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300mm	IRRIGATION VALVE	RELOCATION VALVE	RESOLUTION VALVE	PIPING	SUPPLY CHANNEL	PIPE DRAIN	EXTERNAL DRAIN	CHUCK/REGULATOR	CULVERT/SPIGON	FARM CHANNEL	FARM DRAIN	PIPELINE	PIPE DROP	BOUNDARY FENCE	INTERNAL FENCE	GATE	WATER TROUGH	ELEVATION	PEGS ELEVATION	PERMANENT MARK	DESIGN ELEVATION	STRUCTURE	WATER TROUGH	TRUCK	DEAD TREE	DEPTH OF OUTFALL (mm)	VERS.	DATE	SURVEYED CO	DESIGNED CO	CHECKED CO	DRAWN CO	PRINT DATE	
200mm	IRRIGATION VALVE	RELOCATION VALVE	RESOLUTION VALVE	PIPING	SUPPLY CHANNEL	PIPE DRAIN	EXTERNAL DRAIN	CHUCK/REGULATOR	CULVERT/SPIGON	FARM CHANNEL	FARM DRAIN	PIPELINE	PIPE DROP	BOUNDARY FENCE	INTERNAL FENCE	GATE	WATER TROUGH	ELEVATION	PEGS ELEVATION	PERMANENT MARK	DESIGN ELEVATION	STRUCTURE	WATER TROUGH	TRUCK	DEAD TREE	DEPTH OF OUTFALL (mm)	C1	18.8.20	N/A	N/A	N/A	N/A	06/09/2022	
150mm	IRRIGATION VALVE	RELOCATION VALVE	RESOLUTION VALVE	PIPING	SUPPLY CHANNEL	PIPE DRAIN	EXTERNAL DRAIN	CHUCK/REGULATOR	CULVERT/SPIGON	FARM CHANNEL	FARM DRAIN	PIPELINE	PIPE DROP	BOUNDARY FENCE	INTERNAL FENCE	GATE	WATER TROUGH	ELEVATION	PEGS ELEVATION	PERMANENT MARK	DESIGN ELEVATION	STRUCTURE	WATER TROUGH	TRUCK	DEAD TREE	DEPTH OF OUTFALL (mm)	C2	18.8.20	N/A	N/A	N/A	N/A	06/09/2022	
100mm	IRRIGATION VALVE	RELOCATION VALVE	RESOLUTION VALVE	PIPING	SUPPLY CHANNEL	PIPE DRAIN	EXTERNAL DRAIN	CHUCK/REGULATOR	CULVERT/SPIGON	FARM CHANNEL	FARM DRAIN	PIPELINE	PIPE DROP	BOUNDARY FENCE	INTERNAL FENCE	GATE	WATER TROUGH	ELEVATION	PEGS ELEVATION	PERMANENT MARK	DESIGN ELEVATION	STRUCTURE	WATER TROUGH	TRUCK	DEAD TREE	DEPTH OF OUTFALL (mm)	C3	6.9.22	Survey Method - GPS	Grid Method - Integrated	Grid Size - 1m	Datum - AHD	PM - RL	
50mm	IRRIGATION VALVE	RELOCATION VALVE	RESOLUTION VALVE	PIPING	SUPPLY CHANNEL	PIPE DRAIN	EXTERNAL DRAIN	CHUCK/REGULATOR	CULVERT/SPIGON	FARM CHANNEL	FARM DRAIN	PIPELINE	PIPE DROP	BOUNDARY FENCE	INTERNAL FENCE	GATE	WATER TROUGH	ELEVATION	PEGS ELEVATION	PERMANENT MARK	DESIGN ELEVATION	STRUCTURE	WATER TROUGH	TRUCK	DEAD TREE	DEPTH OF OUTFALL (mm)								
40mm	IRRIGATION VALVE	RELOCATION VALVE	RESOLUTION VALVE	PIPING	SUPPLY CHANNEL	PIPE DRAIN	EXTERNAL DRAIN	CHUCK/REGULATOR	CULVERT/SPIGON	FARM CHANNEL	FARM DRAIN	PIPELINE	PIPE DROP	BOUNDARY FENCE	INTERNAL FENCE	GATE	WATER TROUGH	ELEVATION	PEGS ELEVATION	PERMANENT MARK	DESIGN ELEVATION	STRUCTURE	WATER TROUGH	TRUCK	DEAD TREE	DEPTH OF OUTFALL (mm)								

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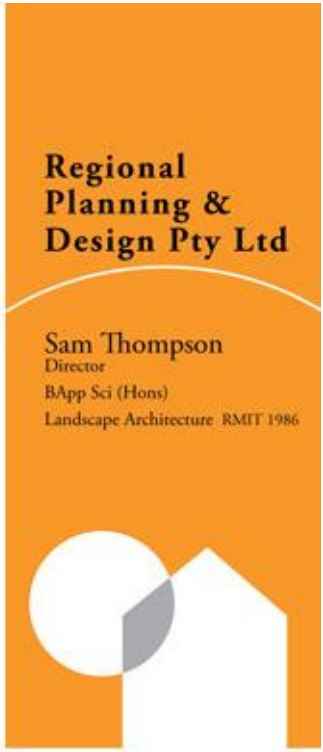
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SCOTT GERRARD  
 JALLUKA  
 ARARAT-HALLS GAP ROAD  
 REF: GERRARD WORKING  
 SHEET: CONCEPT PLAN

**DIAL BEFORE YOU DIG**  
 The Essential First Step







# BUSHFIRE MANAGEMENT STATEMENT



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**Lot 2 Ararat-Halls Gap Road  
Moyston Ref No 21.319**

## Disclaimer

This report has been made with careful consideration and with the best information available to Regional Planning and Design Pty Ltd at the time of writing. Before relying on information in this report, users should evaluate the accuracy, completeness and relevance of the information provided for their purposes. Regional Planning and Design Pty Ltd do not guarantee that it is without flaw or omission of any kind and therefore disclaim all liability for any error, loss or other consequence that may arise from you relying on any information in this report.

Requirements detailed in this document do not guarantee survival of the buildings or the occupants. The client is strongly encouraged to develop and practice a bushfire survival plan.

Information and assistance including a template for a Bushfire Survival Plan is provided as part of the 'Fire Ready Kit' available through the CFA website at <http://www.cfa.vic.gov.au> or through your local CFA Regional office.

## Version Control

Report Version	Description	Date Completed	Issued to
A	Issued as a draft for discussion	29/8/2021	Client
B	Issued as a final version	30/5/2022	Client



# 1 SUMMARY

Summary	
Proposal	Construction of a dwelling
Date of site visit:	27/8/2021
Broad landscape setting Type (Technical Guide Planning Permit Applications – Bushfire Management Overlay)	3
Access requirements can be met	3.5m wide driveway with 4m vertical and 4.5m horizontal clearance with a turning area.
Defendable Space requirements can be met	BAL 12.5 (57 m from the edges of the building)
Proposed BAL construction level	29
Is native vegetation removal required:	No

## 2 INTRODUCTION

This Bushfire Management Statement (BMS) has been prepared to enable Scott Gerrard to respond to the requirements of Clause 44.06 *Bushfire Management Overlay* (known from this point on as Clause 44.06), and associated Clause 52.03 *Bushfire Protection: Planning Requirements* (known from this point on as Clause 52.03) for the construction of a dwelling at Lot 2 Ararat-Halls Gap Road Moyston.

### Methodology

The BMS is in two parts

Part 1 Site description, hazard assessment and locality description

Part 2 A Bushfire Management Statement describing how the proposed development responds to the requirements in Clause 53.02 and 44.06.



### 3 ZONING AND OVERLAYS

Clause Number	Name
35.07	Farming Zone
44.06	Bushfire Management Overlay
53.02	Bushfire Planning
43.02	Significant Landscape Overlay
42.02	Vegetation Protection Overlay

**Figure 1 Zoning**

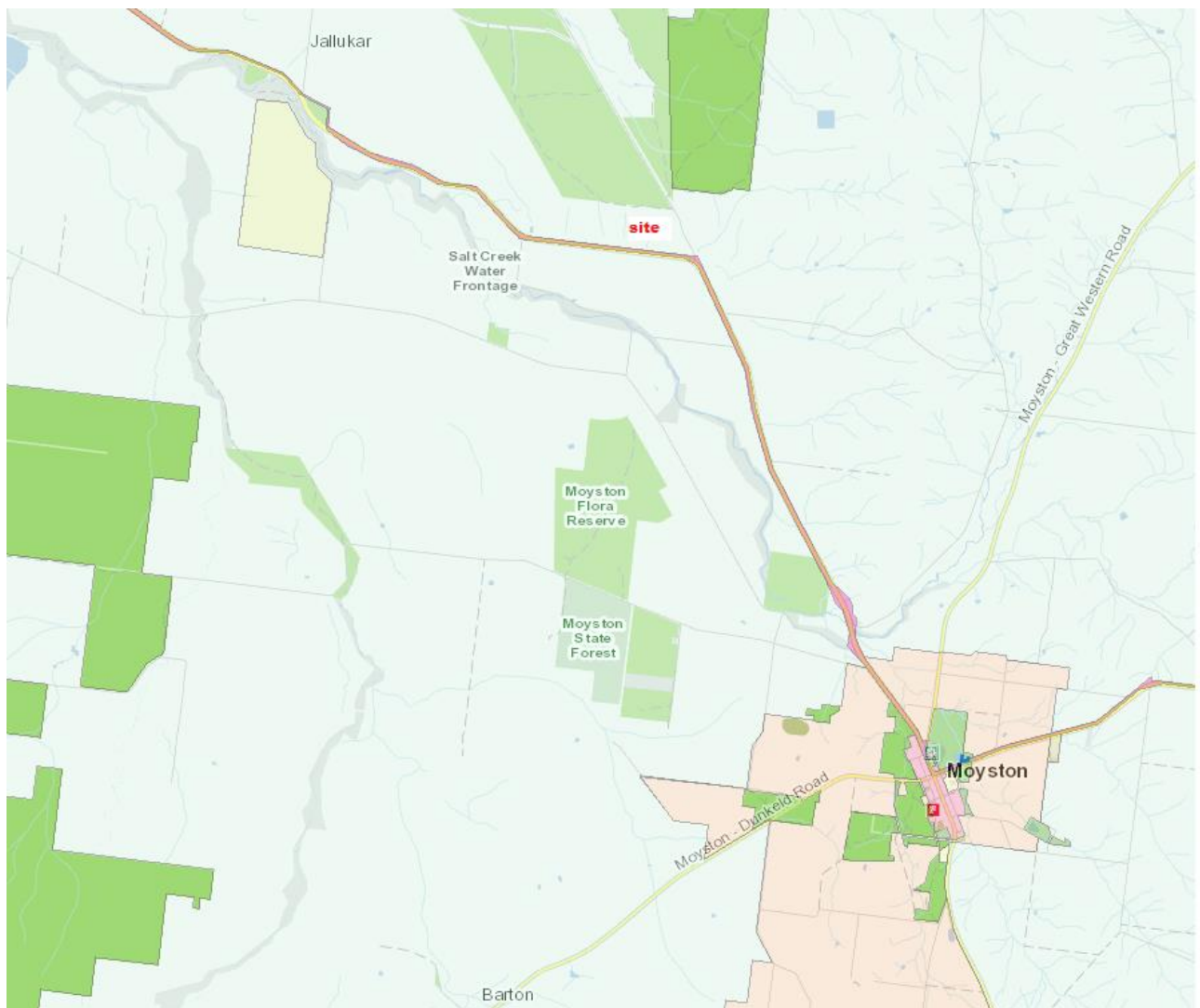




## 4 LOCATION

The site is located to the north west of the Township of Moyston. The site has forest to the immediate north. There is mountainous terrain and forest to the west in the Grampians National Park.

The site could be vulnerable to long runs of fire from the north and north west and south west following a wind change, which often occurs on high fire risk days in summer. This is described in further detail in the Bushfire Hazard Landscape Assessment



**FIGURE 2 LOCATION**



## 5 SITE DESCRIPTION

Site shape, dimensions, size , existing use and buildings and works	
The shape of the site is:	Rectangular with angled eastern boundary
The site has a total area of:	28.33 ha
The current use of the site is	Grazing
The buildings or works located on the site are:	Nil
Site topography	The site is elevated on a ridgeline in the north eastern part. Land slopes gently to the south west on an overall 0 to 5 degree downslope
Site vegetation	The site is mostly covered in grazed grassland
Services and infrastructure	The site is connected to the gravel road network



**FIGURE 3 EXISTING CONDITIONS AIR PHOTO**



Site Photo



Photo 1 Looking north from the proposed house site area



Photo 2 Looking east from the proposed house site area



Site Photo



Photo 3 Looking west from the proposed house site area



Photo 4 Looking south from the proposed house site area



Site Photo



Photo 5 Looking north from the south boundary towards the proposed house site



Photo 6 Looking north to forest on the north boundary



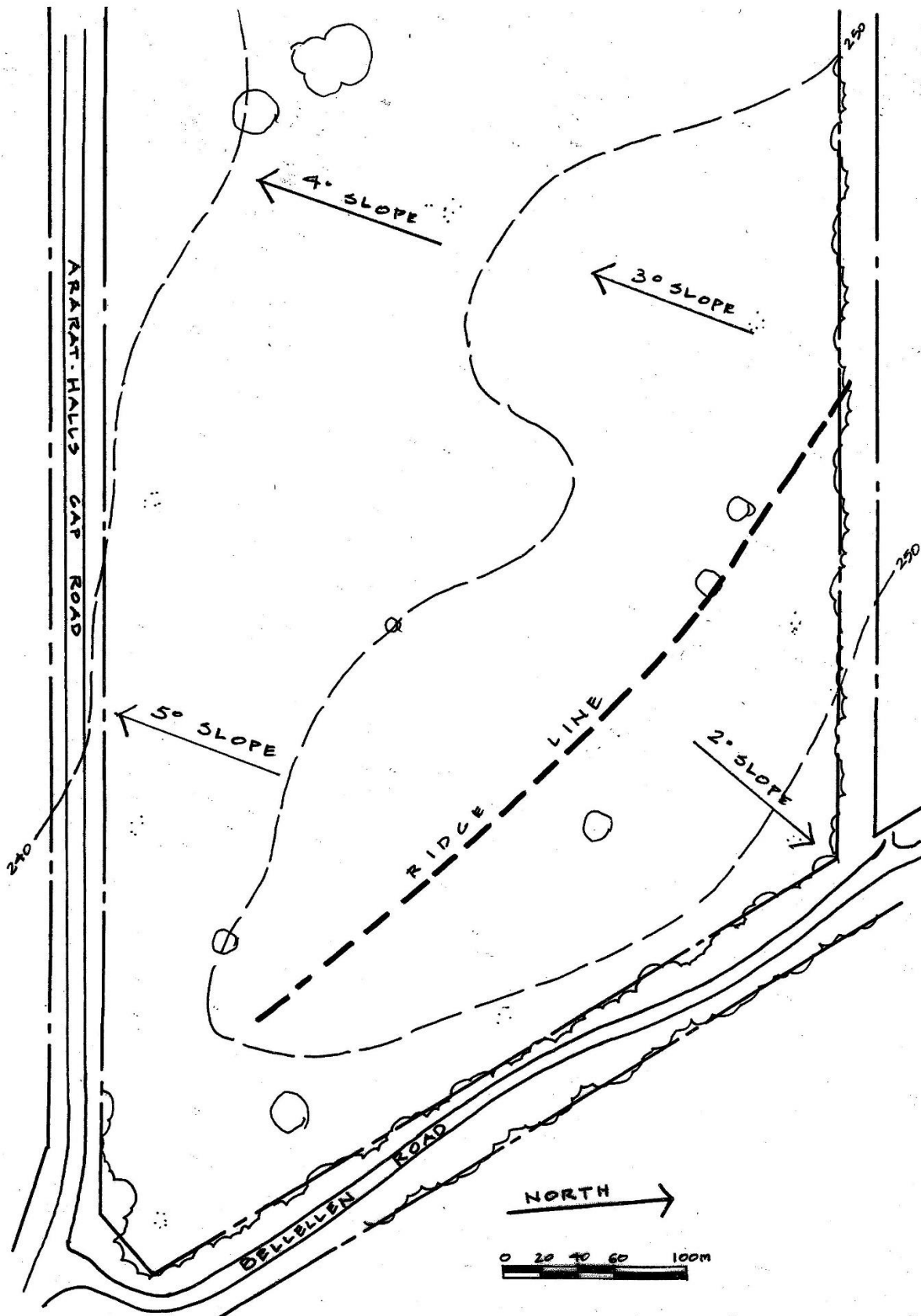


FIGURE 4 EXISTING CONDITIONS PART PLAN



## 6 ACCESS

The vehicle access is from Bellellen Road on the east boundary which joins the Ararat Halls Gap Road on the southern boundary. This provides access to Moyston to the south east through open areas of managed grassland.

Access Photo



Photo 7 Looking south east along Bellellen Road on the eastern boundary of the site



Photo 8 Looking west along the Ararat Halls Gap Road on the southern boundary of the site



## 7 BUSHFIRE HAZARD SITE ASSESSMENT

As shown in Figure 5 and described in Appendix 1, within the 150 metre assessment is mostly managed grassland with forest to the north and east (photos 9 to 14 )



**FIGURE 5 150 METRE ASSESSMENT PLAN**



Surrounding Landscape Photos



Photo 9 Looking north to forest in the road verge to the east of site



Photo 10 Looking north through forest to the north of the site



**Surrounding Landscape Photos**



Photo 11 Looking west through regenerating forest on the north boundary of the site



Photo 12 Looking east across managed grassland to the east of the site



**Surrounding Landscape Photos**



Photo 13 Looking west across managed grassland on the west boundary of the site



Photo 14 Looking south across managed grassland south of the site



## 8 BUSHFIRE HAZARD LANDSCAPE ASSESSMENT

The site has extensive areas of forest, woodland and grassland to the north west and south west. On a broad landscape scale this increases the fire risk to the site as on high fire danger days there are often strong north westerly winds followed by a strong south west change which can turn the east flank of a fire approaching from the north west into a long fire front. There is the potential for more than 4 kilometre long runs of fire from the north west to affect the site. As shown on Figure 7 on the following page, fuels to the south west are fragmented with managed farmland which will help to reduce the fire risk.

The areas of forest to the east of the site are less likely to form part of a long rapidly moving bushfire as winds from the east are not generally experienced on high fire danger days. A spot fire could start to the east of the site and burn slowly towards the site

There are sufficient areas of stringy bark forest (particularly to the north west) to cause significant spotting and ember attack (embers can easily travel more than one kilometre). Ember attack causes highest house loss in bushfires

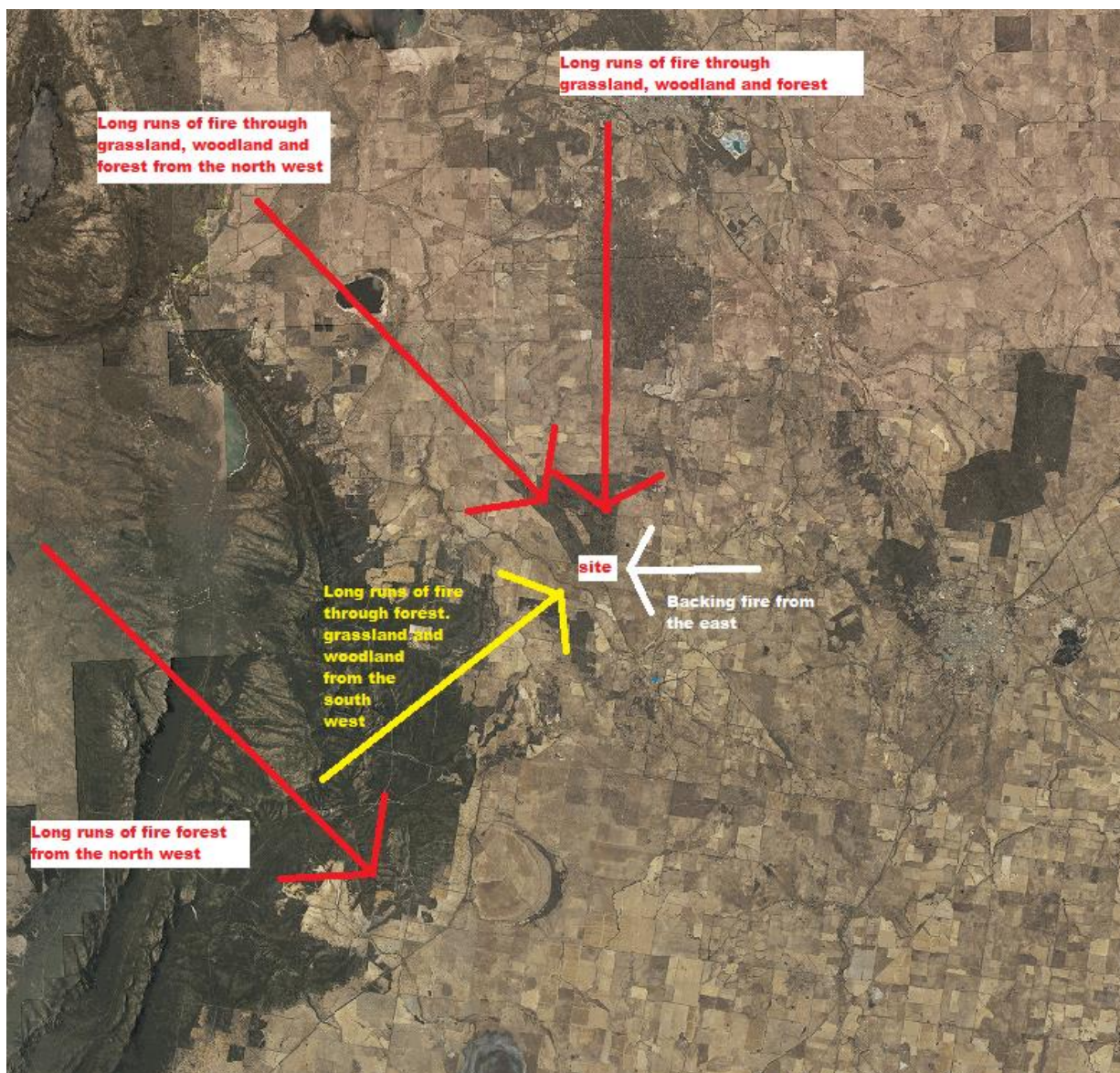
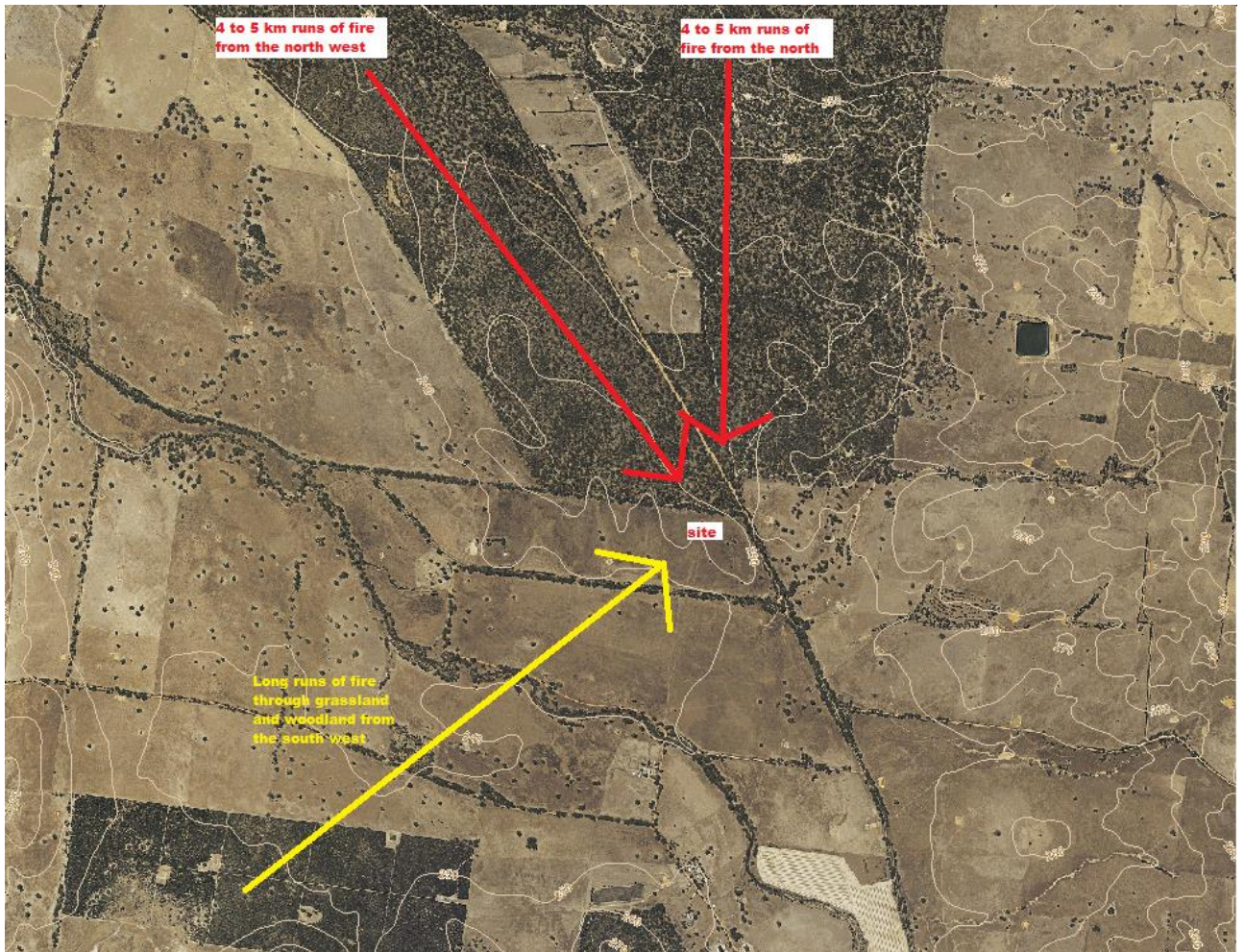


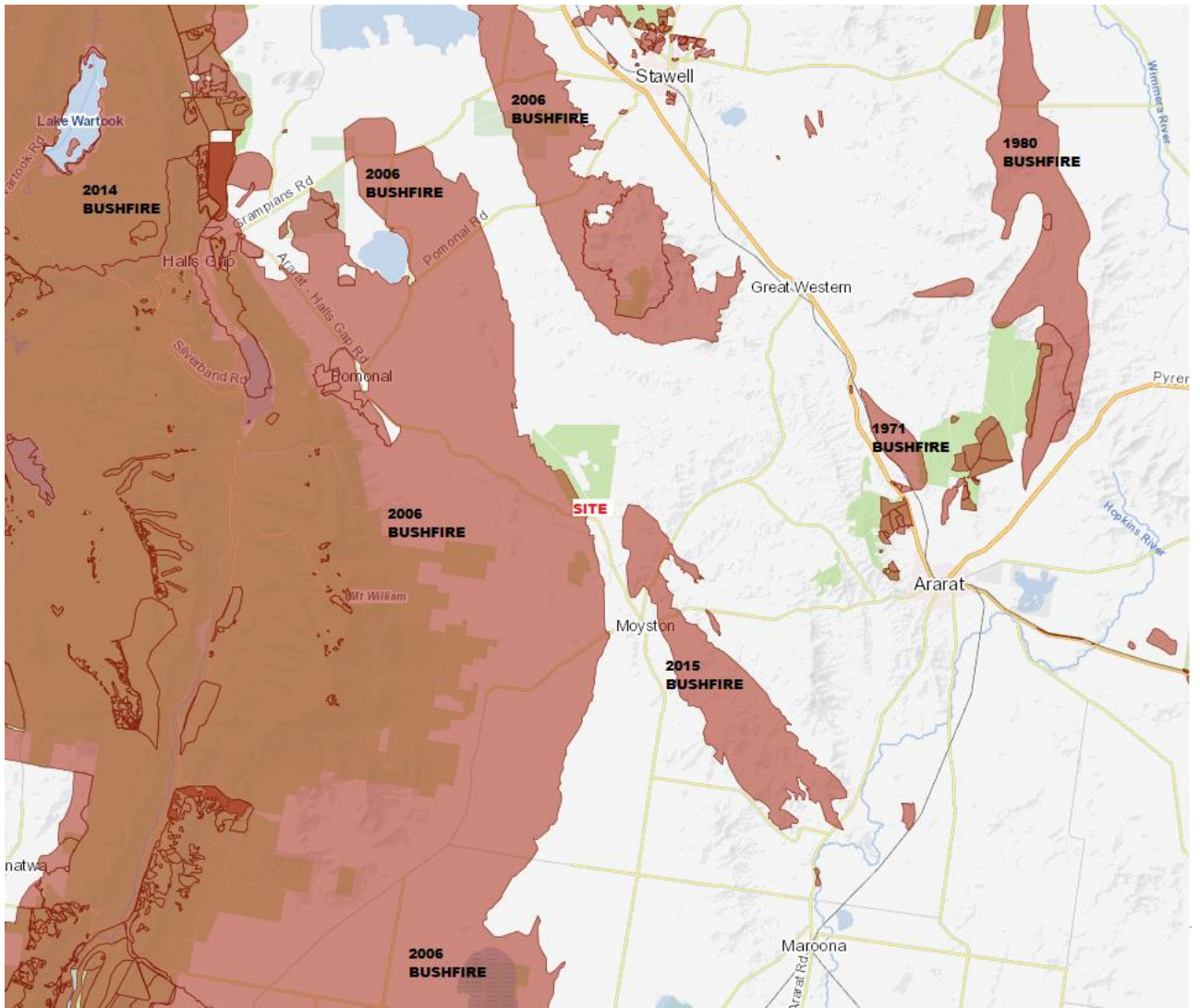
FIGURE 6 BUSHFIRE CONTEXT PLAN





**FIGURE 7 BUSHFIRE LOCAL CONTEXT PLAN**

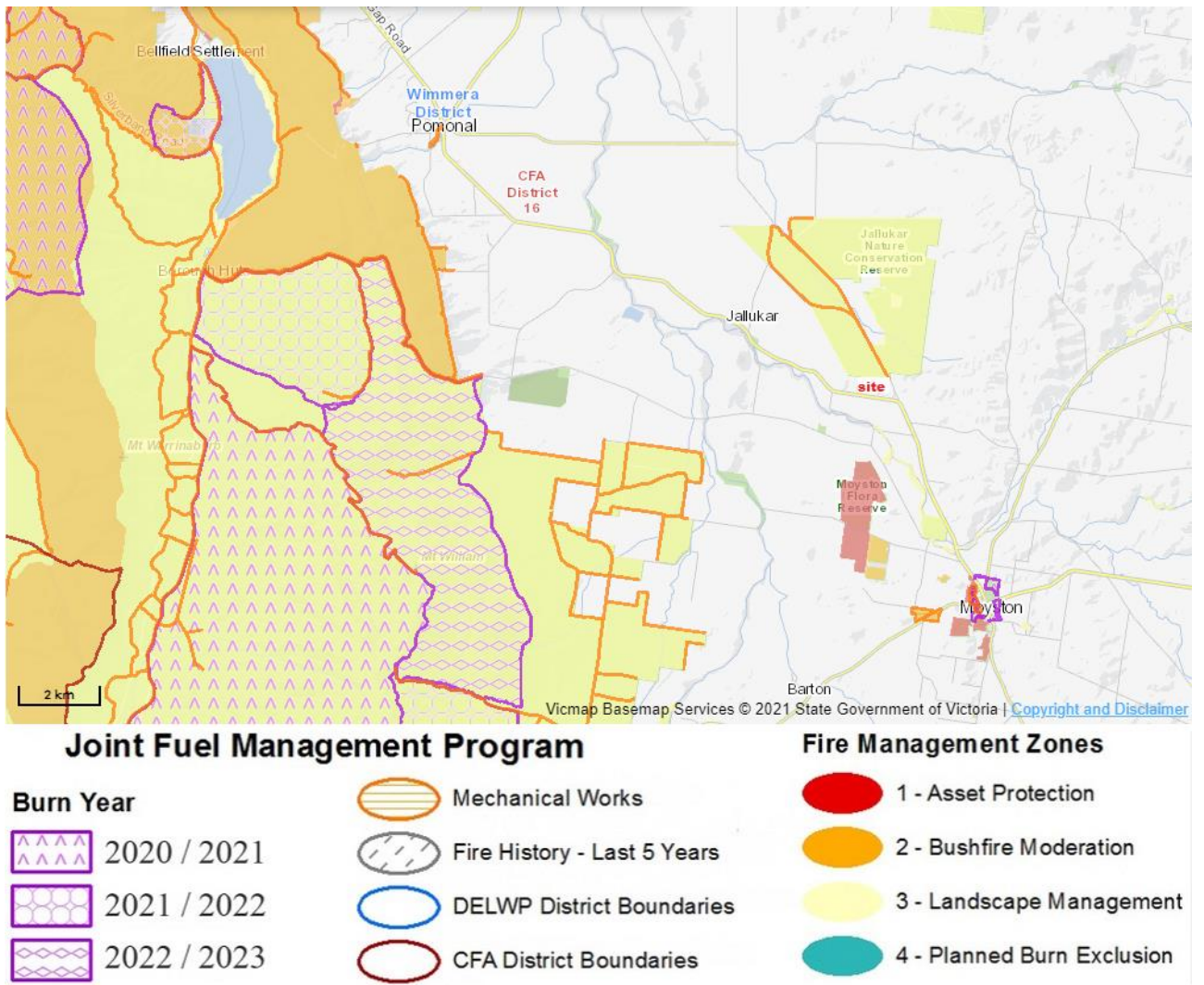




**FIGURE 8 BUSHFIRE HISTORY MAP**

The Fire History Map above shows there have been significant fires around the site in the recent years with most forest to the north west, west and south having burned since 2006 . There have been fuel reduction burns to the west which will help reduce the risk to the site. Figure 9 on the following page shows there are planned burns to the south and west of the site in the next few years to reduce the fuel load in near by forest. Public Land surrounding the site is in Landscape Management and Bushfire Moderation Zones which aim to reduce the overall fuel load and fire risk. north, north west and west





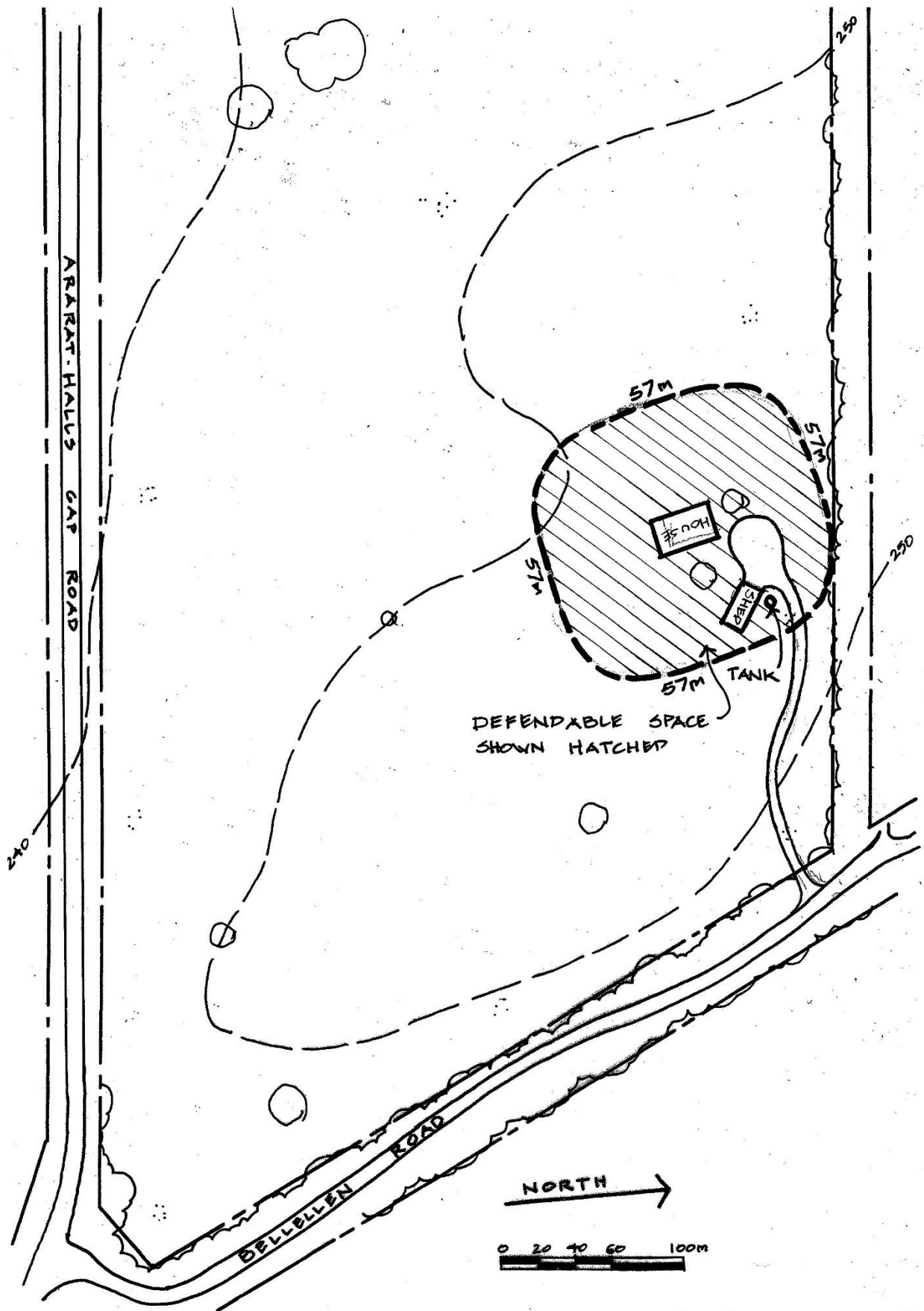
**FIGURE 9 BUSHFIRE MANAGEMENT ZONES AND PLANNED BURNS**





FIGURE 10 STANDARD DEFENDABLE SPACE SET BACKS





**FIGURE 11 DEFENDABLE SPACE , ACCESS AND WATER SUPPLY**  
 (See notes on following page)



## **SCHEDULE OF BUSHFIRE PROTECTION WORKS)**

### **Defendable space**

The area of defendable space is shown hatched on Figure 11 on the previous page for the distance of 57 metres from the building edges. Vegetation (and other flammable materials) will be modified and managed in accordance with the following requirements:

- 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.
- Plants greater than 10 centimetres in height must not be placed within 3m of a window or glass feature of the building.
- Shrubs must not be located under the canopy of 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 overhang or touch any elements of the building.
- The canopy of trees must be separated by at least 5 metres within the area hatched in red.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.

### **Construction standards**

The dwelling will be designed and constructed a minimum Bushfire Attack Level of (BAL) 29 . There are no special construction requirements for the sheds

### **Water supply**

The tank shown on the plan will hold 10,000 litres of effective water supply for fire fighting purposes which meets the following requirements:

- Is stored in an above ground water tank constructed of concrete or metal.
  - All fixed above-ground water pipes and fittings required for fire fighting purposes must be made of corrosive resistant metal
  - Include a separate outlet for occupant use
- The water supply must also
- Incorporate a ball or gate valve (British Standard Pipe (BSP) 65mm) and coupling (64 mm CFA 3 thread per inch male fitting).
  - The outlet/s of the water tank must be within 4m of the access way and 60m of all parts of the buildings and be unobstructed.
  - Be readily identifiable from the building or appropriate identification signage to the satisfaction of CFA must be provided.
  - Any pipework and fittings must be a minimum of 100 mm (excluding the CFA coupling).

### **Access**

The driveway shown on the plan will provide access for trucks for fire fighting purposes which meets the following requirements:

- A load limit of at least 15 tonnes.
- Curves must have a minimum inner radius of 10m.
- The average grade must be no more than 1 in 7 (14.4 per cent) (8.1 degrees) with a maximum of no more than 1 in 5 (20 per cent) (11.3 degrees) for no more than 50m.
- Have a minimum trafficable width of 3.5m of all weather construction.
- Be clear of encroachments for at least 0.5m on each side and 4m above the access way.
- Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.

A turning area will be provided for fire fighting vehicles close to the building by one of the following:

- A turning circle with a minimum radius of eight metres.
- A driveway encircling the dwelling.
- The provision of other vehicle turning heads (such as a T or Y head) which meet the specification of Austroad Design for an 8.8 metre Service Vehicle.



## 9 BUSHFIRE MANAGEMENT STATEMENT

Clause 53.02 contains a range of sub clauses with objectives, approved measures (AM), alternative measures (AltM) and decision guidelines. The table below details which clauses are relevant to this application. The following section demonstrates how the requirements have been met for the relevant standards.

Relevant clauses and measures applicable to the proposed development.

Clause	Approved Measure	Achieved / Applicable	Justification
Clause 53.02 -3 – Dwellings in existing settlements – Bushfire protection objective	AM 1.1	Not Applicable	NA as the site is zoned farming.
	AM 1.2	Not Applicable	
	AM 1.3	Not Applicable	
Clause 53.02 -4.1 Landscape, siting and design objectives	AM 2.1	Not Applicable	Applicable as a single dwelling is proposed
	AM 2.2	Not Applicable	
	AM 2.3	Not Applicable	
Clause 53.02 -4.2 Defendable space and construction objectives	AM 3.1	Applicable	This application addresses this clause.
	AM 3.2	Not Applicable	This proposal is for a single dwelling so N A
	AltM 3.3	Not Applicable	Defendable space is within boundaries
	AltM 3.4	Not Applicable	Table 2 Used
	AltM 3.5	Not Applicable	Table 2 Used
	AltM 3.6	Not Applicable	This proposal is for a dwelling
Clause 53.02 -4.3 Water supply and access objectives	AM 4.1	Applicable	This development satisfies this clause.
	AM 4.2	Not Applicable	This proposal is for a single dwelling
Clause 53.02 -4.4 Subdivision objectives	AM 5.1	Not Applicable	No subdivision is proposed
	AM 5.2	Not Applicable	
	AM 5.3	Not Applicable	
	AM 5.4	Not Applicable	
	AM 5.5	Not Applicable	



### 9.1.1 52.03-2.1 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	Requirement
AM 2.1	<p><b>The bushfire risk to the development from the landscape beyond the site can be mitigated to an acceptable level.</b></p> <p><b>Response:</b></p> <p>The site is located to the south east of forest. There is good access to managed farmland to the south.</p> <p>The forest to the north west is zoned PCRZ so while it is likely to remain forest, it is covered by a Landscape Management Zone, which will help reduce the fuel load and risk.</p> <p>This site is able to meet the defensible space requirements for a BAL 12.5 as per the Method 1 assessment of AS 3959-2009 within the property boundaries. Due to the broadscale landscape risk BAL 29 construction standards are proposed.</p>
AM 2.2	<p><b>Buildings are sited to ensure the site best achieves the following: The maximum separation distance between the building and the bushfire hazard.</b></p> <ul style="list-style-type: none"> <li>• <b>The building is in close proximity to a public road.</b></li> <li>• <b>Access can be provided to the building for emergency service vehicles.</b></li> </ul> <p><b>Response:</b></p> <p>The development has been planned so that the proposed building enables enough defensible space to achieve BAL 12.5 defensible space. (See Appendix 1)</p> <p>The defensible space is contained within the property boundaries.</p> <p>The proposed dwelling will have a driveway connecting to Bellellen Road, providing adequate access for residents and fire fighters .</p> <p>The proposed driveway will allow for CFA vehicles to access the site.</p>
AM 2.3	<p><b>A building is designed to be responsive to the landscape risk and reduce the impact of bushfire on the building</b></p> <p><b>Response:</b></p> <p>The new dwelling will be required to meet a BAL of 29. The construction requirements minimise the ability for ember penetration and radiant heat exposure to compromise the building integrity.</p>



### 9.1.2 52.03-2.2 Defendable space and construction objective

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

Approved Measure	Requirement
AM 3.1	<p><b>A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person’s unit, industry, office or retail premises is provided with defendable space in accordance with:</b></p> <p><b>Table 2 Columns A, B or C and Table 6 to Clause 53.02 -5 wholly within the title boundaries of the land; or</b></p> <p><b>If there are significant siting constraints, Table 2 Column D and Table 6 to Clause 53.02 -3.</b></p> <p><b>The 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.</b></p> <p><b>Response:</b></p> <p>The house has been sited to achieve BAL 12.5 defendable space (in accordance with Column A of Table 2 to Clause 53.02- 5) within the property boundaries. This has been based on the hazard of forest on a 0 – degree downslope in all directions (57 metres)</p> <p>BAL 29 construction standards are proposed due to the broadscale landscape fire risk.</p> <p>A shed that is larger than 100m<sup>2</sup> and ancillary to a dwelling in the BMO needs to be surrounded by 10m defendable space (Table 7 to Clause 52.47) and be separated from any dwellings by 10 metres (CI 44.06 and 66.03).</p> <p>The State of Victoria Department of Environment, Land, Water and Planning prepared a fact sheet Outbuildings in the Bushfire Management Overlay in 2017 which states <i>Defendable space must be created for a distance of 10 metres around the proposed building or to the property boundary, whichever is the lesser</i></p> <p>The shed is able to meet the defendable space requirements with 10 metres of defendable space beyond the external; walls of the structure and is separated from the dwelling by more than 10 metres.</p> <p>Therefore there are no special bushfire requirements for the proposed shed</p>



### 9.1.3 52.03-2.3 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	Requirement
AM 4.1	<p><b>A building used for a dwelling (including an extension or alteration to a dwelling), a dependant person’s unit, industry, office or retail premises is provided with:</b></p> <p><b>A static water supply for fire fighting and property protection purposes specified in Table 4 to Clause 53.02 -5.</b></p> <p><b>Vehicle access that is designed and constructed as specified in Table 5 to Clause 53.02 -5.</b></p> <p><b>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</b></p> <p><b>Response:</b></p> <p>A static water supply will be provided using a fire resistant tank which has a CFA compatible outlet positioned so that a fire truck can drive to within 4 metres of the outlet which is located within 60 metres of the dwelling. 10 000 litres will always be retained within the tank for fire fighting purposes .</p> <p>Access requirements can be met. A 3.5 metre wide track capable of carrying a 15 ton truck with 4m vertical and 4.5m horizontal clearance will be provided via a proposed track. (See Table 5, Appendix 3) A turning area is to be provided.</p>



## APPENDICES

### APPENDIX 1– BUSHFIRE SITE ASSESSMENT

	North	South	East	West
Vegetation Type	Forest	Woodland	Forest	Grassland
Distance from the house site boundary to vegetation	60	300	190	0
The effective slope under the vegetation	0 - 5	0 - 5	0 - 5	0 - 5
The width of required defensible space	57	57	57	57
BAL	29	29	29	29

### 10 APPENDIX 2 DEFENDABLE SPACE CHECKLIST FOR SITE (TABLE 6, CLAUSE 52.03-3)

Requirement	Compliance	Comment	Is a permit required to remove vegetation
All leaves and vegetation debris must be removed at regular intervals during the declared fire danger period.	No	Leaf litter to be removed	No
Grass must be short cropped and maintained during the declared fire danger period.	Yes		No
Within 10 metres of a building, flammable objects must not be located close to the vulnerable parts of the building.	Yes		No
Plants greater than 10 centimetres in height must not be placed within 3m of a window or glass feature of the building.	Yes		No
Shrubs must not be located under the canopy of trees.	Yes		No
Individual and clumps of shrubs must not exceed 5 sq. metres in area and must be separated by at least 5 metres.	Yes		No
Trees must not overhang or touch any elements of the building.	Yes		No
The canopy of trees must be separated by at least 5 metres.	No	Trees to be removed	No
There must be a clearance of at least 2 metres between the lowest tree branches and ground level.	No	Trees to be removed	No

## APPENDIX 3 ACCESS AND WATER SUPPLY REQUIREMENTS

**Table 4 Water supply requirements**

### Capacity, fittings and access

Lot sizes (square meters)	Hydrant available	Capacity (litres)	Fire authority fittings and access required
Less than 500	Not applicable	2,500	No
500-1,000	Yes	5,000	No
500-1,000	No	10,000	Yes
1,001 and above	Not applicable	10,000	Yes

*Note 1: A hydrant is available if it is located within 120 metres of the rear of the building*

### Fire Authority requirements

Unless otherwise agreed in writing by the relevant fire authority, the water supply must:

- Be stored in an above ground water tank constructed of concrete or metal.
- Have all fixed above ground water pipes and fittings required for firefighting purposes made of corrosive resistant metal.
- Include a separate outlet for occupant use.

Where a 10,000 litre water supply is required, fire authority fittings and access must be provided as follows:

- Be readily identifiable from the building or appropriate identification signage to the satisfaction of the relevant fire authority.
- Be located within 60 metres of the outer edge of the approved building.
- The outlet/s of the water tank must be within 4 metres of the accessway and unobstructed.
- Incorporate a separate ball or gate valve (British Standard Pipe (BSP 65 millimetre) and coupling (64 millimetre CFA 3 thread per inch male fitting).
- Any pipework and fittings must be a minimum of 65 millimetres (excluding the CFA coupling).



**Table 5 Vehicle access design and construction**

Vehicle access (or part thereof) of a length specified in Column A implements the design and construction requirements specified in Column B.

Column A	Column B
Length of access is less than 30 metres	There are no design and construction requirements if fire authority access to the water supply is not required under <b>AM4.1</b> .
Length of access is less than 30 metres	Where fire authority access to the water supply is required under <b>AM4.1</b> fire authority vehicles should be able to 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"> <li>▪ All-weather construction.</li> <li>▪ A load limit of at least 15 tonnes.</li> <li>▪ Provide a minimum trafficable width of 3.5 metres.</li> <li>▪ Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically.</li> <li>▪ Curves must have a minimum inner radius of 10 metres.</li> <li>▪ The average grade must be no more than 1 in 7 (14.4%) (8.1°) with a maximum grade of no more</li> </ul>
	<ul style="list-style-type: none"> <li>than 1 in 5 (20%) (11.3°) for no more than 50 metres.</li> <li>▪ Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.</li> </ul>
Length of access is greater than 100 metres	A turning area for fire fighting vehicles must be provided close to the building by one of the following: <ul style="list-style-type: none"> <li>▪ A turning circle with a minimum radius of eight metres.</li> <li>▪ A driveway encircling the dwelling.</li> <li>▪ The provision of other vehicle turning heads – such as a T or Y head – which meet the specification of Austroad Design for an 8.8 metre Service Vehicle.</li> </ul>
Length of access is greater than 200 metres	<ul style="list-style-type: none"> <li>▪ Passing bays must be provided at least every 200 metres.</li> <li>▪ Passing bays must be a minimum of 20 metres long with a minimum trafficable width of 6 metres.</li> </ul>

*Note 1: The length of access should be measured from a public road to either the building or the water supply outlet, whichever is longer.*

Column A	Column B
Length of access is greater than 100 metres	A turning area for fire fighting vehicles must be provided close to the building by one of the following: <ul style="list-style-type: none"> <li>▪ A turning circle with a minimum radius of eight metres.</li> <li>▪ A driveway encircling the dwelling.</li> <li>▪ The provision of other vehicle turning heads – such as a T or Y head – which meet the specification of Austroad Design for an 8.8 metre Service Vehicle.</li> </ul>
Length of access is greater than 200 metres	<ul style="list-style-type: none"> <li>▪ Passing bays must be provided at least every 200 metres.</li> <li>▪ Passing bays must be a minimum of 20 metres long with a minimum trafficable width of six metres.</li> </ul>

*Note 1: The length of access should be measured from a public road to either the building or the water supply outlet, whichever is longer.*

## APPENDIX 4 NATIVE VEGETATION REMOVAL

### Offset requirements

Under Clause 52.12-5 the application is exempt from the requirement to apply for and offset the native vegetation as the removal is required to create defensible space as shown below

*Exemption to create defensible space for a dwelling approved under Clause 44.06 of this planning scheme*

*Any requirement of a planning permit, including any condition, which has the effect of prohibiting the removal, destruction or lopping of vegetation, or any requirement of this planning scheme to obtain a planning permit, or any provision of this planning scheme that prohibits the removal, destruction or lopping of vegetation or requires the removal, destruction or lopping of vegetation to be carried out in a particular manner, does not apply to the removal, destruction or lopping of vegetation to construct a dwelling and create its defensible space if all of the following requirements are met:*

*Land is in the Bushfire Management Overlay.*

*Land is in the General Residential Zone, Residential Growth Zone, Neighbourhood Residential Zone, Urban Growth Zone, Low Density Residential Zone, Township Zone, Rural Living Zone, Farming Zone or Rural Activity Zone.*

*The removal, destruction or lopping of vegetation*

*Does not exceed the distance specified in Table 1 to Clause 53.02-3 of this planning scheme, based on the bushfire attack level determined by a relevant building surveyor in deciding an application for a building permit under the Building Act 1993 for a dwelling or alteration or extension to the dwelling; or*

*Is required to be undertaken by a condition in a planning permit issued after 31 July 2014 under Clause 44.06 of this scheme for a dwelling or an alteration or extension to the dwelling*



## 11 REFERENCES

CFA (2014). *Vegetation Classes: Victorian Bushfire Management Overlay*. Country Fire Authority, Burwood East, Victoria.

CFA (2011). *Landscaping for Bushfire: Garden design and plant selection*. Country Fire Authority, Burwood East, Victoria.

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Standards Australia (2009). *AS 39359-2018 Construction of Buildings in Bushfire Prone Areas*. Standards Australia, North Sydney, New South Wales.

DELWP (2017) *Planning Permit Applications – Bushfire Management Overlay Technical Guide* Department of Environment, Land, Water and Planning

DELWP (2018) *Clause 13.02-1S Bushfire planning* Department of Environment, Land, Water and Planning

[http://planning-schemes.delwp.vic.gov.au/schemes/vpps/13\\_02-1S.pdf](http://planning-schemes.delwp.vic.gov.au/schemes/vpps/13_02-1S.pdf)

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DELWP (2018) *Clause 52.12 Bushfire Protection Exemptions*. Department of Environment, Land, Water and Planning

[http://planning-schemes.delwp.vic.gov.au/schemes/vpps/52\\_12.pdf](http://planning-schemes.delwp.vic.gov.au/schemes/vpps/52_12.pdf)

DELWP (2018) *Bushfire Fuel and Risk Management*

<https://www.ffm.vic.gov.au/bushfire-fuel-and-risk-management/joint-fuel-management-program>

Nearmap

<http://maps.au.nearmap.com>

## SCHEDULE OF BUSHFIRE PROTECTION MEASURES

### Defendable space

The area of defendable space is shown hatched will extend 57 m from the building edges. Vegetation (and other flammable materials) will be modified and managed in accordance with the following requirements:

- 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.
- Plants greater than 10 centimetres in height must not be placed within 3m of a window or glass feature of the building.
- Shrubs must not be located under the canopy of 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 overhang or touch any elements of the building.
- The canopy of trees must be separated by at least 5 metres within the area hatched in red.
- There must be a clearance of at least 2 metres between the lowest tree branches and ground level.

### Construction standards

The dwelling will be designed and constructed a minimum Bushfire Attack Level of (BAL) 29 There are no special construction requirements for the shed.

### Water supply

The tank shown on the plan will each hold 10,000 litres of effective water supply for fire fighting purposes which meets the following requirements:

- Is stored in an above ground water tank constructed of concrete or metal.
- All fixed above-ground water pipes and fittings required for fire fighting purposes must be made of corrosive resistant metal
- Include a separate outlet for occupant use

The water supply must also

- Incorporate a ball or gate valve (British Standard Pipe (BSP) 65mm) and coupling (64 mm CFA 3 thread per inch male fitting).
- The outlet/s of the water tank must be within 4m of the access way and 60m of all parts of the buildings and be unobstructed.
- Be readily identifiable from the building or appropriate identification signage to the satisfaction of CFA must be provided.
- Any pipework and fittings must be a minimum of 100 mm (excluding the CFA coupling).

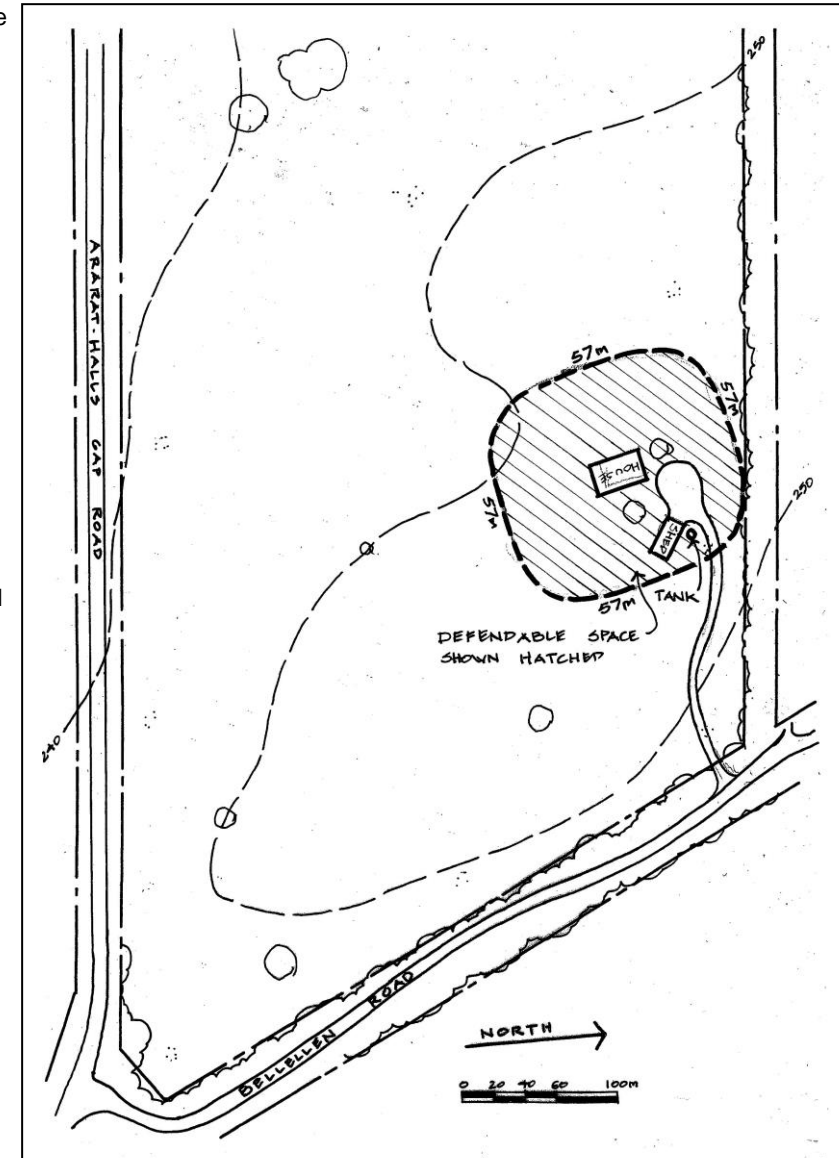
### Access

The driveway shown on the plan will provide access for trucks for fire fighting purposes which meets the following requirements:

- A load limit of at least 15 tonnes.
- Curves must have a minimum inner radius of 10m.
- The average grade must be no more than 1 in 7 (14.4 per cent) (8.1 degrees) with a maximum of no more than 1 in 5 (20 per cent) (11.3 degrees) for no more than 50m.
- Have a minimum trafficable width of 3.5m of all weather construction.
- Be clear of encroachments for at least 0.5m on each side and 4m above the access way.
- Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.

A turning area will be provided for fire fighting vehicles close to the building by one of the following:

- A turning circle with a minimum radius of eight metres.
- A driveway encircling the dwelling.
- The provision of other vehicle turning heads (such as a T or Y head) which meet the specification of Austroad Design for an 8.8 metre Service Vehicle



**FIGURE 12 BUSHFIRE MANAGEMENT PLAN**

**Lot 2 Ararat – Halls Gap Road Moyston**

**Version B**

**30/5/2022**