Bushfire Assessment

18 CARTER STREET & 41-57 HOBSON STREET STRATFORD

Proposed Development Plan

Reference: 30635

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PREPARED BY MILLAR MERRIGAN ON BEHALF OF:

The owner of 18 Carter Street and 41-57 Hobson Street Stratford

FORMAL LAND DESCRIPTION:

- S2 PS812031
- CA 6 Sect 48 Township of Stratford Parish of Stratford

PROPOSAL:

Proposed Development Plan

AUTHORITY:

Wellington Shire

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1 INTRODUCTION

Millar Merrigan have been engaged to prepare this Bushfire Assessment to support the submission of the ***Proposed Development Plan*** under Development Plan Overlay – Schedule 1 at ***18 Carter Street & 41-57 Hobson Street Stratford.***

This assessment seeks to provide details and discussion in response to Clause 13.02 Bushfire Planning.

This report will assist Council, as the planning authority to consider bushfire risk in relation to the proposed development as required by State Planning Policies.

It is not a BAL assessment and should not be used as part of the building permit process.

2 THE SITE

The land subject to the Carter Street Development Plan comprises of two allotments in single ownership known as:

- Lot S2 PS812031M
- Crown Allotment 6 Section 48 Township of Stratford Parish of Stratford

The total area is 5.993ha and the land is located between Hobsons Street and Carter Street, Stratford, as shown in Figure 1 below.

There is a single dwelling located in the southwestern corner with the remainder of the land comprising of pasture grass that is grazed and cut for hay. A series of internal paddocks are available throughout. Topography of the land is generally flat and some trees are present around the dwelling and property boundaries.

There are no restrictions or easements applicable.

Figure 1: Aerial Image of Study Area (boundaries approximate)

3 THE PROPOSAL

The Carter Street Development Plan (DP) outlines the land use and road layout to direct future subdivisions. The DP is to be approved before a subdivision application can be made.

The DP identifies residential development for the majority of the area, with the existing dwelling retained in a suitable sized allotment. A central reserve is proposed within the residential area to cater for open space and drainage requirements. We understand that the intension is for the reserve to be landscaped to low threat conditions to ensure it does not create bushfire threat.

An internal road network is provided which connects to Carter Street to the north and Hobson Street to the south. A road connection is provided to the east to cater for future development.

Figure 2: Proposed development plan layout

4 BUSHFIRE POLICY

Planning Schemes contain a range of policies that are used to inform decision making and particular emphasis is placed on bushfire risk as outlined below.

4.1 CLAUSE 71.02 OPERATION OF THE PLANNING POLICY FRAMEWORK

The Planning Policy Framework provides a context for spatial planning and decision making by planning and responsible authorities. *Integrated Decision Making (71.02-3)* states that:

> *Planning and responsible authorities should endeavour to integrate the range of planning policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations. However, in bushfire affected areas, planning and responsible authorities must prioritise the protection of human life over all other policy considerations.*

In accordance with this directive, bushfire considerations must be prioritised over all other elements and this emphasis was introduced to the scheme through Amendment VC140 (December 2017) which was a recommendation made by the 2009 Victorian Bushfires Royal Commission.

4.2 PLANNING POLICY FRAMEWORK

The Planning Policy Framework is based around a series of themes, which includes *Clause 13 Environmental Risks and Amenity*. *Clause 13.02-1S Bushfire Planning* is of particular relevance to decision making and seeks:

- *To strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.*

A series of strategies are outlined in this clause as follows:

PROTECTION OF HUMAN LIFE

Give priority to the protection of human life by:

- *Prioritising the protection of human life over all other policy considerations.*
- *Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.*
- *Reducing the vulnerability of communities to bushfire through the consideration of bushfire risk in decision making at all stages of the planning process.*

BUSHFIRE HAZARD IDENTIFICATION AND ASSESSMENT

Identify bushfire hazard and undertake appropriate risk assessment by:

- *Applying the best available science to identify vegetation, topographic and climatic conditions that create a bushfire hazard.*
- *Considering the best available information about bushfire hazard including the map of designated bushfire prone areas prepared under the Building Act 1993 or regulations made under that Act.*
- *Applying the Bushfire Management Overlay to areas where the extent of vegetation can create an extreme bushfire hazard.*
- *Considering and assessing the bushfire hazard on the basis of:*
  – Landscape conditions - meaning conditions in the landscape within 20 kilometres (and potentially up to 75 kilometres) of a site;

– Local conditions - meaning conditions in the area within approximately 1 kilometre of a site;
– Neighbourhood conditions - meaning conditions in the area within 400 metres of a site; and
– The site for the development.

- *Consulting with emergency management agencies and the relevant fire authority early in the process to receive their recommendations and implement appropriate bushfire protection measures.*
- *Ensuring that strategic planning documents, planning scheme amendments, planning permit applications and development plan approvals properly assess bushfire risk and include appropriate bushfire protection measures.*
- *Not approving development where a landowner or proponent has not satisfactorily demonstrated that the relevant policies have been addressed, performance measures satisfied or bushfire protection measures can be adequately implemented.*

SETTLEMENT PLANNING

Plan to strengthen the resilience of settlements and communities and prioritise protection of human life by:

- *Directing population growth and development to low risk locations, being those locations assessed as having a radiant heat flux of less than 12.5 kilowatts/square metre under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009).*
- *Ensuring the availability of, and safe access to, areas assessed as a BAL-LOW rating under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009) where human life can be better protected from the effects of bushfire.*
- *Ensuring the bushfire risk to existing and future residents, property and community infrastructure will not increase as a result of future land use and development.*
- *Achieving no net increase in risk to existing and future residents, property and community infrastructure, through the implementation of bushfire protection measures and where possible reducing bushfire risk overall.*
- *Assessing and addressing the bushfire hazard posed to the settlement and the likely bushfire behaviour it will produce at a landscape, settlement, local, neighbourhood and site scale, including the potential for neighbourhood-scale destruction.*
- *Assessing alternative low risk locations for settlement growth on a regional, municipal, settlement, local and neighbourhood basis.*
- *Not approving any strategic planning document, local planning policy, or planning scheme amendment that will result in the introduction or intensification of development in an area that has, or will on completion have, more than a BAL-12.5 rating under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009).*

AREAS OF BIODIVERSITY CONSERVATION VALUE

Ensure settlement growth and development approvals can implement bushfire protection measures without unacceptable biodiversity impacts by discouraging settlement growth and development in bushfire affected areas that are important areas of biodiversity.

USE AND DEVELOPMENT CONTROL IN A BUSHFIRE PRONE AREA

In a bushfire prone area designated in accordance with regulations made under the Building Act 1993, bushfire risk should be considered when assessing planning applications for the following uses and development:

- ***Subdivisions of more than 10 lots.***
- *Accommodation.*
- *Childcare centre.*
- *Education centre.*

- *Emergency services facility.*
- *Hospital.*
- *Indoor recreation facility.*
- *Major sports and recreation facility.*
- *Place of assembly.*
- *Any application for development that will result in people congregating in large numbers.*

When assessing a planning permit application for the above uses and development:

- *Consider the risk of bushfire to people, property and community infrastructure.*
- *Require the implementation of appropriate bushfire protection measures to address the identified bushfire risk.*
- *Ensure new development can implement bushfire protection measures without unacceptable biodiversity impacts.*

4.3 BUSHFIRE MANAGEMENT OVERLAY

The *Bushfire Management Overlay (Clause 44.06) (BMO)* is applied to areas where there is potential for extreme bushfire behaviour, such as a crown fire, extreme ember attack and radiant heat. It seeks:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire.*
- *To identify areas where the bushfire hazard warrants bushfire protection measures to be implemented.*
- *To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level.*

The *BMO* mapping addresses bushfire hazard through assessment of fire behaviour generated from several factors including topography, fire fuel type and load, and weather. A key output is modelled head fire intensity levels which is a measure of the rate of energy release per unit length of fire front expressed as kW/m. The most significant bushfire hazard is where head fire intensity is modelled to be 30,000kW/m or more. This level of hazard informs where the *BMO* applies. *(Source: Planning Advisory Note 46 Bushfire Management Overlay Mapping Methodology and Criteria, DTPLI, 2013).*

Pursuant to the *BMO* a permit is required to subdivide land and undertake buildings and works associated with a series of specified uses, including accommodation. It applies the requirements of *Clause 53.02 Bushfire Planning* which seek:

- *To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire.*
- *To ensure that the location, design and construction of development appropriately responds to the bushfire hazard.*
- *To ensure development is only permitted where the risk to life, property and community infrastructure from bushfire can be reduced to an acceptable level.*
- *To specify location, design and construction measures for a single dwelling that reduces the bushfire risk to life and property to an acceptable level.*

The *BMO* and subsequently *Bushfire Planning* are therefore applicable when land is covered by the overlay.

As shown in Figure 3 below, the subject site is not covered by the *BMO* and as such these requirements are not applicable to a future subdivision application. The closest *BMO* mapping is located more than 3km north-east covering the vegetation within the Stratford Highway Park.

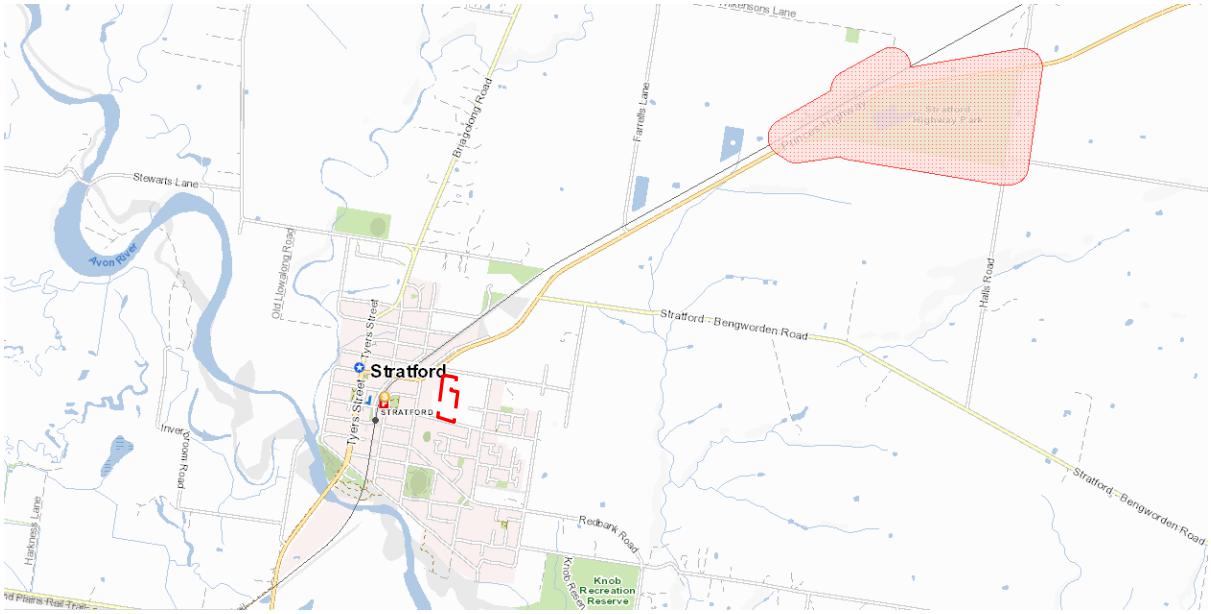

Figure 3: Bushfire Management Overlay Mapping – site highlighted red outline (source: mapshare.vic.gov.au)

4.4 BUSHFIRE PRONE AREAS

Bushfire Prone Areas (BPA) are locations that are subject to, or likely to be subject to bushfires and are determined by the Minister for Planning for the purposes of the building control system. Specific bushfire construction standards apply in designated BPA in Victoria and these are aimed at improving bushfire protection for residential buildings.

BPA mapping includes all areas mapped by the *BMO* and extend to wider areas where moderate bushfire hazard can be expected. These are areas with head fire intensity modelled to be between 4,000kW/m and 30,000kW/m. *(Source: Planning Advisory Note 46 Bushfire Management Overlay Mapping Methodology and Criteria, DTPLI, 2013).*

A minimum construction standard applies to new residential buildings, schools, child care centres, hospitals, aged care facilities and associated buildings in designated Bushfire Prone Areas. Landowners are required to build to a minimum Bushfire Attack Level of 12.5.

A Bushfire Attack Level (BAL) is a way of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact. There are six Bushfire Attack Levels that form part of the Australian Standard for construction of buildings in bushfire prone areas (AS 3959-2009); BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ (Flame Zone), as shown in Figure 4 below.

Figure 4: Building Impact (source BMO Technical Guide, DELP, 2017)

The requirements of the BPA are applied at building permit stage under the *Building Regulations, 2018.*

The subject land is wholly contained within the BPA (see Figure 5 below), however the established urban areas of Stratford are not within the mapped areas and as such are BAL-LOW locations. Given that the land is zoned for residential purposes, abuts the existing BAL-LOW areas and the DP shows a standard subdivision layout, it is anticipated that the BPA mapping may be removed from this area once development has occurred.

The East Stratford Outline Development Plan provides for future development to the east of the site and as such there is scope that the BPA may be removed in the wider area upon development.

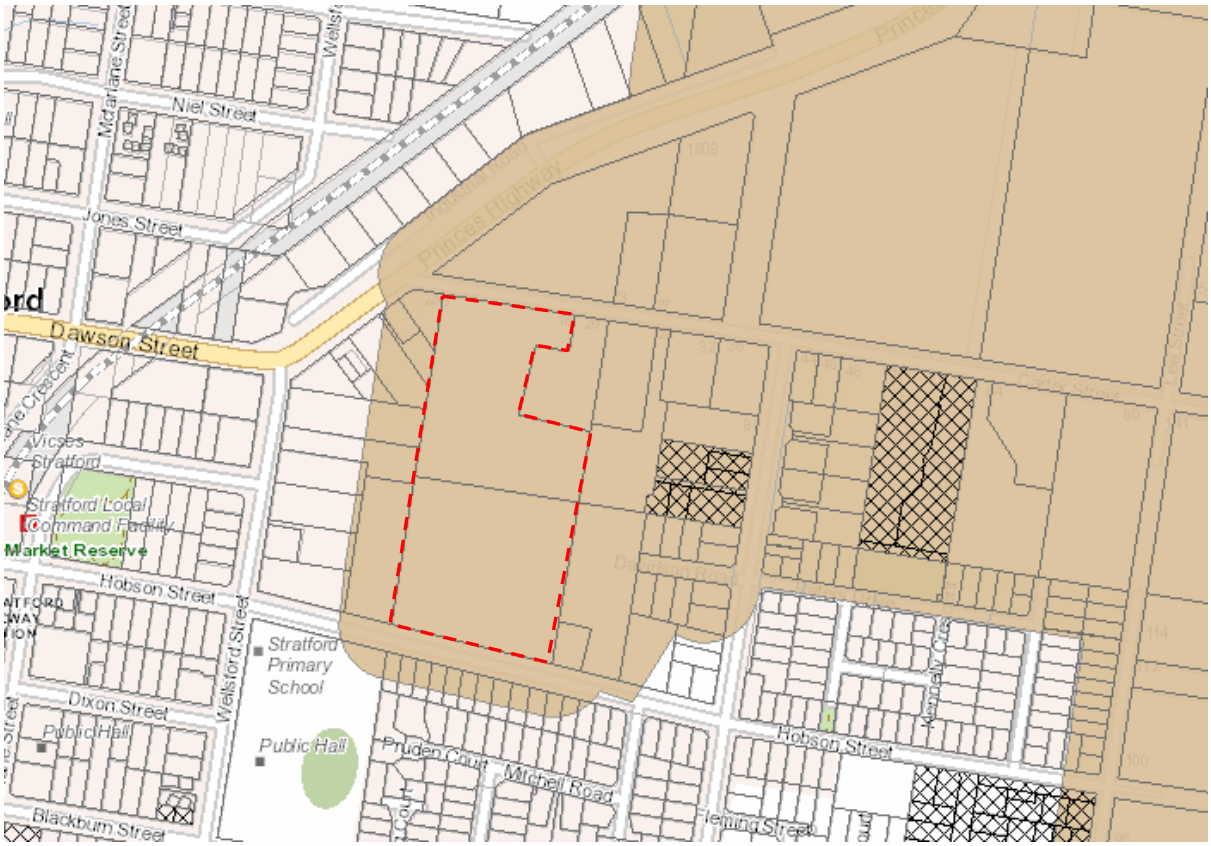

Figure 5: Bushfire Prone Area Mapping (source: mapshare.vic.gov.au)

5 BUSHFIRE HAZARD LANDSCAPE ASSESSMENT

The bushfire hazard landscape assessment provides information on the bushfire hazard for 20km (or greater) around 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 seeks to:

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

(Source: Planning Permit Applications Bushfire Management Overlay, Technical Guide, DELWP, 2017).

The broader landscape and the potential size or scale of a bushfire is an important consideration for decision makers as 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.

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. *(Source: Planning Permit Applications Bushfire Management Overlay, Technical Guide, DELWP, 2017).*

The following sections provide an assessment against the bushfire hazard landscape around the subject site.

5.1 FEATURES

The wider landscape is divided into three distinct areas as follows:

- **Urban Areas**:
  There are urban settlements across the landscape Including Stratford, Maffra and the larger centre of Sale. These township areas offer BAL-LOW conditions and have been excluded from the BPA. The urban areas do not pose a bushfire risk.

- **Farming Areas**:
  Cleared farming land dominates the assessment area in all directions. There is very little vegetation within these locations aside from grassland which would cause a risk during the summer months. Grass fire could approach from the northwest under prevailing wind conditions, or the southwest following a condition change. In either case the site is protected from direct interface with landscape scale grassland risk by the existing BAL LOW areas of the Stratford township.

- **Forested Areas**:
  Forest vegetation is available in the northern and northeastern extent of the assessment area. The Providence Ponds Nature Conservation Reserve connects with vegetation further north that forms part of the Avon National Park. These areas of vegetation are some 15km from the site. Whilst forest fires could occur within this location it would not approach the site under prevailing wind conditions. There are areas of grassland between the forested areas and northern edge of the Stratford township. There is also a small patch of forest vegetation to the southeast of the site at Knob reserve. This is some 1.5kms from the site and located to the southeast and as such fire behaviour in this reserve would not impact the site.

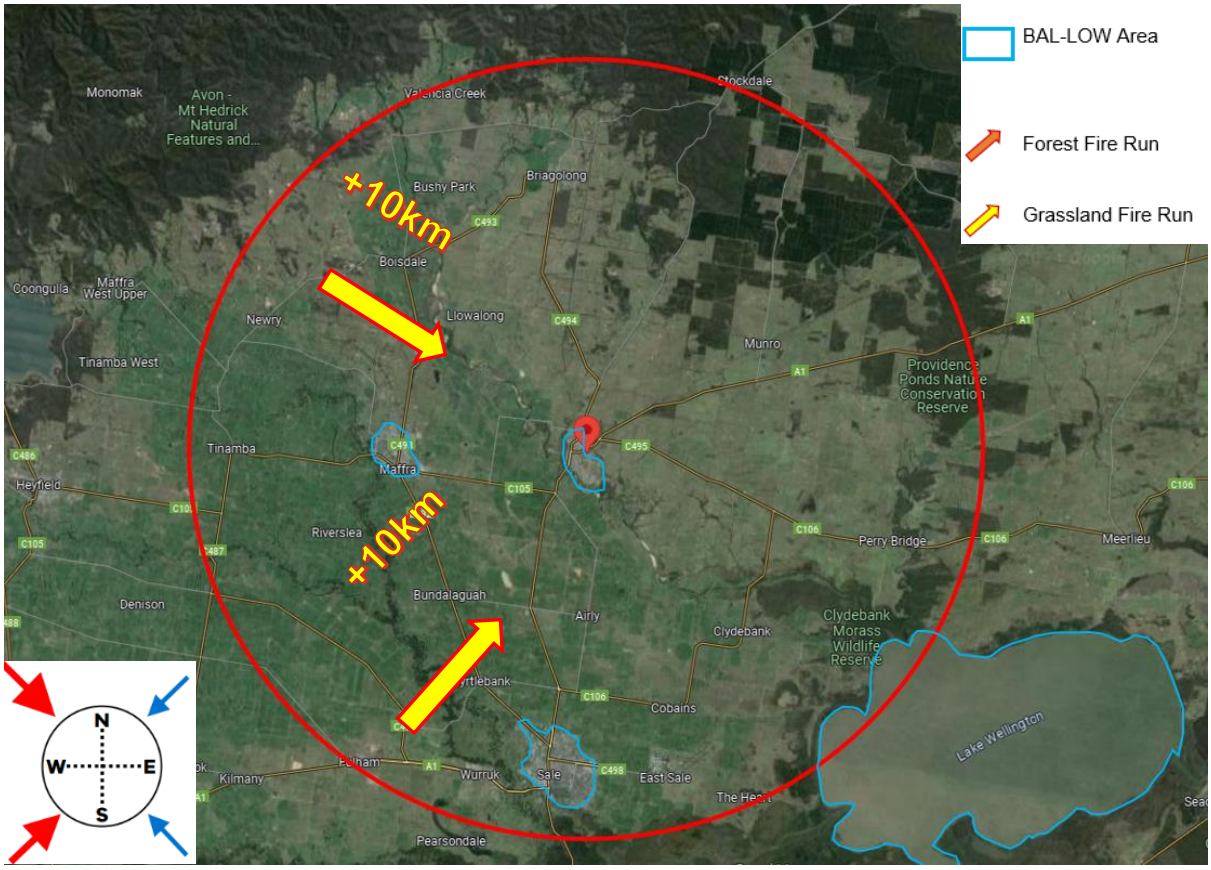

Figure 6: Landscape Assessment

5.2 LANDSCAPE TYPE

Landscape types are set out within the Bushfire Management Overlay Technical Guide (DELWP, 2017) and this location is considered to be consistent with Broader Landscape Type 2, which is described as follows:

- *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.*

(source: Planning Permit Applications Bushfire Management Overlay, Technical Guide, DELWP, 2017).

A landscape scale bushfire could only approach from the northwest under prevailing conditions and the land is located within an urban area (when considering the DP) with minimal fuel conditions. The BAL-LOW areas of surrounding urban development provide shelter from bushfire and are easily accessible.

To consider the suitability and adequacy of the standard design fire of *AS3959*, judging the size to which a fire can grow and develop before impacting the site is crucial. This is because the scale of a bushfire and therefore its destructive power is driven by the characteristics of the broader landscape, rather than those assessed immediately around the site (i.e. within the 150m assessment area). *(source: Guideline – Applying the Bushfire Hazard Landscape Assessment in a Bushfire Management Overlay, CFA, September 2018).*

The site is well separate from forested vegetation and as such a convection fire would not directly impact the location. Grassfires would impact the edges of urban development however these are manageable through site based design.

5.3 BUSHFIRE HISTORY

Bushfire history data shows that fires are a regular occurrence in the vegetated ranges to the northwest. The closest localised fire was a grassfire on the outskirts of Stratford in 1978.

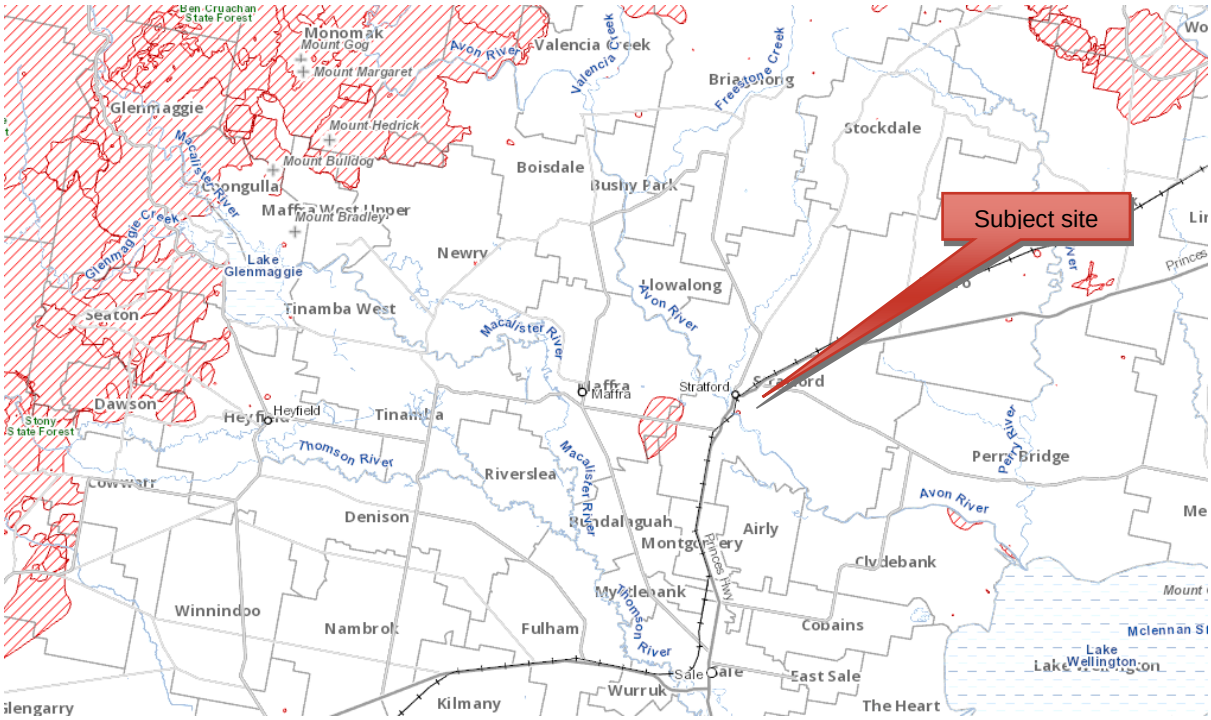

Figure 7: Bushfire History (source: mapshare.vic.gov.au)

5.4 PLANNED BURNS

Various fuel breaks and planned burns are scheduled across the wider area from 2022 to 2025, primarily in the vegetated ranges to the north, see Figure 8 below.

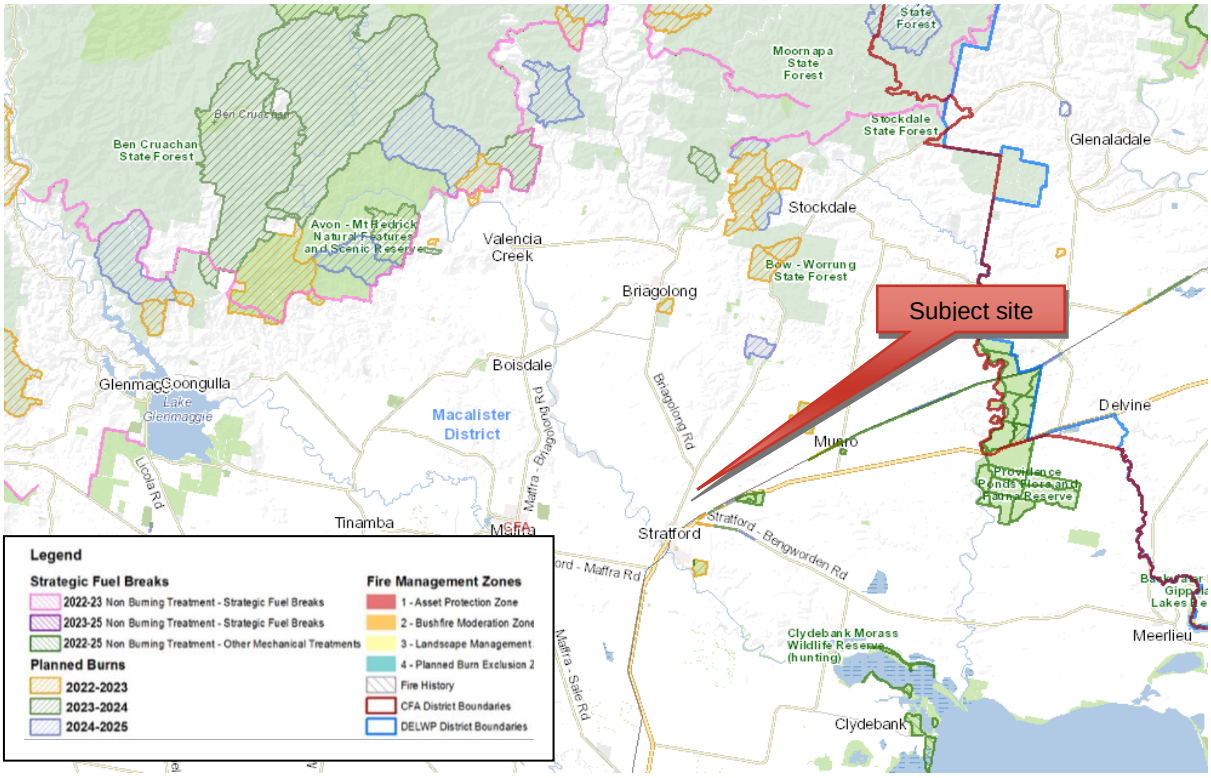

Figure 8: Fire Operations Plan (source: mapshare.vic.gov.au)

5.5 VICTORIAN FIRE RISK REGISTER

Information from the Victorian Fire Risk Register (VFRR) shows that much of the existing urban areas of Stratford have a 'Low' risk. The subject site is indicated with a red outline below and is to the east of the low risk areas within a 'Medium' risk area. The vulnerability is stated as 'low' and the consequence is 'minor', however the likelihood is 'likely'.

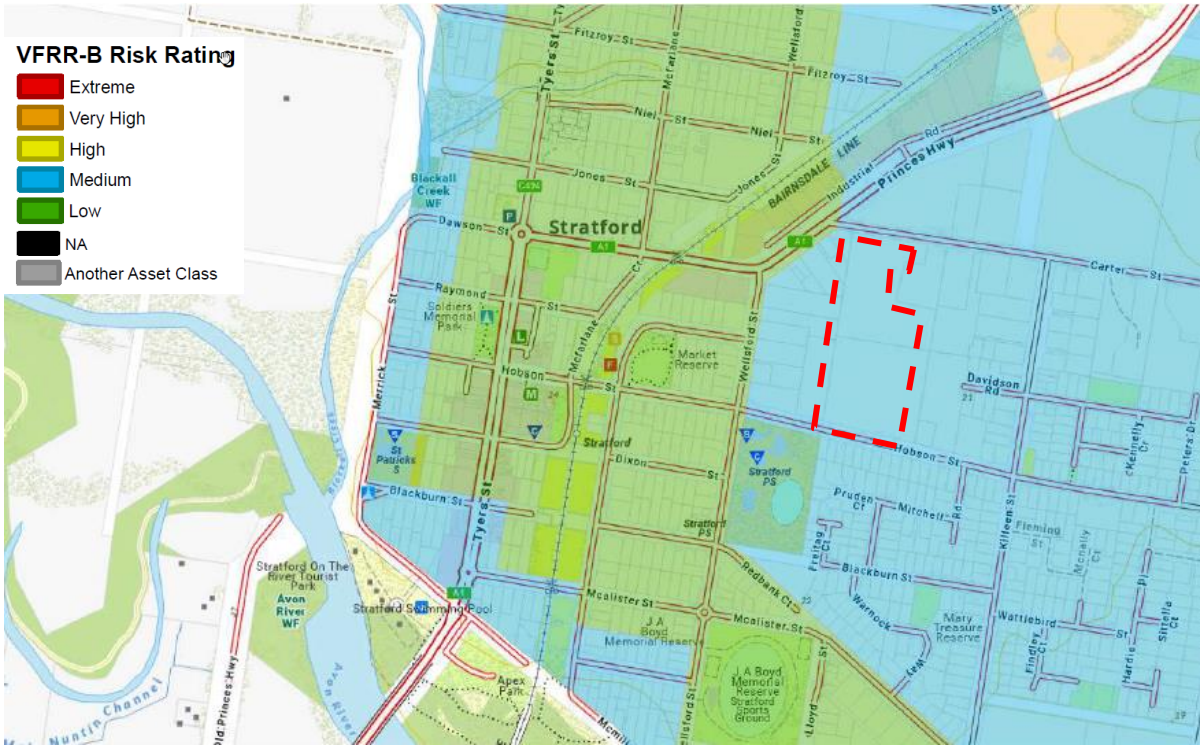

Figure 9: Victorian Fire Risk Register (source: provided by CFA)

6 BUSHFIRE HAZARD SITE ASSESSMENT

The bushfire hazard site assessment documents the bushfire hazard on and near a site. The assessment seeks to:

- *Provide factual information on the bushfire hazard (vegetation type and slope)*
- *Inform defendable space and building construction requirements*

(Source: Planning Permit Applications Bushfire Management Overlay, Technical Guide, DELWP, 2017).

It 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.

The following sections provide an assessment against the bushfire hazard site assessment.

6.1 LOCAL & NEIGHBOURHOOD CONDITIONS

The local (1km) and neighbourhood conditions (400m) around the land comprise a mix of urban development, rural living development, cleared farming land and some small hobby farming properties comprising of grassland, see Figure 10 below.

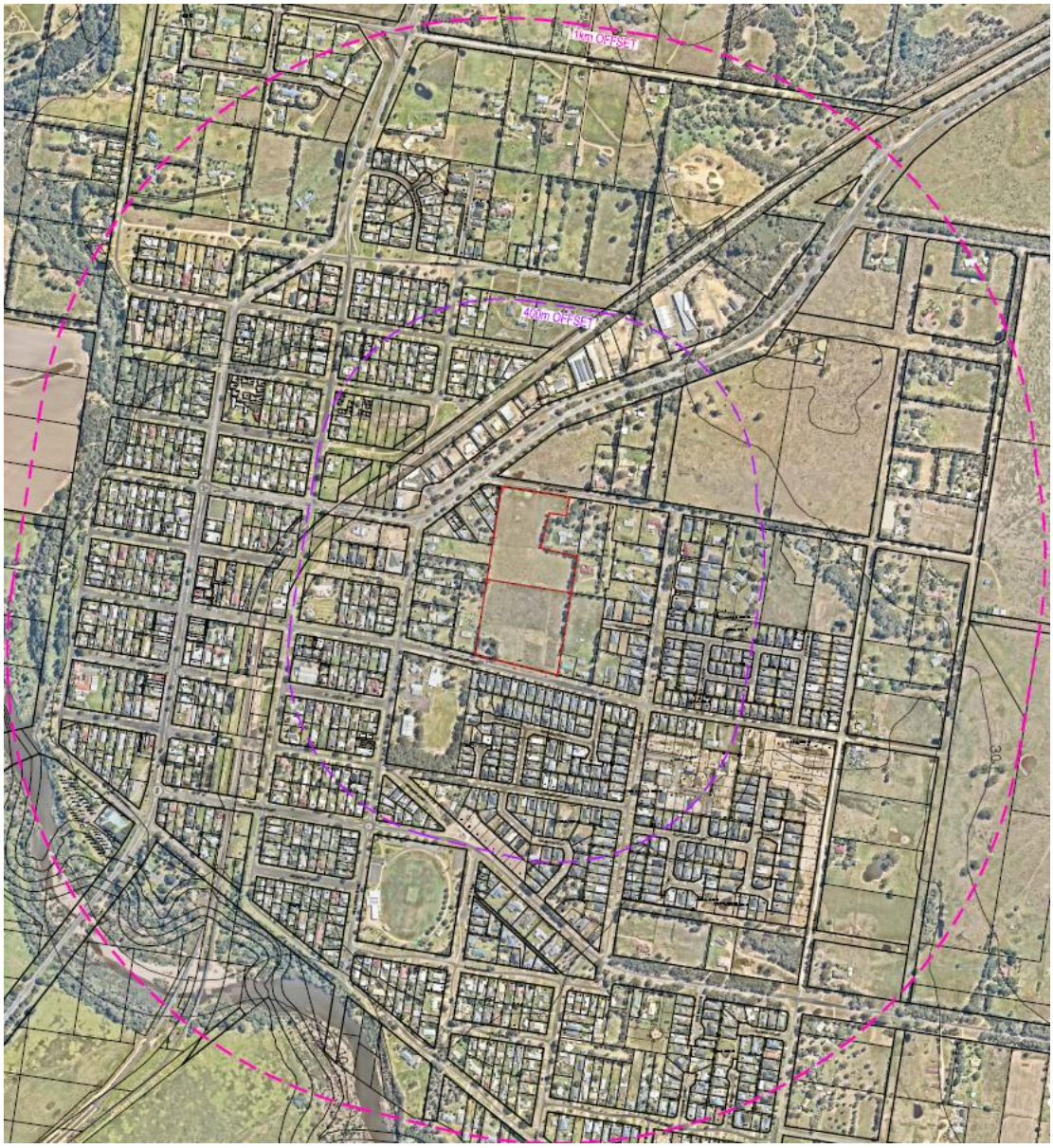

Figure 10: Local & Neighbourhood Conditions

6.2 TOPOGRAPHY

The topography in this location is relatively flat, see Figure 11 below.

Figure 11: Topography (source mapshare.vic.gov.au)

6.3 DEFENDABLE SPACE

It is a requirement of *Clause 13.02* that population growth and development be directed to low risk locations and that an application for accommodation in a BPA consider bushfire risk in accordance with the *Building Act, 1993*. This applies *AS3959-2018 Construction of Buildings in Bushfire-prone Areas* (Standards Australia), which requires a 100m radius around the site to be assessed for slope and vegetation.

As depicted in Figure 12 below, vegetation on site and within this area is dominated by the following:

- Low threat conditions of the urban areas and managed lifestyle lots.
- Lineal or scattered vegetation along property boundaries that is less than 20m wide, with managed understory and is exempt from assessment (shown purple - exempt);
- Grassland on the northern side of Carter Street, noting that this land is zoned for residential purposes and is included within the East Stratford Outline Development Plan so is unlikely to be a permanent threat.
- All other vegetation within the site can be considered a scattered tree or windrow that does not offer a significant risk. Grassland within the site will be removed as the subdivision occurs in accordance with the Development Plan.
- It is expected that as properties within the East Stratford Outline Development Plan area develop, the risk will continue to reduce.

The land is essentially flat, with a slight fall from east to west.

Figure 12: 100m Assessment Area. Green vegetation classified, purple exempt vegetation.

Photograph 1: Looking within the site at existing Grassland conditions

Photograph 2: Looking along Hobson Street – low threat conditions opposite the site

Photograph 3: Windrows of vegetation planted along boundaries within the assessment area – exempt

Photograph 4: Looking along Carter Street - grassland opposite the site

In accordance with *AS3959* the following defendable space distance applies to achieve BAL-12.5 construction*:*

Vegetation type	***Slope (worst case)***	***Separation distance***
Grassland	Flat	19m

No separation distances are required from Low Threat vegetation.

Surrounding land is zoned for residential purposes and managed to low threat conditions. It is noted that there are a few larger lots within the assessment area, however these lots are mown and do not present a bushfire risk.

According to the East Stratford Outline Development Plan, the majority of the eastern abuttal will over time be developed with residential infill, with some development having already occurred.

The northern and northeastern grassland areas are earmarked for redevelopment to a maximum of 2000sqm and 4000sqm lots respectively and as such threats in this directions are also expected to be reduced over time with the introduction of dwellings and managed gardens.

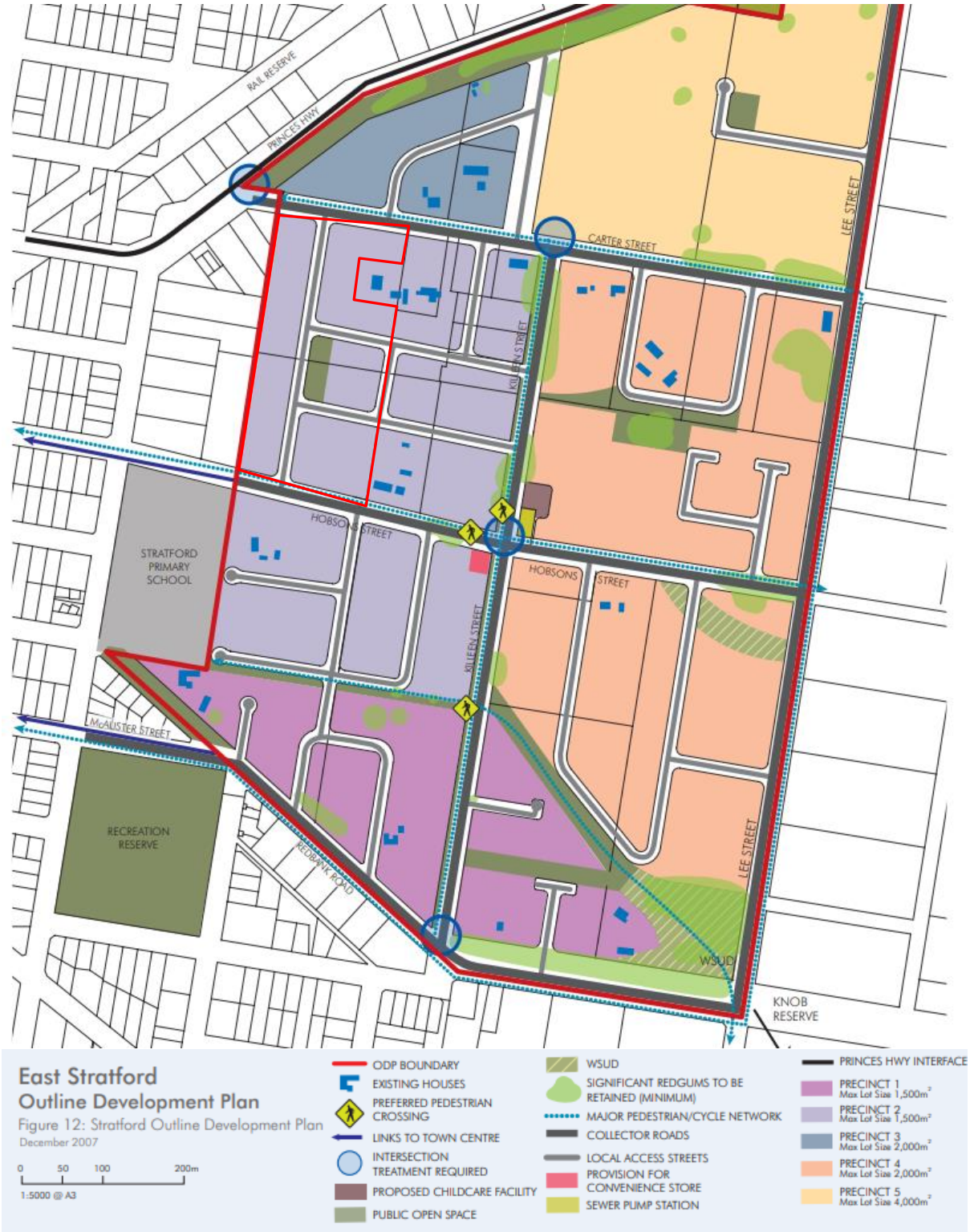

Figure 13: Extract from the East Stratford Outline Development Plan indicates that residential infill is proposed along most of the eastern abuttal to the site. Subject site highlighted.

In relation to the temporary grassland hazard on the northern side of Carter Street, the road reserve offers 20m width and the required 19m of separation can easily be achieved. To avoid any reliance on external parties, the setback has been taken from the edge of bitumen. Subdivision of the site will see creation of lots fronting Carter Street and it can reasonably be assumed that residents will mow their nature strips. Dwelling front setbacks easily make up the separation distance and shown below.

Figure 14: BAL12-5 Setback Plan

7 SHELTER FROM BUSHFIRE

Neighbourhood Safer Places (NSP) (also known as a 'Bushfire Place of Last Resort' (BPLR)) are designated places of last resort when all other bushfire plans have failed. They may provide some protection from direct flame and heat from a fire, but they do not guarantee safety.

Wellington Shire have two BPLR; Loch Sport and Port Albert, neither of which are accessible to this site. Rather, the surrounding urban areas are BAL-LOW and these are locations where ember attack and radiant heat is expected to be below 12.5kw/m2.

8 ACCESS

The BAL- LOW areas of surrounding urban development are within 100m of the site and are easily accessible either via Carter Street or Hobson Street. The routes do not pass through any permanent bushfire hazards.

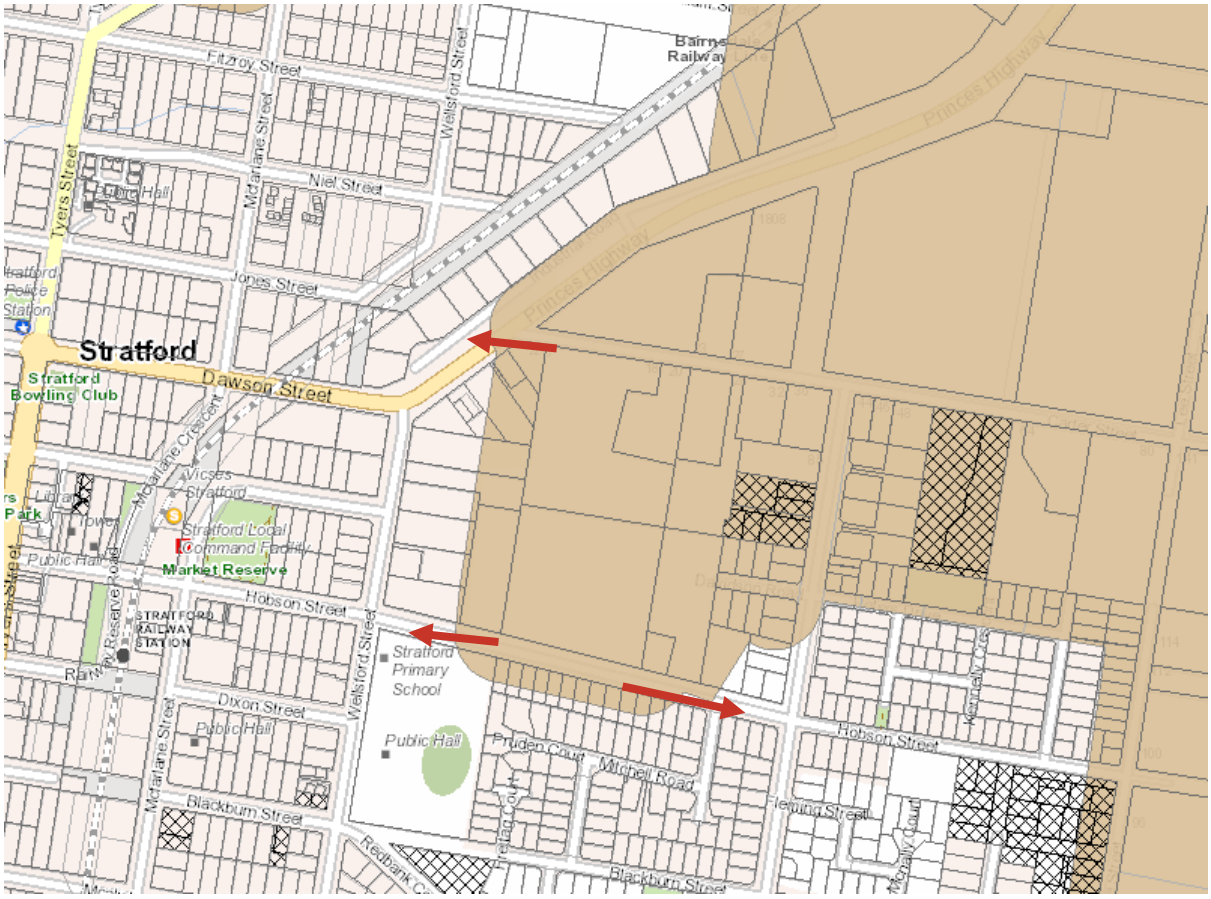

Figure 15: Access to Place of Shelter (source mapshare.vic.gov.au)

9 BIODIVERSITY CONSIDERATIONS

Clause 13.02 seeks to ensure that new development can implement bushfire protection measures without unacceptable biodiversity impacts.

A Native Vegetation Assessment has been prepared for the site and identifies patches of native grasses and scattered indigenous trees. The design provides for retention of some scattered trees however patches of vegetation are to be removed. The retention of this vegetation will not result in an unreasonable risk.

10 ASSESSMENT AGAINST CLAUSE 13.02

The following sections provide an assessment against the relevant matters of *Clause 13.02* in light of the findings discussed above.

PROTECTION OF HUMAN LIFE

Population growth is to be directed to low risk locations and reduce the vulnerability of communities to bushfire risk. The land is very close to existing BAL-LOW areas and when the subject site and further residential land to the east and north is developed it is plausible that the BPA will be removed. As such, the subject site is considered to be a low risk location.

BUSHFIRE HAZARD

The site and landscape bushfire hazard has been identified above and concludes that the landscape risk is moderated to an acceptable level given that the land is located in a residential zone on the edge of the existing urban area. Fire history shows that fires in the vegetated ranges to the far north have not impacted Stratford and *AS3959* ensures that buildings will be designed in response to localised threats. The site is located on the east side of the existing urban areas where it is protected from a potential fire front under prevailing winds.

SETTLEMENT PLANNING

The land is zoned for residential purposes and as such it will be developed as an infill parcel located proximate to the established urban area of Stratford. As the land is already zoned for residential purposes, it is not considered necessary to undertake an assessment of alternative locations. This land will be developed for residential purposes and the DP approval process provides an avenue to ensure that bushfire risk is suitably considered.

The site has existing perimeter roads to the north, and south with abuttal to residential zoned land to the east and west. As outlined above, the proposed lots can feasibly achieve a radiant heat flux of 12.5 kilowatts/square metre (or less) in accordance with *AS3959* when considering the abutting bushfire hazards and vegetation to be retained on site. Non combustible fencing along the eastern and western boundaries could be considered given the larger abutting allotments are not yet developed.

Easy and convenient access is available to the BAL-LOW areas of the surrounding urban area which are a very short distance away. It is envisioned that the extent of BPA will be reduced once the site and adjacent residential land to the east is developed.

Internal roads will be designed and constructed to the satisfaction of the responsible authority at subdivision stage and fire hydrants will be installed as required.

BIODIVERSITY VALUES

Significant trees are indicated for retention to provide for amenity. Retention of this vegetation will not cause a bushfire threat. Patches of grassland vegetation and some scattered trees are shown fore retention and will be offset as outlined in the native vegetation assessment.

BUSHFIRE PRONE AREA

This assessment has considered the requirements of the *Building Act, 1993* as required and all new vacant lots can achieve BAL-12.5 construction. As detailed above, the risk is acceptable, bushfire protection measures are achievable and there are no known unreasonable biodiversity impacts.

11 RECOMMENDATIONS

The following recommendations are made in relation to bushfire protection for the development plan:

- Approve the Development Plan as it shows a BAL 12.5 setback from Grassland to the north and non-combustible fencing along the eastern and western boundaries of the site.
- There is no requirement to prepare a Bushfire Management Plan at the subdivision stage on the basis that the subject site is not impacted by the BMO and there are no defendable space areas required. It is anticipated that the lots will be developed with single dwellings and managed to low threat conditions.

12 CONCLUSION

Integrated Decision Making (71.02-3) requires planning and responsible authorities to prioritise the protection of human life over all other policy considerations in bushfire affected areas.

Bushfire Planning (Clause 13.02) outlines the objective to be achieved and this seeks to strengthen the resilience of settlements and communities to bushfire risk-based planning that priorities protection of human life.

The landscape risk is considered acceptable given the infill nature of the site's location and the fact that it is already zoned for residential purposes. Extensive planned development in the area will further reduce the bushfire risk to the east. Credible shelter options are available in close proximity to the land and provide for an important feature in the aim to protect life.

The site assessment demonstrates that the proposed vacant lots can achieve BAL-12.5 construction in accordance with *Clause 13.02* and the *Building Act, 1993*.

There are no known significant biodiversity constraints that will prohibit bushfire protection measures being achieved. The proposal responds to the sites biodiversity attributes and design ensures retention can be achieved without an increased risk.

Development of this land prioritises protection of human life over all other policy considerations and there are no bushfire protection measures to be applied given that *AS3959* provides an appropriate means of implementing construction standards.

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Development & Building in Bushfire Prone Areas (UTS)

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