

### Planning Permit Applications Bushfire Management Overlay

**Technical Guide** 

SEPTEMBER 2017

This technical guide provides advice on preparing and assessing an application under Clause 44.06 Bushfire Management Overlay.

### Introduction

Planning schemes guide the development of land in areas of high bushfire hazard. The location, siting, design and construction of development and the implementation of bushfire protection measures are considered where the Bushfire Management Overlay applies.

### What are the bushfire planning provisions?

The bushfire planning provisions discussed in this technical guide are:

- Clause 44.06 Bushfire Management Overlay
- Clause 52.47 Planning for Bushfire
- Clause 52.48-5 Bushfire exemption to create defendable space
- Clause 66.06 Referral requirements to the relevant fire authority.

# Why is bushfire an important planning consideration?

Victoria is one of the most fire-prone areas in the world with a history of catastrophic bushfires.

The last decade in particular has seen a dramatic increase in the number, size and severity of bushfires. Major fire events such as the 2003 Alpine Fire, 2006 Grampians Fire, the 2006/07 Great Divide fire and the devastating 2009 Black Saturday fires are evidence of increasing fire risk.

A variety of causes can ignite a bushfire. Some causes, such as lightning strikes, are natural and cannot be prevented while others result from human activity. The high bushfire risk in Victoria is the consequence of a combination of factors including:

- large areas of highly flammable dry eucalypt forest and expanses of highly flammable grassland
- a climatic pattern of mild, moist winters followed by hot dry summers and protracted droughts
- increasing population density in bushfire-prone areas, such as in the rural-urban fringe.



### How to use this technical guide

This guide uses a five-step process and shows how to work through the different parts of the planning scheme to prepare an application that fully considers bushfire matters. It also identifies how a council will assess an application and make a decision on whether planning permission is appropriate.

Four separate application pathways apply dependent on what the application is for and the zone that applies to the site.

The guide is structured to reflect the five steps:

- **Step 1:** Find out if the Bushfire Management Overlay applies.
- **Step 2:** Identify which application pathway applies. Separate application pathways apply depending on what the application is for and the planning controls that apply to the site.
- **Step 3:** Assess the bushfire hazard on and around your land.
- **Step 4:** Prepare an application that includes bushfire protection measures.
- **Step 5:** Understand how the council will assess your application

# FIVE-STEP APPROACH TO PREPARING AND ASSESSING A PLANNING APPLICATION

STEP 1

Find out if the Bushfire Management Overlay applies

EXEMPT FROM PERMIT – check Clause 44.06 for buildings and works that are exempt from a planning permit under the BMO

STEP 2

Identify which application pathway applies

Select the relevant pathway below

OR

FAST TRACK PATHWAY

Single dwellings in a schedule. Check if your property is convered by the schedule using Planning Maps Online.

OR

Check if this applies in your zone.

PATHWAY ONE

Single dwellings in existing settlements

Check if this applies in your zone

(Clause 52.47-1)

PATHWAY TWO

All other buildings and works

OR

(Clause 52.47-2)

PATHWAY THREE

Subdivision

(Clause 52.47-2)

STEP 3

Assess the bushfire hazard on and around your land

STEP 4

Prepare an application that includes bushfire protection measures

STEP 5

Understand how the council will assess your application

### STEP 1

# FIND OUT IF THE BUSHFIRE MANAGEMENT OVERLAY APPLIES

Use this part to:

- work out if the Bushfire Management Overlay applies to a site
- determine if planning permission is required for the proposed development
- consider if a planning permit exemption allows for development to proceed without obtaining permission.

# CLAUSE 44.06 BUSHFIRE MANAGEMENT OVERLAY

The Bushfire Management Overlay consists of a map showing where it applies and written provisions which set out the planning scheme requirements.

The areas where the Bushfire Management Overlay applies are shown on planning scheme maps as **BMO**. These areas have the potential for extreme bushfire behaviour, such as a crown bushfire and extreme ember attack and radiant heat.



The boundaries of where the Bushfire Management Overlay applies are based on the bushfire hazard and therefore do not follow property boundaries or identifiable ground features such as rivers or roads.

Clause 44.06 of planning schemes sets out the written provisions of the Bushfire Management Overlay. These guide the development of land and ensure the suitability of new development is considered before it proceeds. Where development occurs in these areas appropriate bushfire protection measures will be required.

See Planning Advisory Note 46: Bushfire Management Overlay Mapping Methodology and Criteria for more information on where the Bushfire Management Overlay applies.

### **CLAUSE 44.06-1 PERMIT REQUIREMENTS**

A planning permit is required to construct a building or construct or carry out works associated with the following land uses:

- Accommodation (including a Dependent person's unit)
- Child care centre
- Education centre
- Hospital
- Industry
- Leisure and recreation
- Office
- Place of assembly
- Retail premises
- Timber production
- Warehouse

A planning permit is also required to subdivide land.



The definition of 'Accommodation' under Clause 74 of planning schemes includes a dwelling or house, a camping and caravan park and a retirement village.

TIP

If the Bushfire Management Overlay only applies to part of a lot, development that is sited outside the Bushfire Management Overlay does not require planning permission.

### **CLAUSE 44.06-1 PERMIT EXEMPTIONS**

The Bushfire Management Overlay includes some exemptions from the need to obtain a planning permit. You should check if any of these apply. The most common exemptions include:

- an alteration or extension to an existing dwelling that is less than 50 per cent of the gross floor area of the existing dwelling.
- an alteration or extension to any building (except a dwelling or dependent person's unit) that is less than 10 per cent of the gross floor area of the existing building.
- buildings or works with a floor area less than 100 square metres ancillary to a dwelling not used for accommodation.

SCHEDULE

A schedule to the Bushfire Management Overlay may specify different permit requirements.

Check if these apply to your land.

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Transitional provisions for single dwellings with an existing building permit have been included in the Bushfire Management Overlay. See *Transitional Provisions Information Sheet* for details.

### STEP 2

### **IDENTIFY WHICH APPLICATION PATHWAY APPLIES**

### Use this part to:

- identify which application pathway a development will be assessed against
- understand how Clause 52.47 operates in relation to its objectives, approved measures, alternative measures and decision guidelines.

### **APPLICATION PATHWAYS**

Fast Track Pathway	Pathway One	Pathway Two	Pathway Three
Single dwellings in BMO schedule	Single dwellings in existing settlements	Other buildings and works	Subdivisions
Bushfire requirements have been pre –determined	Check if this applies in your zone		
Check if this applies on your land			
(BMO schedule)	(Clause 52.47-1)	(Clause 52.47-2)	(Clause 52.47-2)

### **FAST TRACK PATHWAY – BMO SCHEDULES**

Clause 44.06 allows BMO schedules to prescribe new requirements (including application requirements), substitute approved measures and additional alternative measures to those listed in Clause 52.47 and modify referral requirements.

BMO schedules can streamline the application process for applicants and councils by specifying bushfire requirements upfront, providing for simplified application requirements and switching off referral to the relevant fire authority.

BMO schedules that provide a fast track pathway generally apply to an area where there is a consistency in the bushfire hazard so rather than repeating individual site assessments, there is a precinct-wide approach to mitigating the risk. This provides certainty for landowners, responsible authorities and avoids the need for referral to the relevant fire authority.

These types of schedules generally apply to applications for a single dwelling on a lot in an existing settlement. These schedules operate as follows:

- The application must be for a single dwelling on a lot.
- The application must meet all of the requirements set out in the schedule.
- No alternative measures can be included in an application.
- An application that meets all of the requirements set out in the schedule is not required to be referred to CFA.

An applicant does not have to use the pre-set bushfire protection measures in the schedule. However an application that does not meet all the bushfire protection measures in the BMO schedule, will be assessed under Pathway One or Two.

For more detail See Information Sheet Smart Bushfire Protection Measures for Single Dwellings on the DELWP website

Note - Clause 44.06 allows for other types of schedules to be developed and there are some BMO schedules currently in planning schemes that operate differently to what is outlined above. Practice Note 64 Local Planning for Bushfire Protection has additional guidance on how to prepare a schedule to the BMO.

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Fast Track schedules are similar to Pathway One in applying to a single dwelling. However the schedule is shown on the planning scheme map while access to Pathway One is determined by the zoning of the land.

# PATHWAY 1 – CLAUSE 52.47-1 DWELLINGS IN EXISTING SETTLEMENTS

Clause 52.47-1 provides a streamlined process for preparing and assessing a planning application.

Clause 52.47-1 applies to an application to construct a single dwelling or construct or carry out works associated with a single dwelling where the following apply:

- The land is zoned Neighbourhood Residential Zone, General Residential Zone, Residential Growth Zone, Urban Growth Zone, Low Density Residential Zone, Township Zone or Rural Living Zone.
- There is only one dwelling on the lot. Clause 52.47-7 operates as follows:
- The application must meet all the approved measures in Clause 52.47-1.
- Where an application meets the applicable approved measures the corresponding objective is also met.
- All approved measures must be met.
- No alternative measures can be included in an application.

If an applicant chooses to include alternative measures, the application will be assessed under Pathway Two and all relevant approved or alternate measures of Clause 52.47-2 must be met.

### PATHWAY TWO – CLAUSE 52.47-2 ALL OTHER BUILDINGS AND WORKS

Clause 52.47-2 applies to all applications except where:

- A BMO schedule applies and all of the requirements of the schedule are met or
- Pathway One applies and the application meets all of the approved measures under Clause 52.47-1 or
- The application is for a subdivision.

Clause 52.47-2 provides a clear structure for preparing and assessing a planning application and provides flexibility for applicants to respond to any unique circumstances of their site.

Clause 52.47-2 is grouped around bushfire protection objectives that describe the outcome that must be achieved in a completed development:

- Clause 52.47-2.1 Landscape, siting and design
- Clause 52.47-2.2 Defendable space and construction
- Clause 52.47-2.3 Water supply and access.

Development must meet all the relevant objectives. An application can demonstrate that the objectives are met in two ways:

- 1. Include the relevant approved measures in the application. Where this is done the application is deemed to meet the relevant objectives.
- 2. Consider the suitability of any relevant alternative measures, whether specified in Clause 52.47 or not, and demonstrate that an alternative measure satisfies the objective. An alternative measure sometimes replaces an approved measure and sometimes adds to an approved measure.

### PATHWAY THREE - CLAUSE 52.47-2 SUBDIVISION

Clause 52.47-2.4 contains requirements for subdivision. It does this by:

- providing subdivision specific approved measures and alternative measures, and
- cross-referencing the need to comply with other objectives and approved measures in Clause 52.47-2.

### STEP 3

# ASSESS THE BUSHFIRE HAZARD ON AND AROUND YOUR LAND

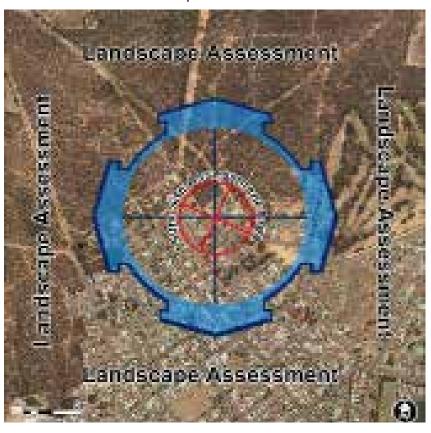
### Use this part to:

- learn more about the hazard assessments used in the Bushfire Management Overlay
- determine what application requirements apply to different types of applications.

There are three application requirements set out in Clause 52.47, however they vary with the application pathway (see Step 2).

Application requirement	Fast Track Pathway (BMO Schedule)	Pathway One Clause 52.47-1	Pathway Two Clause 52.47-2	Pathway Three Clause 52.47-2.4
Bushfire hazard landscape assessment	×	×	<b>√</b>	<b>√</b>
Bushfire hazard site assessment	×	<b>√</b>	<b>√</b>	<b>√</b>
Bushfire management statement	×	<b>√</b>	<b>√</b>	<b>√</b>
Bushfire management plan	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

### How the assessments operate



### **BUSHFIRE HAZARD LANDSCAPE ASSESSMENT**

The bushfire hazard landscape assessment provides information on the bushfire hazard more than 150 metres away from a development site. Considering bushfire from this broader landscape perspective is important as it affects the level of bushfire risk a development and its future occupants may be exposed to.

The landscape assessment:

- provides factual information on the bushfire hazard (vegetation extent and slope)
- provides information on key features of the general locality that are relevant to better understanding the protection provided by the location
- provides contextual information on a site.

### Why is the surrounding landscape important in bushfire decisions?

The broader landscape and the potential size or scale of a bushfire is an important consideration in the assessment of a planning application. The likelihood of a bushfire, its severity and intensity, and the potential impact on life and property varies depending on where a site is located in the surrounding landscape.

The defendable space and construction requirements in the BMO and Clause 52.47 are based on standard requirements. To determine these requirements models are used to predict radiant heat from a fire front based on specific inputs and assumptions.

Considering the surrounding landscape in bushfire decisions is important because the accuracy of the models in reflecting bushfire exposure on a particular site, varies in different landscapes. This is because the scale of a bushfire and its potential destructive power is driven by the characteristics of broader landscape, rather than those characteristics within 150 metres of the site.

There are a number of factors that influence the potential bushfire behaviour at a landscape scale, including:

- extent and continuity of vegetation
- topography
- the potential fire run and area that is likely to be impacted by the fire, for example a fire in a grassland may only impact one or two streets into a residential area however a large bushfire may impact many kilometres in front of the main fire
- the location and exposure of the urban area, township, isolated rural area to bushfire
- the extent of neighbourhood-scale damage the bushfire may produce.

# How is the landscape assessment used in preparing and assessing a planning application?

The landscape assessment presents contextual information on a site and informs the Bushfire Hazard Site Assessment. It provides information that is important when considering the potential bushfire behaviour and how the approved and alternative measures adequately mitigate the risk.

The landscape assessment is used where Clause 52.47-2 requires consideration of the bushfire risk from the landscape beyond the site. This includes measures AM 2.1, AltM 3.5, AltM 3.6 and AM 5.1 and associated decision guidelines.

The assessment provides information that allows these provisions to be responded to as part of the bushfire management statement submitted with an application.

### Preparing the landscape assessment

The landscape assessment is prepared using the simple process set out in this technical guide. This process sets out the type of information for both a basic assessment and the type of further information that may be required for locations where the broader landscape is complex and/or presents a significant risk to life and property.

### Considering the bushfire risk arising from the broader landscape

Bushfire is a dynamic hazard and can be highly unpredictable. Because of this the factors that contribute to the bushfire risk are diverse. The purpose of the landscape assessment is not to predict the outcome of a bushfire event but to provide information that builds a better understanding of the bushfire risk in a location and to help make informed decisions.

To streamline decision making, this guide identifies a range of landscape types. These seek to support more consistent decision making based on the risk from the landscape beyond the site.

### PROCESS FOR PREPARING THE LANDSCAPE ASSESSMENT

## Show basic information

Show and annotate on aerial photos:

- · the subject site
- scale and distance bar
- vegetation extent in the broader locality
- the road network
- information from the relevant Regional Bushfire Planning Assessment
- any history of bushfire in the area
- a bushfire direction of travel diagram
- any significant landscape features that are relevant to the considerations set out in Clause 52.47-2.

Measure and show distances:

- fire run(s) into the site
- proximity of the site to nearby urban, township or other areas where fuel is managed in a minimum fuel condition

TIP: The landscape assessment may be best shown on two aerial photos:

- One showing 20 km around the site and the information above
- One showing 50 100 km around the site.

# Provide further information for more complex locations

Depending on the location and type of development proposed, consider whether documenting the following supports the assessment of the application:

- describe the likely bushfire scenarios
- consider and note any state, regional or local bushfire management and prevention actions occurring around the site that is relevant to understanding the bushfire hazard and the level of risk to the site
- assess nearby locations in urban, township or other areas where protection can be provided from the impact of extreme bushfire behaviour to determine:
  - if they are managed in a minimum fuel condition and there is sufficient distance or shielding to protect people from direct flame contact or harmful levels of radiant heat
  - · access involves distances
  - the risks that may arise on the journey from the subject site to the place of greater protection, for example, from roadside vegetation or congestion
- provide additional information on any matter relevant to the exercise of discretion under an alternative measure in Clause 52.47-2.

### Apply landscape type and provide conclusions

 Apply one of the landscape types set out in this guide.
 Make recommendations in the bushfire management statement about life safety and development proceeding on the subject site.

### LANDSCAPE TYPE SAMPLES

### Broader Landscape Type One



- There is little vegetation beyond 150 metres of the site (except grasslands and lowthreat vegetation).
- Extreme bushfire behaviour is not possible.
- The type and extent of vegetation is unlikely to result in neighbourhood-scale destruction of property.
- Immediate access is available to a place that provides shelter from bushfire.





### **Broader Landscape Type Two**



- The type and extent of vegetation located more than 150 metres from the site may result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to a site.
- Bushfire can only approach from one aspect and the site is located in a suburban, township or urban area managed in a minimum fuel condition.
- Access is readily available to a place that provides shelter from bushfire. This will often be the surrounding developed area.

### **Broader Landscape Type Three**



- The type and extent of vegetation located more than 150 metres from the site may result in neighbourhood-scale destruction as it interacts with the bushfire hazard on and close to a site.
- Bushfire can approach from more than one aspect.
- The site is located in an area that is not managed in a minimum fuel condition.
- Access to an appropriate place that provides shelter from bushfire is not certain.

### Broader Landscape Type Four



- The broader landscape presents an extreme risk.
- Fires have hours or days to grow and develop before impacting.
- Evacuation options are limited or not available.







# Fire Season 2013 2011 2003 2011 2009 1995 2008 1990 2007 1985 2006 1983

### **BUSHFIRE DIRECTION OF TRAVEL DIAGRAM**

These diagrams show the wind directions that influence bushfire in Victoria.

Diagram 1 should be added to all landscape assessments. This shows that wind may travel in all directions but that the most dominant weather conditions are winds from the northwest and the southwest. Southwesterly winds are associated with the weather change that crosses Victoria and creates the most dangerous bushfire conditions as experienced on Black Saturday.

Diagram 2 should also be added to landscape assessments that may be influenced by coastal weather conditions.



**FIRE HISTORY MAP** 

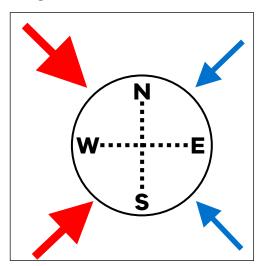
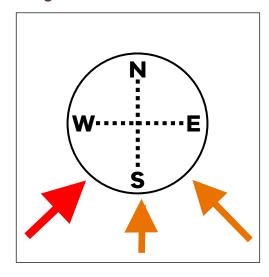


Diagram 2



# EXAMPLE DESCRIPTIONS OF LIKELY BUSHFIRE SCENARIOS

### **Example 1: Gumnut township**

The Gumnut Ranges carry a variety of vegetation types including tall wet forest with heavy fuel loads. It is likely that an ignition in the farming land to the north of the National Park or within the forest itself would develop rapidly and grow to a significant size. The forest extends between 10km and 50km in width and is approximately 100km long. There is ample space for a large fire to develop and there is clearly potential for a large and intense bushfire to occur.

Within this context Gumnut township could be impacted by bushfire from the north or northwest under the wind direction typical of extreme fire weather, or from the southwest following the wind change typically associated with the passage of a cold front following a period of hot weather.

Under these scenarios extreme ember attack is certain across the entire settlement. Neighbourhood-scale destruction of property from the moving front impacting on the edge of the township is likely, as evidenced in the Ash Wednesday bushfires that impacted on the area. Bushfire throughout the settlement is possible when the landscape bushfire interacts with localised vegetation located throughout the settlement (including from ember attack).

Under these scenarios bushfire could impact on properties and life across the entire township area.

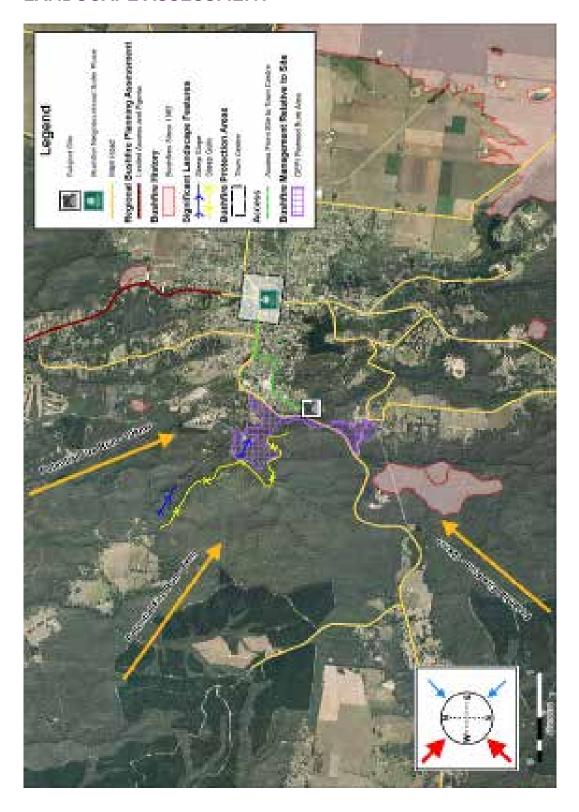
### Example 2: Gumnut estate

Gumnut estate comprises a heavily vegetated linear reserve 5ha in size adjoining residential properties. The maximum width of the reserve in any one place is less than 40 metres, the reserve has a number of fuel breaks 20 metres wide managed by the local council, and the vegetation type is scrub.

Due to the configuration of the reserve a bushfire burning for many hours and running across a landscape is not possible. A localised fire is possible and is made more likely due to the urban nature of the location and the potential for arson and illegal activities such as camp fires. Any fire that starts may quickly take hold and impact on adjoining properties. While the intensity of the bushfire may be severe it will not be sustained for any significant length of time.

Those properties that may be impacted have immediate access to the street network and the urban area away from the reserve. This area has little to no fuel and in all bushfire scenarios occupants of the houses adjoining the reserve can readily move to these areas.

# EXAMPLE PLAN DESCRIBING THE BUSHFIRE HAZARD LANDSCAPE ASSESSMENT



### **BUSHFIRE HAZARD SITE ASSESSMENT**

The bushfire hazard site assessment (the site assessment) documents the bushfire hazard on and near a site. The assessment:

- provides factual information on the bushfire hazard (vegetation type and slope)
- informs defendable space and building construction requirements
- is informed by the methodology contained in Australian Standard AS3959:2009 Construction of buildings in bushfire prone areas (AS3959) to provide contextual information on a site.

### How to prepare the site assessment

The site assessment is prepared using the simple process set out in this technical guide. This process integrates the relevant parts of AS3959.

Hazard identification can be complex and expert advice may be required. Pre-application discussions with the local council can help to correctly identify the bushfire hazard and identify if expert advice is needed.

# Tables 1, 2 and 3 to Clause 52.47-3: Defendable space and construction requirement

Tables 1, 2 and 3 set out defendable space and construction requirements. The site assessment provides factual information about the proximity of the existing bushfire hazard to a proposed building irrespective of the defendable space that can or will be provided. The site assessment is therefore separate to the use of the tables.

# Are there any changes to the site assessment methodology contained in AS3959?

Yes. The following changes are relevant to preparing the site assessment under the application requirements of the planning scheme:

- The relevant fire danger index is set in the defendable space tables in Clause 52.47-3.
- An assessment area of 150 metres is to be used.

### What vegetation classifications are used?

The site assessment requires vegetation to be classified according to whether it is forest, woodland, scrub, shrublands, mallee/mulga, rainforests or grassland. Vegetation that does not fit into the classifications above may be classified as low threat or modified.

The basis of these classifications is the likely fire behaviour that may arise from different vegetation types and not the ecological or floristic value of the vegetation. This is why the assessment must be prepared using the bushfire specific tools set out in planning schemes.

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Vegetation should always be classified on the basis of what it will be at maturity or in its long term condition. For example, vegetation following a bushfire should be classified according to what it will be once regenerated. Excludable vegetation or low-threat vegetation should be classified on the basis of what it would be if it was no longer managed unless it is reasonable to assume the existing management will continue.

### Low-threat vegetation

Low-threat vegetation is defined in AS3959 as follows:

### 2.2.3.2

Exclusions—Low threat vegetation and non-vegetated areas

- (a) Vegetation of any type that is more than 100 m from the site.
- (b) Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified.
- (c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other.
- (d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified.
- (e) Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.
- (f) Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTE: Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm).

### **Modified vegetation**

Modified vegetation refers to vegetation that is different from the other vegetation types shown in AS3959 and Table 1 and Table 2 of Clause 52.47-3 because it has been altered from its natural state. Modified vegetation can be difficult to classify as the likely fire behaviour may not produce a fire front moving across a landscape as assumed by fire modelling but will generate radiant heat and localised flame contact that needs to be fully considered.

Modified vegetation may arise in parts of Victoria where fuel loads are high but the vegetation is altered because of urban development, gardens, the way the vegetation is configured (for example, limited or no understorey vegetation), or because the fuel loads are different from the fuel loads assumed in AS3959. Modified vegetation may also arise where the vegetation cannot be excluded as it is not low-threat or low-risk.

Where the bushfire hazard landscape and site assessments justify that vegetation is modified Table 1 and Table 2 set out the defendable space and construction response to this in conjunction with the applicable approved measures. The tables specify that defendable space is to be provided for a distance of 50 metres or to the property boundary, whichever is the lesser. The minimum construction standard is BAL-29. The landscape context and extent of modification will determine the final outcome. Particularly in landscape types three and four, if there is any doubt as to whether vegetation is modified, the vegetation should not be considered as modified and should be assigned the vegetation type that otherwise best fits (for example, forest, scrub, etc).

₽ H If vegetation is modified the importance of siting, under the applicable approved measure, is further enhanced. Siting is essential to ensure that structures are protected as much as possible from the localised sources of radiant heat and flame contact that will continue to arise from the modified vegetation (including from neighbouring land).

### What slope classifications are used?

The slope of the land under the vegetation influences likely fire behaviour. As the slope increases so does the intensity and rate of spread of bushfire.

The assessment requires the slope under classifiable vegetation to be identified according to the following classifications:

- All upslopes and flat land (0 degrees)
- Downslope >0 to 5 degrees
- Downslope >5 to 10 degrees
- Downslope >10 to 15 degrees
- Downslope >15 to 20 degrees
- Downslope greater than 20 degrees.

### How to document the site assessment

The site assessment is documented on a plan. Examples are shown in this guide to assist in preparing an application.

There are Bushfire Management Statement templates on the DELWP and CFA websites.

### PROCESS FOR PREPARING THE SITE ASSESSMENT

Assessment area and analysis of the site	<ul> <li>Show:</li> <li>the 150 metre area around the location of proposed buildings and around reasonable siting options for proposed buildings (if they are available)</li> <li>site shape, dimensions, size, orientation, contours, existing use and siting of buildings or works on and near the land</li> <li>existing vehicle access arrangements</li> <li>the location of the nearest fire hydrant</li> <li>any features of the site relevant to bushfire considerations.</li> </ul>	
Vegetation classification This is Section 2.2.3 in AS3959	<ul> <li>Show the classifiable vegetation within the assessment area. Use:</li> <li>the classifications set out in this technical guide, which are the same as in planning schemes and AS3959</li> <li>the written and pictorial descriptions of vegetation set out in AS3959</li> </ul>	
Exclusions – low-threat vegetation and non- vegetated areas This is Section 2.2.3.2 in AS3959	Show excludable vegetation within the assessment area (if any). Use the written descriptions of excludable vegetation in this guide which are the same as AS3959.	
Distance to classifiable vegetation This is Section 2.2.4 AS3959	Show the distance between classifiable vegetation and he proposed buildings and/or reasonable siting options or proposed buildings (if they are available).	
Slope under the classifiable vegetation This is Section 2.2.5 in AS3959	Show the slope under the classifiable vegetation. Use the slope classifications set out in this technical guide which are the same as in planning schemes and AS3959.  Note: Slope is based on the slope under the classifiable vegetation and not the slope between the vegetation and the building.	

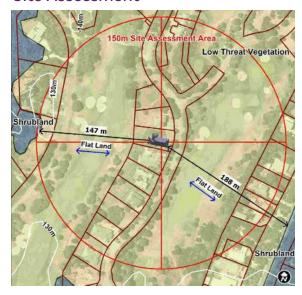
### **EXAMPLES OF THE SITE ASSESSMENT**

### Example 1

Site



Site Assessment



### Example 2

Site



Site Assessment



### Example 3

Site



Site Assessment

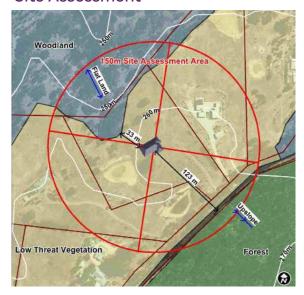


Example 4

Site



Site Assessment



### Example 5

### Site

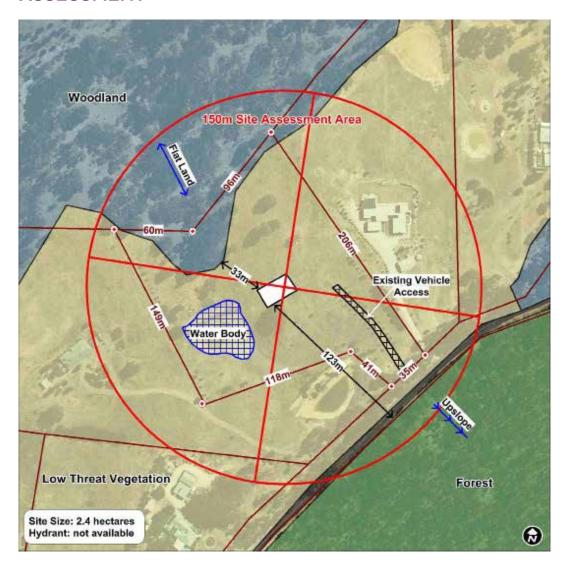


### Site Assessment



Note: These examples do not show the full analysis of the site. See the fully worked example for this extra information.

# **EXAMPLE PLAN DESCRIBING THE BUSHFIRE SITE ASSESSMENT**



### **BUSHFIRE MANAGEMENT STATEMENT**

The bushfire management statement is prepared by or on behalf of the permit applicant. It is a report that:

- shows how a proposal has responded to the bushfire hazard site assessment and bushfire hazard landscape assessment
- documents the way an application has applied the approved measures in Clause 52.47
- justifies any alternative measures in Clause 52.47 that have been applied
- shows how a proposal has responded to the relevant decision guidelines
- demonstrates to the council that a planning permit should be granted.

### STEP 4

# PREPARE AN APPLICATION THAT INCLUDES BUSHFIRE PROTECTION MEASURES

Based on application pathway that you have identified different bushfire protection measures will be required. The following sections detail the requirements, design suggestions and provide examples of how to meet approved or alternative measures for each pathway.

### Fast Track Pathway – BMO Schedules

Use this part if:

- the property is in a BMO schedule area
- the application is for a single dwelling on a lot and
- the application can meet all of the requirements listed in the schedule.

### Operation of BMO schedules

BMO schedules include a statement which sets out the operation and the types of application the schedule applies to. For example a schedule will generally apply to an application for a single dwelling on a lot, have simplified application requirements and must meet all of the requirements listed in the schedule or Clause 52.47 applies. Referral to the relevant fire authority is switched off provided the schedule requirements are met.

In BMO schedule areas, a precinct wide assessment of the bushfire hazard has been undertaken to determine the requirements up front. There is no need to do an individual site assessment. If all of the requirements listed in the schedule are met, the bushfire management objectives are satisfied.

### **Application requirements**

This is where the application process is simplified, rather than requiring a bushfire management statement and site assessment, the only requirement is for a Bushfire Management Plan.

If all of the relevant information is included, council can endorse the plan and issue the permit.

### Requirements to be met

The schedule sets out requirements that must be met for the fast track pathway to be used.

This includes:

- A bushfire attack level (BAL) construction for the dwelling
- Defendable space and vegetation management requirements
- A static water supply
- Vehicle access to the property.

### **Mandatory Condition**

An application must include the mandatory conditions specified in Clause 44.06-4 and any others as specified in the schedule.

### Referral

The fast track BMO schedules turn off referral to the relevant fire authority.

### Information

The Bushfire Management Plan must clearly show that all of the requirements have been met including any conditions relation to managing the defendable space, water supply access and fittings and vehicle access.

### **Tips**

There is a template Bushfire Management Plan on the DELWP and CFA website. Simply fill in the relevant information and submit with a planning permit application to council for endorsement.

### Guidance

There are information sheets that set out the simple requirements for schedules.

# PATHWAY 1 – OBJECTIVES AND APPROVED MEASURES FOR CLAUSE 52.47-1

### Use this part if:

- the land is in a BMO schedule and you are not using the schedule requirements
- the application is to construct a single dwelling or construct or carry out works associated with a single dwelling (that is, alterations and extensions)
- the land is zoned
   Neighbourhood Residential
   Zone, General Residential
   Zone, Residential Growth
   Zone, Urban Growth Zone,
   Low Density Residential
   Zone, Township Zone or Rural
   Living Zone.

### Clause 52.47-1 Dwellings in existing settlements

A streamlined process for preparing an application can be used. This requires that approved measures AM 1.1, AM 1.2 and AM 1.3 be included in an application.

### Approved measure AM 1.1: Siting

Bushfire protection can be enhanced by considering the separation of a dwelling from the bushfire hazard, proximity to public roads and emergency service vehicle access on a site. Considering these elements together supports the selection of an appropriate place to site a dwelling.

Each application can demonstrate that the best possible site for the dwelling is selected, even if there are siting constraints, such as lot size. AM 1.1 can therefore be implemented on all sites.

### **MEASURE** Requirement

### **AM 1.1** A building is sited to ensure the site best achieves the following:

- The maximum separation distance between the building and the bushfire hazard.
- The building is in close proximity to a public road.
- · Access can be provided to the building for emergency service vehicles.

### Information

The bushfire hazard site assessment provides the information to respond to this approved measure.

### **Design suggestions**

- Consider the siting options that may available. Different options will offer more or less protection from a bushfire. Justify the preferred siting in the bushfire management statement.
- Use existing cleared areas.
- Consider opportunities to minimise exposure to the bushfire hazard that will remain (for example, if the bushfire hazard is from neighbouring land).
- If the bushfire hazard is on one or two aspects only focus on maximising the separation distance on these sides of the building.
- Minimise the need for long access routes and consider the vehicle access design and construction requirements.
- On smaller lots siting options are limited. Siting consistent with neighbouring development and to comply with planning schemes and building regulations will usually be appropriate.

### Tip

The greater separation distance between the bushfire hazard and the proposed buildings, the lower the bushfire risk and construction costs.

### Approved measure AM 1.2: Defendable space and construction

The main feature is to consider defendable space around a structure that mitigates the effects of flame contact, radiant heat and embers on buildings and to apply the corresponding construction standard (referred to as a bushfire attack level).

### MEASURE Requirement

### AM 1.2 (part)

A building provides the defendable space in accordance with Column A, B, C, D or E of Table 1 to Clause 52.47-3. Table 6 sets out the vegetation management requirements within the defendable space. Adjoining land may be included as defendable space where there is a reasonable assurance that the land will remain or continue to be managed in that condition as part of the defendable space.

A building is constructed to the bushfire attack level:

- That corresponds to the defendable space provided in accordance with Table 1 to Clause 52.47-3, or
- The next lower bushfire attack level that corresponds to the defendable space provided in accordance with Table 1 to Clause 52.47-3 where all of the following apply:
  - A private bushfire shelter (a Class 10c building within the meaning of the Building Regulations 2006) is constructed on the same land as the dwelling.
  - A minimum bushfire attack level of BAL 12.5 is provided in all circumstances.

### Information

The bushfire hazard site assessment provides the information to respond to this approved measure.

### **Design suggestions**

### Determine defendable space based on the siting of the dwelling

Once a site for a dwelling is selected the defendable space can be determined. A planning application uses the bushfire hazard site assessment and Table 1 to work this out. AM 1.2 and Table 1 provide for the landowner to choose how much defendable space is provided. The less defendable space provided the higher the construction standard and associated cost.

### Apply the applicable construction standard (bushfire attack level)

Once the defendable space is determined, use Table 1 (reading down the columns) to obtain the applicable bushfire attack level.

### Consider whether the next lower bushfire attack level is appropriate

Once the bushfire attack level is determined using Table 1, AM 1.2 provides that the next lower bushfire attack level may be applied subject to a private bushfire shelter being constructed on the same land as the dwelling. Where a landowner chooses to include this as part of their application this should be clearly identified in the bushfire management statement.

The bushfire attack level can never be lower than BAL 12.5 (basic ember protection).

### Tip

Defendable space separates a building from the bushfire hazard to mitigate the effects of flame contact, radiant heat and embers. The safety of future occupants is enhanced where defendable space is provided, particularly if defendable space in Column A, B or C is capable of being provided.

### Guidance

Appendix 1 provides further guidance.

# Approved measure AM 1.2 (continued): Defendable space on adjoining land

Adjoining land can be 'included' as defendable space where it is managed in a condition that achieves the same outcome as if it was managed and located on site.

### **MEASURE**

### Requirement

### AM 1.2 (part)

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

### Information

The bushfire hazard site assessment provides the information to respond to this approved measure.

The bushfire hazard site assessment should justify that any adjoining land meets the defendable space requirements if this approved measure is included in an application.

### **Design suggestions**

- Low-threat vegetation will often be suitable as off-site defendable space if it can be demonstrated that the adjoining land will remain in that condition.
- If off-site defendable space can be justified the actual defendable space on that aspect is provided to the property boundary of the site subject to the application.
- If adjoining land will be managed in future then a permit condition should require management to occur before development commences.
- The bushfire management statement will need to provide evidence that the adjoining land will remain in that condition.

### **Tips**

- The defendable space required, whether on site or on adjoining land, should still meet the approved measure.
- No obligation is placed (or capable of being placed) on the adjoining land. The adjoining land is included for the purposes of the assessment of the application. Defendable space that needs to be managed will only be on the land subject to the application.

### Guidance



### Example 1

The assessment of defendable space includes consideration of off-site features such as the golf course, adjoining road and neighbouring properties.



### Example 2

The assessment of defendable space includes consideration of off-site features such as the adjoining road and neighbouring properties.



### Example 3

The assessment of defendable space includes consideration of off-site features such as the adjoining road, neighbouring properties and a water body on neighbouring land.

### Approved measure AM 1.3: Water supply and access

Once a site for a dwelling is selected the static water supply and vehicle access design and construction standards can be applied.

### **MEASURE** Requirement

### **AM 1.3** A building is provided with:

- A static water supply for fire fighting and property protection purposes specified in Table 4 to Clause 52.47-3. 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.
- Vehicle access that is designed and constructed as specified in Table 5 to Clause 52.47-3.

### Information

The bushfire hazard site assessment provides the information to respond to this approved measure.

### **Design suggestions**

- Fire authority access and length of the access are the essential criteria to determine the applicable requirements under AM 1.3. Table 4 and the Fire Authority Requirements below set out the fittings and access requirements. Further detail is in the guidance in Appendix 3.
- Incorporating this approved measure simply involves:
  - · identifying the applicable requirements in the bushfire management statement
  - \* showing the applicable requirements on the submitted plans.

### Tips

- Fire authority access to the water supply (if required) will be an important factor when considering where to site the structure in AM 1.1.
- The water supply and vehicle access design and construction standards will be a condition on the planning permit.

### Guidance

Appendix 3 provides further guidance.

# PATHWAY 2 – OBJECTIVES AND APPROVED MEASURES FOR CLAUSE 52.47-2 – APPLICATIONS FOR BUILDINGS AND WORKS

### Use this part if:

- the land is in a BMO schedule and you are not using the schedule requirements
- Clause 52.47-1 does not apply to the application.

### Clause 52.47-2 Bushfire protection objectives

Clause 52.47-2 provides a performance based approach to implementing bushfire protection measures.

The objectives are:

- Clause 52.47-2.1 Landscape, siting and design objectives
- Clause 52.47-2.2 Defendable space and construction objective
- Clause 52.47-2.3 Water supply and access objective.

#### **CLAUSE 52.47-2.1 LANDSCAPE, SITING AND DESIGN OBJECTIVES**

These objectives:

- consider how the location affects the bushfire risk to new development
- select a site for the proposed development on the land
- consider whether simple design improvements can enhance a building's resilience to embers.

#### Approved measure AM 2.1: Broader landscape

The landscape beyond the site (more than 150 metres away) impacts on the level of bushfire risk. These factors cannot be influenced by a landowner but need to be fully considered to ensure the bushfire risk to new development and potential future occupants is acceptable.

#### MEASURE Requirement

#### **AM 2.1**

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

#### Information

The bushfire hazard landscape assessment provides the information to respond to this approved measure.

#### **Design suggestions**

This approved measure requires consideration of the landscape beyond the site in preparing and assessing an application. There are no 'design' elements to incorporate into a proposal.

Where the bushfire hazard landscape assessment defines the location as landscape type one or two, an application that meets the other objectives in Clause 52.47-2 will mitigate the bushfire risk to an acceptable level. The approved measure is met.

Where the bushfire hazard landscape assessment defines the location as landscape type three or four, the landscape beyond the site may present a significant bushfire risk. Whether this approved measure is met will depend on the following factors:

- the bushfire hazard landscape assessment, particularly Step 2, which provides more information on complex locations having regard to likely bushfire scenarios, bushfire management and prevention actions occurring around a site, and the proximity to nearby locations that can provide protection from the impact of extreme fire behaviour
- whether other approved measures can be implemented
- if other approved measures cannot be implemented, the level of protection provided through the use of alternative measures
- the decision guidelines in Clause 52.47-2.

#### **Tips**

- In landscape types three or four it may be necessary to provide enhanced bushfire protection measures over and above the standard requirements of Clause 52.47. See CFA Guideline Applying the Bushfire Hazard Landscape Assessment in the Bushfire Management Overlay.
- Where landscape type three or four applies, landowners should not assume that development is not acceptable. Most applications where the Bushfire Management Overlay applies obtain planning permission. A well prepared application that demonstrates how life safety has been considered allows the council to consider the application on its merits.
- There is no alternative measure. Decision guidelines require every application to demonstrate that the bushfire risk from the landscape beyond the site can be mitigated to an acceptable level.

#### Approved measure AM 2.2: Siting

Bushfire protection can be enhanced by considering the separation of a dwelling from the bushfire hazard, proximity to public roads and emergency service vehicle access on a site. Considering these elements together supports the selection of an appropriate place to site a dwelling.

Each application is capable of demonstrating that the considerations in AM 2.2 have been made and that the best possible site for the dwelling is selected, even if there are siting constraints such as lot size or a high risk broader landscape. AM 2.2 can therefore be implemented on all sites.

#### **MEASURE** Requirement

#### **AM 2.2** A building is sited to ensure the site best achieves the following:

- The maximum separation distance between the building and the bushfire hazard.
- The building is in close proximity to a public road.
- Access can be provided to the building for emergency service vehicles.

#### Information

The bushfire hazard site assessment provides the information to respond to this approved measure

#### **Design suggestions**

- Consider the siting options that may available. Different options will offer more or less protection from a bushfire. Justify the preferred siting in the bushfire management statement.
- Use existing cleared areas.
- Use earth mounds, cut-and-fill or terraced ground to help reduce radiant heat exposure, block or deflect embers and wind driven debris.
- Consider opportunities to minimise exposure to the bushfire hazard that will remain (for example, if the bushfire hazard is from neighbouring land).
- Implement the defendable space required under the relevant approved measures.
- If the bushfire hazard is on one or two aspects focus on maximising the separation distance on these sides of the building.
- Minimise the need for long access routes and consider the vehicle access design and construction requirements.
- On smaller lots siting options are limited. Siting consistent with neighbouring development and to comply with planning schemes and building regulations will usually be appropriate.

#### Tips

• The greater the separation distance between the bushfire hazard and the proposed buildings, the lower the bushfire risk and construction costs.

#### Approved measure AM 2.3: Building design

Most structures damaged or destroyed by bushfire occur through ember attack. The design of buildings can prevent the accumulation of debris (such as leaves) and minimise entry points for embers.

#### **MEASURE** Requirement

AM 2.3 A building is designed to be responsive to the landscape risk and reduce the impact of bushfire on the building.

#### Information

The information in the bushfire hazard landscape assessment and bushfire hazard site assessment will reinforce the potential for bushfire to impact on a structure.

#### **Design suggestions**

Avoid building design that allows for embers to lodge in re-entrant corners, complex roof lines, gaps between building materials and unenclosed underfloor spaces.

In higher risk landscapes the following should be considered:

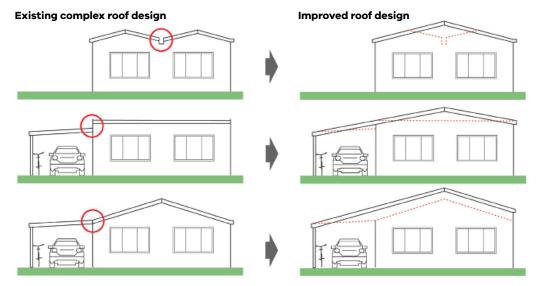
- Construct a concrete slab or fully enclose under floor spaces
- For BAL 12.5 and 19 decks, eaves and fascia should be constructed to comply with BAL 29
- Fire induced winds should be considered. This means constructing to lower cyclone levels
- External materials attached to the building should be non-combustible. This includes decks and other structures
- · Building should be of simple design with minimal re-entrant corners and basic roof lines
- A compliant private bushfire shelter might also be considered.

#### Tip

Use the diagrams to consider whether simple improvements to the design can enhance a building's resilience to embers.

#### Guidance

#### Improvements to roof design



#### Minimise ember hazard

#### **Existing complex roof design**

Building design should minimise ember hazards.



# CLAUSE 52.47-2.2 DEFENDABLE SPACE AND CONSTRUCTION OBJECTIVE

This objective is to provide defendable space around a structure that mitigates the effects of flame contact, radiant heat and embers on buildings and to apply the corresponding construction standard (referred to as a bushfire attack level).

# Approved measure AM 3.1: Defendable space for a dwelling, a dependent person's unit, industry, office or retail premises

#### **MEASURE** Requirement

#### **AM 3.1**

A building used for a dwelling (including an extension or alteration to a dwelling), a dependent person's unit, industry, office or retail premises is provided with defendable space in accordance with:

- Column A, B or C of Table 2 to Clause 52.47-3 wholly within the title boundaries of the land; or
- If there are significant siting constraints, Column D of Table 2 to Clause 52.47-3.

The building is constructed to the bushfire attack level that corresponds to the defendable space provided in accordance with Table 2 to Clause 52.47-3.

#### **Information**

The bushfire hazard site assessment provides the information to respond to this approved measure.

#### **Design suggestions**

- Column A, B or C defendable space should be provided, irrespective of the extent of vegetation management it may involve.
- Column D defendable space can be provided if there are significant siting constraints.
   The significance of the siting constraint will be considered by the responsible authority in making a decision. The bushfire management statement should identify the siting constraint and the basis for its significance.
- Once the defendable space to be provided is determined, use Table 2 to apply the corresponding bushfire attack level (reading down the columns).
- Vegetation management must be in accordance with Table 6 unless otherwise agreed in writing by the relevant fire authority.

#### Tips

- Significant siting constraints may include the size of the lot, matters of national environmental significance, or environmental hazards such as landslip or inundation.
- A range of alternative measures are available to assist landowners to demonstrate that defendable space can be provided.

#### Guidance

Appendix 1 provides further guidance.

# Approved measure AM 3.2: Defendable space for other buildings and works

#### **MEASURE** Requirement

#### **AM 3.2**

A building used for accommodation (other than a dwelling or dependent person's unit), a child care centre, an education centre, a hospital, leisure and recreation or a place of assembly is:

- Provided with defendable space in accordance with Table 3 to Clause 52.47-3 wholly within the title boundaries of the land.
- Constructed to a bushfire attack level of BAL 12.5.

#### Information

The bushfire hazard site assessment provides the information to respond to this approved measure.

#### **Design suggestions**

Apply the applicable defendable space as set out in Table 3.

#### Tip

In some contexts providing defendable space as specified in Table 3 is not possible or appropriate. Alternative measures contained in Clause 52.47-2.2 may assist in these instances.

#### **Guidance**

Appendix 1 provides further guidance.

#### Replacement and extensions to existing buildings

There is an opportunity to create more bushfire resilient communities through the replacement and extension to an existing building. These existing buildings may not have any or adequate bushfire protection measures. The Bushfire Management Overlay seeks to facilitate improvements to these properties through their redevelopment.

Most applications for replacement or extensions to an existing building can implement the applicable approved measures. Where this is not possible, most likely due to the size of the lot or environmental constraints, applications should develop a site-specific response to the bushfire hazard. This response will be alternative measures to the relevant approved measures that cannot be met.

#### 9

The bushfire management statement should explain how:

- the development does not increase the likely intensity of the occupation of the land
- the siting of the buildings meets AM 2.2
- defendable space is provided to meet the approved measure, but on any aspects where this is not possible defendable space is provided to the property boundary
- that water supply and site access arrangements are appropriate under the approved measures.

Councils will consider the relevant decision guidelines in making a decision. Where there is an overall reduction in the bushfire risk from the existing situation then planning permission will be appropriate. This includes in all landscape types under AM 2.1.

#### Alternative measure AltM 3.3: Defendable space on adjoining land

Adjoining land can be counted as defendable space where it is managed in a condition that achieves the same outcome as if it was managed and located on site.

#### **MEASURE** Requirement

#### **AltM 3.3**

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

#### Information

The bushfire hazard site assessment provides the information to respond to this alternative measure.

The bushfire hazard site assessment should justify that any adjoining land meets the defendable space requirements if this alternative measure is included in an application.

#### **Design suggestions**

- Low-threat vegetation will often be suitable as off-site defendable space if it can be demonstrated that the adjoining land will remain in that condition.
- If off-site defendable space can be justified the actual defendable space on that aspect is provided to the property boundary of the site subject to the application.
- If adjoining land will be managed in future then a permit condition should require management to occur before development commences.
- The bushfire management statement will need to provide evidence that the adjoining land will remain in that condition.

#### **Tips**

- This alternative measure works alongside the approved measure. The defendable space required, whether on site or on adjoining land, should still meet the approved measure.
- No obligation is placed (or capable of being placed) on the adjoining land. The adjoining land is included for the purposes of the assessment of the application. Defendable space that needs to be managed will only be on the land subject to the application.
- If vegetation is 'partially modified' AM 3.1 and AM 3.2 allow for defendable space to be provided to the property boundary. There is no need to use this alternative measure in these instances.

#### Guidance



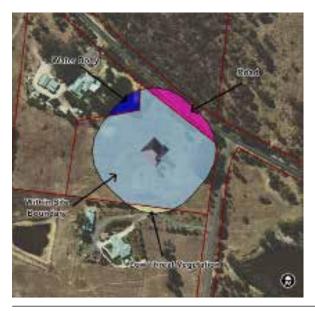
#### Example 1

The assessment of defendable space includes consideration of off-site features such as the golf course, adjoining road and neighbouring properties.



#### Example 2

The assessment of defendable space includes consideration of off-site features such as the adjoining road and neighbouring properties.



#### Example 3

The assessment of defendable space includes consideration of off-site features such as the adjoining road, neighbouring properties and a water body on neighbouring land.

# Alternative measure AltM 3.4: Calculate defendable space using Method 2 of AS3959

#### **MEASURE** Requirement

#### **AltM 3.4**

Defendable space and the bushfire attack level is determined using Method 2 of AS3959 subject to any guidance published by the relevant fire authority.

#### Information

The bushfire hazard site assessment provides information against which the use of Method 2 is compared.

#### **Design suggestions**

- AS3959 provides for a site-specific assessment of the bushfire hazard.
- Downslopes greater than 20 degrees are not within the parameters of the approved measures, and are shown as none specified in the tables. Use this alternative measure in these scenarios.
- Sites that can provide defendable space in accordance with the approved measure should do so.
- Any variation of inputs and assumptions using Method 2 should be in accordance with the published guidance of the relevant fire authority.

#### Tip

If an applicant chooses to use AltM 3.4 it is in addition to, and not a replacement for, the application requirement to prepare the site assessment as set out in this technical guide.

#### Alternative measure AltM 3.5: Dwellings subject to direct flame contact

Alternative measure AltM 3.5 sets out how to prepare a planning application where adequate defendable space cannot be provided for a dwelling (that is, approved measure AM 3.1 cannot be met, including by using alternative measures). AM 3.1 ensures that new houses have a defendable space that avoids flame contact from a fire front and reduces radiant heat to acceptable levels. The approved measure should be implemented where it is achievable.

Site constraints, such as lot size, can sometimes make it impossible to provide defendable space. This alternative measure provides guidance as to how a landowner can prepare a planning application in these circumstances. The information prepared is used by the responsible authority to decide if planning permission is appropriate.

#### **MEASURE** Requirement

#### **AltM 3.5**

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.
  - There is sufficient distance or shielding to protect people from direct flame contact or harmful levels of radiant heat.
- Less defendable space and a 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 to a lot where the requirements of AM 3.1 cannot be met.

#### Information

The bushfire hazard site assessment and the bushfire hazard landscape assessment provide the information to respond to this alternative measure.

#### **Design suggestions**

Use the guidance below to work through the information to be provided where this alternative measure is included in an application.

#### Tips

- The alternative measure only applies to a dwelling.
- The landscape types identified in the bushfire hazard landscape assessment are used as part of this alternative measure.
- The considerations required under this alternative measure are similar to those contained in approved measure AM 2.1 and its consideration of the broader landscape.
- A structure subject to direct flame contact from a moving fire front arises when defendable space in accordance with AM 3.1 cannot be provided.

#### Guidance

#### Consideration of the surrounding landscape

The bushfire hazard landscape assessment considers the risk that a site may be exposed to because of the location of the site in the broader landscape. This is the critical factor in deciding whether this alternative measure is appropriate.

Landscapes types one and two will generally have readily available access to a place that provides shelter from bushfire. The information contained in the bushfire hazard site assessment is self-explanatory and this alternative measure are likely to be appropriate in these landscape types.

Landscape types three and four are more complex locations and it may be necessary to provide additional mitigation measures to address the landscape risk. The bushfire hazard landscape assessment will need to provide further information and justification where this alternative measure is proposed.



#### **Nearby places of shelter**

The bushfire hazard site assessment will need to identify 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
- there is sufficient distance or shielding to protect people from direct flame contact or harmful levels of radiant heat.



#### Access to nearby places of shelter

The bushfire hazard site assessment will need to demonstrate that access to the nearby place of shelter is suitable for the purposes of life safety for the occupants of the proposed development. Factors to consider include:

- travel being over a very short distance
- the subject site and the place of shelter usually being within the same settlement (a township)
- travel being on foot.



#### **Apply BAL FZ**

The alternative measure requires that where direct flame contact on a structure is likely the construction standard is a bushfire attack level of BAL FZ.



#### Decision

The council will consider the information provided and will apply the decision guidelines in Clause 52.47-2 to decide if the bushfire risk has been reduced to an acceptable level.

Clause 52.47-2 requires the council to consider how life can be prioritised. The surrounding landscape influences the level of risk on a site even where defendable space is not provided. Consistent with the State Planning Policy for bushfire (Clause 13.05 of planning schemes), the council must also consider how life may be compromised through unfavourable aspects of the surrounding landscape.

# Alternative measure AltM 3.6: Integrated decision making for development occupied by more vulnerable people

Accommodation (other than a dwelling or a dependent person's unit), child care centre, education centre, hospital, leisure and recreation, and place of assembly may be occupied by people with increased vulnerability for reasons such age, mobility or a lack of familiarity with a local area.

AltM 3.6 allows for another approach to demonstrate that the bushfire risk has been reduced to an acceptable level in circumstances where defendable space cannot be provided in accordance with AM 3.2. It does this by supporting an integrated approach to managing bushfire risk and the consideration of emergency management procedures that can be established in association with the use of the land.

Life safety can be significantly enhanced through this approach. Many uses occupied by potentially vulnerable people have the advantage of management control over the operations of the facility. Other activities have a single land manager (such as for public land). These provide additional 'tools' through which the bushfire risk can be managed.

#### **MEASURE** Requirement

#### **AltM 3.6**

A building used for accommodation (other than a dwelling or dependent person's unit), child care centre, education centre, hospital, leisure and recreation or place of assembly may provide defendable space in accordance with Column A, B or C of Table 2 to Clause 52.47-3 where it can be demonstrated that:

- An integrated approach to risk management has been adopted that considers:
  - The characteristics of the likely future occupants including their age, mobility and capacity to evacuate during a bushfire emergency.
  - The intended frequency and nature of occupation.
  - The effectiveness of proposed emergency management arrangements, including a mechanism to secure implementation.
- Less defendable space and a higher construction standard is appropriate having regard to the bushfire hazard landscape assessment.

#### Information

The bushfire hazard site assessment and the bushfire hazard landscape assessment provide the information to respond to this alternative measure.

#### **Design suggestions**

Use the guidance below to work through the information to be provided where this alternative measure is included in an application.

#### Tips

- The landscape types identified in the bushfire hazard landscape assessment are used as part of this alternative measure.
- The preparation of a bushfire emergency plan should meet the published requirements of the relevant fire authority. It will be important to demonstrate proposed emergency management arrangements can be practically implemented.
- Where emergency management arrangements are central to reducing the risk to an acceptable level, the implementation of these arrangements will be included as a condition on any planning permit issued.

#### Guidance

#### Identify the characteristics of the proposed use

The bushfire management statement should document and evidence the characteristics of the likely future occupants including their age, mobility and capacity to evacuate during a bushfire emergency. The intended frequency and nature of occupation should also be set out.



#### Identify emergency management procedures

Emergency management procedures should be developed to show how life safety will be managed before, during and after a bushfire event. The following will be important considerations:

- The need for the activity to not operate when bushfire conditions are forecast to reach 'trigger' points on the fire danger index. At a minimum the use should not operate on code red days. By closing on pre-determined days a significant reduction in the bushfire risk to life is achieved by it not being occupied.
- The ability to evacuate to other locations that may provide shelter from extreme bushfire behaviour (such as nearby urban, township or settlement areas).
- Places to shelter on the site from extreme bushfire behaviour. This may involve:
  - providing at least one building on site that meets the defendable space distances in Column A, B or C of Table 2; and/or
  - providing a location in close proximity where protection can be provided from the impact of extreme bushfire behaviour, where fuel is managed in a minimum fuel condition, and where there is sufficient distance or shielding to protect people from direct flame contact or harmful levels of radiant heat.
- Other factors set out in guidance published by the relevant fire authority.

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Landscape types one and two identified through the bushfire hazard landscape assessment may not require formal emergency management arrangements as they are afforded protection by their location in the broader landscape and are inherently lower risk locations.



#### Consider defendable space

Provide defendable space in accordance with Column A, B or C of Table 2 that integrates with the life safety provided through emergency management arrangements, having regard to:

- the feasibility and resilience of the proposed emergency management arrangements
- the bushfire hazard landscape assessment, including the level of protection that may be provided by the location of the site in the broader landscape
- focusing on buildings that are essential for life protection, recognising that not all buildings need be occupied during a bushfire event.



#### **Decision**

The council will consider the information provided and will apply the decision guidelines in Clause 52.47-2 to decide if the bushfire risk has been reduced to an acceptable level. This will include fully considering the bushfire risk arising from the broader landscape as required by AM 2.1.

#### **CLAUSE 52.47-2.3 WATER SUPPLY AND ACCESS OBJECTIVE**

This objective is to provide a static water supply for all development and to ensure access on the site is designed and constructed to enhance safety.

#### Approved measures AM 4.1 and AM 4.2

#### MEASURE Requirement

#### **AM 4.1**

A building used for a dwelling (including an extension or alteration to a dwelling), a dependent person's unit, industry, office or retail premises is provided with:

- A static water supply for fire fighting and property protection purposes specified in Table 4 to Clause 52.47-3.
- Vehicle access that is designed and constructed as specified in Table 5 to Clause 52.47-3.

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.

#### **AM 4.2**

A building used for accommodation (other than a dwelling or dependent person's unit), child care centre, education centre, hospital, leisure and recreation or place of assembly is provided with:

- A static water supply for fire fighting and property protection purposes of 10,000 litres per 1,500 square metres of floor space up to 40,000 litres.
- Vehicle access that is designed and constructed as specified in Table 5 to Clause 52.47-3.
- An integrated approach to risk management that ensures the water supply and access arrangements will be effective based on the characteristics of the likely future occupants including their age, mobility and capacity to evacuate during a bushfire emergency.

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.

#### Information

The bushfire hazard site assessment provides the information to respond to this alternative measure

#### **Design suggestions**

- Fire authority access and length of the access are the essential criteria to determine the applicable requirements under AM 4.1 and AM 4.2. Use the guidance in Appendix 3.
- The requirements should be identified in the bushfire management statement and shown on the submitted plans.
- Buildings used for accommodation (other than a dwelling or dependent person's unit), child
  care centre, education centre, hospital, leisure and recreation or place of assembly may be
  occupied by people with increased vulnerability for reasons such age, mobility or a lack of
  familiarity with a local area. AM 4.2 requires that this be considered in finalising the water
  supply and site access requirements for these activities.

#### Tips

- Fire authority access to the water supply (if required) will be an important factor when considering where to site the structure in AM 2.2.
- If a landowner seeks to vary the water supply and access requirements it will be through an unspecified alternative measure. Such an approach will need to demonstrate equal or superior outcomes than the approved measure.
- The water supply and vehicle access design and construction standards will be a condition on the planning permit.

#### Guidance

Appendix 3 provides further guidance.

# PATHWAY 3 – OBJECTIVES AND APPROVED MEASURES FOR CLAUSE 52.47-2 – APPLICATIONS FOR SUBDIVISION

Use this part if the application is for subdivision.

This part provides further advice on the subdivision-specific approved and alternative measures. The objective seeks to ensure that subdivision design and layout is responsive to the bushfire hazard and that all new lots are capable of being developed for their likely future use. Lots for residential and rural-residential purposes should have bushfire protection measures specified at the subdivision stage.

#### Introduction

Subdivision design is an important way to enhance a future community's resilience to bushfire and to ensure that new lots provide a high level of bushfire protection for future development. The combination of different approaches at the lot level and the subdivision level provides the greatest opportunity to maximise bushfire protection. Bushfire protection should be considered at the initial planning stages and integrated as an essential factor informing subdivision design and layout.

#### Clause 52.47-2.4 (Subdivision objectives)

Clause 52.47-2.4 contains requirements for subdivisions. It does this by:

- providing subdivision-specific approved measures and alternative measures, and
- cross-referencing the need to comply with other relevant objectives and approved measures in Clause 52.47-2.

#### Considering the broader landscape

Decision guidelines at Clause 52.47-2 require that the risk from the broader landscape be considered in deciding an application. The landscape beyond the site (more than 150 metres away) impacts on the level of bushfire risk. These broader factors need to be fully considered to ensure the bushfire risk to new lots created and the likely future development is acceptable.

Use the bushfire hazard landscape assessment and guidance for approved measure AM 2.1 to inform consideration of the broader landscape for new subdivisions. The bushfire management statement should fully document the relevant considerations.

An important consideration for subdivisions will be the landscape-scale bushfire behaviour that may occur in the broader area. This will vary considerably depending on topography, extent of vegetation and proximity to existing settlements. The location of a subdivision should be carefully selected to avoid creating entirely new risk that cannot be mitigated to an acceptable level.

The bushfire hazard landscape assessment should be tailored to ensure it provides adequate information to inform preparing and assessing applications for subdivisions.

#### General guidance for designing new subdivisions

The figure below provides an overview of the key subdivision layout and design considerations.

#### General guidance for new subdivision

#### **Approach**

- 1 Subdivision should manage the bushfire risk within its boundaries.
- 2 Staged subdivisions should provide for the management of the bushfire risk to new lots as the stages of subdivision progress.

#### Hazard management

- 3 Ensure the design of landscaped areas and areas to be revegetated do not result in a bushfire hazard to future development.
- 4 Locate any offsets away from new lots and future development.
- Use low-hazard areas like golf courses, managed parklands, sports ovals and public spaces to separate new lots from the bushfire hazard.
- 6 Avoid introducing bushfire hazards into subdivisions, including those that allow for the passage of bushfire into an area. This includes wetlands, gullies, or bushland reserves. Where landscaping and design features are included ensure they are capable of being managed in a low fuel condition.
- Consider how future public uses may be impacted by a bushfire and the opportunities they may provide to enhance bushfire protection for the area (for instance, through the location of car parking and other low-fuel areas).



#### **Buffers**

- 8 Perimeter roads are effective in separating new lots from the bushfire hazard.
- 9 Perimeter roads in combination with defendable space in front setbacks of new lots is an effective way to achieve the defendable space required under approved measures without requiring larger lots adjoining the bushfire hazard.
- 10 Where new bushfire hazards are introduced (for example, for environmental reasons) such hazards may also require a perimeter road to separate the hazard from lots.
- Carefully consider larger lots adjoining the bushfire hazard. Larger lots require more management intervention to maintain defendable space. Where poorly maintained they will become a bushfire hazard.

Opportunities for communal water supplies are encouraged. They may be more useful for fire authorities during a bushfire emergency. The location of shared water supplies should be responsive to operational needs of the relevant fire authority.

#### Roads

- Future residents and fire authorities require safe access within the subdivision and to and from the subdivision.
- 14 Two different access options to the wider road network will enhance bushfire safety and support more effective fire fighting.
- 15 Direct roads away from the bushfire hazard and avoid situations where roads pass through areas of unmanaged vegetation.
- 16 Apply the requirements of Clause 56 of planning schemes when designing the road network.

#### Approved measure AM 5.1: Subdivision

Requirements for a subdivision ensure that the bushfire risk to new lots is considered at the subdivision stage.

#### **MEASURE** Requirement

#### AM 5.1

An application to subdivide land, other than where AM 5.2 applies, demonstrates that each proposed lot is capable of meeting:

- The defendable space in accordance with Column A, B or C of Table 2 to Clause 52.47-3.
- The vegetation management requirements in Table 6 of Clause 52.47.
- The approved measures in Clause 52.47-2.1 and Clause 52.47-2.3.

#### Information

The bushfire hazard site assessment and the bushfire hazard landscape assessment provide the information to respond to this approved measure.

#### **Design suggestions**

- This approved measure requires an application to demonstrate that each proposed lot can, in future, be provided with bushfire protection measures and is capable of being granted a planning permit under the Bushfire Management Overlay when the lot is developed. Use the bushfire management statement to demonstrate this.
- Subdivision should be capable of managing the bushfire risk within the boundaries of the land subject to the application. This includes ensuring that defendable space can be wholly contained on the subject land.
- Use other parts of this technical guide to respond to this approved measure:
  - Use guidance for AM 2.1 to consider how the landscape beyond the site impacts on whether the subdivision of land is suitable and the bushfire risk can be reduced to an acceptable level.
  - Use guidance for AM 2.2 to consider siting. Use a building envelope for the purpose of the assessment.
  - Use guidance for AM 4.1 and AM 4.2 to consider water supply and lot access. Use a building envelope for the purpose of the assessment.

#### Tips

- There are no 'design elements' that need to be formally endorsed at the subdivision stage. Bushfire protection measures will be formalised through subsequent approvals under the Bushfire Management Overlay when development is proposed.
- Given there are no buildings or structures considering the design of buildings through AM 2.3 is not a relevant consideration at the subdivision stage.
- Other parts of the planning scheme, such as zones, also specify bushfire protection measures. Integrate these considerations as part of the bushfire management statement.

#### Guidance



# BUSHFIRE HAZARD SITE ASSESSMENT

Assess the existing vegetation through the bushfire hazard site assessment.



#### **WORKINGS**

Apply defendable space to meet the approved measure.

# Approved measure AM 5.2 and Alternative measure AltM 5.5: Residential and rural-residential subdivisions

Requirements for residential and rural-residential subdivision ensure that the bushfire risk is fully considered at the subdivision stage. Bushfire protection measures to develop each lot with a single dwelling are identified at the subdivision stage to ensure that no new residential lot is created that cannot be safely developed under the requirements of the Bushfire Management Overlay.

#### **MEASURE** Requirement

AM 5.2

An application to subdivide land zoned for residential or rural-residential purposes must be accompanied by a plan that shows:

- A building envelope for a single dwelling on each lot that complies with AM 2.2 and provides defendable space in accordance with:
  - Columns A or B of Table 2 to Clause 52.47-3 for a subdivision that creates 10 or more lots;
     or
  - Columns A, B or C of Table 2 for a subdivision that creates less than 10 lots.
- Defendable space wholly contained within the boundaries of the proposed subdivision.

Defendable space may be shared between lots within the subdivision. Defendable space for a lot may utilise communal areas, such as roads, where that land can meet the requirements for defendable space.

- Vegetation management requirements in Table 6 to implement and maintain the defendable space required under this approved measure.
- Water supply and vehicle access that complies with AM 4.1.

#### **AltM 5.5**

A building envelope for a subdivision that creates more than 10 lots required under AM 5.2 may show defendable space in accordance with Column C of Table 2 where it can be demonstrated that:

- All other requirements of AM 5.2 have been met.
- Less defendable space and a higher construction standard is appropriate having regard to the bushfire hazard landscape assessment.

#### Information

The bushfire hazard site assessment and the bushfire hazard landscape assessment provides the information to respond to this approved measure.

#### **Design suggestions**

- A subdivision should manage the bushfire risk within the boundaries of the land subject to the application. This includes ensuring that defendable space is wholly contained on the subject land.
- Determine the defendable space based on a building envelope for each lot.
- Defendable space may be shared between lots within the subdivision. Defendable space can also include road reserves and other areas that will be managed to meet the defendable space vegetation management requirements.
- The approved measure has subdivision-specific requirements for defendable space depending on how many lots are proposed. Ensure the correct columns in Table 2 are used.
- AltM 5.2 allows for less defendable space for subdivisions of more than 10 lots. Use the bushfire hazard landscape assessment to ensure this alternative measure is appropriate.
- AM 5.2 cross-references to other approved measures in Clause 52.47-2. Refer to other parts in this document for guidance on these.
- Tables 4 and 5 set out water supply and vehicle access requirements. These should be applied to each lot. Opportunities to provide communal water supplies are encouraged and could be a suitable alternative measure to demonstrate an adequate supply of water is available. Further detail is in Appendix 3.

#### Tip

Perimeter roads are important in larger subdivisions as they:

- provide fire fighters with easier access to structures, allowing more efficient use of firefighting resources
- provide a safe retreat for firefighters
- provide a clear control line from which to conduct hazard reduction or back burning operations.

#### Guidance



# BUSHFIRE HAZARD SITE ASSESSMENT

Assess the existing vegetation through the bushfire hazard site assessment.



#### **WORKINGS**

Apply defendable space to meet the approved measure.

Defendable space can be shared amongst lots for the purpose of assessing the approved measure.



#### FINAL DEFENDABLE SPACE

Each lot has its defendable space shown.

Permit conditions will implement the defendable space.

#### **Guidance**

The following process explains how AM 5.2 operates with the mandatory subdivision permit condition at Clause 44.06-4 and the permit exemption for a dwelling at Clause 44.06-1.

#### Step 1: Approved measure AM 5.2 (Clause 52.47-2.4)

The approved measure requires that bushfire protection measures to develop each lot with a single dwelling be identified as part of the application.



#### Step 2: Mandatory permit condition (Clause 44.06-3)

A mandatory permit condition is inserted on all permits issued requiring the bushfire protection measures for each lot to be specified in a s.173 agreement. This would be in the form of an endorsed plan and associated schedule setting out the measures in detail. The s.173 agreement is registered on the title of each lot created in the subdivision.



#### Step 3: Permit exemption (Clause 44.06-1)

A permit exemption allows for a dwelling to be constructed on a lot without the need for further planning permission under the Bushfire Management Overlay if a s.173 agreement is registered on the title of each lot.



#### Step 4: Implement s.173 agreement

The s.173 agreement requires that if the landowner uses the permit exemption the bushfire mitigation measures set out in the agreement must be implemented and maintained to the satisfaction of the responsible authority on a continuing basis.

#### Tip

Care should be taken to ensure that other permit conditions inserted on the subdivision approval do not mandate that the bushfire protection measures identified for each lot be implemented. A landowner is entitled to not access the permit exemption and seek planning permission for a different package of bushfire protection measures, if they choose.

# Approved measure AM 5.3: Perimeter road Approved measure AM 5.4: Manage the risk

Perimeter roads are an important design element in larger subdivisions. Perimeter roads serve a number of functions including separating new development from the bushfire hazard, providing a line of control to more safely conduct hazard reduction activities, and providing a safer location for fire authorities to attack a bushfire and defend a community during a bushfire event.

The Bushfire Management Overlay ensures that all new subdivisions are designed and managed from the beginning of their existence to enhance community resilience to bushfire. Landscaping and the management of fuel in new subdivisions is an important factor to sustain these protections on an ongoing basis.

#### MEASURE Requirement

#### AM 5.3 An application

An application to subdivide land to create 10 or more lots provides a perimeter road adjoining the hazardous vegetation to support fire fighting.

### AM 5.4 A subdivision manages the bushfire risk to future development from existing or proposed landscaping, public open space and communal areas.

#### Information

The bushfire hazard site assessment and the bushfire hazard landscape assessment provide the information to respond to these approved measures.

#### **Design suggestions**

- Use the guidance in this document to maximise the bushfire protection that can be provided when designing subdivisions.
- Include a perimeter road for subdivisions of 10 or more lots.
- Subdivision layout and design should ensure that the defendable space and construction requirement for new lots are not compromised over time.
- Mechanisms to ensure ongoing hazard management on public land may be required. This should be identified in the bushfire management statement.
- Staged subdivisions should provide for the management of the bushfire risk to new lots as the stages of subdivision progress. This may include the need to temporarily manage the bushfire hazard as stages progress.

#### Tip

Perimeter roads are important in larger subdivisions as they:

- provide fire fighters with easier access to structures, allowing more efficient use of firefighting resources
- provide a safe retreat for firefighters
- provide a clear control line from which to conduct hazard reduction or back burning operations.

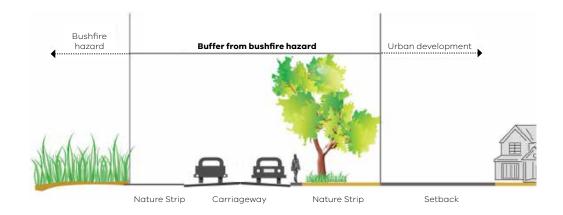
#### **Guidance: Examples of effective perimeter roads**











STEP 5

# UNDERSTAND HOW THE COUNCIL WILL ASSESS YOUR APPLICATION

Use this part to understand how the council will make a decision on an application, the mandatory permit conditions that will apply and the permit exemption for defendable space.

#### **DECISION GUIDELINES FOR BMO SCHEDULES**

BMO schedules provide a fast track pathway for preparing and assessing a planning permit application. The responsible authority must consider whether all of the bushfire protection measures in this schedule have been met.

The council planning officer will check that the bushfire management plan meets all of the requirements specified in the BMO schedule. If it does, your application does not need to be referred to the CFA.

If council approves the planning permit application, the bushfire management plan is approved and becomes part of the planning permit.

If your application does not meet all of the bushfire protection measures required in the BMO schedule it will be assessed under either the process for Pathway One (if eligible) or Pathway Two, including referral to the CFA.

#### **DECISION GUIDELINES FOR CLAUSE 52.47-1**

Clause 52.47-1 applies a streamlined process for preparing an application and this is reflected in the decision guidelines. Decision guidelines set out the matters that a council must consider before deciding on an application. Clause 52.47-1.1 sets out the following decision guidelines:

- Consider the bushfire hazard site assessment and the bushfire management statement submitted with the application.
- Assess that all approved measures in Clause 52.47-1.1 have been incorporated in the application and correctly applied.

As all approved measures must be incorporated in the application there are no alternative measures to be considered.

#### Referral

The relevant fire authority is a recommending referral authority in accordance with Clause 66.03 of planning schemes. The views of the relevant fire authority are considered by the council, including suggested conditions or if the relevant fire authority considers planning permission should not be granted. However, the decision is made by the council.

Where all approved measures have been incorporated in the application and correctly applied, planning permission should be aranted.

#### **Mandatory permit conditions**

Clause 44.06-3 identifies mandatory conditions that must be applied.

All permits must include a mandatory condition that the bushfire protection measures forming part of the planning permit be maintained to the satisfaction of the council.

All permits that include the next lower bushfire attack level enabled by AM 1.2 will include a mandatory condition requiring a s173 agreement that is to specify that a private bushfire shelter be constructed, maintained and made available for use at all times.

#### **DECISION GUIDELINES FOR CLAUSE 52.47-2**

#### Introduction

Clause 52.47-2.1 sets out the matters that a council must consider before deciding on an application. The decision guidelines are best considered according to the following themes

#### Information

- The bushfire hazard landscape assessment, the bushfire hazard site assessment and the bushfire management statement submitted with the application.
- The impact of any state, regional or local bushfire management and prevention actions
  occurring around the site and in the wider area on the bushfire hazard and the level of
  risk to the proposed development.

#### Operation of Clause 52.47-2

- Whether the proposed development meets the objectives of Clause 52.47-2 regardless of other measures which may be available, including private bushfire shelters, community shelters and the presence of places of last resort.
- Whether the proposed measures can be practically implemented and maintained in conjunction with the ongoing use of the land.
- Whether the use of an alternative measure meets the relevant objective having regard
  to the bushfire hazard and the nature of any constraint that prevents the applicable
  approved measure from being implemented.

#### Decision making across the different objectives in Clause 52.47-2

- If one or more of the objectives in Clause 52.47-2 will not be achieved in the completed development, whether the development will, taking all relevant factors into account, reduce the bushfire risk to a level that warrants it proceeding.
- Whether the risk arising from the broader landscape can be mitigated to an acceptable level or warrants the development not proceeding.

#### Referral

The relevant fire authority is a recommending referral authority in accordance with Clause 66.03 of planning schemes for an application to develop land with a dwelling and to subdivide land. The views of the relevant fire authority are considered by the council, including suggested conditions or if the relevant fire authority considers planning permission should not be granted. However, the final decision is made by the council.

The relevant fire authority is a determining referral authority in accordance with Clause 66.03 of planning schemes for all other applications where Clause 52.47-2 applies. The views of the relevant fire authority are considered by the council. Any conditions requested by the relevant fire authority must be included on any planning permit issued. If the relevant fire authority recommends the application be refused the council must refuse the application.

#### **Mandatory permit conditions**

Clause 44.06-3 identifies mandatory conditions that must be applied.

All permits except those for subdivision must include a mandatory condition that the bushfire protection measures forming part of the planning permit be maintained to the satisfaction of the council.

All subdivision permits that create a lot for a single dwelling on land zoned for residential purposes must include a mandatory condition requiring a s173 agreement that is to specify the bushfire protection measures for developing each lot with a single dwelling. See Step 4c for further information about how the subdivision arrangements operate.

#### **WHAT HAPPENS NEXT**

After lodging your planning permit application council will assess your application based on the pathway it belongs too. An overview of the matters assessed by council is detailed below.

PATHWAY	FAST TRACK PATHWAY	PATHWAY ONE	PATHWAY TWO	PATHWAY THREE
	Single dwellings in a schedule.	Single dwellings in existing settlements	All other buildings and works	Subdivision
ASSESSMENT	Pre-set bush fire protection requirements specified in the schedule	Approved measures and decision guidelines in Clause 52.47-1.	Approved and Alternative measures in Clause 52.47-2 Decision guidelines at Clause 52.47-2.5 including:  • whether the broader landscape risk can be mitigated to an acceptable level, and  • whether the proposed development meets the objectives of Clause 52.47-2.	Approved and Alternative measures in Clause 52.47-2.4  Decision guidelines at Clause 52.47-2.5 including:  • whether the broader landscape risk can be mitigated to an acceptable level, and  • whether the proposed development meets the objectives of Clause 52.47-2.
REFERRAL	No	Yes	Yes	Yes
MANDATORY CONDITIONS	Yes	Yes	Yes	Yes

#### **REFERRAL**

There are different referral requirements for certain types of planning permit applications, these are set out in Clause 66 of the planning scheme. Where referral of planning permit applications is required in the BMO, it will be to the relevant fire authority (typically the CFA) for comment.

Referral is not required for some types of non habitable outbuildings and for applications meeting the requirements of a schedule that preset bush fire protection requirements for single dwellings.

#### Outbuildings not requiring referral

Referral to the relevant fire authority is not required for a non habitable outbuilding ancillary to an existing dwelling:

- with a gross floor area greater than 100 square metres,
- providing 10 metres of defendable space in accordance with the vegetation management requirements at Clause 52.47 with the following variation:
  - the canopy of trees must be separated by at least 2 metres.

If less than 10 metres from any existing building used for accommodation the outbuilding must also meet the construction requirements at Table 7 of Clause 52.47 for a fire separation wall.

A template Bushfire Management Plan is available for applicants on the DELWP and CFA websites. There is also an information sheet (Outbuildings Fact Sheet) that provides examples for outbuildings.

## No referral required for single dwellings in a schedule with pre-set bushfire protection measures

There is no referral of the application to the CFA where it meets all of the requirements of the schedule.

Councils may need to review business practices to ensure that applications prepared to meet the requirements of schedules are not automatically referred to CFA through established administrative processes.

A planner should undertake a preliminary check of the application and identify whether the application has been designed to meet the schedule requirements.

This can be undertaken at a pre application meeting or as soon as possible after lodgment of the application. There is an information sheet and template Bushfire Management Plan on DELWP's website to assist councils and applicants preparing applications in a BMO schedule.

# Is referral required where an applicant opts out of schedule requirements?

For various reasons an applicant may decide to use alterative bushfire protection measures to those specified in the schedule.

An application will then be assessed under the relevant provisions of Clause 44.06 Bushfire Management Overlay and Clause 52.47 Planning for Bushfire.

Referral is required of applications that do not meet the schedule requirements

Where an application does not meet the requirements of the schedule or decides to opt out and use alterative bushfire safety measures to that specified in the schedule, referral to the CFA would be required.

#### THE PLANNING PERMIT

The planning permit and the associated endorsed plans should be simple and self-contained to maximise the opportunity for land owners to comply. This will enhance the safety of future occupants by ensuring the implementation of bushfire protection measures required under the Bushfire Management Overlay.

#### Permit conditions and endorsed plans

The planning permit should specify:

- defendable space vegetation management requirements (see Appendix 2)
- the applicable bushfire level (BAL) that is to be implemented at the building permit stage according to the relevant sections of AS3959:2009 Building in a Bushfire Prone Area (Standards Australia)
- the size of the water tank and any associated requirements
- access design and construction requirements (see Appendix 3)
- any mandatory condition specified in Clause 44.06-3 of planning schemes.

The endorsed plans should show:

- the layout of any buildings and works
- he defendable space area
- the water tank location
- the access arrangements.

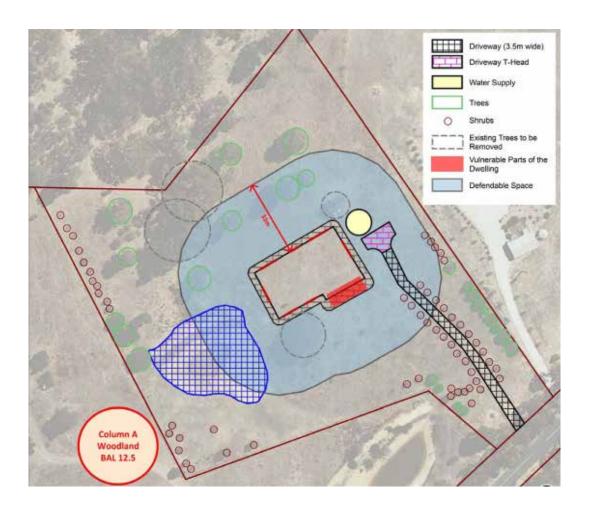
The plan below is a simple example of the type of plan that should be endorsed.

#### Mandatory permit conditions

All permits must include a mandatory condition that the bushfire protection measures forming part of the planning permit be maintained on a continual basis, to the satisfaction of the council.

In addition:

- Pathway One permits that include construction to a lower bushfire attack level enabled by providing a private bushfire shelter will include a mandatory condition requiring a s173 agreement that is to specify that a private bushfire shelter be constructed, maintained and made available for use at all times.
- All subdivision permits that create a lot for a single dwelling on land zoned for residential purposes must include a mandatory condition requiring a Section 173 agreement that is to specify the bushfire protection measures for developing each lot with a single dwelling.



#### Permit exemption to create defendable space

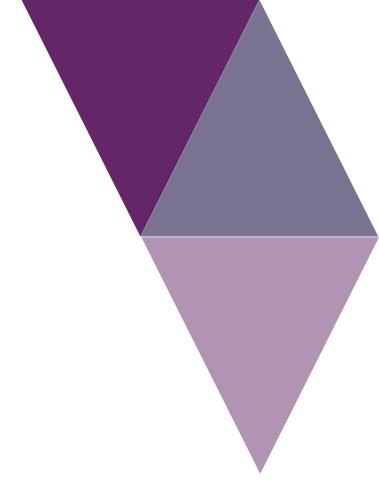
Clause 52.48-5 sets out a planning permit exemption to create defendable space for a single dwelling or an alteration or extension to a dwelling.

Where a planning permit has been issued under the Bushfire Management Overlay, the removal, destruction or lopping of vegetation to create a defendable space cannot be prevented by:

- any requirement of a planning permit, including any condition, or
- any requirement or provision of the planning scheme.

This exemption only applies where 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.

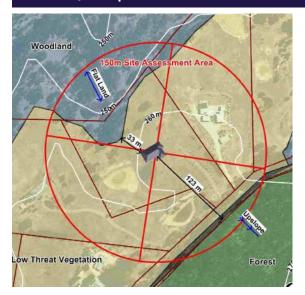
In other circumstances, the vegetation management required to implement defendable space can have requirements and conditions imposed as part of the grant planning permission.



# APPENDICES TECHNICAL NOTES

#### 1 APPLYING DEFENDABLE SPACE

#### Guidance | Example 1



# BUSHFIRE HAZARD SITE ASSESSMENT

Assess the existing vegetation through the bushfire hazard site assessment.



#### **WORKINGS**

For forest vegetation Column A, B, or C defendable space can be met.



#### FINAL DEFENDABLE SPACE

Column A (forest) defendable space provided.

#### Guidance | Example 2



# BUSHFIRE HAZARD SITE ASSESSMENT

Assess the existing vegetation through the bushfire hazard site assessment.



#### **WORKINGS**

For forest vegetation Column A, B, or C defendable space can be met on that aspect.

For low threat vegetation defendable space is 50m or to the property boundary, whichever is lesser.



#### FINAL DEFENDABLE SPACE

Defendable space is responsive to the bushfire risk from different aspect.

Column A (forest) defendable space provided on aspect containing forest. Defendable space provided to property boundary on aspect with low threat vegetation.

#### 2

# BACKGROUND ON THE DEFENDABLE SPACE AND CONSTRUCTION REQUIREMENTS OF THE BUSHFIRE MANAGEMENT OVERLAY

Defendable space is an area of land around a building where vegetation is modified and managed to reduce the effects of flame contact, radiant heat and embers associated with bushfire. Flame contact, radiant heat and embers are the way a bushfire attacks a building.



(Unmanaged vegetation)



Defendable space is a defined term in Clause 72 of planning schemes.

#### Forms of bushfire attack

There are up to five forms of bushfire attack that are considered when preparing and assessing a planning application depending on the application pathway being used. These are described in the figure below. The purpose of the bushfire hazard site assessment and the bushfire hazard landscape assessment is to help understand how the forms of bushfire attack might apply to a specific site and development proposal.

The Bushfire Management Overlay ensures that the forms of bushfire attack have been adequately mitigated through the implementation of the approved measures and alternative measures in Clause 52.47.

#### Defendable space required in Clause 52.47

Clause 52.47 sets out how much defendable space is to be provided depending on the application pathway being used (see Step 2). This is summarised in the figure below.

#### What are the construction standards?

Construction standards for bushfire are expressed as bushfire attack levels. These levels are identified in AS3959. The different bushfire attack levels seek to mitigate different forms of bushfire attack. There is a direct relationship between the defendable space provided and the bushfire attack level in that the closer the vegetation is to the structure the high the construction standard. The figure below identifies the bushfire attack levels and provides the technical description of what they seek to achieve.

#### What vegetation modifications and management are required for the defendable space?

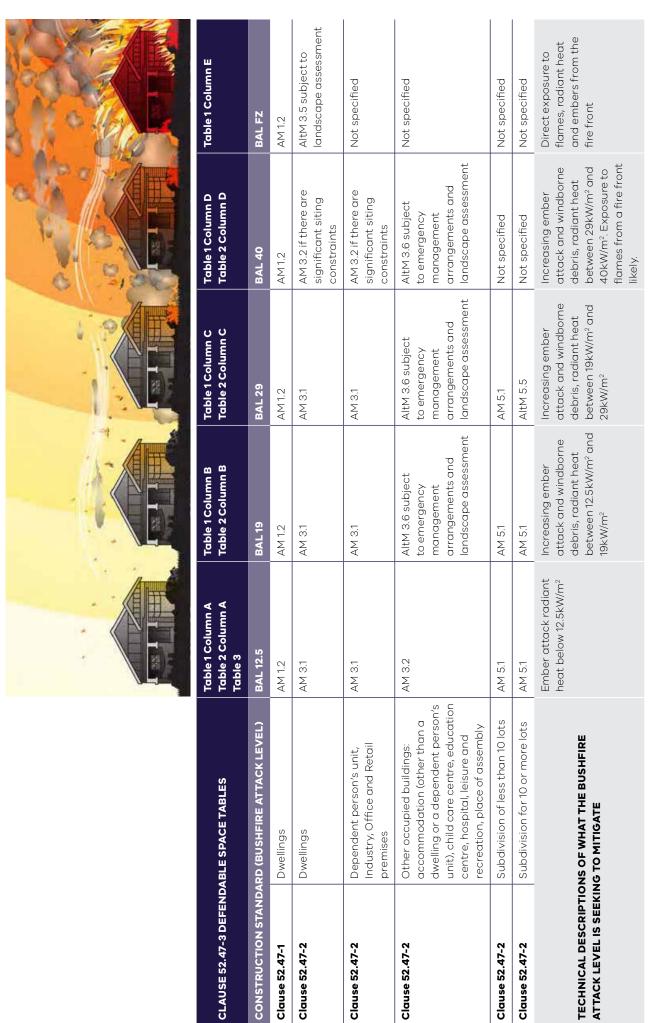
Once the amount of defendable space is determined, the vegetation within this area is modified and managed to ensure the defendable space mitigates the bushfire as it approaches the structure. Table 6 in Clause 52.47 contains the vegetation management prescriptions that should be applied to any planning permit issued containing defendable space.

These may be varied, if agreed in writing, to the satisfaction of the relevant fire authority or as specified in a schedule to the BMO.

# FORMS OF BUSHFIRE ATTACK

EXTREME FIRE BEHAVIOUR	<ul> <li>Occurs from fire behaviour in the surrounding landscape, including where it interacts with the hazard in close proximity to a building.</li> <li>Arises in high risk landscapes, with long fire runs, steep topography and vegetation in a mostly natural state.</li> <li>Influenced by fuel loads and drought conditions.</li> <li>Associated with high temperatures, wind, cyclonic winds, lightning.</li> <li>Extreme ember attack will occur.</li> <li>Associated with weather as seen on Black Saturday.</li> <li>Any fire that starts and takes hold will be so intense that life safety may be seriously compromised.</li> </ul>	BUSHFIRE HAZARD LANDSCAPE ASSESSMENT
FLAME CONTACT FROM FIRE FRONT	Occurs from the hazard in close proximity to a building (150 metres).      Direct flame contact from a fire front where vegetation is in a mostly natural state (such as in national parks).      Occurs when a building is in close proximity to the vegetation.      May arise in lower risk areas (such as from a local park) or in higher risk areas (larger vegetated areas such as forests and coastal reserves).	BUSHFIRE HAZARD SITE ASSESSMENT
LOCALISED FLAME CONTACT	Occurs from the hazard in close proximity to a building (up to 50 metres).  Direct flame contact from individual elements, such as vegetation, fences or structures.  Burning elements may arrive from neighbouring land.  Can occur in areas where the vegetation is modified or is managed as a garden.  Not direct flame contact from a moving fire front.	BUSHFIRE HAZARD SITE ASSESSMENT
RADIANT HEAT	Occurs from the hazard in close proximity to a building (up to 150 metres).  The heat you can feel from a fire.  Can ignite surfaces without flame contact or ember attack.  Dries out vegetation ahead of a bushfire so that it burns more readily.	BUSHFIRE HAZARD SITE ASSESSMENT
EMBERATTACK	May occur from the hazard in very close proximity to a building (nearby trees, neighbouring houses).      May occur from fire behaviour in the surrounding landscape.      Most common way houses catch fire during a bushfire.      Occurs when small burning twigs, leaves and bark are carried by wind, landing in and around a building.      Can happen before, during and after a bushfire.	BUSHFIRE HAZARD SITE ASSESSMENT BUSHFIRE HAZARD LANDSCAPE ASSESSMENT

# **DEFENDABLE SPACE AND CONSTRUCTION REQUIREMENTS OF CLAUSE 52.47**



#### 3

#### **WATER SUPPLY AND ACCESS**

#### No access requirement

ΙĒ

- Fire authority access to the water supply is not required in Table 4 of Clause 52.47-3; and
- The driveway is less than 30 metres.

#### THEN

- There are no access requirements under the Bushfire Management Overlay.
- Apply the water supply requirements in Table 4.

#### Basic access requirement

ΙĒ

- Fire authority access to the water supply is required in Table 4; and
- The driveway is less than 30 metres.

## THEN

- There are no access requirements subject to fire authority vehicles getting within 4 metres of the water supply using the access otherwise provided, (for example, residential dwelling).
- Apply the water supply requirements in Table 4.

#### Tailored access requirement

ΙĒ

- Fire authority access to the water supply is required in Table 4; and
- The driveway is more than 30 metres.

#### THEN

- Access should be provided in accordance with Table 5, depending on the length of the access.
- Apply the water supply requirements in Table 4.

TIP

An accessway that is longer than 30 metres for purposes other than access to the primary structure on a property or the associated water supply does not require fire authority access. The purpose of a threshold of 30 metres below which fire authority access design and construction is not required relates to the primary structure on a property and not any other structures (such as sheds).

#### Water tank requirements

Table 4 of Clause 52.47 sets out the capacity, fittings and access requirements for water supply in the BMO.

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 material, and
- include a separate outlet for occupant use.

Where a 10,000 litre water supply is required the following fire authority fittings apply:

- the water supply must be readily identifiable from the building or appropriate identification signage to the satisfaction of the relevant fire authority.
- the water supply must 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.
- the water supply must 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).

# Shared water tank 35,000 litres Domestic Water 10,000 litres Firefighting reserve outlet Domestic water outlet Water supply identification Blue reflective marker 400<sub>mm</sub> Blue reflective marker 15cm high, 3cm thick

#### **Access**

Where the length of access is greater than 30 metres the following design and construction requirements apply:

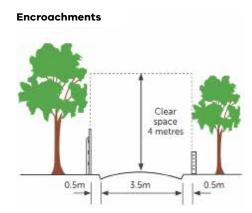
- Curves must have a minimum inner radius of 10 metres.
- The average grade must be no more than 1 in 7 (14.4%) (8.1°) with a maximum of no more than 1 in 5 (20%) (11.3°) for no more than 50 metres.
- Dips must have no more than a 1 in 8 (12.5%) (7.1°) entry and exit angle.
- A load limit of at least 15 tonnes and be of all-weather construction.
- Provide a minimum trafficable width of 3.5 metres.
- Be clear of encroachments for at least 0.5 metres on each side and at least 4 metres vertically.
- A cleared area of 0.5 metres is required to allow for the opening of vehicle doors along driveways.
- Dips must have no more than a 1 in 8 (12.5 per cent) (7.1 degrees) entry and exit angle.

#### Width



#### Dips and gradients



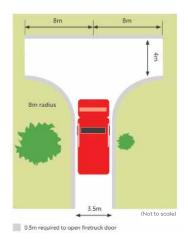


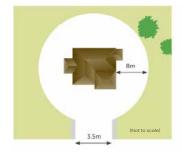
#### Access between 100 metres to 200 metres in length

In addition to the above:

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

- a turning circle with a minimum radius of 8 metres
- a driveway encircling the dwelling
- 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.

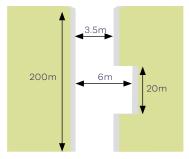




#### Access greater than 200 metres in length

In addition to the above, passing bays are required at least every 200 metres that are:

- a minimum of 20 metres long
- with a minimum trafficable width of 6 metres.



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