

Bushfire Management Statement

PATHWAY 2 APPLICATION (CLAUSE 53.02-4)

- Construction of a dwelling (including an extension or alteration to a dwelling)
- Dependant Person Unit
- Industry
- Office
- Retail Premises
- Service Station
- Warehouse

Property Address: 90 Moor Street, Barmah

Applicant/Owner Name: Ross and Julie Langdon

Date: 28/1/2024

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 53.03 – Bushfire Planning.

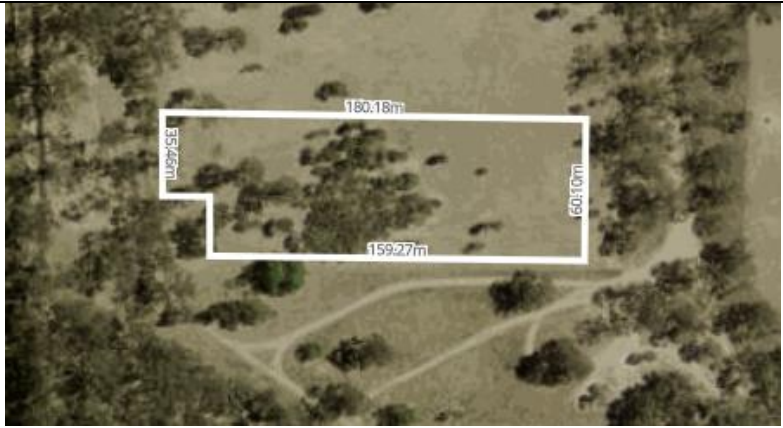
The statement contains three components:

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 building in bushfire prone areas (Standards Australia) excluding paragraph (a) of Section 2.2.3.2. Photographs or other techniques may be used to assist in describing the bushfire hazard.
3. A **bushfire management statement** describing how the proposed development responds to the requirements of Clause 44.05 and 53.02.

Application Details

| | |
|--------------------------|--|
| Municipality | Moira Shire Council |
| Title Description | Lot 1 TP389476 |
| Overlays | Bushfire Management Overlay, Environmental Significance Overlay – Schedule 2, Rural Floodway Overlay |
| Zoning | Farming Zone |

Site Description

| | |
|---|--|
| Site shape | Irregular in shape |
| Site Dimensions: |  |
| Site Area: | 10348.47m ² |
| Existing use and siting of buildings and works on and near the land: | The land is developed with a hay shed and other outbuildings. The surrounding uses are generally developed lifestyle properties with farming land across Moor Street to the east. |
| Existing vehicle arrangements: | The subject site has access off Moor Street which is a gravel road and in close proximity to Knowles Road and further north is the Barmah-Shepparton Road which is bitumen sealed. |
| Location of nearest fire hydrant: | No fire hydrant nearby. |
| Any other features of the site relevant to bushfire considerations: | The site is relatively flat and with pockets of native vegetation including areas of cleared land. The surrounding area is a variety of lands either similar in size, or larger farming lots to the east and to the north is the township of |

| | |
|--|--|
| | <p>Barmah with smaller developed lots. To the west of the lot is the River Murray Reserve which is classified as woodland vegetation with the Murray River abutting the reserve to the west.</p> |
|--|--|

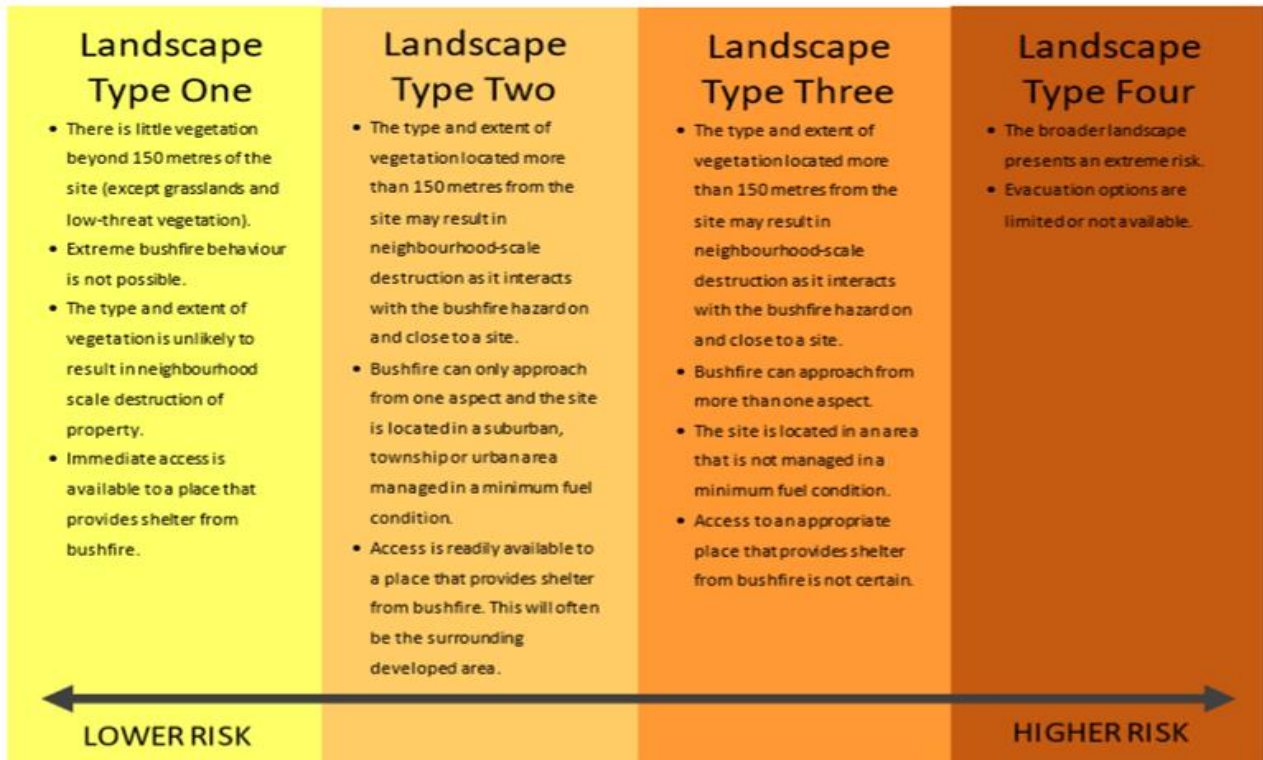
Bushfire Landscape Assessment

Reference is made to the 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?

The landscape scenario that best fits the subject site is considered to be Landscape Three, as the fire can approach from more than one aspect.

What is the likely fire behaviour impacting the site?

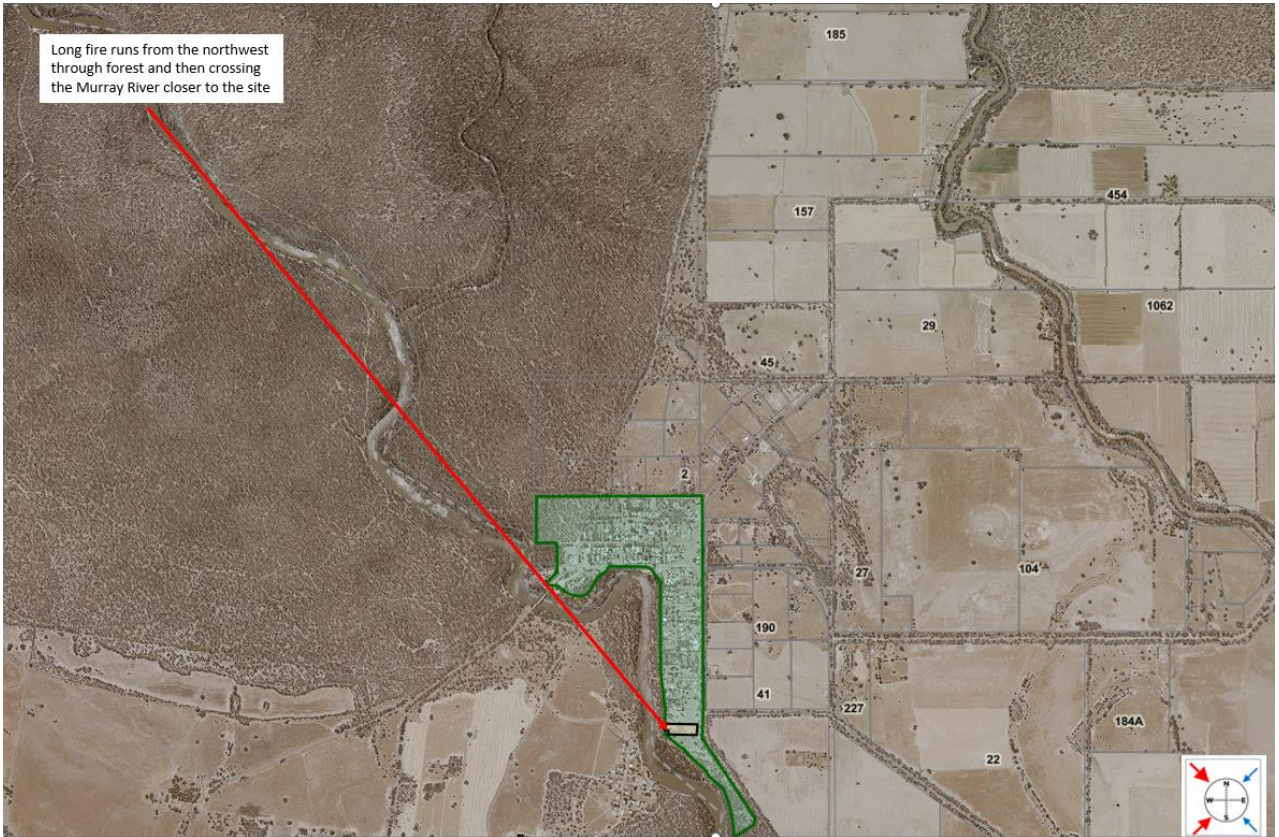



Subject site

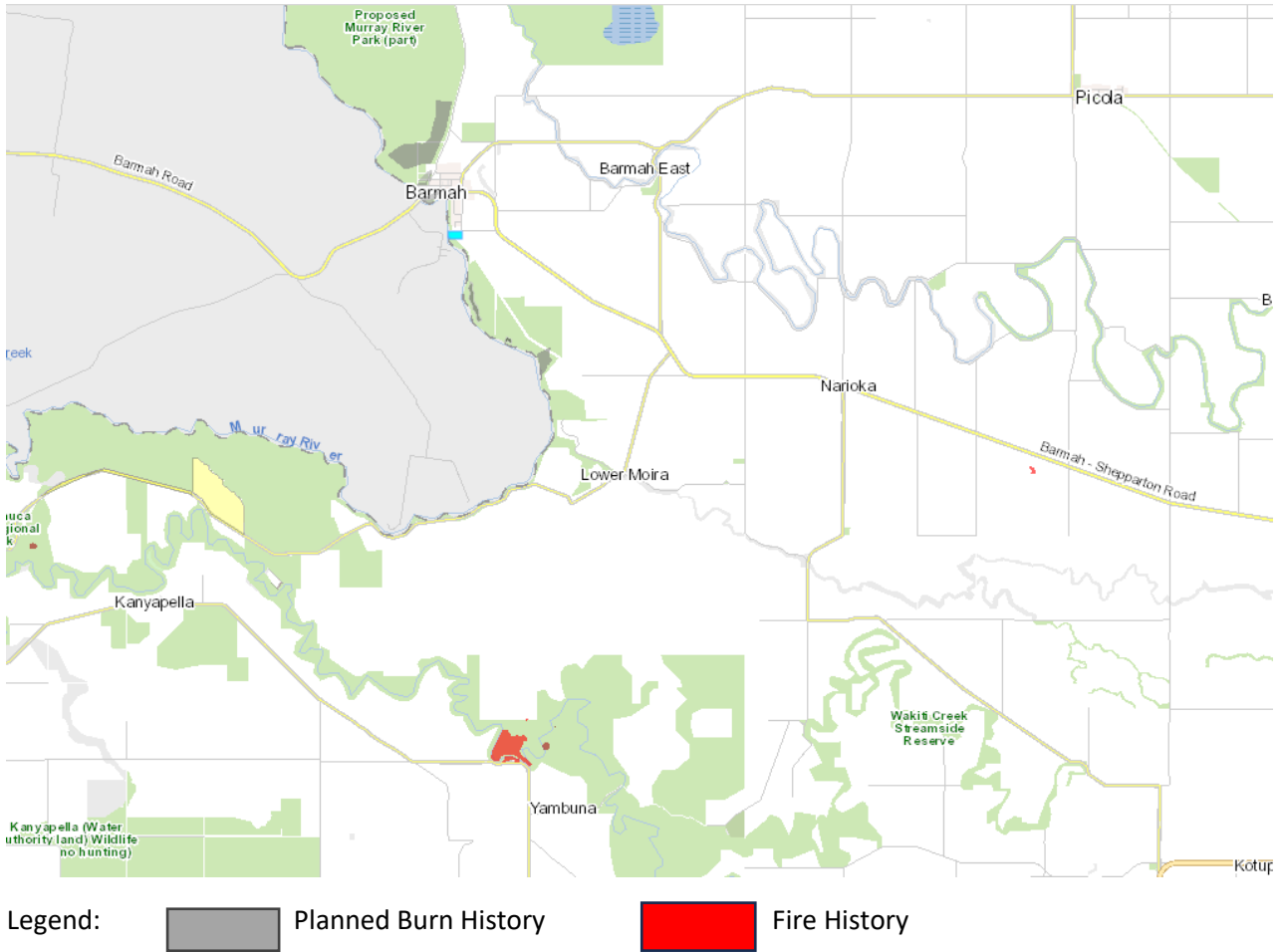
Bushfire Hazard Site Assessment Plan

The site is considered to be assessed as a Landscape Type Two classification. There is a potential fire run from the north west where the run commences from NSW and runs through the Barmah National Park with the fire run being extensive. The land in all directions including northwest is flat and varies from forest, woodland and closer to the site is the managed grazing land and the Murray River.

The fire history identifies that there have been no fires within the area. There has been planned burns just north of the of the subject site and the township of Barmah. There are a number of towns within the vicinity to the south and east which provides shelter should a bushfire occur.



Bushfire History & Planned Burn History



The Bushfire History identifies that there has been very little bushfire activity within the area. It is noted that planned burns have been undertaken just north of the township of Barmah and another burn further south between the subject site and Lower Moira as shown on the map.

Bushfire Hazard Site Assessment

The table below provides details in regard to the classification of the vegetation within 150 metres of the proposed development in accordance with AS3959: 2009 Construction of buildings in bushfire prone areas.

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

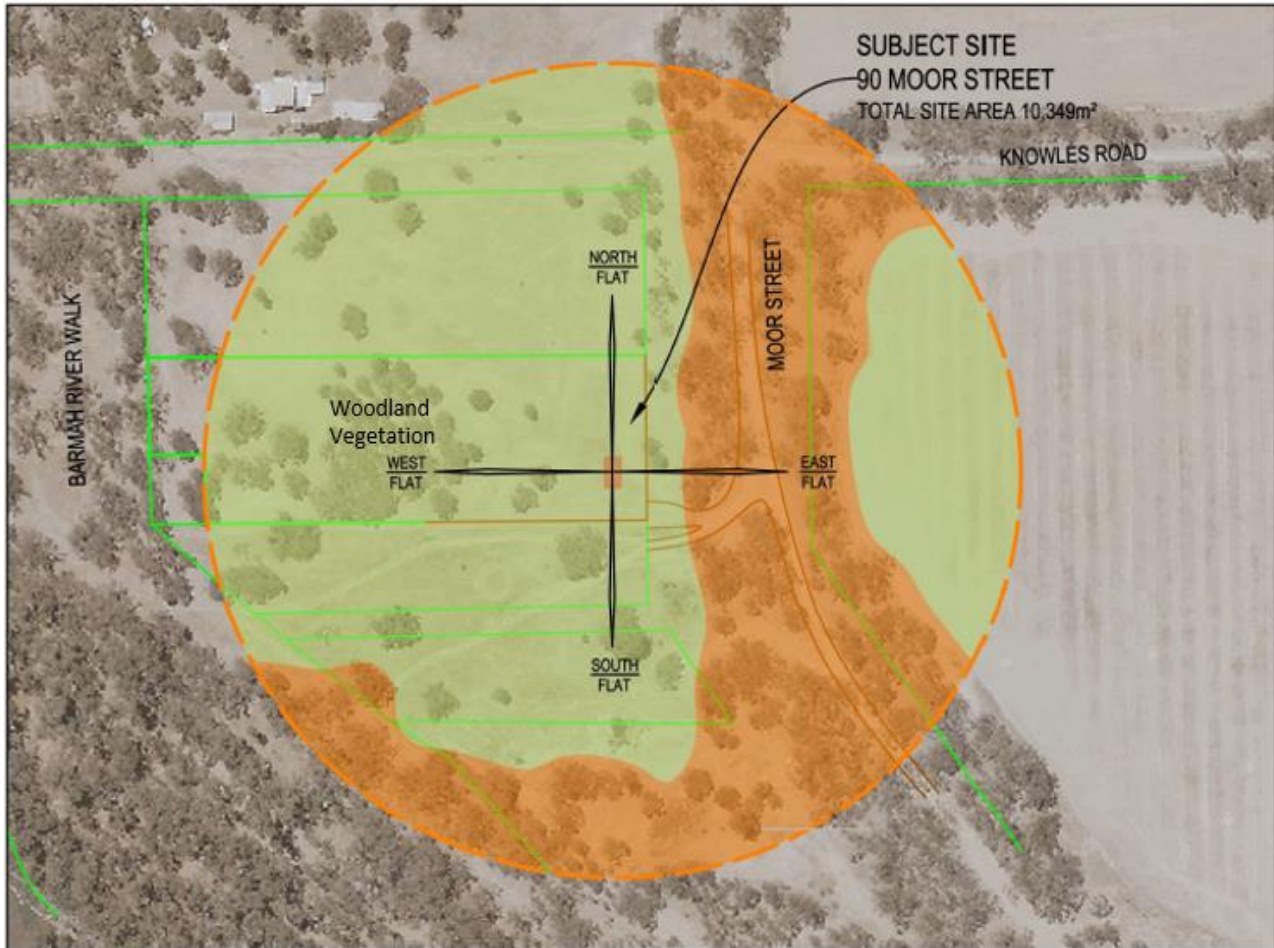
| | Direction (Aspect) | | | |
|---|--|--|--|--|
| | Northern | Southern | Eastern | Western |
| Vegetation (within 150 metres of proposed building / works) | Excludable / Low Threat <input type="checkbox"/> | Excludable / Low Threat <input type="checkbox"/> | Excludable / Low Threat <input type="checkbox"/> | Excludable / Low Threat <input type="checkbox"/> |
| | Modified <input checked="" type="checkbox"/> | Modified <input checked="" type="checkbox"/> | Modified <input checked="" type="checkbox"/> | Modified <input checked="" type="checkbox"/> |
| | Forest <input type="checkbox"/> | Forest <input type="checkbox"/> | Forest <input type="checkbox"/> | Forest <input type="checkbox"/> |
| | Woodland <input type="checkbox"/> | Woodland <input checked="" type="checkbox"/> | Woodland <input checked="" type="checkbox"/> | Woodland <input checked="" type="checkbox"/> |
| | Scrub (tall) <input type="checkbox"/> | Scrub (tall) <input type="checkbox"/> | Scrub (tall) <input type="checkbox"/> | Scrub (tall) <input type="checkbox"/> |
| | Shrubland (short) <input type="checkbox"/> | Shrubland (short) <input type="checkbox"/> | Shrubland (short) <input type="checkbox"/> | Shrubland (short) <input type="checkbox"/> |
| | Mallee <input type="checkbox"/> | Mallee <input type="checkbox"/> | Mallee <input type="checkbox"/> | Mallee <input type="checkbox"/> |
| | Rainforest <input type="checkbox"/> | Rainforest <input type="checkbox"/> | Rainforest <input type="checkbox"/> | Rainforest <input type="checkbox"/> |
| | Grassland <input type="checkbox"/> | Grassland <input type="checkbox"/> | Grassland <input type="checkbox"/> | Grassland <input type="checkbox"/> |
| Effective Slope (under the classifiable vegetation within 150 metres) | Upslope / Flat <input checked="" type="checkbox"/> | Upslope / Flat <input checked="" type="checkbox"/> | Upslope / Flat <input checked="" type="checkbox"/> | Upslope / Flat <input checked="" type="checkbox"/> |
| | DOWNSLOPE | DOWNSLOPE | DOWNSLOPE | DOWNSLOPE |
| | >0 to 5 ° <input type="checkbox"/> | >0 to 5 ° <input type="checkbox"/> | >0 to 5 ° <input type="checkbox"/> | >0 to 5 ° <input type="checkbox"/> |
| | >5 to 10° <input type="checkbox"/> | >5 to 10° <input type="checkbox"/> | >5 to 10° <input type="checkbox"/> | >5 to 10° <input type="checkbox"/> |
| | >10° to 15° <input type="checkbox"/> | >10° to 15° <input type="checkbox"/> | >10° to 15° <input type="checkbox"/> | >10° to 15° <input type="checkbox"/> |
| | >15 to 20° <input type="checkbox"/> | >15 to 20° <input type="checkbox"/> | >15 to 20° <input type="checkbox"/> | >15 to 20° <input type="checkbox"/> |
| >20° <input type="checkbox"/> | >20° <input type="checkbox"/> | >20° <input type="checkbox"/> | >20° <input type="checkbox"/> | |
| Distance (m) to Classifiable Vegetation | 10 metres | 10m modified & 110m Woodland | 10m modified | 10m modified & 40m Woodland |







A scaled plan that shows the following is required:

- 150 metre assessment around the location of the proposed buildings and around reasonable siting options for the proposed buildings (if they are available).
- Property boundaries
- Orientation
- Classifiable vegetation within the assessment area

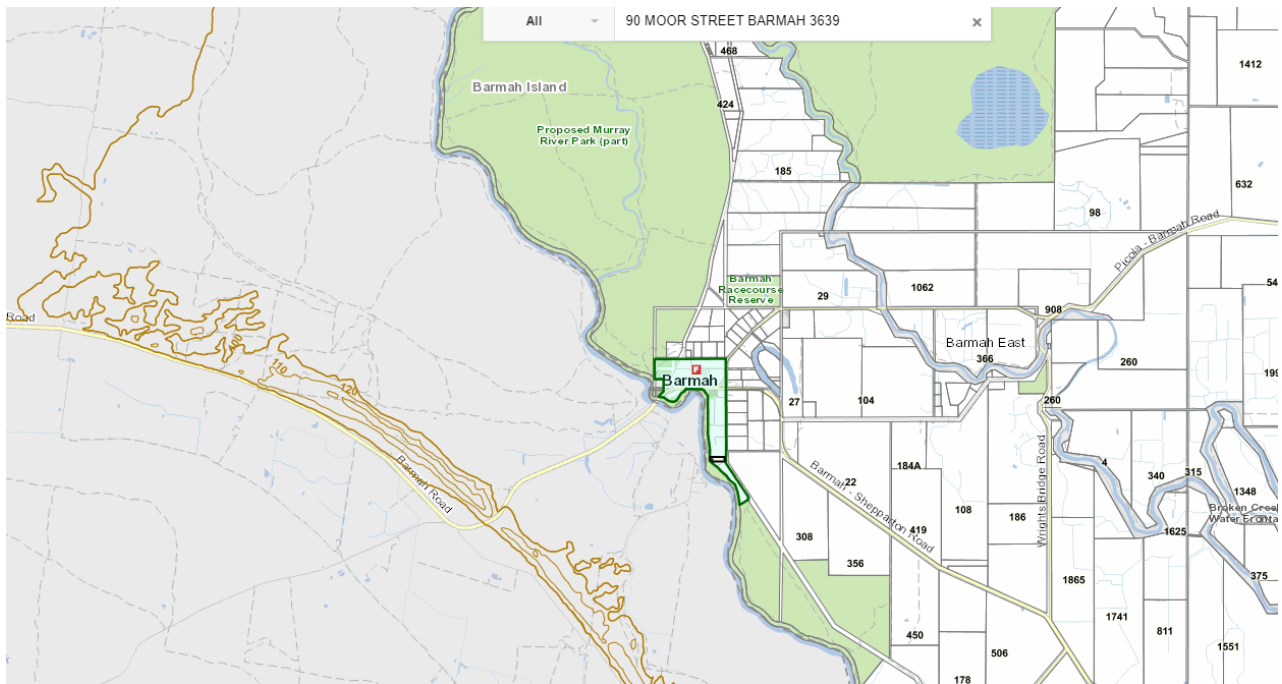
- Excludable vegetation within the assessment area
- Distance between the classifiable vegetation and the proposed buildings
- Slope under the classifiable vegetation (slope is based on the slope under the classifiable vegetation and not the slope between the vegetation and the building)

Bushfire Site Hazard Plan



| | | | |
|--------|---|---|--|
| LEGEND |  150m RADIUS |  BOUNDARY |  MODIFIED/LOW THREAT VEGETATION |
| |  DWELLING |  WATERCOURSE |  WOODLAND |

Contour 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 of bushfire.
- 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. The surrounding landscape varies from modified and woodland on properties to the north, south, east and west and further afield across the road of Moor Street, where it is modified cropping in the farming zone or the west to the Murray River.

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

Approved Measure (AM) 2.2 – Siting

Requirement

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

- The maximum separation distance between the building and the bushfire hazard. The dwelling has been sited where there is very little vegetation and where defensible space of 50 metres or to the property boundary is to be provided.
- The building is in close proximity to Moor Street and then to the north is Barmah-Shepparton Road which is bitumen sealed which provides access in both directions being east and west.
- Access can be provided to the building for emergency service vehicles where the accessway is already constructed from Moor.

Any other comments – The siting is considered appropriate and located where there is very little native vegetation located within the immediate area for the dwelling site.

Has Approved Measure (AM) 2.2 been met? **Yes** **No**

Approved Measure (AM) 2.3 – Building Design

Requirement

The building is designed to be responsive to the landscape risk and reduce the impact of bushfire on the building. The building will be constructed from shipping container material for wall cladding, with colorbond roof, aluminium windows, including being designed that embers will not be able to penetrate the dwelling in the subfloor and to be constructed with a BAL 29.

Has Approved Measure (AM) 2.2 been met? **Yes** **No**

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

The 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 Table 2 to Clause 53.02-5.

The defendable space distance required is in accordance with Table 2 to Clause 53.02-5 is 25 metres in all directions.

Table 6 of Clause 53.02-5 – Vegetation management requirement:

| Vegetation must be managed to the following standard | CONFIRM ACCEPTANCE |
|--|-------------------------------------|
| <ul style="list-style-type: none"> Grass must be short cropped and maintained during the declared fire danger period. All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period. Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building. Shrubs must not be located under the canopy trees. Individual and clumps of shrubs must not exceed 5 sq metres in area and must be separated by at least 5 metres. Trees must not overhand or touch any elements of the building. The canopy of trees must be separated by at least 5 metres. There must be a clearance of at least 2 metres between the lowest tree branch and ground level. | <input checked="" type="checkbox"/> |

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

Yes 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 5302-5. The building will be constructed to **BAL 29**

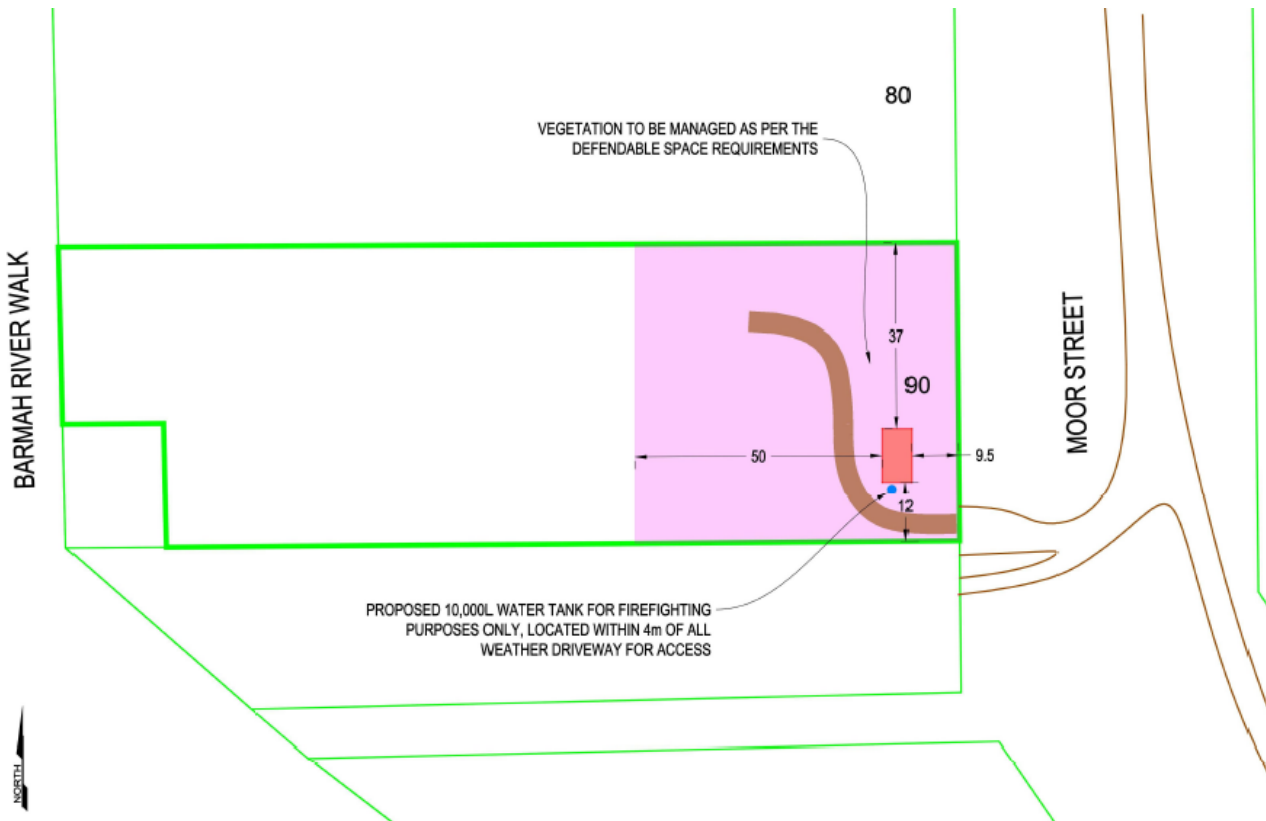
Is the defensible space wholly contained within the boundaries of your property?

Yes No if no, see Alternative Measure 3.3

Any other comments?

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

Defendable Space



53.02-4-3 - Water Supply and Access Objective

- A static water supply is provided to assist in protecting the property.
- Vehicles 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 dependent 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 Available | Capacity (litres) | Fire Authority Fittings & Access Required | Select Response |
|----------------|-------------------|-------------------|---|-------------------------------------|
| Less than 500 | Not Applicable | 2,500 | No | <input type="checkbox"/> |
| 500-1000 | Yes | 5,000 | No | <input type="checkbox"/> |
| 500 – 1000 | No | 10,000 | Yes | <input type="checkbox"/> |
| 1001 and above | Not Applicable | 10,000 | Yes | <input checked="" type="checkbox"/> |

Note: a hydrant is available if it is located within 120 metres of the rear of the buildings.

| | |
|--|---|
| <p>Confirm Static Water Supply meets the following requirements</p> | <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Is stored in an above ground water tank constructed of concrete or metal <input checked="" type="checkbox"/> All fixed above ground water pipes and fittings for fire fighting purposes must be made of corrosive resistant metal. <input checked="" type="checkbox"/> Include a separate outlet for occupant use <p>The following additional requirements apply when 10,000 litres of static water is required:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Be readily identifiable from the building or appropriate identification signage to the satisfaction of CFA must be provided. <input checked="" type="checkbox"/> Be located within 60 metres of the outer edge of the approved building. |
|--|---|

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

Additional information:

Has Approved Measure (AM) 4.1 (Water Supply)

been met?

Yes **No**

Access Requirement

A building used for a dwelling (including an extension or alteration to a dwelling), a dependent 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 access is less than 30 metres | <input checked="" type="checkbox"/> There are no design and construction requirement if fire authority access to water supply is not required under AM 4.1 |
| Length of access is more than 30 metres | <input checked="" type="checkbox"/> Where the 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. Explain how the fire authority can get within 4 metres of the water supply outlet. |
| Length of access is greater than 30 metres | The following design and construction requirements apply: <ul style="list-style-type: none"> <input type="checkbox"/> All weather construction <input type="checkbox"/> A load limit of at least 15 tonnes <input type="checkbox"/> Provide a minimum trafficable width of 3.5 metres <input type="checkbox"/> Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically <input type="checkbox"/> Curves must have a minimum inner radius of 10 metres |

| | |
|---|---|
| | <input type="checkbox"/> The average grade must be no more than 1 in 7 (14.48%)(8.1°) with a maximum grade of no more than 1 in 5 (20%)(11.3°) for no more than 50 metres <input type="checkbox"/> Dips must have no more than a 1 in 8 (12.5 per centre (7.1 degrees) entry and exit angle) |
| <p>Length of access is greater than 100 metres</p> | <p>A turning area for fire fighting vehicles must be provided close to the building by one of the following:</p> <input type="checkbox"/> A turning circle with a minimum radius of eight metres <input type="checkbox"/> A driveway encircling the dwelling <input type="checkbox"/> 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. |
| <p>Length of access is greater than 200 metres</p> | <input type="checkbox"/> Passing bays must be provided at least every 200 metres <input type="checkbox"/> Passing bays must be a minimum of 20 metres long with a minimum trafficable width of six metre. |

Additional information:

The access road to the dwelling is located less than 30 metres from the property boundary.

Has Approved Measure (AM) 4.1 (Access)

been met?

Yes **No**

Attachment 1 – Site Photos



Photo 1: View of subject site from Moor Street



Photo 2: North on Moor Street



Photo 3: Internal driveway within 90 Moor Street



Photo 4: North from proposed building envelope



Photo 5: West from proposed building envelope



Photo 6: South from proposed building envelope



Photo 7: South on Moor Street



Photo 8: East from proposed building envelope