



Bushfire Management Overlay and bushfire protection: planning requirements

This practice note provides advice on preparing and assessing an application under clause 44.06 Bushfire Management Overlay (BMO) and the associated particular provision clause 52.47 Bushfire Protection: Planning Requirements.

Introduction

Areas in the BMO are areas that have the highest fire risk and are likely to be particularly exposed to the impact of bushfire. The suitability of new development in these areas must be fully considered before it proceeds. Where development does occur in these areas appropriate bushfire protection measures will be required.

What is the purpose of the BMO?

Victoria has one of the highest levels of bushfire risk in the world. The planning policy objective for bushfire protection is to assist to strengthen community resilience to bushfire.

The purpose of the BMO is to:

- identify areas where the bushfire hazard requires minimum bushfire protection measures for subdivision and buildings and works to be specified

- ensure that the location, design and construction of development and the implementation of bushfire protection measures are considered
- ensure that development does not proceed unless the risk to life and property from bushfire is managed to an acceptable level.

What is the BMO?

The BMO consists of a map which shows the areas affected by the BMO and written provisions which set out:

- the types of development that require a planning permit
- the information that must be submitted with a planning permit application
- the decision guidelines that the council must consider when they assess a planning permit application.

The planning provisions are contained in clause 44.06 – Bushfire Management Overlay of the planning scheme and can be viewed at planningschemes.dpcd.vic.gov.au

Information about how Victoria's planning system works, including planning schemes, overlays and planning permits is available at www.dpcd.vic.gov.au/planning



Where does the BMO apply?

The areas to which the BMO applies are shown on the planning scheme maps as either BMO or WMO.

To see if the BMO affects a property obtain a free Planning Property Report online at www.land.vic.gov.au

Alternatively, view the BMO planning scheme maps online at planningschemes.dpcd.vic.gov.au or at the offices of your local council.

The BMO boundaries are based on the bushfire hazard. The maps therefore do not always follow property boundaries or identifiable ground features such as rivers or roads. In some cases the BMO will only apply to part of a property.

How does the BMO regulate new development?

Where the BMO applies to land, a planning permit is required to construct a building or construct or carry out works associated with land uses that are likely to increase the number of people in the overlay area. These land uses are:

- 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

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

A planning permit is also required to subdivide land affected by the BMO.

The BMO includes some exemptions from the need to obtain a planning permit, including for an extension to an existing dwelling provided that the floor area of the extension is less than 50% of the area of the existing dwelling.

What requirements apply to permit applications under the BMO?

The requirements for new development in the BMO are set out in clause 52.47 Bushfire protection: planning requirements. This includes detailed **objectives, standards, mandatory standards and decision guidelines** that permit applications need to comply with. Where a schedule to the BMO includes different standards, then these standards will apply.

A new development must meet all of the relevant objectives of clause 52.47. The objectives aim to achieve development that:

- assists to strengthen community resilience to bushfire
- ensures the consideration of the location, design and construction of development and the implementation of bushfire protection measures in areas of bushfire hazard
- ensures development does not proceed unless the risk to life and property from bushfire can be reduced to an acceptable level.

The **objectives** describe the desired outcome to be achieved in the completed development. Objectives cannot be 'traded off'.

Deciding if an objective is met requires forming a judgement about whether the proposed development will achieve the desired outcome described in the objective. If council in consultation with the relevant fire authority decides that the outcome will not be achieved, either the design will need to be changed or the application refused.

In deciding whether the development meets the objectives, council must consider the standards, mandatory standards and decision guidelines.

A **standard** contains the preferred measures of meeting an objective and in most instances should be met. However, if the particular features of the site or the neighbourhood mean that the standard would not meet the objective, an alternative design solution may be considered.

Some standards are not open to alternative approaches. These **mandatory standards** contain the required approach to a particular matter and only the mandatory standard is able



to be used to meet the objective. No flexibility is available for an alternative design solution to be used.

The mandatory standards are Standards BF5, BF6.1, BF6.3, BF7.1, BF8.1, BF9.0 and BF10.

The **decision guidelines** set out matters that will help council decide if either:

- the objective will be met if the standard is met, or
- the objective will be met if an alternative design solution is used.

All of the decision guidelines must be considered.

A permit application will be referred to the relevant fire authority

All planning permit applications in the BMO will be referred to the relevant fire authority for review. This will be either the Country Fire Authority (CFA) or the Metropolitan Fire and Emergency Services Board.

The fire authority will advise the responsible authority if any specific planning permit conditions are needed or if it objects to the granting of a planning permit. The fire authority can also ask for more information from the applicant.

What must an application under the BMO contain?

An application under the BMO must contain a locality and site description and a bushfire management statement.

A template Bushfire Management Statement and sample Bushfire Management Statement are available at www.dpcd.vic.gov.au/bushfireresources.

Locality and site description

The locality and site description gives important information for assessing the environment around the proposed development. There are many considerations in determining the bushfire threat a proposed development may be exposed to and what bushfire protection measures are necessary.

The locality and site description must be in the form of a plan that is to scale and accurately describes the existing condition of the site

and land for at least 250 metres from the site boundary. Depending on the size of the development it may be appropriate to provide two separate plans, one describing the site and one the local context. If available, the site and locality plans should be based on recent aerial photography.

Bushfire Management Statement

The Bushfire Management Statement is a document prepared by or on behalf of the permit applicant and is used to determine if the requirements of the BMO have been met and whether a planning permit should be granted. It contains:

- a Bushfire Site Assessment prepared to calculate defensible space and construction requirements for new development
- a report demonstrating how the application meets the relevant objectives, standards, mandatory standard and decision guidelines set out in clause 52.47.

Appendix 1 gives more detail on preparing a Bushfire Site Assessment.

What must be considered under the BMO?

The applicable provisions in clause 52.47 must be considered when preparing and assessing applications under the BMO.

Buildings and works

The objectives, standards and decision guidelines for buildings and works applications cover the following matters:

- location (BF3)
- siting and layout (BF4)
- bushfire protection measures (BF5)
- defensible space for dwellings and dependent person's units (BF6.1, 6.2 and 6.3)
- defensible space for industry, office and retail premises (BF7.1 and 7.2)
- defensible space and construction for other occupied buildings (BF8.1 and 8.2)
- defensible space location (BF9)
- water supply and access (BF10).



Subdivision

The objectives, standards and decision guidelines for a subdivision application cover the following matters:

- general requirements for subdivision (BF1)
- subdivision requirements for residential lots (BF2)
- location (BF3)
- siting and layout (BF4)
- bushfire protection measures (BF5).

What are the vegetation management requirements under the BMO?

Defendable space under the BMO has an inner zone and an outer zone which have different vegetation management prescriptions depending on the site. Clause 52.47 sets out defendable space requirements for a new development or subdivision. These are calculated through the Bushfire Site Assessment having regard to the vegetation and slope on a site. Appendix 2 provides more detailed information on the vegetation management requirements under the BMO.

What is the mandatory building and works condition under the BMO?

Clause 44.06-4 of the BMO requires that a mandatory condition be included in every planning permit so that bushfire protection measures are maintained on an ongoing basis after the development authorised by the planning permit has been completed. The condition informs permit holders of their ongoing obligations and enables a responsible authority to enforce ongoing compliance when necessary.

What are the requirements for a subdivision that creates a residential lot?

Clause 52.47-2 applies to subdivision that creates a residential lot. Standard BF2 requires each lot to contain essential bushfire protection measures to develop the land with a single dwelling. Clause 44.06-4 of the BMO requires that a mandatory condition be included in every applicable planning permit. The condition requires a section 173 agreement to be entered into which sets out the bushfire protection measures contained in the subdivision permit.

Clause 44.06-1 of the BMO provides a permit exemption for buildings and works associated with a single dwelling where the buildings and works are in accordance with the subdivision permit and the section 173 agreement required by it.

An owner of a lot may choose not to use the buildings and works exemption and instead apply for a buildings and works permit under the BMO. However, where the bushfire protection measures contained in the section 173 agreement are implemented no further approvals are required to develop the land with a single dwelling.

A model section 173 agreement which applicants can use to comply with the mandatory condition is available at www.dpcd.vic.gov.au/planning/bushfire. The applicant or land owner must pay the reasonable costs associated with preparing the agreement.

What transitional arrangements will support the introduction of the BMO?

The BMO includes transitional provisions so that an application lodged under the WMO before 18 November 2011 can continue to be assessed under those provisions. This means a new application is not required and the council can continue to progress the existing application.

The council and the CFA may consider a request from a permit applicant who has lodged an application under the WMO prior to 18 November 2011 to have the requirements of the BMO considered as part of their application.

How does the BMO relate to other planning requirements?

The BMO addresses bushfire matters only. There may be other planning requirements that need to be considered. Before lodging a permit application check with the local council about what other planning requirements may apply to the land.

Planning requirements for protecting native vegetation are particularly relevant to development in the BMO. Depending on the location of the property a planning permit may be required to remove, destroy or lop vegetation. Where this is the case, the Bushfire Management Statement should set out a justification for this and any relevant planning scheme provision that addresses vegetation.



More information

Bushfire related information is available at www.dpcd.vic.gov.au/planning/bushfire

Building regulations and building permits

Information about building regulations and building permits is available at www.buildingcommission.vic.gov.au

For more information about building in a BMO and in a bushfire prone area contact:

- the planning department of the local council
- the CFA on 9262 8444.

Preparing a property for bushfire

Information about preparing a property for bushfire is available from the CFA website www.cfa.vic.gov.au

Vegetation

Information about vegetation removal for bushfire protection is available at www.dpcd.vic.gov.au/planning/bushfire

Information about the operation of the native vegetation planning provisions is available at www.dpcd.vic.gov.au/planning/practicenotes

Information about native vegetation in Victoria is available at www.dse.vic.gov.au/land-management/native-vegetation-local-government

Victoria's planning system

Information about planning schemes and planning permits is available at www.dpcd.vic.gov.au/planning

View bushfire related planning provisions in the relevant planning scheme at planningschemes.dpcd.vic.gov.au (or <http://planningschemes.dpcd.vic.gov.au/index.html>)

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Appendix 1: Bushfire Site Assessment

A Bushfire Site Assessment is an essential component of a Bushfire Management Statement. The Bushfire Site Assessment is prepared to determine the requirements for defendable space and building construction associated with new development.

The template Bushfire Management Statement shows how to document the Bushfire Site Assessment. It may also be useful to review the sample Bushfire Management Statement.

Defendable space is an area of land around a building where vegetation is modified and managed to reduce the effects of flame contact and radiant heat associated with bushfire. Defendable space has an inner and outer zone that have different vegetation management requirements. Appendix 2 sets out more information on vegetation management.

Construction requirements are specified as Bushfire Attack Levels (BAL) as defined by AS 3959-2009 *Construction of buildings in bushfire prone areas* (AS 3959-2009). A BAL corresponds to a modelled level of bushfire exposure considering factors such as embers, flying debris, radiant heat, wind and exposure to flames. As a development's potential exposure to bushfire increases so does the BAL.

What does the Bushfire Site Assessment do?

The Bushfire Site Assessment demonstrates how the defendable space and corresponding construction requirements set out in Standards BF6.2, BF7.2 & BF8.2 of clause 52.47 are being met. It is a technical assessment according to a set methodology which involves assessing nearby vegetation types and slope. It forms part of the Bushfire Management Statement which considers all other applicable objectives, standards, mandatory standards and decision guidelines in clause 52.47.

Two methods for determining defendable space and construction requirements

Clause 52.47 sets out mandatory standards (BF6.1, BF7.1 and BF8.1) that require defendable space and construction requirements to be determined as part of the Bushfire Site Assessment. There are two approaches which can be used.

Approach 1: Section 2 of AS 3959-2009 Construction of buildings in bushfire prone areas

A Bushfire Site Assessment under clause 52.47 is aligned to the process for conducting a site assessment in accordance with building requirements as set out in Section 2 of AS 3959-2009. Approach 1 relies on Section 2 of AS 3959-2009 with the exception that Tables 2.4.2 to 2.4.5 of AS 3959-2009 are replaced by defendable space requirements set out in Tables 1 and 2 (depending on the type of development) of clause 52.47. This defendable space includes an inner and an outer zone.

Appendix 2 provides more information on the vegetation management to be achieved in each zone.

It is a mandatory standard that Tables 1 and 2 (as appropriate) in clause 52.47 be used as these have been developed to reflect the specific nature of the bushfire hazard in areas where the BMO applies.

Approach 2: Alternative method

An alternative method provides flexibility for a permit applicant to demonstrate how the standards for defendable space and construction can be achieved through more detailed consideration of local variables, including bushfire behaviour.

The CFA has published guidance setting out the inputs which are to be used when determining defendable space and construction requirements. These are based on the AS 3959-2009 Method B process. This guidance ensures that any



alternative method calculates defensible space to the satisfaction of the relevant fire authority, a requirement of mandatory standards BF6.1, BF7.1 and BF8.1 in clause 52.47.

How is the site assessment under the BMO different to the site assessment prepared at the building permit stage?

A site assessment is required under the BMO as well as under the *Building Act 1993* at the building permit stage. However, where a site assessment is done as part of the BMO then a further assessment is not required at the building permit stage as the relevant building surveyor must accept the BAL contained in a planning permit.

A site assessment done under the BMO has some key differences to that which would otherwise be undertaken at the building permit stage. These are set out in clause 52.47 of planning schemes, and include:

- the use of defensible space requirements as contained in clause 52.47 rather than those contained in AS 3959-2009
- the siting, layout and location of a new structure is considered in detail before undertaking the site assessment. This involves an iterative approach between the site assessment itself and the other objectives, standards, mandatory standards and decision guidelines set out in clause 52.47.

Where are the requirements for defensible space and corresponding construction levels set out?

Clause 52.47 sets out requirements for defensible space and corresponding construction levels. These requirements vary depending on the type of development proposed and are summarised in the following table. The standards recognise the vulnerability to bushfire of different uses and the broader planning context associated with the development.

The aim is to try to achieve development outcomes of BAL-29 or less, noting that a range of site specific solutions or approaches may be possible.

DEVELOPMENT TYPE	REQUIREMENT	DEFENDABLE SPACE
Subdivisions (less than 10 lots)	BAL-29 or less	Table 1
Subdivisions (10 lots or more)	BAL-19 or less	Table 1
Dwellings and Dependent person's units	BAL-29 or less	Table 1
Where standard BF6.2 applies	BAL-40	Table 1
Where standard BF6.3 applies	Alternative Solution	
Industry, office and retail	BAL-29 or less	Table 1
Where standard BF7.2 applies	BAL-40	Table 1
Other occupied buildings	BAL-12.5	Table 2

What are significant siting constraints?

The following standards in clause 52.47 set out the provisions relating to significant siting constraints:

- Standard BF6.2
- Mandatory Standard BF6.3
- Standard BF7.2

A significant siting constraint may include avoiding land subject to inundation or landslip. The Bushfire Management Statement will need to clearly set out the siting constraints which an applicant is relying on. Where significant siting constraints exist, defensible space to achieve a BAL-40 may be considered.

During extreme bushfire weather a building that has only achieved defensible space for a BAL-40 can expect a level of direct flame impact. Careful consideration is therefore needed before an application relying on BAL-40 or greater will be acceptable and it is expected there will be few instances where this will occur.

An application that relies on BAL-40 or greater will need to be complemented by other favourable site conditions including having regard to likely bushfire behaviour on a landscape basis,



type of occupancy of the building, situations where a bushfire is not likely to reach the assumed potential behaviour and the provision of safe egress. Additional bushfire protection requirements such as shielding or protecting the building are also likely to be necessary. The relevant fire authority will be relied on for expert judgement and this will be made on a case by case basis.

How do you prepare a Bushfire Site Assessment?

In undertaking a Bushfire Site Assessment it may be necessary to obtain a copy of AS 3959-2009 *Construction of buildings in bushfire prone areas*. If required, this can be purchased from SAI Global <http://infostore.saiglobal.com/store>.

Undertaking an assessment to determine a BAL is also a requirement of the building system. Doing the assessment as part of the planning application has two impacts:

1. It brings forward the assessment from the building permit stage to the planning permit stage
2. It means that further assessments to determine a BAL at the building permit stage is not necessary. Regulation 811 of the Building Regulations 2006 requires that a building surveyor at the building permit stage must accept the BAL specified on a planning permit.

The Bushfire Site Assessment is a distinct process but in practice will involve an iterative approach between calculating defendable space and corresponding BAL and the other provisions in clause 52.47 such as those relating to location, layout and siting.

The steps involved in a Bushfire Site Assessment are set out below.

Preliminary step

Before you determine the appropriate defendable space and BAL for your proposal the location, layout and siting objectives must be considered. Standards BF3 and BF4 in clause 52.47 should be met to ensure the most appropriate location on the site for the structure has been selected.

This requires consideration of the reasonable siting options which may be available and ensures that the structure is proposed to be sited in the best location before beginning the Bushfire Site Assessment.

For subdivisions the layout and design including building envelopes will also need to be considered.

Step 1 – Determine the assessment area

The area within 150 metres of the development must be considered as part of the Bushfire Site Assessment. For buildings this distance is from the building footprint or facade. All applicable vegetation and slopes must be considered.

For subdivision this distance is from the boundary of the subdivision. Note that classifiable vegetation and effective slope within the subdivision must also be considered as part of the assessment.

Step 2 – Classify the Vegetation and Slope

Step 2 uses the AS 3959-2009 assessment methodology to:

- 2a) Determine the classifiable vegetation
- 2b) Determine the distance of the site from the classifiable vegetation
- 2c) Determine the effective slope under the vegetation.

This information is needed to use Tables 1 and 2 in clause 52.47 and to calculate defendable space and corresponding construction requirements in the next step.

The CFA has prepared a Fire Service Guideline and a vegetation key designed to support accurate determination of vegetation types described in AS 3959-2009. The key should be used to support this part of the Bushfire Site Assessment.

Step 3 – Determine your defendable space and corresponding BAL

Using the inputs from Step 2, the defendable space requirements set out in Tables 1 and 2 (as appropriate) of clause 52.47 and the corresponding BAL, can be determined.



Step 4 – Meeting the standards

Where Step 3 does not result in the Standards of clause 52.47 being met or where a BAL40 or higher is proposed due to significant siting constraints, the suitability of the site for development will need to be reconsidered. Other ways may be available to meet the standards including:

- consider whether a safer site for the development is available on the land
- consider whether defensible space can be provided off the site, subject to the requirements of Mandatory Standard BF9
- for a dwelling and dependent person's unit, consider Mandatory Standard BF6.3
- consider the need for vegetation management and/or removal to achieve the required defensible space.

These considerations should be documented as part of the Bushfire Management Statement and demonstrate the considerations which have been made in determining the proposal for which planning permission is sought.

Step 5 – Preparing the documentation to be submitted as part of your application

The application should document how each standard has been met. This will include the Bushfire Management Statement and the detailed plans of the proposal.

A sample site plan depicting the relevant requirements is set out in the sample Bushfire Management Statement available at www.dpcd.vic.gov.au/planning/bushfire



Appendix 2: Vegetation management in the BMO

The impact of bushfire can be reduced where vegetation has been modified to reduce the amount of fuel available to burn. The creation of defensible space around a structure is the key means through which this is done and is a central part of the bushfire protection requirements set out in clause 52.47.

Vegetation management does not require the removal of all fuels. Plants and trees can provide protection from strong winds, intense heat and embers. Ground cover is also needed to prevent erosion.

Defensible space is made up of two distinct areas. An inner zone closest to the building and an outer zone. The inner zone requires more intensive vegetation management than the outer zone.

The inner zone is an area immediately surrounding a building or subdivision where fuel is managed to a minimum condition. The inner zone aims to:

- reduce radiant heat on a building through the reduction of fire intensity, to a level where the building is unlikely to be ignited during the passage of a fire
- eliminate direct flame contact of the building from the outer zone or the unmodified vegetation
- reduce ember attack on the building by reducing the amount of potential fire brands.

The outer zone is an area around the building between the inner zone and the unmodified vegetation which substantially decreases the intensity of an approaching fire and restricts the pathway to crown fuels. Fuels in the outer zone are managed to:

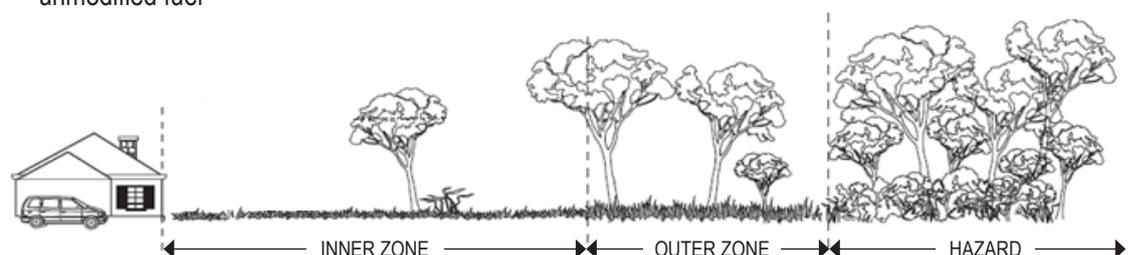
- moderate fire behaviour coming from the unmodified fuel

- reduce radiant heat on a building and to draw fire out of the canopy to a level where the building is unlikely to be subject to flame contact, excessive radiant heat and ember attack arising from fire brands.

A diagram of the inner and outer zone is shown below. The vegetation management arrangements on each individual site may vary as a result of the Bushfire Site Assessment undertaken as part of the requirements of the BMO.

The inner zone seeks to manage fuel in the following condition:

- Within 10 metres of a building flammable objects such as plants, mulches and fences must not be located close to the vulnerable parts of the building such as windows, decks and eaves.
- Trees must not overhang the roofline of the building, touch walls or other elements of a building.
- Consistent with long-standing CFA practical advice grass around properties should be kept short. Five centimetres or less is considered short. All leaves and vegetation debris must be removed at regular intervals.
- Shrubs should not be planted under trees.
- Plants greater than 10 centimetres in height at maturity must not be placed directly in front of a window or other glass feature.
- Tree canopy separation of two metres and overall canopy cover of no more than 15% at maturity.





The outer zone seeks to manage fuel in the following condition:

- Grass must be no more than 10 centimetres in height and leaf and other debris mowed, slashed or mulched.
- Shrubs and trees should not form a continuous canopy.
- Tree branches below two metres from ground level should be removed.
- Trees may touch with an overall canopy cover of no more than 30 percent at maturity with few shrubs in the understorey.
- Shrubs should be in clumps no greater than 10 square metres which are separated from each other by at least 10 metres.

For both the inner zone and the outer zone:

- Non-flammable features such as tennis courts, swimming pools, dams, patios, driveways or paths should be incorporated into the proposal, especially on the northern and western sides of the proposed building.
- Features with high flammability such as doormats and firewood stacks should not be located near the structure.