



## Bushfire Assessment

### Planning Proposal

Sir Moses Montefiore  
Jewish Home, Hunters Hill

Montefiore

18 May 2023

(Ref: 23061)

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# Executive summary

## **Objective**

This Bushfire Assessment Report was commissioned by Montefiore to inform a Planning Proposal application seeking approval to rezone land to facilitate redevelopment of an existing aged care facility, being the Sir Moses Montefiore Jewish Home in High Street, Hunters Hill. The objective was to assess the bushfire hazard and recommend bushfire protection measures to achieve compliance with the relevant specifications and requirements for protection against bushfires.

## **Compliance with legislation and policy**

A Planning Proposal on bushfire prone land must have regard to Section 9.1(2) Direction 4.3 – ‘Planning for Bush Fire Protection’ of the *Environmental Planning and Assessment Act 1979* as well as the NSW Rural Fire Service document ‘Planning for Bush Fire Protection 2019’.

## **Bushfire hazard**

The primary bushfire hazard consists of forest within Boronia Park Reserve to the south and along the Lane Cove River to the east. The site is within a highly urbanised area and the hazards are confined to urban bushland remnants which are separated from the site. There are no hazards within the site.

## **Measures to achieve compliance**

The proposed rezoning and redevelopment of part of the site requires reliance on the ‘Planning for Bush Fire Protection 2019’ Section 6.4 ‘Development of existing facilities’ objectives. This section permits redevelopment of existing Special Fire Protection Purpose (SFPP) facilities without the compliance with Acceptable Solution Asset Protection Zones (APZ) where compliance cannot be achieved due to existing site constraints. The new buildings cannot be located closer to the hazard than the existing buildings and a better bushfire protection outcome must be achieved for the facility as a whole.

This assessment identifies the potential development area which is defined by a combination of compliant APZs and the existing building line. It is also recommended that improvements in bushfire protection be made to the existing aged care facility that will be retained on site. Consultation with NSW Rural Fire Service is required to gain support in principle for the application of the Section 6.4 objectives to the proposal.

## **Conclusion**

The report concludes that the Planning Proposal together with the recommended bushfire protection measures satisfies the specifications and requirements of Ministerial Direction No. 4.3 and *Planning for Bush Fire Protection*.

# 1 Introduction

<b>Street or property name:</b>	45, 47, 49-51 Barons Crescent; 4, 6, 8, 10, 12, 14, 16, 18, 20 Gaza Avenue; 116 & 118 High Street	
<b>Suburb, town or locality:</b>	Hunters Hill	<b>Postcode:</b> 2110
<b>Lot/DP no:</b>	Lot 2 DP 312298, Lots 9 & 10 DP 724017, Lots 1 & 2 DP 325793 and Lots 50-60 & 62-63 DP 16119	
<b>Local Government Area:</b>	Hunters Hill	
<b>Type of proposal:</b>	Rezoning to allow redevelopment of SFPP facility	

## 1.1 Background

Montefiore commissioned Peterson Bushfire to prepare a Bushfire Assessment Report to inform the preparation of a Planning Proposal for the above site which is identified as containing 'bushfire prone land'. This report presents the assessment and recommendations to ensure compliance with the relevant bushfire protection legislation and policy.

This bushfire assessment has been prepared by a consultant accredited by the Fire Protection Association of Australia's BPAD scheme (Accreditation No. BPD-L3-18882).

## 1.2 Location and description of subject land



The subject land is comprised of 18 lots forming a total area of approximately 4 hectares and located between High Street and Barons Crescent, Hunters Hill. The location of the subject land is shown on Figure 1.

The subject land contains the Sir Moses Montefiore Jewish Home (Hunters Hill) and features an aged care facility and some independent living units. The western edge of the subject land proximate to Gaza Avenue is comprised of lots with single dwellings under lease and currently do not serve a function to the operation of Montefiore.





## Legend

-  Watercourse
-  Subject Land



Date: 17/05/2023

0 125 250 500  
Metres

Figure 1: The Location of the Subject Land

Coordinate System: GDA 1994 MGA Zone 56

Imagery: © Nearmap



### 1.3 Description of development proposal

This Bushfire Assessment Report has been prepared to inform and support a Planning Proposal that seeks to rezone the subject land from R2 – Low Density Residential to SP2 – Infrastructure (Seniors Housing). The amendment seeks to increase the possible maximum building height limit and increase the floor space ratio.

A development masterplan has been prepared that shows the proposed redevelopment of the northern and western parts of the subject land. The development would result in the reduction in aged care beds from 334 to 194 and an increase in the Independent Living Units (ILU) from 18 to 144, resulting in an overall net decrease in beds by 14. The transformation of the subject land involves the demolition of the dwellings along Gaza Avenue and construction of ILUs in their place. The aged care facility within the south-east part of the subject land will be retained.

Figure 2 shows the proposed masterplan.





### Legend

- Cadastre
- Subject Land



Date: 17/05/2023

0 12.5 25 50  
Metres

**Figure 2: The Proposal**

Coordinate System: GDA 1994 MGA Zone 56

Imagery: © Nearmap



## 2 Assessment requirements

Planning Proposal submissions involving bush fire prone land (refer to Figure 3) must have regard to Section 9.1(2) Direction 4.3 – ‘Planning for Bush Fire Protection’ of the *Environmental Planning and Assessment Act 1979* as well as the NSW Rural Fire Service document ‘Planning for Bush Fire Protection 2019’ (referred to as ‘PBP’ throughout this report).

### 2.1 Direction 4.3 requirements

When investigating the capability of bushfire prone land to be rezoned, submissions must have regard to Section 9.2 Direction 4.3 – ‘Planning for Bush Fire Protection’ of the *Environmental Planning and Assessment Act 1979*. The objectives of Direction 4.3 are:

- *To protect life, property and the environment from bushfire hazards, by discouraging the establishment of incompatible land uses in bushfire prone areas; and*
- *To encourage sound management of bushfire prone areas.*

Direction 4.3 instructs councils on the bushfire matters which need to be addressed when drafting and amending Local Environmental Plans (LEP). They are as follows:

- *In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 3.34 of the Act, and prior to undertaking community consultation in satisfaction of clause 4, Schedule 1 to the EP&A Act, and take into account any comments made.*
- *A planning proposal must:*
  - *have regard to the document Planning for Bush Fire Protection 2019;*
  - *introduce controls that avoid placing inappropriate developments in hazardous areas; and*
  - *ensure that bushfire hazard reduction is not prohibited within the Asset Protection Zone (APZ).*
- *A planning proposal must, where development is proposed, comply with the following provisions, as appropriate:*
  - *provide an Asset Protection Zone (APZ) incorporating at a minimum:*
    - *an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and,*



- *an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road.*
- *for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the planning proposal permit Special Fire Protection Purposes (as defined under Section 100B of the Rural Fires Act 1997), the APZ provisions must be complied with,*
- *contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks,*
- *contain provisions for adequate water supply for fire-fighting purposes,*
- *minimise the perimeter of the area of land interfacing the hazard which may be developed,*
- *introduce controls on the placement of combustible materials in the Inner Protection Area.*

## **2.2 Planning for Bush Fire Protection 2019 (PBP) requirements**

Most of the Direction 4.3 provisions are specified within PBP. This report addresses both Direction 4.3 and PBP, combining responses to requirements where there is overlap between the requirements.

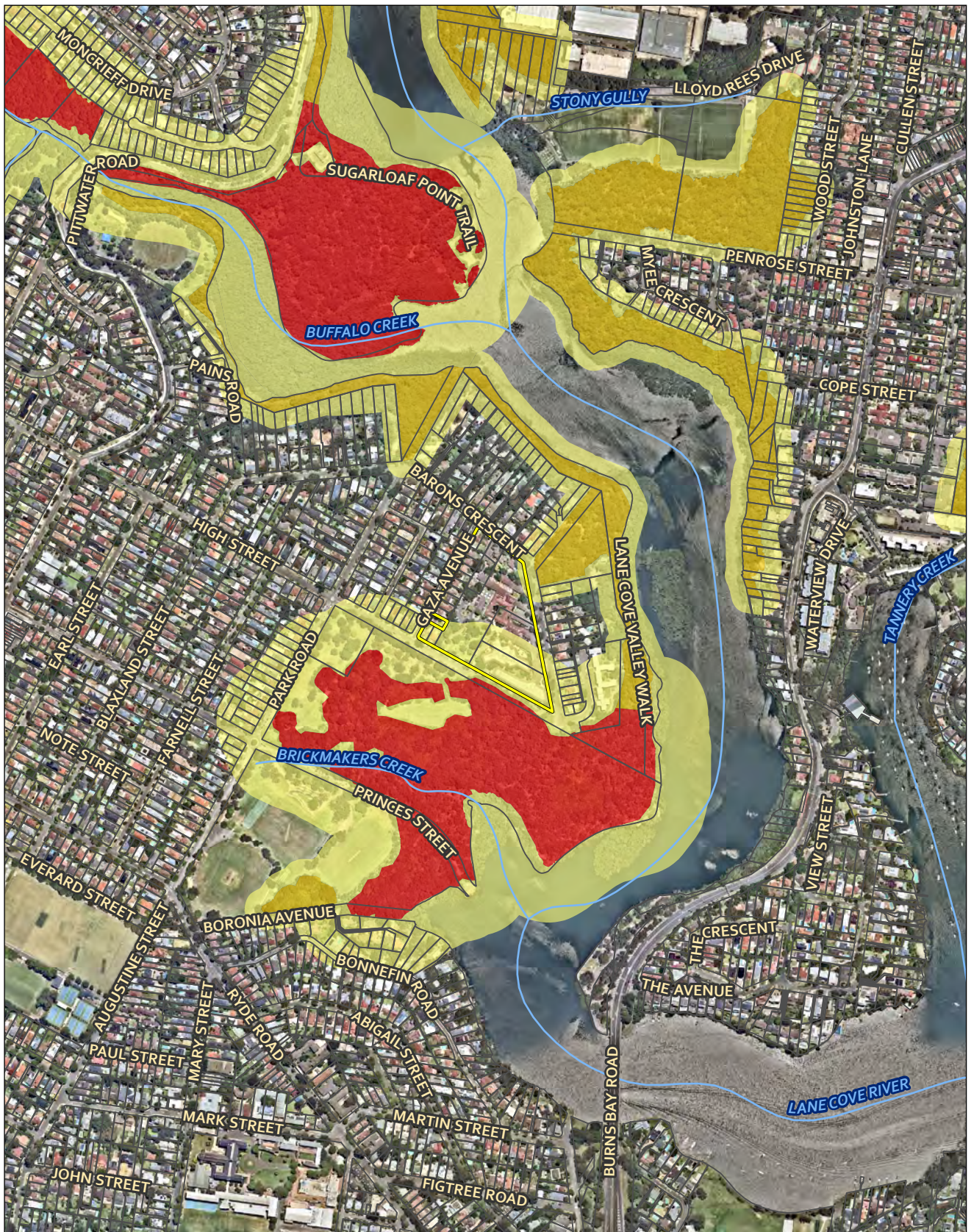
PBP also specifies the type of bushfire assessment and level of information and detail required for Planning Proposal submissions. PBP Section 4 'Strategic Planning' outlines the submission requirements. The Planning Proposal is to be assessed in accordance with PBP Section 4.4.1 whereby the nature, scale and risk of the proposal and its potential impact on the wider infrastructure network is such that a Strategic Bush Fire Study (SBFS) is not required in accordance with PBP Section 4.2. A SBFS is required for strategic development proposals whereby new areas are to be developed.

### **2.2.1 PBP assessment objectives for Special Fire Protection Purpose (SFPP)**




The subject land is identified as containing 'bushfire prone land' as shown on Figure 3. Development proposals involving seniors living on bushfire prone land are defined 'Special Fire Protection Purpose' (SFPP) development by s100B *Rural Fires Act 1997* and require assessment in accordance with the NSW Rural Fire Service (RFS) document *Planning for Bush Fire Protection 2019* (RFS 2019), referred to as 'PBP' throughout this report.

Chapter 6 of PBP addresses SFPP development and outlines the assessment methodology and protection measures, such as Asset Protection Zones (APZ), Bushfire Attack Levels (BAL), adequate access and water supply for fire-fighting, and vegetation management.









### Legend

-  Watercourse
-  Subject Land
-  Cadastre

### Bushfire Prone Land

-  Vegetation Category 1
-  Vegetation Category 2

-  Vegetation Category 3
-  Vegetation Buffer



Date: 17/05/2023

0 125 250 500  
Metres

**Figure 3: Bushfire Prone Land**

Coordinate System: GDA 1994 MGA Zone 56

Imagery: © Nearmap



## 3 Bushfire hazard

An assessment of the surrounding bushfire hazard is necessary to determine the suitability of the proposed future land use as well as the required bushfire protection measures, such as Asset Protection Zones (APZ), that may be required between future development and bushfire hazards. The bushfire hazard is a combination of vegetation and slope determined in accordance with methodology specified by PBP.

The subject land and surrounding bushfire hazards were inspected on 11<sup>th</sup> May 2023. Photographs are provided in Appendix A.

### 3.1 Predominant vegetation

The vegetation within 140 m of the subject land has been assessed in accordance with the methodology specified by PBP. These hazards are mapped on Figure 4 and described below.

The predominant vegetation is Sydney Coast Dry Sclerophyll Forest to the south of the subject land within Boronia Park Reserve and extending around to the east along the foreshore of the Lane Cove River.

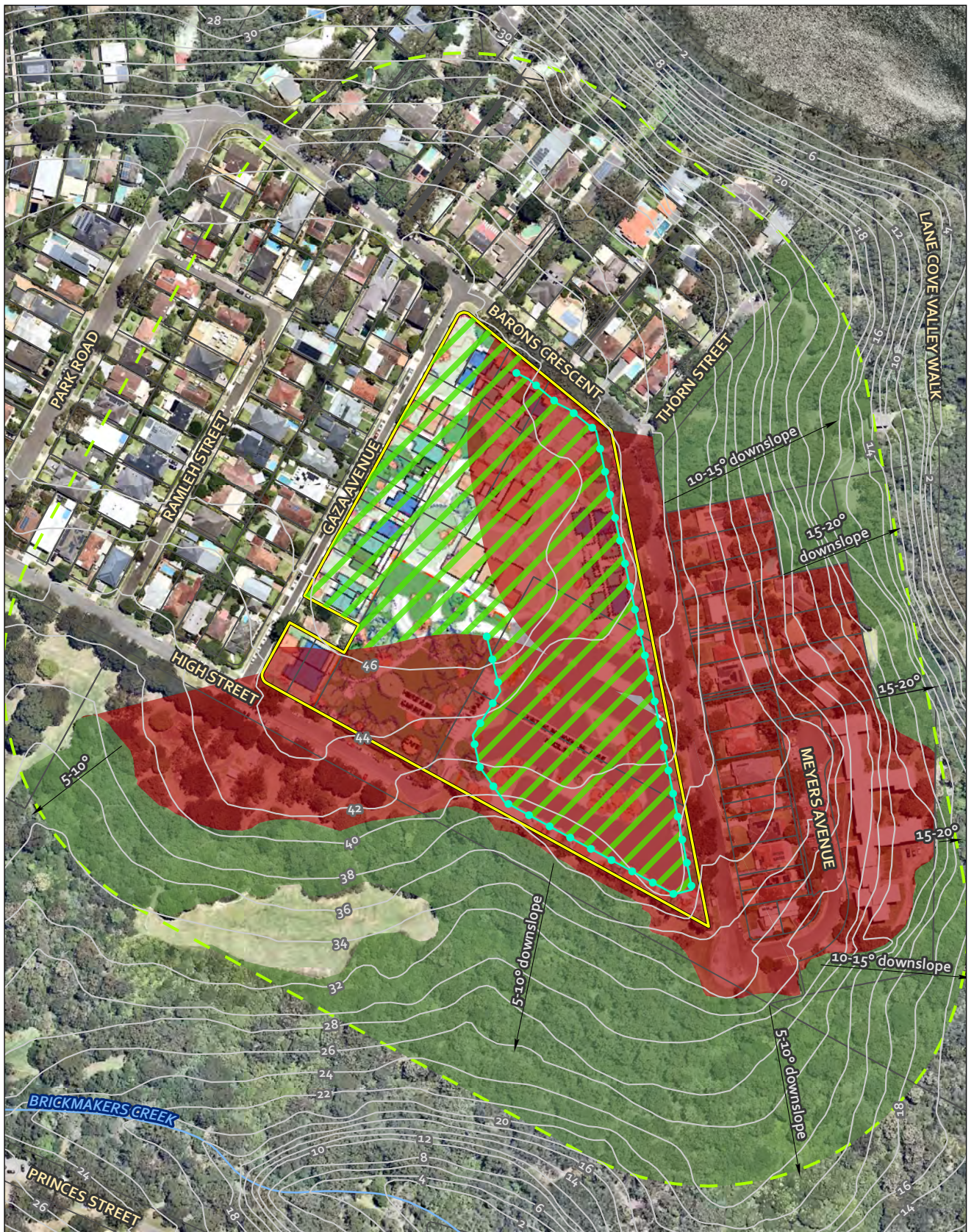
The vegetation is separated from the subject land by roads, managed portions of the reserve and residential properties. The managed edge of the forest is identified on Figure 4.

### 3.2 Effective slope

The 'effective slope' influencing fire behaviour has been assessed in accordance with the methodology specified within PBP. This is conducted by measuring the slope that would most influence fire behaviour where the hazard occurs within 100 m of the subject land. The slope was determined using a 2 m contour layer as shown on Figure 4.

The effective slope ranges from the PBP slope class of 'downslope 5-10 degrees' to the south to 'downslope 10-15 degrees' and 'downslope 15-20 degrees to the east'. The slope classes are indicated on Figure 4.





### Legend

- Contour - 2m
- Watercourse
- Cadastre
- Subject Land

- Vegetation Assessment Buffer - 140m
- Potential Developable Area
- Existing Building Line

- Asset Protection Zone - SFPP
- Vegetation Formation**
- Forest



Date: 18/05/2023

0 12.525 50  
Metres

**Figure 4: Bushfire Hazard Analysis and Asset Protection Zone**

Coordinate System: GDA 1994 MGA Zone 56

Imagery: © Nearmap



## 4 Addressing compliance

This section details how compliance with the assessment requirements listed in Section 2 are addressed. The response to requirements is set out following the structure of Direction 4.3, followed by PBP. There is duplication of requirements between Direction 4.3 and PBP; in these cases, the relevant report subsection is referred to for the appropriate response.

### 4.1 Direction 4.3

The objectives of Direction 4.3 can only be satisfied once the provisions are achieved. Demonstration of achieving the provisions is provided below (Section 4.1.2). Statements of how the objectives are achieved are as follows:

#### 4.1.1 Objectives

##### **Objective 1**

*“To protect life, property and the environment from bushfire hazards, by discouraging the establishment of incompatible land uses in bushfire prone areas”*

The intention of the objective is to avoid a development outcome that is faced by or poses a risk that cannot be managed to an acceptable level (i.e. compliant with PBP). The assessment of ‘incompatible’, ‘inappropriate’ and ‘acceptable’ is a subjective one, and one that is not defined within PBP, legislation or related policy. To guide an assessment, reference should be made to the measures specified by PBP (see Section 4.2 of this report), such as the ability to establish and maintain adequate APZs, and the assurance of acceptable access and evacuation.

This Bushfire Assessment Report demonstrates that the hazard can be managed to an acceptable level by implementing the recommendations therefore making it compatible with the surrounding environment. The rezoning and masterplan do not propose a development outcome with an increased risk profile compared to the existing development. The proposal will reduce the number of more vulnerable aged beds within areas impacted by APZs by replacing these with ILUs.

##### **Objective 2**

*“To encourage sound management of bushfire prone areas”*

The recommended bushfire protection measures demonstrate sound management of the subject land for the intended use. The provisions and how they are to be addressed are listed in Section 4.1.2.

### 4.1.2 Provisions

#### Provision 1

“have regard to Planning for Bush Fire Protection 2019”

Addressing this provision is detailed in Section 4.2. The Planning Proposal complies with PBP.

#### Provision 2

“introduce controls that avoid placing inappropriate developments in hazardous areas”

The proposal is not considered inappropriate given that it involves a partial redevelopment of a similar use that will result in a decrease in the number of vulnerable aged care beds and decrease in the overall number of beds on site. Controls (bushfire protection measures) will be set in place to ensure compliance with PBP. The controls are set out in Section 4.2.

#### Provision 3

“ensure that bushfire hazard reduction is not prohibited within the Asset Protection Zone (APZ)”

Bushfire hazard reduction is not required within the subject land as it is already a managed environment. The available APZs comprise of the subject land and adjoining managed lands that are routinely managed, such as road reserves, residential properties and open space.

#### Provision 4

“provide an Asset Protection Zone (APZ) incorporating at a minimum:

- an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and,
- an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road”

APZs will be provided as detailed in Section 4.2. Perimeter access is also available in the form of existing roads.

#### Provision 5

“for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the draft LEP permit Special Fire Protection Purposes (as defined under Section 100B of the Rural Fires Act 1997), the APZ provisions must be complied with”

Section 4.2 details the application of APZs utilising PBP Section 6.4 ‘Development of existing SFPP facilities’.



**Provision 6**

“contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks”

The subject land benefits from road frontage for all existing and proposed buildings as well as an existing property access road. More detail on the proposed access is detailed in Section 4.2.

**Provision 7**

“contain provisions for adequate water supply for fire-fighting purposes”

All aspects of future development will have a hydrant supply that complies with PBP. More details are provided at Section 4.2.

**Provision 8**

“minimise the perimeter of the area of land interfacing the hazard which may be developed”

The hazard interface is fixed and defined by the existing forest corridor to the east and south. Hazard interface areas are not excessive and do not create incursions of hazard into the development, ‘bottle-necks’ or ‘pinch-points’.

**Provision 9**

“introduce controls on the placement of combustible materials in the Inner Protection Area”

Section 4.2 details the how the subject land is to be maintained.

**4.2 Planning for Bush Fire Protection 2019 (PBP)**

Compliance with ‘Planning for Bush Fire Protection 2019’ (PBP) is achieved by addressing the provisions of PBP Chapter 6 ‘Special Fire Protection Purpose developments’. Sections 4.2.1 to 4.2.6 below outline the bushfire protection measures integrated into the design to ensure compliance with PBP.

**4.2.1 Asset Protection Zones (APZ)**

Using the hazard parameters of vegetation and slope discussed in Section 3, the Acceptable Solution Asset Protection Zone (APZ) between the proposed buildings and the bushfire hazard has been determined using Table A1.12.1 of PBP. Table 2 on the following page lists the APZ results and the APZ is shown on Figure 4.

Two APZ dimensions result, being a 93 m APZ from forest vegetation within Boronia Park to the south and a 100 m APZ from forest vegetation beyond residential development to the east and at the corner of Barons Crescent and Thorn Street to the north-east.

It is to be noted that the existing and proposed buildings do not comply with the Acceptable Solution APZ dimension. However, this can be acceptable in this case as the proposal constitutes redevelopment of an existing SFPP facility whereby the objectives listed at PBP

Section 6.4 'Development of existing SFF facilities' can be satisfied. The response to the objectives is provided following Table 2.

PBP Section 6.4 applies whereby redevelopment of an existing site with similar use may occur without compliant APZs providing a better bushfire protection outcome is achieved for the site overall and the proposed buildings are not located closer to the bushfire hazard than the existing buildings. Consideration must also be given to any increase in risk profile as a result of the development, such as the placement of more vulnerable people in a space mapped as APZ or an overall increase of the number of people placed in a bushfire prone area.

Figure 4 shows the 'Potential Developable Area' which is a combination of the area not impacted by the Acceptable Solution APZ and the area bounded by the 'Existing Building Line'.

There is only one location whereby proposed redevelopment is not within the 'Potential Developable Area'. This is 62 and 63 High Street. The APZ impacts both lots and the Section 6.4 objectives cannot be applied due to the proposed change of use from single residential dwellings to seniors living.

Consultation with NSW Rural Fire Service is required to confirm application of the Section 6.4 objectives to a site. Consultation will occur as part of the Planning Proposal process.

**Table 2: Determination of APZ**

Location <sup>1</sup>	Vegetation <sup>2</sup>	Slope <sup>3</sup>	PBP APZ <sup>4</sup>
North-east	Forest	Downslope 10-15°	100 m
East	Forest	Downslope 15-20°	100 m
South-east	Forest	Downslope 10-15°	100 m
South	Forest	Downslope 5-10°	93 m
South-west	Forest	Downslope 5-10°	93 m

<sup>1</sup> Location of hazard with reference to subject land.

<sup>2</sup> Predominant vegetation classification over 140 m from subject land.

<sup>3</sup> Effective slope assessed over 100 m from subject land where the bushfire hazard occurs.

<sup>4</sup> Minimum APZ required by PBP Acceptable Solution for SFPP development (Table A1.12.1).

Response to PBP Section 6.4 objectives regarding development of existing SFPP facilities:

a) *Provide an appropriate defensible space.*

The adjacent road reserves provide adequate defensible space. Defensible space is discussed further at Section 4.2.4. This objective is satisfied.

b) *Site the building in a location which ensures appropriate separation from the hazard to minimise potential for material ignition.*

As the proposal involves a redevelopment, the building locations will be similar to the existing buildings. All buildings will be required to comply with the relevant Bushfire



Attack Level (BAL). BAL compliance is discussed further at Section 4.2.2. This objective is satisfied.

- c) *Provide a better bush fire protection outcome for existing buildings.*

Ember protection upgrades and the development of a 'Bushfire Emergency Management and Evacuation Plan' are two measures that can be applied to the aged care buildings that are not proposed to be redeveloped. These measures are discussed further at Sections 4.2.2 and 4.2.6, respectively. This objective is satisfied.

- d) *New buildings should be located as far from the hazard as possible and should not be extended towards or situated closer to the hazard than the existing buildings (unless they can comply with Section 6.8).*

New buildings will not be located closer to the bushfire hazard than the existing buildings. This objective is satisfied.

- e) *Ensure there is no increase in bush fire management and maintenance responsibility on adjoining land owners without their written confirmation.*

Bushfire management or responsibilities will not be placed on to adjoining lands. This objective is satisfied.

- f) *Ensure building design and construction enhances the chances of occupant and building survival.*

All new buildings will require BAL compliance and existing buildings to be retained are recommended to have ember protection upgrades. Construction standards are discussed further at Section 4.2.2. This objective is satisfied.

- g) *Provide for safe emergency evacuation procedures including capacity of existing infrastructure (such as roads).*

It is recommended that a 'Bushfire Emergency Management and Evacuation Plan' be prepared for the entire facility. Emergency management is discussed further at Section 4.2.6. This objective is satisfied.

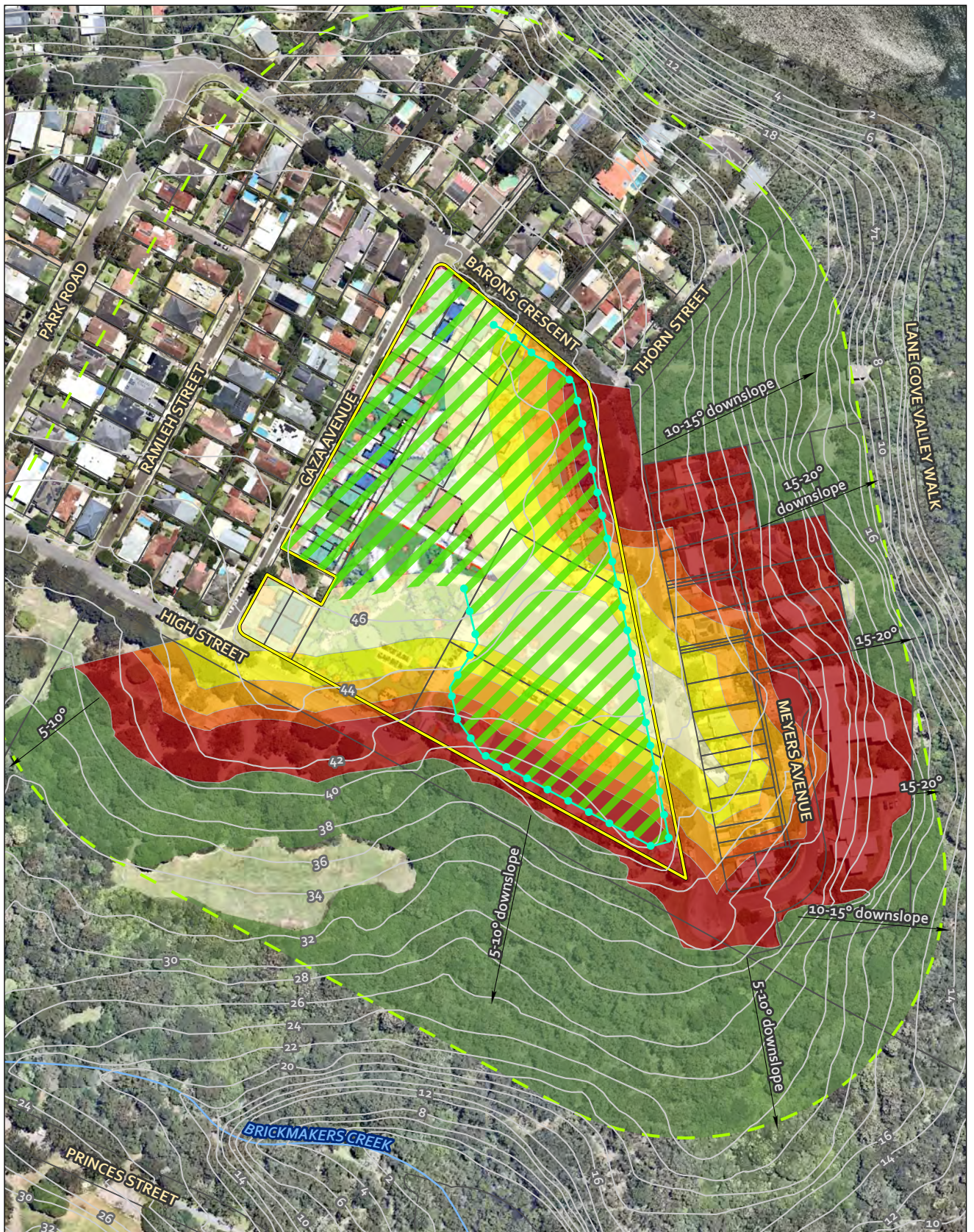
#### **4.2.2 Construction standards**

The Bushfire Attack Levels (BAL) for the subject land have been determined in accordance with PBP Table A1.12.5. Figure 5 shows the BALs affecting the subject land.

Buildings are to be designed and constructed to comply with the relevant BAL as mapped. The corresponding BAL construction specifications are listed within Australian Standard AS 3959-2018 *Constructions of buildings in bushfire-prone areas* (AS 3959). The NSW variation to AS 3959 is also to be applied to the BAL requirements. The variation can be found at Section 7.5.2 of PBP.

In order to utilise the Section 6.4 objectives, a proposal is to apply measures that will provide a better bushfire protection outcome. A standard approach to achieve this is to apply ember protection measures to the existing buildings that will be retained. It is therefore recommended that the aged care facility to be retained in the south-east corner of the subject land have ember protection upgrades in accordance with 'minimal protection measures' as listed within the RFS document 'Upgrading of existing buildings'. Upgrades are to prevent the entry of embers and involve, but not limited to, installation of metal mesh flyscreens to openable windows and vents/weepholes, sealing of gaps, and application of draught excluders to doors. The purpose of the upgrade is to provide a level of protection akin to BAL-12.5.





#### Legend

- Contour - 2m
- Watercourse
- Cadastre
- Subject Land

- Vegetation Assessment Buffer - 140m
- Potential Developable Area
- Existing Building Line

#### Vegetation Formation

- Forest

#### Bushfire Attack Level

- BAL Flame Zone
- BAL 40

- BAL 29
- BAL 19
- BAL 12.5 roadsegment



Date: 17/05/2023

0 12.525 50  
Metres

Figure 5: Bushfire Attack Level

Coordinate System: GDA 1994 MGA Zone 56

Imagery: © Nearmap



### 4.2.3 Vegetation management and landscaping

The area of proposed redevelopment currently complies with the performance of an Inner Protection Area (IPA) as described within Appendix A4.1.1 of PBP. Some trees and landscaping will be removed to allow construction of buildings which will improve IPA performance.

The IPA requirements stated within PBP are repeated below:

#### **A4.1.1 Inner Protection Areas (IPAs)**

*The IPA is the area closest to the building and creates a fuel-managed area which can minimise the impact of direct flame contact and radiant heat on the development and act as a defensible space. Vegetation within the IPA should be kept to a minimum level. Litter fuels within the IPA should be kept below 1cm in height and be discontinuous.*

*In practical terms the IPA is typically the curtilage around the building, consisting of a mown lawn and well maintained gardens.*

*When establishing and maintaining an IPA the following requirements apply:*

- **Trees**
  - *tree canopy cover should be less than 15% at maturity;*
  - *trees at maturity should not touch or overhang the building;*
  - *lower limbs should be removed up to a height of 2m above the ground;*
  - *tree canopies should be separated by 2 to 5m; and*
  - *preference should be given to smooth barked and evergreen trees.*
- **Shrubs**
  - *create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings should be provided;*
  - *shrubs should not be located under trees;*
  - *shrubs should not form more than 10% ground cover; and*
  - *clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.*
- **Grass**
  - *grass should be kept mown (as a guide grass should be kept to no more than 100mm in height); and*
  - *leaves and vegetation debris should be removed.*



#### **4.2.4 Access**

##### ***Alternate access and egress***

PBP requires an access design that enables safe evacuation whilst facilitating adequate emergency and operational response.

The site has an access point to High Street on the southern boundary which will remain to provide the access to the aged care facility to be retained. The proposed ILU buildings will front and gain direct access from public streets (e.g. Barons Crescent to the east and Gaza Street to the west)

The multiple access roads ensure compliance with PBP in regard to alternate access for evacuation and operational response.

##### ***Perimeter access***

The existing streets will provide perimeter access and defensible space for all aspects of the proposed redevelopment.

##### ***Internal roads***

The access road off High Street provides one-way through road access that complies with the PBP Acceptable Solutions for one-way roads. The road will remain unchanged and will continue to service the aged care facility to be retained in the south-eastern corner.

The proposed ILU buildings will gain direct access to adjoining public streets. Access for fire appliances within the subject land will not be required for the proposed buildings as fire-fighting operations can occur from the street frontage at the location of boosters and other hydrants.

#### **4.2.5 Water supply for fire-fighting**

Future buildings will require fire hydrants to be installed to comply with *AS 2419.1 – 2005 Fire Hydrant Installations - System Design, Installation and Commissioning* (AS 2419).

#### **4.2.6 Emergency management**

A 'Bushfire Emergency Management and Evacuation Plan' is to be prepared for the development prior to occupation of the buildings. The Plan is to be prepared in accordance with the NSW Rural Fire Service document 'A Guide to Developing a Bushfire Emergency Management and Evacuation Plan' (RFS 2014).

A plan is also to be prepared for the existing aged care facility to be retained. This is a measure to ensure that a better bushfire protection outcome is achieved in accordance with the PBP Section 6.4 objectives.

## 5 Conclusion

The information presented in this Bushfire Assessment Report demonstrates that the proposal to amend the zoning at the subject land to allow redevelopment for seniors living can satisfy the Ministerial Direction No. 4.3 – ‘Planning for Bush Fire Protection’ and the requirements of ‘Planning for Bush Fire Protection 2019’.

PBP Section 6.4 ‘Development of existing SFPP facilities’ has been applied due to the constraining nature of the APZs and limited space within the subject land. It is proposed to ensure new buildings are not constructed closer to the bushfire hazards than the existing buildings. The application of the PBP Section 6.4 objectives is justified in this case for the following reasons:

- The proposal involves the redevelopment of an existing facility involving the same use.
- Occupation rate will not increase as a result of the proposal.
- The risk profile will decrease as a result of the proposal by a reduction in overall beds and replacement of more vulnerable aged care beds with less vulnerable seniors living ILUs.

The following measures can be applied to ensure a better bushfire protection outcome is achieved for the site overall:

- Replacement of aged construction with BAL compliant buildings.
- A decrease in the risk profile and occupancy rate.
- Application of ember protection measures to the aged care facility to be retained.
- Preparation of a ‘Bushfire Emergency Management and Evacuation Plan’ for the aged care facility to be retained.

Consultation with the NSW Rural Fire Service is required to confirm acceptance of the application of the Section 6.4 objectives.

In addition to the measures mentioned above, this report outlines the bushfire protection measures available and recommended to ensure compliance with PBP. The measures include APZ and defensible space, construction standards, landscaping, access, water supply and emergency management planning.



David Peterson





# References

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Standards Australia 2005. *Fire hydrant installations - System design, installation and commissioning*, AS2419.1, Fourth edition 2005, Standards Australia International Ltd, Sydney.

Standards Australia. 2018. *Construction of buildings in bushfire-prone areas*, AS 3959, Standards Australia International Ltd, Sydney.

## Appendix A - Photographs



**Photograph 1: Forest hazard beyond Barons Crescent to the north-east**





**Photograph 2: Forest hazard to the south of aged care facility**





**Photograph 3: Managed reserve to the south of High Street**





**Photograph 4: Managed grounds of the subject land**





**Photograph 5: Existing access one-way through road for aged care facility**



