# **Bushfire Management Statement**

## PATHWAY 2 APPLICATION (Clause 53.02-4)

- □ Construction of a dwelling (including an extension or alteration to a dwelling)
- Dependant Persons Unit
- ✓ Industry
- ✓ Office

Date:

- Retail Premises
- □ Service Station
- □ Warehouse

## Property Address:

Mount Buller Ski Field, Crown Allotment 5A, Section

A, Parish of Changue East

**Applicant/Owner Name:** 

Buller Ski Lifts 18/02/2022

| Prepared by: |                                 |
|--------------|---------------------------------|
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## Introduction

This Bushfire Management Statement has been prepared in response to the requirements of Clause 44.06 – Bushfire Management Overlay, and in accordance with the application requirements of Clause 53.02 – Bushfire Planning.

The statement contains three components:

- 1. A **bushfire hazard landscape assessment** including a plan that describes the bushfire hazard of the general locality more than 150 metres from the site. Photographs or other techniques may be used to assist in describing the bushfire hazard.
- 2. A **bushfire hazard site assessment** including a plan that describes the bushfire hazard within 150 metres of the proposed development. The description of the hazard must be prepared in accordance with Section 2.2.3 to 2.2.5 of AS3959:2009 Construction of buildings in bushfire prone areas (Standards Australia) excluding paragraph (a) of section 2.2.3.2. Photographs or other techniques maybe used to assist in describing the bushfire hazard.
- 3. A **bushfire management statement** describing how the proposed development responds to the requirements of Clause 44.06 and 53.02.



## **Application Details**

| Municipality:      | Mount Buller Alpine Resort                                                 |  |  |
|--------------------|----------------------------------------------------------------------------|--|--|
| Title description: | Crown Allotment 5A, Section A, Parish of Changue East                      |  |  |
|                    | Environmental Significance Overlay                                         |  |  |
|                    | Heritage Overlay                                                           |  |  |
| Overlays:          | Design and Development Overlay                                             |  |  |
|                    | Erosion Management Overlay                                                 |  |  |
|                    | Bushfire Management Overlay                                                |  |  |
| Zoning:            | Alpine Resorts Planning Scheme, Comprehensive Development Zone, Schedule 2 |  |  |

## **Site Description**

| Site change                                                                   | See attached Site Den (in Site Deates costian)                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site shape:                                                                   | See attached Site Plan (in Site Photos section)                                                                                                                                                                                                                                                                                                  |
| Site Dimensions:                                                              | See attached Site Plan (in Site Photos section)                                                                                                                                                                                                                                                                                                  |
| Site Area                                                                     | The works area is 650m2, the existing building has a gross floor area over two other levels of 1,517m2, with the proposed extension having a gross floor area of 340m2, increasing the building gross floor area to 1,857m2, the gross floor area increase is 22%.                                                                               |
| Existing use and<br>siting of buildings<br>and works on and<br>near the land: | The existing building, Mid-station, is used as a ski field<br>lift station and storage facility. This building is<br>surrounded by managed ski slopes that are subject to<br>summer vegetation management in the form of machine<br>(tractor) slashing                                                                                           |
| Existing vehicle<br>arrangements:                                             | The existing building and proposed extension have two<br>wheel drive vehicle road access outside of the winter<br>snow season and oversnow access during the winter<br>snow season                                                                                                                                                               |
| Location of nearest fire hydrant:                                             | Mount Buller Village – 80m, Snowmaking Hydrant 30m                                                                                                                                                                                                                                                                                               |
| Any other features<br>of the site relevant<br>to bushfire<br>considerations:  | The snowmaking reticulation system water supply is<br>available at this site and is part of our bushfire<br>management plan, there is in excess of 100ML of water<br>available and a pumping capacity of up 500lt/sec and<br>100lt/sec with generator power supply. As mentioned<br>above, this building is used as a ski field lift station and |



| storage | facility | during | the | winter | snow | season | (June- |
|---------|----------|--------|-----|--------|------|--------|--------|
| Sep/Oct | )        |        |     |        |      |        |        |

## **Bushfire Landscape Assessment**

Refer to Planning Permit Applications Bushfire Management Overlay Technical Guide for details to assist in developing a Bushfire Hazard Landscape Assessment.

Which landscape scenario represents the site? (Refer to Technical Guide for descriptions)

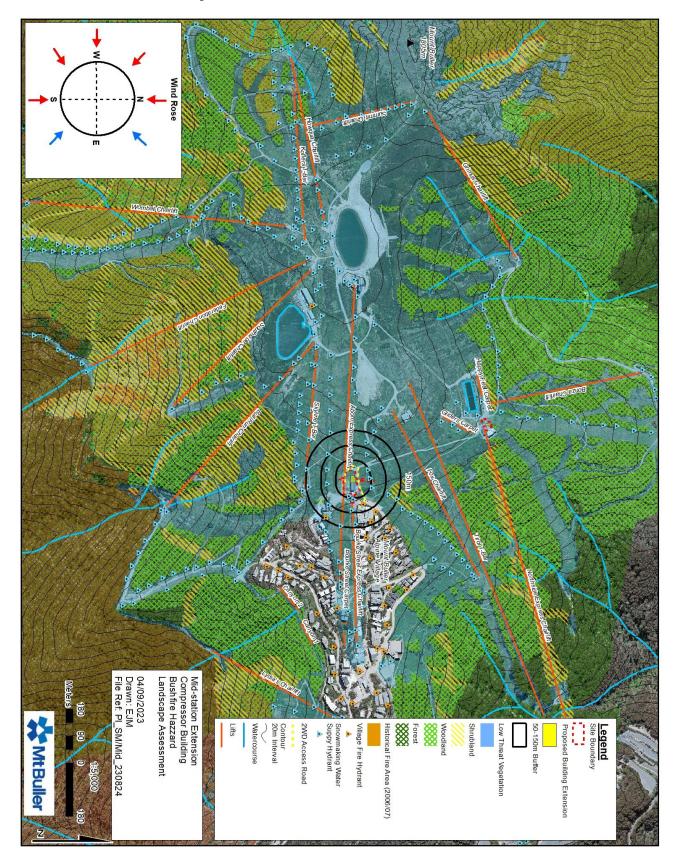
The landscape scenario that represents this is Landscape Scenario 3.

## What is the likely fire behaviour impacting the site?

A fire could be large of ember attack from the north/north west or direct flame contact and/or radiant heat coming up slope from the north or north east interrupted by managed ski slopes.



# ADVERTISED PLAN



## **Bushfire Landscape Assessment Plan**

## **Bushfire Hazard Assessment**

Classify the vegetation within 150 metres of the proposed development in accordance with AS3959:2009 Construction of buildings in bushfire prone areas.

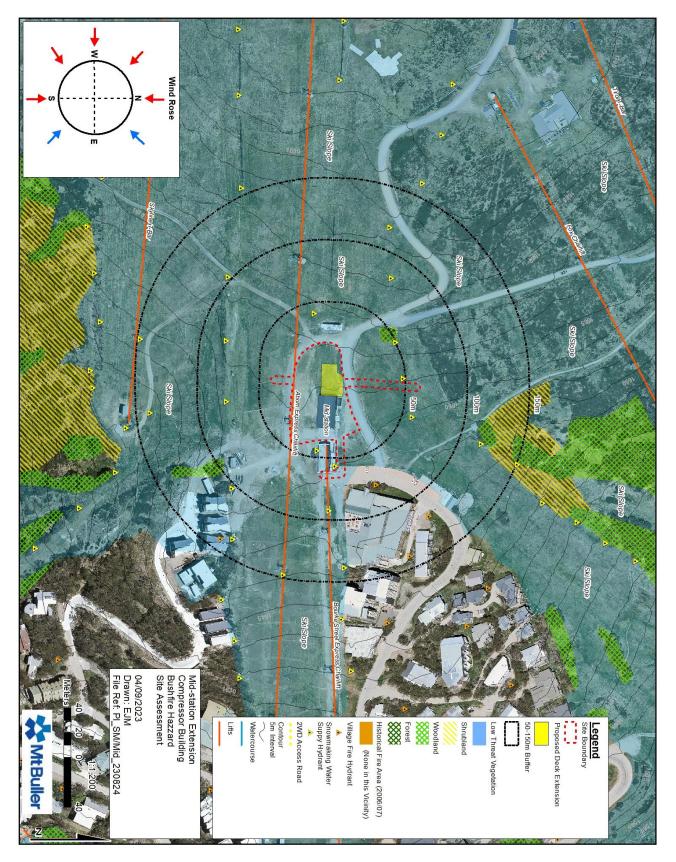
|                                                  | Direction (Aspect)             |                              |                              |                              |  |  |  |
|--------------------------------------------------|--------------------------------|------------------------------|------------------------------|------------------------------|--|--|--|
|                                                  | Northern                       | Southern                     | Eastern                      | Western                      |  |  |  |
|                                                  | Excludable / Low<br>Threat 🗸 🗸 | Excludable / Low<br>Threat ✓ | Excludable / Low<br>Threat 🗸 | Excludable / Low<br>Threat 🗸 |  |  |  |
|                                                  | Modified 🗸                     | Modified 🗸                   | Modified 🗸                   | Modified 🗸                   |  |  |  |
|                                                  | Forest                         | Forest                       | Forest                       | Forest                       |  |  |  |
| Vegetation                                       | Woodland 🗸                     | Woodland 🗌                   | Woodland 🗌                   | Woodland 🗌                   |  |  |  |
| (within 150 metres of proposed                   | Scrub (tall)                   | Scrub (tall)                 | Scrub (tall)                 | Scrub (tall)                 |  |  |  |
| building / works)                                | Shrubland (short) $\Box$       | Shrubland (short) $\Box$     | Shrubland (short) 🗌          | Shrubland (short) 🗌          |  |  |  |
|                                                  | Mallee 🗌                       | Mallee 🗌                     | Mallee 🗌                     | Mallee                       |  |  |  |
|                                                  | Rainforest                     | Rainforest 🗌                 | Rainforest 🗌                 | Rainforest                   |  |  |  |
|                                                  | Grassland 🗸                    | Grassland 🗸                  | Grassland 🗸                  | Grassland 🗸                  |  |  |  |
|                                                  | Upslope / Flat                 | Upslope / Flat               | Upslope / Flat               | Upslope / Flat 🗸             |  |  |  |
|                                                  | DOWNSLOPE                      | DOWNSLOPE                    | DOWNSLOPE                    | DOWNSLOPE                    |  |  |  |
| Effective<br>Slope                               | >0 to 5 °                      | >0 to 5 °                    | >0 to 5 °                    | >0 to 5 °                    |  |  |  |
| under the                                        | >5 to 10°                      | >5 to 10°                    | >5 to 10° 🗸                  | >5 to 10°                    |  |  |  |
| classifiable<br>vegetation within                | >10° to 15° 🗸                  | >10° to 15° 🗸                | >10° to 15°                  | >10° to 15°                  |  |  |  |
| 150 metres)                                      | >15 to 20°                     | >15 to 20°                   | >15 to 20°                   | >15 to 20°                   |  |  |  |
|                                                  | >20°                           | >20°                         | >20°                         | >20°                         |  |  |  |
| Distance (m)<br>to<br>Classifiable<br>Vegetation | 112m                           | 150m+                        | 150m+                        | 150m+                        |  |  |  |

#### A scaled plan that shows the following is required:

- 150 metre assessment around the location of proposed buildings and around reasonable siting options for proposed buildings (if they are available)
- Property boundaries
- Orientation
- Contours
- Classifiable vegetation within the assessment area
- Excludable vegetation within the assessment area
- Distance between the classifiable vegetation and the proposed buildings
- Slope under the classifiable vegetation (slope is based on the slope under the classifiable vegetation and not the slope between the vegetation and the building)



# ADVERTISED PLAN



## **Bushfire Site Hazard Plan**

## **Bushfire Management Statement**

## 53.02-4.1 Landscape, Siting and design objectives

- Development is appropriate having regard to the nature of the bushfire risk arising from the surrounding landscape.
- Development is sited to minimise the risk from bushfire.
- Development is sited to provide safe access for vehicles, including emergency vehicles.
- Building design minimises vulnerability to bushfire attack.

## Approved Measure (AM) 2.1 - Landscape

#### Requirement

The bushfire risk to the development from the landscape beyond the site can be mitigated to an acceptable level.

All approaches are ski slope, which is low threat vegetation (open grassland) or to the north woodland dispersed with ski slope and much of it is flat or upslope. Additionally, all approaches have access to the snowmaking water supply for fire fighting purposes

| Has Approved Measure (AM) 2.1 been met? | Yes 🗌 No 🗌 |  |
|-----------------------------------------|------------|--|
|-----------------------------------------|------------|--|

## Approved Measure (AM) 2.2 - Siting

## Requirement

A building is sited to ensure the site best achieves the following:

 The maximum separation distance between the building and the bushfire hazard

These proposed works are an extension to an existing building which has been in this location since 1984, the proposed extension is sited on low lying non-native grasses, and as mentioned above this building is surrounded by managed ski slopes that are subject to summer vegetation management in the form of machine (tractor) slashing

• The building is in close proximity to a public road

The building has two wheel drive vehicle road access outside of the winter snow season and oversnow access during the winter snow seasonAs above, the building has two wheel drive vehicle road access outside of the winter snow season and oversnow access during the winter snow and is 70m from the nearest village road, which has access for four wheel drive vehicles

• Access can be provided to the building for emergency service vehicles



As above, the building has two wheel drive vehicle road access outside of the winter snow season and oversnow access during the winter snow season and access can be provided to emergency service vehicles during the summer season. During the winter snow season the building is 70m from the nearest village road, which has access for four wheel drive vehicles

#### Any other comments

As mentioned above, the snowmaking reticulation system provides further water to this site and is part of our bushfire management plan.

| Has Approved Measure (AM) 2.2 been met? | Yes 🗸 | No |  |
|-----------------------------------------|-------|----|--|
|-----------------------------------------|-------|----|--|

#### Approved Measure (AM) 2.3 – Building Design

#### Requirement

A building is designed to be responsive to the landscape risk and reduce the impact of bushfire on the building.

As mentioned above, These proposed works are an extension to an existing building which has been in this location since 1984



## 53.02-4.2 – Defendable Space and Construction Objective

• Defendable space and building construction mitigate the effect of flame contact, radiant heat and embers on the building.

## Approved Measure (AM) 3.1 – Bushfire Construction and Defendable Space

### **Requirement:**

A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person's unit, industry, office, retail premises, service station or warehouse provides the defendable space in accordance with Column A, B, C of Table 2 to Clause 53.02-5 and is managed in accordance with Table 6 to Clause 53.02-5 wholly within the title boundaries of the land.

The building will be provided with defendable space in accordance with Column A

The defendable space distance required is 50 metres.

| Vegetation must to be managed to the following standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CONFIRM<br>ACCEPTANCE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <ul> <li>Grass must be short cropped and maintained during the declared fire danger period.</li> <li>All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.</li> <li>Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building.</li> <li>Plants greater than 10 centimetres in height must not be placed within 3m of a window or glass feature of the building.</li> <li>Shrubs must not be located under the canopy of trees.</li> <li>Individual and clumps of shrubs must not exceed 5 sq. metres in area and must be separated by at least 5 metres.</li> <li>Trees must not overhang or touch any elements of the building.</li> <li>The canopy of trees must be separated by at least 5 metres.</li> <li>There must be a clearance of at least 2 metres between the lowest tree branches and ground level.</li> </ul> | ✓                     |

Are there significant siting constraints that would allow Column D of Table 2 to Clause 53.02-5?

Yes 🗌

Click here to explain the significant siting constraints that would allow Column D of Table 2 to Clause 53.02-5

No ✓ Not Applicable



## A building is constructed to the bushfire attack level:

• That corresponds to the defendable space provided in accordance with Table 2 to Clause 53.02-5. The building will be constructed to BAL 12.5

# Is the defendable space wholly contained within the boundaries of your property?

**Yes V No i** if no, see Alternative Measure 3.3

## Any other comments

As mentioned elsewhere in this document, these proposed works are an extension to an existing building which has been in this location since 1984 and are sited on low lying non-native grasses, and as mentioned above, this building is surrounded by managed ski slopes that are subject to summer vegetation management in the form of machine (tractor) slashing.

The terrain south, south west and west of the site is low threat vegetation (open grassland) and much of it is flat or upslope from the site. All other approaches are ski slope, which is low threat vegetation (open grassland) or woodland dispersed with ski slope. Additionally north, north west, west, south west and south approaches have access to the snowmaking system water supply for fire fighting purposes.

| Has Approved Measure (AM) 3.1 been met? | Yes 🗌 No 🗌 |  |
|-----------------------------------------|------------|--|
|-----------------------------------------|------------|--|



## **Alternative Measures**

## Alternative Measure (AltM) 3.3 – Defendable Space on adjoining land

#### **Requirement:**

Adjoining land may be included as defendable space where there is reasonable assurance that the land will remain or continue to be managed in that condition as part of the defendable space.

The adjoining land, as with the whole site is within the Mt Buller Ski Field and managed as part of the ski field Vegetation Management Plan which is ongoing.

See attached photos in Site Photos section below

Has Alternative Measure (AltM) 3.3 been met? Yes 🗌 No 🗌 N/A 🗌

## Alternative Measure (AltM) 3.4 – Calculate defendable space using Method 2 of AS3959-2009

#### **Requirement:**

Defendable space and the bushfire attack level is determined using Method 2 of AS3959:2009 Construction of buildings in bushfire prone areas (Standards Australia) subject to any guidance published by the relevant fire authority.

Click here to explain how defendable space and bushfire attack level has been determined. Evidence will need to be provided to substantiate and variation to the model inputs.



## Alternative Measure (AltM) 3.5 – Dwellings subject to direct flame contact

#### **Requirement:**

A building used for a dwelling (including an extension or alteration to a dwelling) may provide defendable space to the property boundary where it can be demonstrated that:

- The lot has access to urban, township or other areas where:
  - Protection can be provided from the impact of extreme bushfire behaviour
  - Fuel is managed in a minimum fuel condition
  - $\circ~$  There is sufficient distance or shielding to protect people from direct flame contact or harmful levels of radiant heat
- Less defendable space and higher construction standard is appropriate having regard to the bushfire hazard landscape assessment
- The dwelling is constructed to a bushfire attack level of BAL-FZ

This alternative measure only applies where the requirements of Approved Measure 3.1 cannot be met.

Click here to provide your response to the requirements that may allow Alternative Measure 3.5 to be used. Included must be an explanation why Approved Measure 3.1 cannot be met

Has Alternative Measure (AltM) 3.5 been met? Yes 🗌 No 🗌 N/A 🗌

**Other Unspecified Alternative Measures** 

Click here to provide your response



## 53.02-4.3 – Water Supply and Access Objectives

- A static water supply is provided to assist in protecting property.
- Vehicle access is designed and constructed to enhance safety in the event of a bushfire.

## Approved Measure (AM) 4.1 – Water Supply and Access

#### Water Supply Requirement

A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person's unit, industry, office, retail premises service station or warehouse is provided with a static water supply for fire fighting and property protection purposes as specified in Table 4 to Clause 53.02-5.

The water supply may be in the same tank as other water supplies provided that a separate outlet is reserved for fire fighting water supplies.

| Lot Size (m²)                                                                               | Hydrant<br>Available                                                                                                                                                   | Capacity<br>(litres)                                                                                                                                                                                                                                                                            | Fire<br>Authority<br>Fittings &<br>Access<br>Required | Select<br>Response |  |  |
|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--------------------|--|--|
| Less than 500                                                                               | Not Applicable                                                                                                                                                         | 2,500                                                                                                                                                                                                                                                                                           | No                                                    |                    |  |  |
| 500 - 1000                                                                                  | Yes                                                                                                                                                                    | 5,000                                                                                                                                                                                                                                                                                           | No                                                    |                    |  |  |
| 500 - 1000                                                                                  | No                                                                                                                                                                     | 10,000                                                                                                                                                                                                                                                                                          | Yes                                                   |                    |  |  |
| 1001 and above                                                                              | Not Applicable                                                                                                                                                         | 10,000                                                                                                                                                                                                                                                                                          | Yes                                                   | ✓                  |  |  |
| Note: a hydrant is available if it is located within 120 metres of the rear of the building |                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                 |                                                       |                    |  |  |
| Confirm Static<br>Water Supply<br>meets the<br>following<br>requirements                    | <ul> <li>concrete of All fixed a fighting p metal.</li> <li>Include a</li> <li>The following a litres of static v</li> <li>Be readily identificat provided.</li> </ul> | <ul> <li>Include a separate outlet for occupant use</li> <li>The following additional requirements apply when 10,000 litres of static water is required:</li> <li>Be readily identifiable from the building or appropriate identification signage to the satisfaction of CFA must be</li> </ul> |                                                       |                    |  |  |



|  | The outlet/s of the water tank must by within 4 metres of the accessway and unobstructed                                        |
|--|---------------------------------------------------------------------------------------------------------------------------------|
|  | Incorporate a ball or gate valve (British Standard Pipe (BSP<br>65mm) and coupling (64mm CFA 3 thread per inch male<br>fitting) |
|  | Any pipework and fittings must be a minimum of 65mm (excluding the CFA coupling)                                                |
|  |                                                                                                                                 |

## Additional Information:

The snowmaking reticulation system water supply is available at this site and is part of our bushfire management plan.

| been met? Yes | 🗌 No |  |
|---------------|------|--|

#### **Access Requirement**

A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person's unit, industry, office, retail premises, service station or warehouse is provided with vehicle access designed and constructed as specified in Table 5 to Clause 53.02-5.



| Column A                                            | Column B                                                                                                                                                                                                                                                                                           |  |  |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Length of<br>access is less<br>than 30 metres       | There are no design and construction requirements if fire<br>authority access to water supply is not required under AM<br>4.1                                                                                                                                                                      |  |  |
| Length of<br>access is less<br>than 30 metres       | <ul> <li>Where fire authority access to the water supply is required under AM 4.1 fire authority vehicles must be able to get within 4 metres of the water supply outlet</li> <li>Click here to explain how a fire authority vehicle can get within 4 metres of the water supply outlet</li> </ul> |  |  |
|                                                     | The following design and construction requirements apply:                                                                                                                                                                                                                                          |  |  |
|                                                     | ✓ All weather construction                                                                                                                                                                                                                                                                         |  |  |
|                                                     | ✓ A load limit of at least 15 tonnes                                                                                                                                                                                                                                                               |  |  |
| Length of<br>access is<br>greater than 30<br>metres | Provide a minimum trafficable width of 3.5 metres                                                                                                                                                                                                                                                  |  |  |
|                                                     | <ul> <li>Be clear of encroachments for at least 0.5 metres on each<br/>side and at least 4 metres vertically</li> </ul>                                                                                                                                                                            |  |  |
|                                                     | ✓ Curves must have a minimum inner radius of 10 metres                                                                                                                                                                                                                                             |  |  |
|                                                     | The average grade must be no more than 1 in 7<br>(14.4%)(8.1°) with a maximum grade of no more than 1<br>in 5 (20%)(11.3°) for no more than 50 metres                                                                                                                                              |  |  |
|                                                     | <ul> <li>Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.</li> </ul>                                                                                                                                                                                       |  |  |
|                                                     | A turning area for fire fighting vehicles must be provided close to the building by one of the following:                                                                                                                                                                                          |  |  |
| Length of                                           | A turning circle with a minimum radius of eight metres                                                                                                                                                                                                                                             |  |  |
| access is<br>greater than                           | A driveway encircling the dwelling                                                                                                                                                                                                                                                                 |  |  |
| 100 metres                                          | □ The provision of other vehicle turning heads such as a T head or Y Head – which meet the specification of Austroad Design for an 8.8 metre service vehicle.                                                                                                                                      |  |  |
| Length of                                           | <ul> <li>Passing bays must be provided at least every 200 metres.</li> </ul>                                                                                                                                                                                                                       |  |  |
| access is<br>greater than<br>200 metres             | <ul> <li>Passing bays must be a minimum of 20 metres long with a minimum trafficable width of six metres.</li> </ul>                                                                                                                                                                               |  |  |

## Additional Information:



Click here to add any comments to support your response to Approved Measure AM 4.1 - Access

| Has Approved Measure (AM) 4.1 (Access) |     |    |  |
|----------------------------------------|-----|----|--|
| been met?                              | Yes | No |  |

## **Attachment 1 – Site Photos**

Image 1: Location of the proposed deck extension with existing deck and building

Image 2: Western approach to the site and existing structure

Image 3: Southern approach to the site and existing structure

*Image 4: View east-north east from the existing structure* 

*Image 5: View north east from the existing structure* 

Image 6: View east to the existing structure

Image 7: View north from the site and existing structure

Image 8: View west from the site and existing structure

Image 9: Site plan showing proposed structure (deck extension) shape and dimensions

