019* (PBP 2019) for the addition of a new garage and drying room to Merritts Lodge. The lodge is located at Lot 601 DP1118588, Thredbo, NSW, 2625.

The land is zoned *C1*: *National Parks and Nature Reserves* and is identified as being in Bush Fire Prone Land (BFPL) on mapping and hence as outlined in *Planning for Bushfire Protection – PBP 2019* (NSW RFS 2019) is considered Special Fire Protection Purpose (SFPP) and is required to obtain a Bush Fire Safety Authority (BFSA) from the RFS under section 100B of the RF Act.

It is recommended that:

- → The proposed garage and drying room addition are to meet BAL FZ construction requirements on North, East and West elevations and BAL 40 on the South elevation as per AS 3959.
- → The entire allotment is to be managed as an Inner Protection Area.

Pending compliance with the recommendations outlined in this report. The performance criteria and deemed to satisfy provisions of minor development in SFPP facilities in an Alpine Resort Area. The proposed works have been assessed in accordance with Section 6.5 and 6.6 of Bushfire Prone Land (Non-EPI) Bushfire Prone Land (Non-EPI)



The assessment confirms the lot is located on Bushfire Prone Land and identifies the following:

- → The subject site is surrounded by a mixture of Managed Land and Sub-Alpine Woodland.
- → Clearing will not exceed the clearing threshold permissible above which the Biodiversity Assessment Method (BAM) and offsets scheme to apply.
- → The areas where works are proposed, do not contain High Biodiversity Value areas.
- → No changes to existing road access are proposed as part of this application.
- → Thredbo is serviced by reticulated water and hydrant system with nearest hydrant system located across the street on Mountain Drive.

ASSET PROTECTION ZONES

Asset protection zones are the most strategically valuable defence against radiant heat and flame, and to lesser extent embers. To allow for emergency service personnel and residents to undertake property protection activities, a defendable space that permits unobstructed access around the building.

An APZ should be maintained from the commencement of building works and maintained for perpetuity for the following distances:

• ENTIRE LOT TO BE MANAGED AS AN INNER PROTECTION AREA (IPA).

The APZ consists of an Inner Protection Area (IPA). The IPA is critical for providing a defendable space and managing heat intensities at the building surface.

CONSTRUCTION

The proposed works will include:

- → Addition of a new single car garage, design and finishes to match existing lodge.
- → Addition of a new drying room to be attached to the existing foyer and to connect to the new garage. New drying room will include a doorway to the existing foyer.

The proposed new garage and drying room are to be constructed to achieve **BAL FZ** on the North, East and West elevations and **BAL 40** on the South elevation as per AS3959-2018, with the exception that the construction requirements shall be varied to comply with the requirements of Section 7.5 of the NSW Rural Fire Service *Planning for Bushfire Protection 2019*.

UTILITIES

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

WATER

The subject site is serviced by reticulated water and has access to a nearby fire hydrant. All above ground water pipes external to the building are to be metal.

GAS

If gas is connected to the building on the subject land, the following criteria must be met:

- → Bottled gas is installed and maintained in accordance with AS 1596 and the requirements of relevant authorities. Metal piping is to be used.
- → All fixed gas cylinders are kept clear of all flammable materials to a distance of 10 metres and shielded on the hazard side of the installation.
- → If gas cylinders need to be kept close to the building, the release valves are directed away from the building and at least 2 metres away from any combustible material, so that they do not act as a catalyst to combustion. Connections to and from gas cylinders are metal.
- → Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used.

EVACUATION AND EMERGENCY MANAGEMENT

The intent of measures is to provide suitable emergency and evacuation (and relocation) arrangements for occupants of special fire protection purpose developments.

To achieve this, the following conditions shall apply:

A building evacuation diagram, site layout diagram and Statement of Action are to be provided in each building in accordance with the NSW Rural Fire Service Guidelines for the Preparation of Emergency/Evacuation Plan and with Australian Standard AS 3745 2010 'Planning for Emergencies in Facilities'.

I. PROPOSAL

This Bush Fire Assessment Report has been compiled for submission to the Department of Planning and Environment (DPE) for the purpose of assessment under Section 100B of the RF Act and is also considered "integrated development" under Section 4.46 of *Environmental Planning and Assessment Act 1979* (EP&A Act).

The report has been prepared in accordance with the submission requirements of Appendix 4 of *Planning for Bush Fire Protection* (NSW RFS 2019) and identifies the proposal can meet the appropriate objectives and performance criteria of Section 6.4 and 6.6 *Planning for Bush Fire Protection* (NSW RFS 2019).

The assessment confirms the subject lot is mapped as bushfire prone land.

Accent Town Planning was commissioned to provide this bushfire assessment. Accredited bushfire assessor, Matthew Stewart inspected the site on 02 February 2023.

- → FIGURE 1 Shows the subject lot location.
- → FIGURE 2 Provides a broad scale aerial view of the subject site.
- → FIGURE 3 Shows a close-up aerial view of the site.
- → FIGURE 4 Provides the site plan for the development.

FIGURE 1 SITE LOCATION



FIGURE 2 BROAD SCALE AERIAL VIEW OF THE SUBJECT SITE

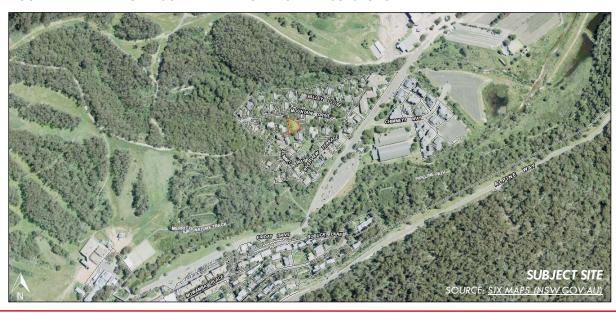
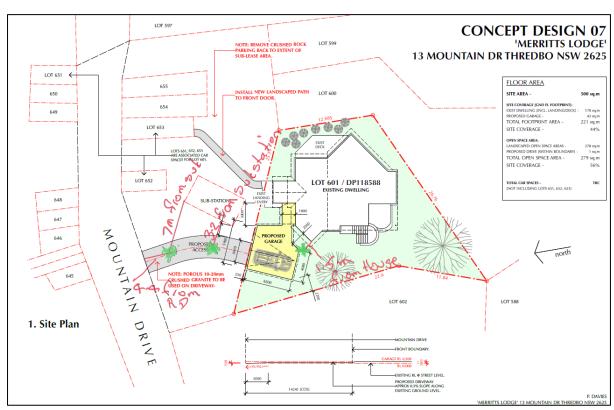


FIGURE 3 CLOSE UP AERIAL VIEW OF THE SITE



FIGURE 4 SITE PLAN



2. PLANNING LAYERS

The following planning layers are described in Table 1 and shown in the Figures below:

TABLE 1 PLANNING LAYERS

MAP	FIGURE	DESCRIPTION	
BUSHFIRE PRONE LAND MAP	5	The subject lot is mapped as "Vegetation Category 1".	
LEP ZONE MAP	6	The subject lot is zoned as "C1 – National Parks and Nature Reserves".	
VEGETATION MAPPING	7	The vegetation within 140m of Merritts Lodge has been mapped as: - SUB-ALPINE SHRUB-GRASS WOODLAND According to Keith (2004) this formation is classified as both "Woodland" and "Forest" depending on the density of the vegetation. Thredbo Valley primarily consists of Sub Alpine Woodland vegetation formations. However, areas surrounding the lodge have been developed for tourist accommodation purposes. The land surrounding the lodge comprises of a mixture of Managed Land and Sub-Alpine Woodland.	
BIODIVERSITY VALUES MAP	8	The subject lot does not contain areas of High Biodiversity Values.	

FIGURE 5 BUSHFIRE PRONE MAP



FIGURE 6 LEP MAP

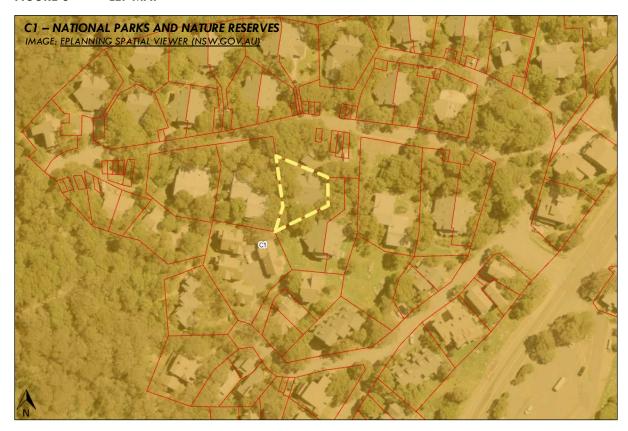


FIGURE 7 VEGETATION MAPPING

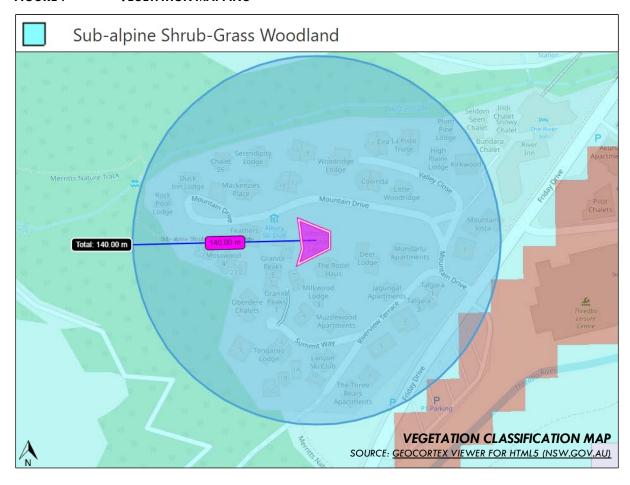


FIGURE 8 BIODIVERSITY VALUES MAP



3. SITE DESCRIPTION

3.1. SLOPE AND ASPECT OF THE SITE WITHIN 100 M OF THE SITE

The Australian Standard AS3959-2018 identifies that the slope of the land under the classified vegetation is much more important than the slope between the site and the edge of the classified vegetation.

As can be seen in Figure 9 below, the land within 100m of the North and West elevations presents an upslope under a mixture of *Managed Land* and maintained clusters of *Sub-Alpine Woodland*. The land within 100m of the South and East elevations presents a $0-5^{\circ}$ downslope which traverses a mixture of *Managed Land* and maintained clusters of *Sub-Alpine Woodland*.

FIGURE 9 SLOPE



3.2. VEGETATION FORMATION WITHIN 140 M OF THE SUBJECT SITE

Thredbo Village is primarily comprised of *Sub Alpine Woodland* and *Managed Land* at the base of the valley. Within 140m of the site, the area is a combination of maintained *Sub Alpine Woodland* clusters and *Managed Land* vegetation.

As seen in Figure 7, within 140m of the subject site consists primarily of one vegetation type:

ightarrow SUB-ALPINE SHRUB-GRASS WOODLAND

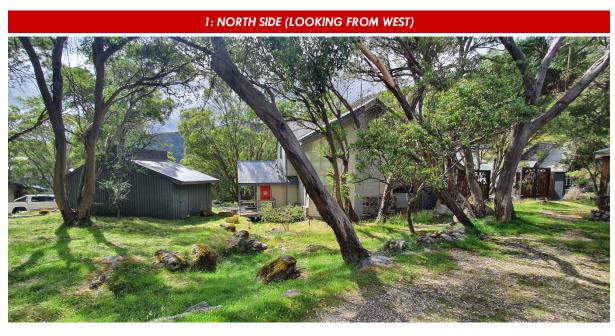
Merritts Lodge is located in a village type setting and is surrounded by tourist accommodation lodges of a similar scale. In order to retain the significant vegetation of the area, mature trees have been retained surrounding the lodges to provide the opportunity for development, whilst retaining the significant landscape features in the area (where possible). Due to the density, and canopy connection with *Sub Alpine Woodland* areas to the West, the vegetation classification for the site is *Sub Alpine Woodland*.

The vegetation formations are described below and summarised in Table 2.

TABLE 2 PREDOMINATE VEGETATION CLASSIFICATION

	VEGETATION FORMATION	EFFECTIVE SLOPE	PHOTOS
NORTH	Sub Alpine Woodland	Upslope	1
EAST	Sub Alpine Woodland	Downslope 0 - 5°	2
SOUTH	Sub Alpine Woodland	Downslope 0 – 5°	3
WEST	Sub Alpine Woodland	Upslope	4

SITE PHOTOS





3: SOUTHWESTERN CORNER



4: WEST



4.0 BIODIVERSITY ASSESSMENT

4.1 BIODIVERSITY OFFSETS SCHEME ASSESSMENT

It is vital that all development and clearing follows the Biodiversity Offsets Scheme which has been created to avoid, minimise, and offset impacts on biodiversity.

There are two key elements to the Biodiversity Offsets Scheme, as follows:

- A. Developers and landholders who undertake development or clearing, generating a credit obligation which must be retired to offset their activity.
- B. Landholders who establish a biodiversity stewardship site on their land, generating credits to sell to developers or landholders who require those credits, to securely offset activities at other sites.

This report will address and assess the proposed development under element A. To complete this assessment, we will evaluate the four triggers and demonstrate that the proposed works should not trigger the Biodiversity Offsets Scheme and therefore the owner will not be required to offset their proposed activities.

4.1.1 CLEARING THRESHOLD

FIGURE 10 CLEARING THRESHOLD

Minimum lot size associated with the property	Threshold for clearing, above which the BAM and offsets scheme apply
Less than 1 ha	0.25 ha or more
1 ha to less than 40 ha	0.5 ha or more
40 ha to less than 1000 ha	1 ha or more
1000 ha or more	2 ha or more

The proposed works involve removal of 3 trees and minimal clearing. As a result, no offsets for the proposed works would be required due to this trigger.

4.1.2 BIODIVERSITY VALUES MAP

In order to assess if the development is located within an area identified with Biodiversity Values, we have completed a search using the Biodiversity Values Map. As shown in Figure 8, the subject allotment does not contain areas with high biodiversity values. Hence, the proposed works do not trigger the entry into the Biodiversity Offsets Scheme.

4.1.3 TEST OF SIGNIFICANCE

To assess the impact of the proposed maintenance works on threatened species we have completed a test of significance to determine if the proposed works are likely to significantly affect threatened species, ecological communities, or their habitats.

We have considered the level of impact to the biodiversity of the area and to do this we have assessed the significance of any of the proposed activities at the site and surrounding alpine ecosystem.

Our assessment of the impact on threatened species and habitats finds:

- → No predicted impacts to threatened species habitat at all.
- → No endangered ecological communities or critically endangered ecological communities located where building works are proposed to occur.
- → No predicted impacts to threatened species habitat at all.
- → No removal of breeding habitats or fragmentation of habitats as a result of clearing below the permissible clearing threshold so will unlikely impact the long-term survival of any species or community.
- → The lot does not contain areas with High Biodiversity Values.
- → Vegetation removal is a key threatening process, and no vegetation removal (under clearing threshold limits) is proposed.

Similarly, the test shows that the proposed maintenance works are not likely to have a significant impact on threatened species or their habitat and will not be carried out in a declared area of outstanding biodiversity value. Therefore, the applicant will not be required to apply the Biodiversity Offsets Scheme or prepare a species impact statement (SIS) as a result of this trigger.

4.1.4 AREAS OF OUTSTANDING BIODIVERSITY VALUES

Protecting the habitats of endangered species is vital to the conservation and recovery of these species. Areas of declared critical habitat under the Threatened Species Conservation Act 1995, have become the first Areas of Outstanding Biodiversity Value (AOBV) in NSW with the commencement of the Biodiversity Conservation Act 2016.

The Biodiversity Conservation Regulation 2017 establishes the criteria for declaring AOBVs. The criteria have been designed to identify the most valuable sites for biodiversity conservation in NSW.

Kosciuszko National Park is not listed as an Area of Outstanding Biodiversity under the Biodiversity Conservation Act 2016. Therefore, due to the subject site being located within Kosciuszko National Park the proposed asset protection zone and works will not be within an area of outstanding biodiversity values and hence not trigger the BOS.

4.1.5 BIODIVERSITY OFFSET SCHEME CONCLUSION

As a result, you can see that the no clearing is required for the proposed works, and the site does not contain BVM mapped areas. For these reasons, the development will not trigger the Biodiversity Offsets Scheme. Therefore, a biodiversity assessment report by a certified biodiversity assessor is not necessary.

5.0 BUSHFIRE THREAT ASSESSMENT

5.1 ASSET PROTECTION ZONES (APZ)

PBP 2019 Table A1.12.7 has been used to determine the width of the required APZ for the proposed development using the vegetation and slope data identified. An FFDI of 50 was used for this location. An APZ should be maintained from the commencement of building works and maintained for perpetuity.

The vegetation classification for bushfire purposes for this site is *Sub-Alpine Woodland*. *Sub-Alpine Woodland* vegetation can be managed as an Inner Protection Area (IPA). The IPA is critical for providing a defendable space and managing heat intensities at the building surface.

The IPA should provide a tree canopy cover less than 15% and any tree canopies must be located greater than 2 metre from any part of the proposed lodge roofline. Garden beds of flammable shrubs should not be located under trees and should be no greater than 10m from an exposed window or door. Trees should have lower limbs removed up to a height of 2 metres above ground.

Table 3 below shows the APZ and BAL Determination for existing lodge.

TABLE 3 APZ AND BAL DETERMINATION

	NORTH	EAST	SOUTH	WEST
GRADIENT	Upslope	Downslope 0 – 5°	Downslope 0 – 5°	Upslope
VEGETATION	Sub-Alpine Woodland	Sub-Alpine Woodland	Sub-Alpine Woodland	Sub-Alpine Woodland
PROPOSED APZ	ENTIRE LOT TO BE MANAGED AS IPA			
SEPARATION DISTANCE (TO LOT BOUNDARY)	0.25 m	10m	20m	2.2 m
APZ REQUIRED BY PBP 2019 UNDER TABLE A1.12.7	11 m	14 m	18-26 m	11 m
BAL PROPOSED	BAL FZ	BAL FZ	BAL 40	BAL FZ

5.2. RELEVANT CONSTRUCTION STANDARD

The Australian Standard AS 3939 – 2018 is the enabling standard that addresses the performance requirements of both parts 2.3.4 and Part GF5.1 of the Building Code of Australia for the construction of the Class 1. 2 and Class 3 buildings within a designated Bushfire Prone Area.

The following was determined for this site:

Relevant fire danger index...... FFDI 50

The proposed new garage and drying room with be required to meet **BAL FZ** construction on North, East and West elevations and **BAL 40** on the South (lowered one BAL level as per clause A1.8 – Shielding) as per the requirements of AS 3959.

5.3. SAFE OPERATIONAL ACCESS

The Planning for Bushfire Protection requires the provision of safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area.

The PBP (2019) requires the provision of safe operational access to structures and water supply for emergency services, while residents are seeking to evacuate from an area.

→ Mountain Drive is a two-wheel drive, all weather road. The widths and design would allow safe access for firefighters while residents are evacuating an area. The capacity of road

surfaces is sufficient to carry fully loaded firefighting vehicles.

5.4. EMERGENCY MANAGEMENT

The intent of measures is to provide suitable emergency and evacuation (and relocation) arrangements for occupants of special fire protection purpose developments.

To achieve this, the following conditions shall apply:

A building evacuation diagram, site layout diagram and Statement of Action are to be provided for the proposed development in accordance with Building Emergency Procedures and Bush Fire Evacuation Plan, the NSW Rural Fire Service Guidelines for the Preparation of Emergency/Evacuation Plan and with Australian Standard AS 3745 2010 'Planning for Emergencies in Facilities'.

The owners are advised to obtain the NSW Rural Fire Service – "Guidelines for the Preparation of Bush Fire Evacuation Plans" & 'Bush Fire Survival Plan' In the event of emergency, the owners should ensure they are familiar with the RFS Bush Fire Alert Levels and use their Bush Fire Survival Plan.

5.5. ADEQUATE WATER AND UTILITY SERVICES

Thredbo is serviced by reticulated water. A hydrant is located on Mountain Drive nearby to Merritts Lodge as indicated in the image below. The location and distance to the hydrants will be consistent with the requirements of the PBP 2019.



Any bottled gas will be installed and maintained in accordance with AS1596 and the requirements of the relevant authority. If gas cylinders need to be kept close to the buildings, the release valves must be directed away from the building and away from any combustible material. Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used.

6.0 LANDSCAPING

An APZ is required to be established and should be maintained for perpetuity as specified.

When landscaping, vegetation should be located greater than 2 m from any part of the roofline of a building or the shed. Garden beds of flammable shrubs are not to be located under trees and should not be within 10 m of an exposed window or door. Trees should have lower limbs removed up to a height of 2 m above the ground.

Appendix 4 (PBP 2019) provides guidelines for landscaping and Bushfire Provisions within the APZ. To incorporate bushfire protection measures into future development, the owner is advised to consider the following:

- → Avoid planting trees species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopy.
- → Avoid planting deciduous species that may increase fuel at surface/ground level by the fall of leaves.
- → Avoid climbing species to walls and pergolas.
- → Locate combustible materials such as woodchips/mulch, flammable fuel stores (LPG gas bottles) away from the building.
- → Locate combustible structures such as garden sheds, pergolas, and materials such as timber furniture away from the building.
- → Ensure any vegetation planted around the house is a suitable distance away so these plants do not come into physical contact with the house as they mature.

The property should be developed to incorporate suitable impervious area surrounding the house, including courtyards, paths, and driveways.

7. HOW THIS PROPOSAL MEETS DEEMED TO SATISFY SOLUTION

DEMONSTRATION COMPLIANCE UNDER SECTION 6.4 – SPECIFIC OBJECTIVES PLANNING FOR BUSHFIRE (2019)

PERFORMANCE CRITERIA	COMPLIES	ACCEPTABLE SOLUTIONS	
THE INTENT MAY BE ACHIEVED WHERE:			
→ provide an appropriate defendable space	Ø	The entire allotment is to be managed as an Inner Protection Area (IPA). This will provide an appropriate defendable space surrounding the existing lodge, and will prevent the need to reduce sensitive vegetation.	
site the building in a location which ensures appropriate separation from the hazard to minimise potential for material ignition	Ø	The proposed new garage and drying room have been sited appropriately, in line with the existing development, and recognises the surrounding vegetation.	
→ provide a better bush fire protection outcome for existing buildings		The proposed development will ensure the protection of assets and occupants by ensuring the condition of the building is maintained.	
→ 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);	N/A	No new buildings proposed, the proposed works are an extension of the existing lodge.	
 ensure there is no increase in bush fire management and maintenance responsibility on adjoining landowners without their written confirmation 	Ø	The proposed new garage and drying room will not increase bush fire management and maintenance responsibility for adjoining landowners.	
 ensure building design and construction enhances the chances of occupant and building survival 	Ø	The works will provide BAL FZ and BAL 40 construction, which provides an appropriate shelter location for occupants.	
provide for safe emergency evacuation procedures including capacity of existing infrastructure (such as roads)	Ø	Access to the development is provided via Mountain Drive, which is an all-weather two-wheel drive access road. Emergency Evacuation plan will be provided in accordance with Thredbo Resort evacuation management plan. An individual evacuation plan will be prepared as described in section 4.4. of this report.	

DEMONSTRATION COMPLIANCE UNDER SECTION 6.6 – SPECIFIC OBJECTIVES PLANNING FOR BUSHFIRE (2019)

PERFORMANCE CRITERIA	COMPLIES	ACCEPTABLE SOLUTIONS	
THE INTENT MAY BE ACHIEVED WHERE:			
→ provide an appropriate defendable space	V	The entire allotment is to be managed as an Inner Protection Area (IPA). This will provide an appropriate defendable space surrounding the existing lodge, and will prevent the need to reduce sensitive vegetation.	
→ provide a better bush fire protection outcome for existing structures (e.g., via ember protection measures)	Ø	The proposed development will ensure the protection of assets and occupants by ensuring the condition of the building is maintained.	
→ ensure new building work complies with the construction standards set out in AS 3959;	Ø	All new building works are to comply with AS 3959, as per the recommendations of this report.	
→ to ensure ongoing management and maintenance responsibilities are in place where APZs are proposed outside of the sub lease or leasehold area	Ø	No APZ is proposed outside of the leasehold area.	
→ written consent from the land managers is provided for all proposed works outside of the sub lease or leasehold area	Ø	No APZ is proposed outside of the leasehold area.	
→ proposed APZs outside of the sub lease or leasehold area are supported by a suitable legal mechanism to ensure APZs are managed under a binding legal agreement in perpetuity	Ø	No APZ is proposed outside of the leasehold area.	
 ensure building design and construction standards enhance the chances of occupant and building survival; 	Ø	The proposed development will ensure the protection of assets and occupants by ensuring the condition of the building is maintained.	
 → provide safe emergency evacuation procedures. → Any additional construction requirements should be commensurate with the following: the scope of the proposed works, including any increase in size and footprint of the building any additional capacity for the accommodation of guests and/or staff on site the cost associated with the proposed upgrade of any building. 	☑	Access to the development is provided via Mountain Drive, which is an all-weather two-wheel drive access road. Emergency Evacuation plan will be provided in accordance with Thredbo Resort evacuation management plan. An individual evacuation plan will be prepared as described in section 4.4. of this report.	

8.0 CONCLUSION

Pending the satisfaction of recommendations outlined in this report, the level of bushfire hazard risk identified in relation to the subject land and the proposed development is not considered to be such that the proposal should be denied due to bushfire considerations.

- → The entire allotment is to be managed as an Inner Protection Area.
- → The proposed garage and drying room addition are to meet BAL FZ construction requirements on North, East and West elevations and BAL 40 on the South elevation as per AS 3959.

This proposal meets a "deemed to satisfy" outcome for Bushfire Protection.

This report does not find that the proposal should be rejected due to bushfire considerations provided the recommendations are undertaken as proposed.

WRITTEN BY:

Tammy Stewart Town Planner

25 JULY 2023

APPENDIX I DEFINITION OF ASSET PROTECTION ZONES

Vegetation within the APZ should be managed in accordance with APZ specifications for the purposes of limiting the travel of a fire, reducing the likelihood of direct flame contact, and removing additional hazards or ignition sources. The following outlines some general vegetation management principles for APZs:

- 1. Discontinuous shrub layer (clumps or islands of shrubs not rows)
- 2. Vertical separation between vegetation stratum
- 3. Tree canopies not overhanging structures
- 4. Management and trimming of trees and other vegetation in the vicinity of power lines and tower lines in accordance with the specifications in "Vegetation Safety Clearances" issued by Energy Australia (NS179, April 2002)
- 5. Maintain low ground covers by mowing / whipper snipper / slashing; and
- 6. Non-combustible mulch e.g. stones and removing stores of combustible materials
- Vegetation to be planted should consist of fire retardant/ less flammable species strategically located to reduce attack from embers (i.e. as ember traps when in small clumps and short wind breaks).

