# APPENDIX A

## A.1: BROADER LANDSCAPE ASSESSMENT

### A.1.1 WHAT IS A BROADER LANDSCAPE ASSESSMENT

The Broader Landscape Assessment (BLA) examines the area external to the planning proposal, extending for a distance of approximately two kilometres. The assessment includes an understanding of the bushfire hazards (vegetation extent), the broader road network, proximity to townsites, urban areas and suitable destinations. It provides a means of quantifying the characteristics and the potential for a landscape scale bushfire in the broader landscape, when considering the suitability of a location for the intensification of land use or development.

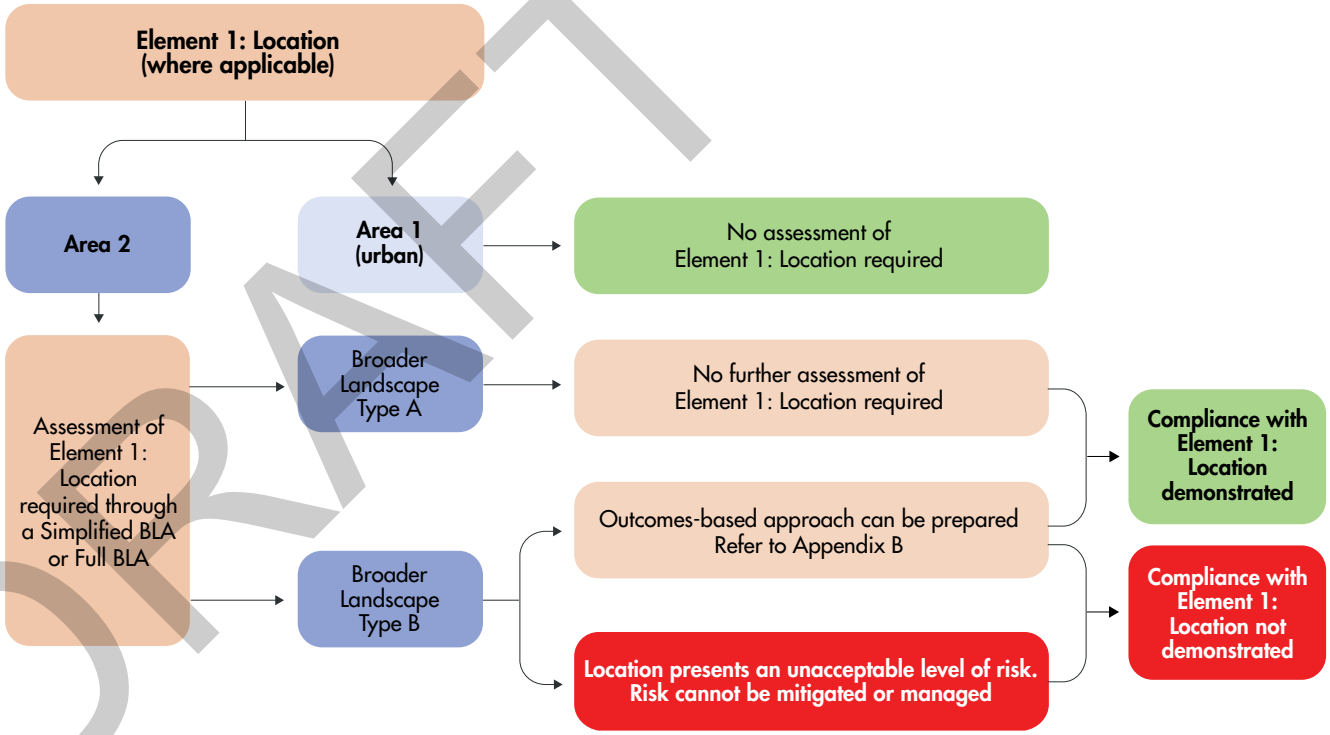
### A.1.2 WHEN IS A BROADER LANDSCAPE ASSESSMENT REQUIRED

Planning proposals within an area designated as Area 1 (Urban) on the *Map of Bush Fire Prone Areas* will not require an assessment of the broader landscape or need to demonstrate compliance with Element 1: Location.

Where strategic planning proposals, structure plans and subdivisions are designated as Area 2 on the *Map of Bush Fire Prone Areas*, an assessment of the broader landscape is required to demonstrate compliance with Element 1: Location. (**Figure 12**)

Where a planning proposal has not previously been assessed against SPP 3.7 (2015), any major modification, resubmission or subsequent stage(s) of the planning

Figure 12: Assessment process for Element 1



process, should demonstrate compliance with Element 1: Location within SPP 3.7 and Guidelines (2024). This does not include development applications.

#### A.1.2.1 How to consider previous BLAs

Where a BLA has been undertaken for a subject site(s) at a prior planning stage, the assessment may still be relevant and should be used to inform compliance with Element 1: Location, at subsequent planning stage(s).

However, the decision-maker has the ability to request a new BLA if they believe that the existing assessment is inadequate. This may include, but not be limited to, instances where there has been a significant period of time since the original assessment was completed/approved, the planning proposal is significantly different, and/or the broader landscape conditions have changed.

### A.1.3 WHO CAN CONDUCT A BROADER LANDSCAPE ASSESSMENT

It is strongly recommended that a BLA and the accompanying bushfire management plan (BMP) be prepared by an accredited Level 2 or Level 3 bushfire planning practitioner. Where the BLA determines that the broader landscape is a type B, and where the bushfire planning practitioner believes the bushfire risk can be mitigated or managed to an acceptable level, then an outcomes-based approach can be prepared. It is strongly recommended that this be undertaken by an accredited Level 3 bushfire planning practitioner.

### A.1.4 BROADER LANDSCAPE ASSESSMENT METHODOLOGY

A BLA should be prepared in accordance with this Appendix. Where an outcomes-based approach is being developed, additional guidance is provided in Appendix B.1: Location.

#### A.1.4.1 Simplified BLA

In recognition that some locations present a lower risk of a landscape scale bushfire, a simplified process has been developed to fast track the BLA assessment. Where the answers to the following questions is yes, a Simplified BLA can be undertaken to demonstrate compliance with Element 1: Location.

The level of detail provided within the assessment should be commensurate with the scale of development and should include at a minimum, a scaled aerial map that should extend for a distance of approximately two kilometres beyond the subject site, with annotations allowing verification of the information relevant to each of the questions below:

1. Is the subject site within a kilometre of a townsite, urban area or suitable destination?
2. Is the road pattern from the planning proposal to the closest townsite, urban area or suitable destination, simple and/or direct (limited intersections)?
3. Is the majority of vegetation cleared, managed or Class G Grassland, within the broader landscape assessment area (e.g. clearing for residential zoned urban lots)?
4. Is the planning proposal exposed to two or less aspects with external bushfire hazards (excluding Class G Grassland)?

If the response is 'no' to **any** of these questions, then a full BLA must be undertaken in accordance with the methodology outlined in the following pages.

#### A.1.4.2 Full BLA

##### Step One: Determine the BLA area

The BLA assessment area should extend for a distance of approximately two kilometres beyond the subject site (**Figure 13**).

Where multiple development sites are proposed, the bushfire planning practitioner may decide that the assessment area is better represented by grouping the development sites into one area (**Figure 14**).

While the bushfire planning practitioner may recommend a larger BLA area, ultimately it is for the decision-maker to determine. This may be due to one or more of the following criteria:

- the extent of contiguous vegetation
- proximity to a suitable destination
- the point of two-way access
- the vulnerability of the future occupants or visitors.

This information can be agreed through a pre-lodgement meeting involving the decision-maker, the Department of Fire and Emergency Services (DFES) – if requested by the decision-maker – and the bushfire planning practitioner, prior to undertaking the BLA.

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Figure 13: How to determine the broader landscape assessment area

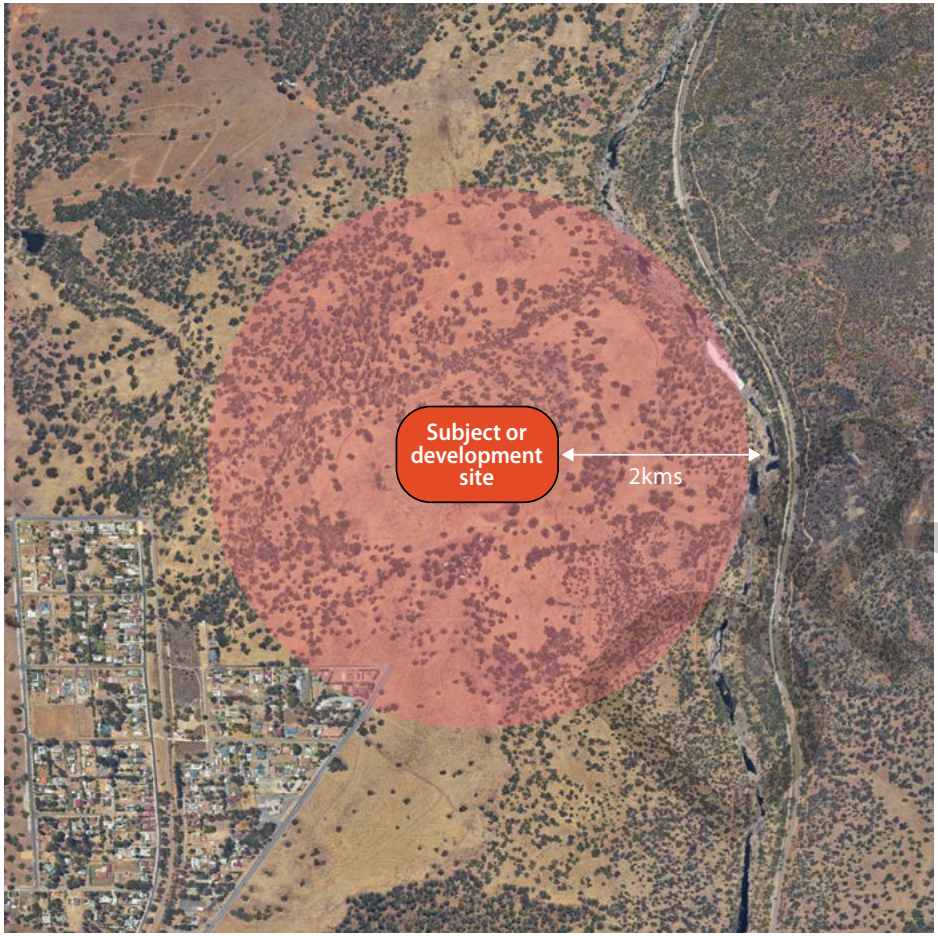
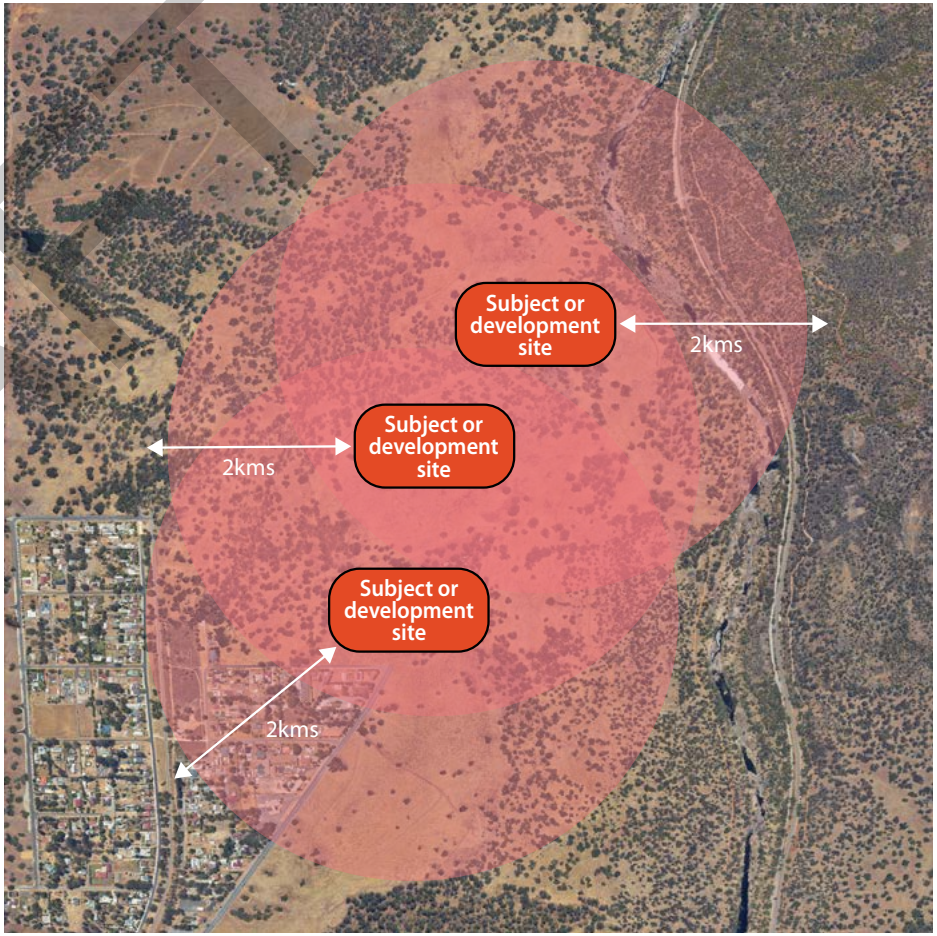



Figure 14: Broader landscape assessment for multiple development sites



## Step Two: Assess and map the broader landscape

Relevant information for the BLA should be shown and annotated on a scaled aerial map. The map should be supported by explanatory text commensurate with the scale and complexity of the proposal and/or the broader landscape.

### A. Assess and map vegetation

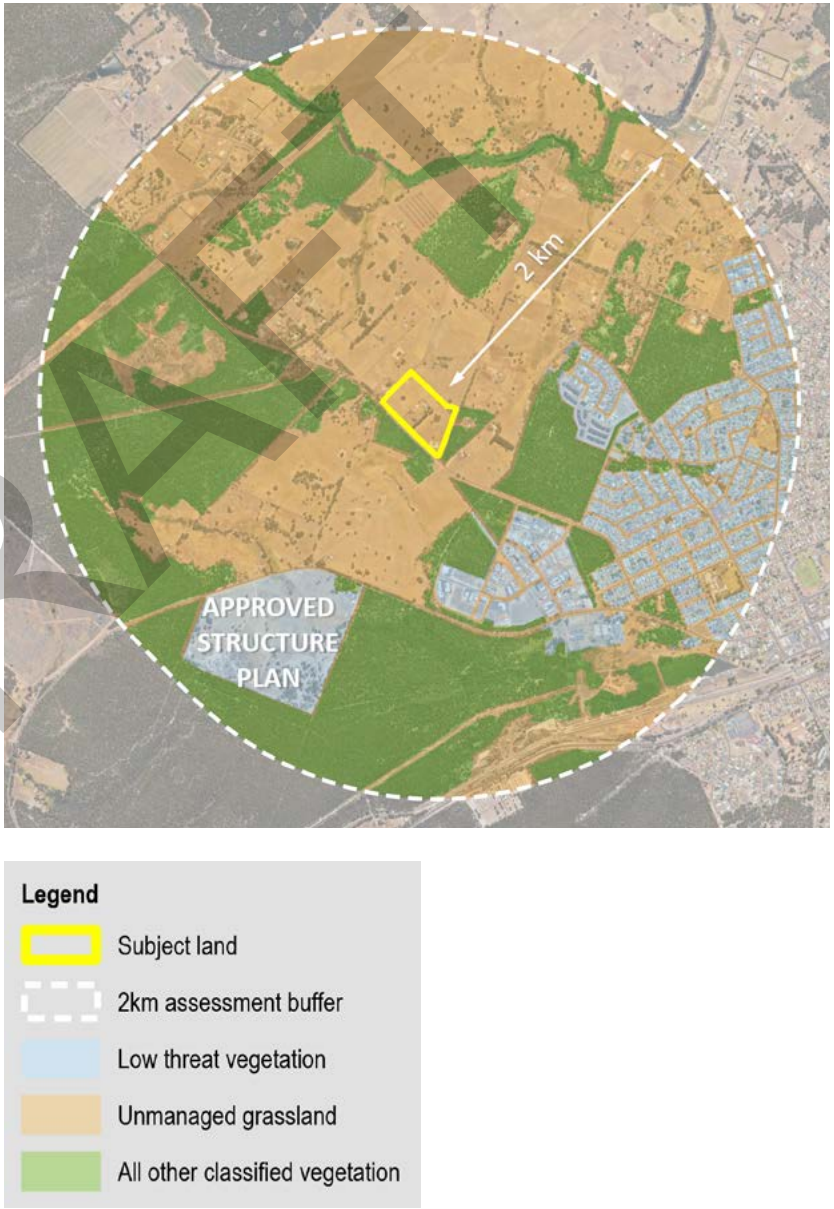
Using up-to-date aerial imagery, undertake a desktop vegetation assessment by delineating plots on the aerial image that distinguish between:

- areas of low threat vegetation and non-vegetated areas (refer to exclusions under AS 3959)
- areas of unmanaged grassland (Class G Grassland)
- areas of all other types of classified vegetation (as one category)
- consideration should be given to any revegetation or areas of environmental, biodiversity or conservational value.

Where the planning proposal adjoins undeveloped land with an approved structure plan or subdivision (which has previously been assessed under SPP 3.7) and proposes a post-development BAL rating of BAL-LOW, this can be treated as a future non-vegetated area.

Where the BLA area includes or directly abuts a coastline or water body, then such areas should be considered as non-vegetated.

Figure 15: Example of Vegetation type and whether it is continuous or fragmented



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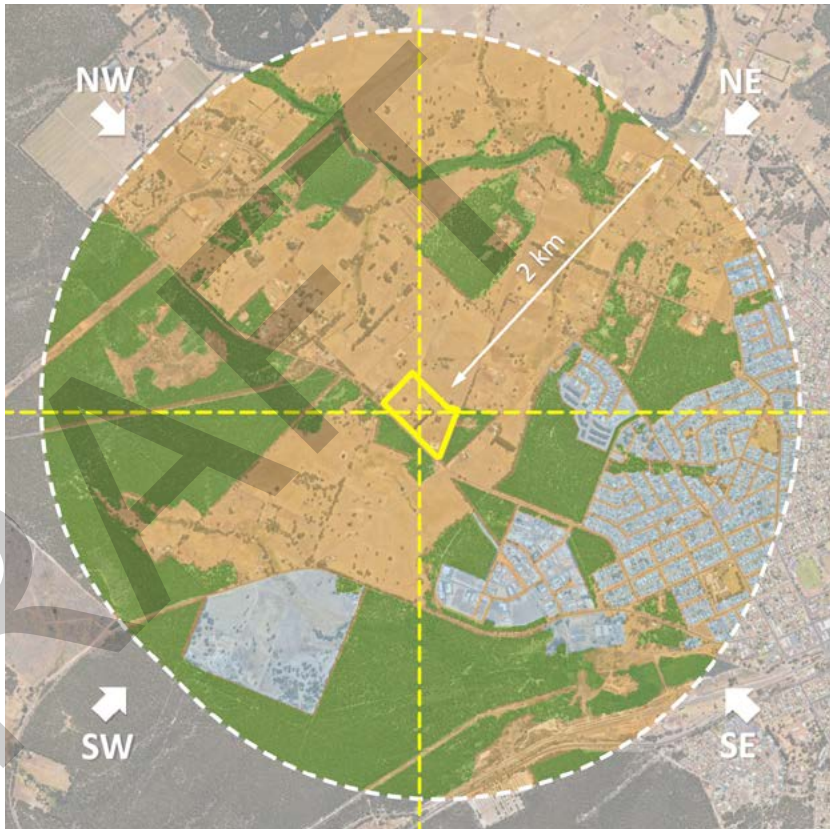
**B. Assess and map aspects**

The assessment of aspects is used to quantify the bushfire hazards that exist within the BLA area that are likely to present landscape scale destruction, including the potential to adversely impact life, property and infrastructure.

Transpose four quadrants within the BLA area that are aligned to the intercardinal directions (Northeast, Southeast, Northwest and Southwest). These quadrants should be used in the assessment of the four aspects that are external to the planning proposal. The extent of classified vegetation should be considered in relation to the identified aspects.

Figure 16: Example of Aspect assessment



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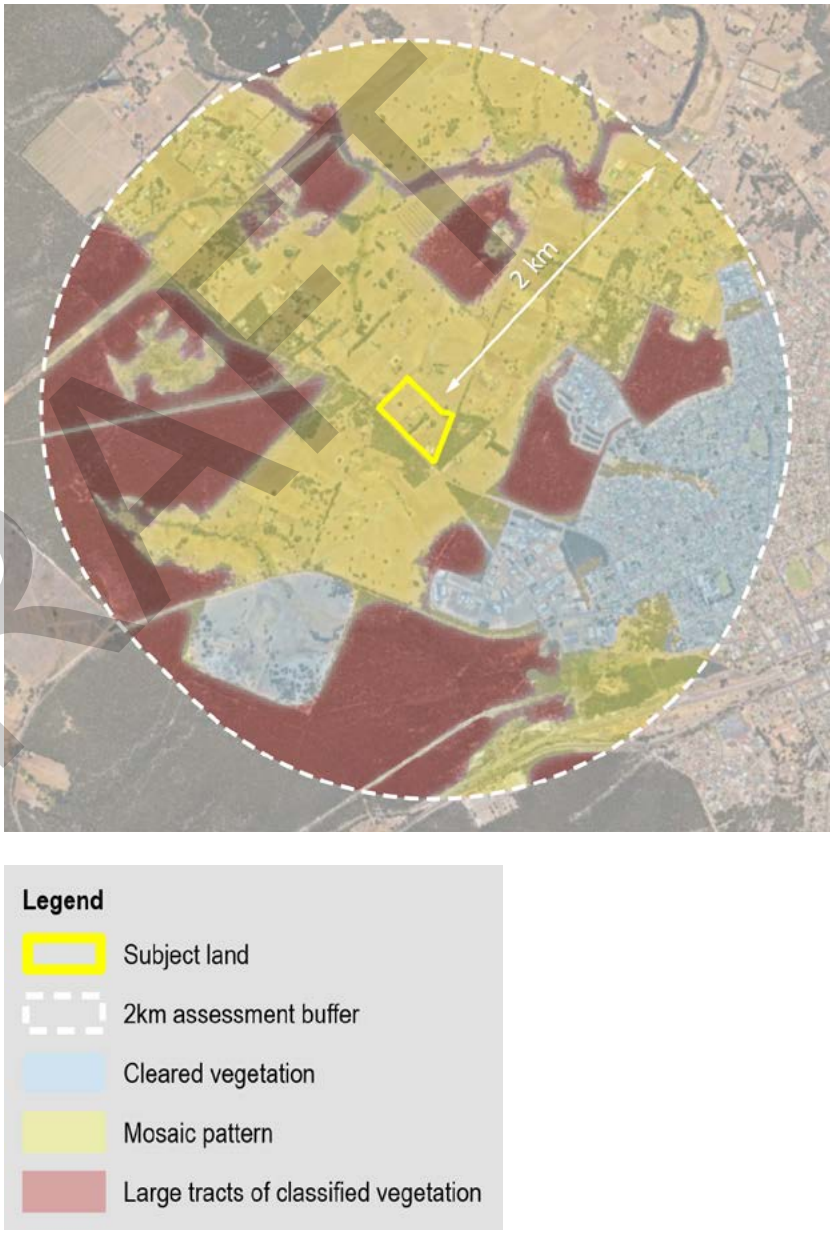
**C. Assess and map the predominant vegetation pattern**

Using the vegetation assessment undertaken in step Two A, distinguish and choose the predominant vegetation pattern from the following types:

- cleared vegetation (e.g. residential or urban zoned and developed land)
- a mosaic pattern of vegetation (including Class G Grassland, and vegetation within rural living precincts)
- large tracts of classified vegetation (e.g. contiguous vegetation within reserves or national parks).

When summarising the extent of classified vegetation, aspects and predominant vegetation pattern, consideration should be given to the ability of a bushfire to form long fire runs and/or the potential to cause a landscape scale bushfire.

Figure 17: Example of predominant vegetation pattern



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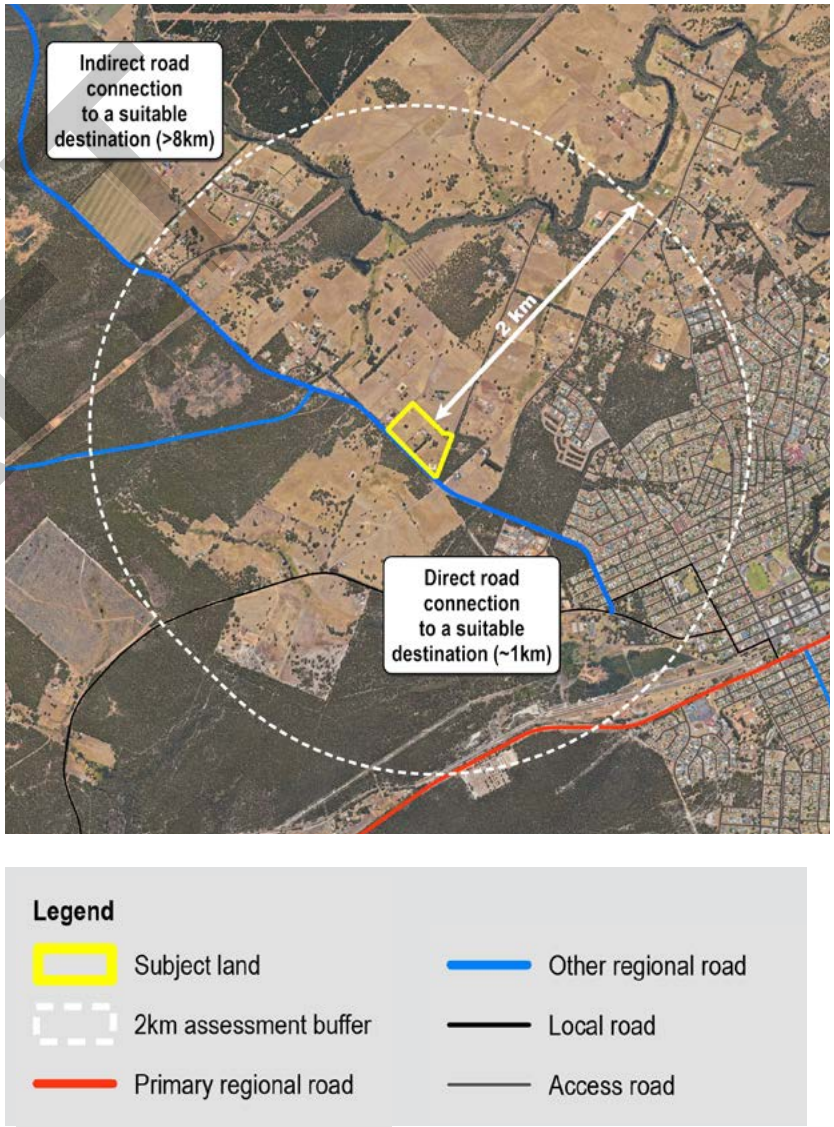
**D. Assess and map road pattern and suitable destination(s)**

- Identify and map the existing and proposed (if known) vehicular access route(s) and suitable destination(s)
- Identify road hierarchy (**Table 2**)
- Assess the reliability and standard of vehicular access routes (sealed or unsealed, topography etc.)
- Differentiate spatially between direct road access, including straight roads with extended view lines (grid or modified grid pattern) or complex road patterns (curved or cul-de-sac pattern)
- Annotate any impediments to use of the access routes, including the presence and characteristics of vegetation along access routes.
- Provide a summary of access routes (see annotation in **Figure 18**) to a suitable destination.

Table 2: Examples of defined road hierarchies
(navigate to links through column heading titles)

| LOCAL PLANNING SCHEME REGULATIONS | LIVEABLE NEIGHBOURHOODS | MAIN ROADS WA |
|---|---|---|
| Primary Distributor Road | Primary distributor Road | Primary Distributor |
| District Distributor Road | Integrator arterial A | Regional Distributor |
| | Integrator arterial B | District Distributor A |
| Local Distributor Road | Neighbourhood connector A | District Distributor B<br>Local Distributor |
| | Neighbourhood connector | |
| Local Road | Access street A | Access Road |
| | Access street | |
| | Access street B | |
| | Access street C | |
| | Access street D | |
| | Access place | |

Figure 18: Example of Access Routes



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## Step Three: Establish the broader landscape type

Use the points-based system in **Table 3** to determine the broader landscape type.

The first column lists each criterion to be considered.

The next three columns include descriptors that relate to the criterion and provide corresponding assigned points listed in the header row (5 points, 2 points and 1 point).

The final column is for noting the point(s) assigned for each criterion. The points column should be tallied, and the sum of points listed in the total points cell. The total points are then used to derive the broader landscape type as indicated at the bottom of the table. The bushfire planning practitioner is responsible for identifying and justifying the points allocated through the BLA. However, due to the potential for subjectivity, the final determination ultimately rests with the decision-maker.

Determination of a broader landscape type should be supported by explanatory text commensurate with the scale and complexity of the planning proposal and/or the broader landscape type.



Table 3: Points-based system for determining a broader landscape type

| CRITERIA | 5 POINTS | 2 POINTS | 1 POINT | POINTS |
|---|---|---|---|---|
| Proximity of the planning proposal to a suitable destination is: | >10km | 1-10km | <1km | |
| The road pattern from the planning proposal to a suitable destination is: | Complex and indirect (cul-de-sacs, and/or multiple intersections) | Mixed road patterns | Simple and/or direct (limited intersections) | |
| The predominant vegetation pattern is: | large tracts of vegetation (contiguous vegetation) | A mosaic pattern of vegetation (e.g. vegetation within rural living precincts) | Cleared vegetation (e.g. clearing for residential zoned urban lots) | |
| Exposure of the planning proposal to an identified external bushfire hazard (excluding Class G Grassland) is from: | Three or four aspects | Two aspects | From nil or one aspect only | |
| **TOTAL POINTS** | | | | |
| **Total points** | **Broader landscape type** | | | |
| 0 - 11 points | Broader landscape type A (BLT A) | | | |
| 12 - 20 points | Broader landscape type B (BLT B) | | | |
| **BROADER LANDSCAPE TYPE DETERMINED** | | | | |

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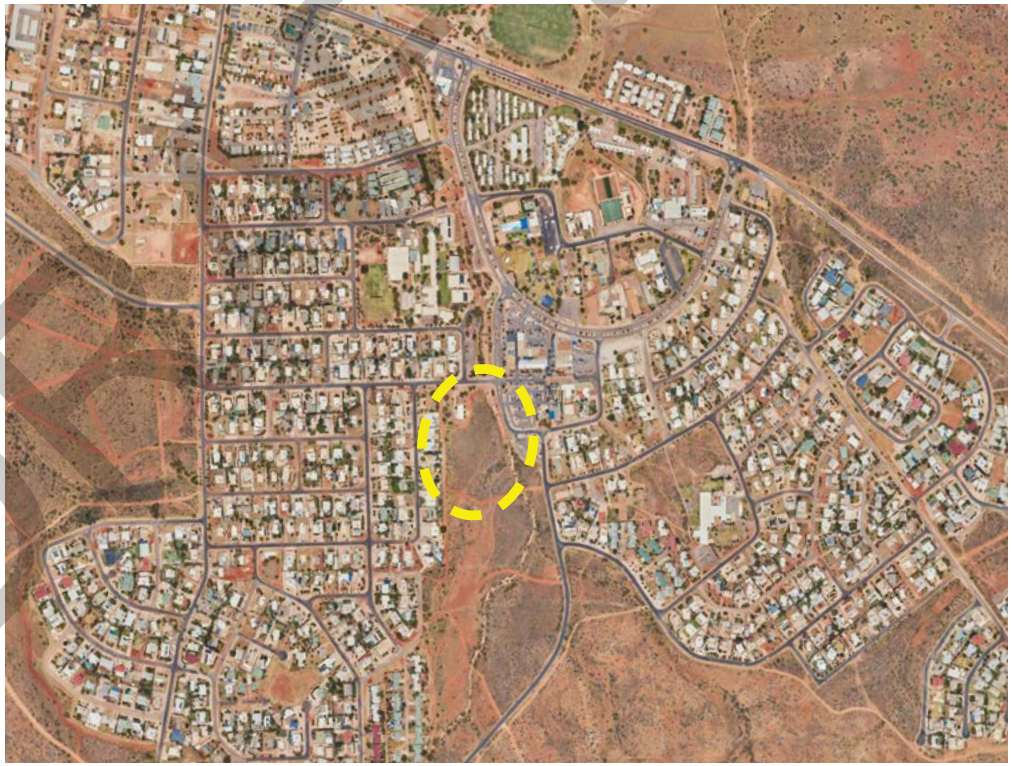
### A.1.4.3 Broader Landscape Type A aerial examples

Examples of sites from Type A are provided, by a simplified points table for each image.

This table utilises colour coding corresponding to **Table 3**, which outlines a points-based system for classifying broader landscape types.

| CRITERIA | POINTS |
|---|---|
| Proximity of the planning proposal to a suitable destination is: | 1 |
| The road pattern from the planning proposal to a suitable destination is: | 1 |
| The predominant vegetation pattern is: | 1 |
| Exposure of the planning proposal to an identified external bushfire hazard (excluding Class G Grassland) is from: | 1 |
| | **TOTAL POINTS** |
| 0-11 points (BLT A)<br>12-20 points (BLT B) | 4 |
| **BROADER LANDSCAPE TYPE DETERMINED** | **TYPE A** |



*The aerial examples shown are indicative only and are not intended to be used as justification for planning proposals or for planning assessment purposes.*

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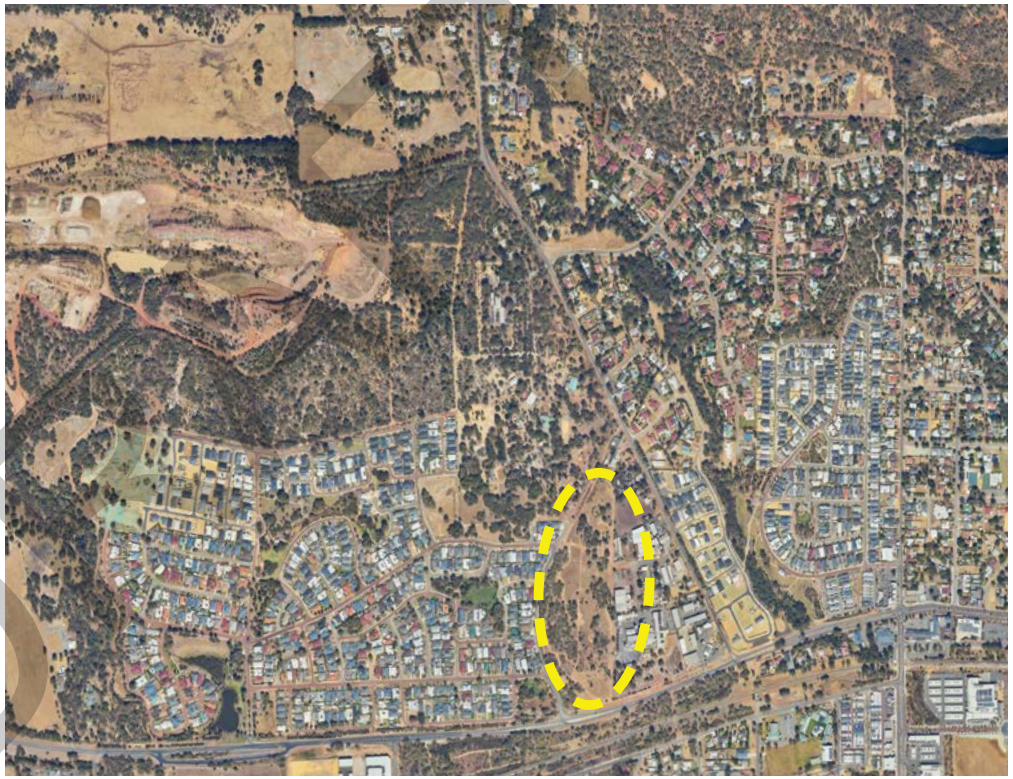
| CRITERIA | POINTS |
|---|---|
| Proximity of the planning proposal to a suitable destination is: | 1 |
| The road pattern from the planning proposal to a suitable destination is: | 1 |
| The predominant vegetation pattern is: | 1 |
| Exposure of the planning proposal to an identified external bushfire hazard (excluding Class G Grassland) is from: | 1 |
| | **TOTAL POINTS** |
| 0-11 points (BLT A)<br>12-20 points (BLT B) | 4 |
| **BROADER LANDSCAPE TYPE DETERMINED** | **TYPE A** |



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| CRITERIA | POINTS |
|---|---|
| Proximity of the planning proposal to a suitable destination is: | 1 |
| The road pattern from the planning proposal to a suitable destination is: | 1 |
| The predominant vegetation pattern is: | 1 |
| Exposure of the planning proposal to an identified external bushfire hazard (excluding Class G Grassland) is from: | 1 |
| | **TOTAL POINTS** |
| 0-11 points (BLT A)<br>12-20 points (BLT B) | 4 |
| **BROADER LANDSCAPE TYPE DETERMINED** | **TYPE A** |

*The aerial examples shown are indicative only and are not intended to be used as justification for planning proposals or for planning assessment purposes.*

### A.1.4.4 Broader Landscape Type B aerial examples

Examples of sites from Type B are provided, by a simplified points table for each image.

This table utilises colour coding corresponding to **Table 3**, which outlines a points-based system for classifying broader landscape types.

| CRITERIA | POINTS |
|---|---|
| Proximity of the planning proposal to a suitable destination is: | 5 |
| The road pattern from the planning proposal to a suitable destination is: | 5 |
| The predominant vegetation pattern is: | 5 |
| Exposure of the planning proposal to an identified external bushfire hazard (excluding Class G Grassland) is from: | 5 |
| | **TOTAL POINTS** |
| 0-11 points (BLT A)<br>12-20 points (BLT B) | 20 |
| **BROADER LANDSCAPE TYPE DETERMINED** | **TYPE B** |

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| CRITERIA | POINTS |
|---|---|
| Proximity of the planning proposal to a suitable destination is: | 5 |
| The road pattern from the planning proposal to a suitable destination is: | 5 |
| The predominant vegetation pattern is: | 5 |
| Exposure of the planning proposal to an identified external bushfire hazard (excluding Class G Grassland) is from: | 5 |
| | **TOTAL POINTS** |
| 0-11 points (BLT A)<br>12-20 points (BLT B) | 20 |
| **BROADER LANDSCAPE TYPE DETERMINED** | **TYPE B** |

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| CRITERIA | POINTS |
|---|---|
| Proximity of the planning proposal to a suitable destination is: | 5 |
| The road pattern from the planning proposal to a suitable destination is: | 5 |
| The predominant vegetation pattern is: | 2 |
| Exposure of the planning proposal to an identified external bushfire hazard (excluding Class G Grassland) is from: | 1 |
| | **TOTAL POINTS** |
| 0-11 points (BLT A)<br>12-20 points (BLT B) | 13 |
| **BROADER LANDSCAPE TYPE DETERMINED** | **TYPE B** |

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# APPENDIX B



## B.1: LOCATION

**State Planning Policy outcome for Element 1: Location – Avoid broader landscapes that present an unacceptable bushfire risk to people, property and infrastructure.**

### B.1.1 BROADER LANDSCAPE ASSESSMENT

Western Australia has experienced significant bushfire incidents. Climate change is increasing the risk, frequency and severity of bushfires due to:

- a higher fuel load with more dry vegetation being available to burn
- a drier fuel load in the landscape
- an increase in extreme fire weather occurrences through a combination of low rainfall and humidity, and high temperatures and wind speeds
- an increase in instances of lightning strikes as extreme weather events become more frequent.

In response to the increasing risk, frequency and severity of bushfires, Element 1: Location, now includes an assessment of the broader landscape, with the aim of identifying those locations that present an unacceptable bushfire risk to people, property and infrastructure.

Appendix A.1: Broader landscape assessment is a methodology to understand the likely size and intensity of a bushfire and to determine the broader landscape type surrounding the planning proposal. The vegetation categories used in this methodology simplify those in AS 3959 and have been developed to provide a broad scale understanding of the vegetation pattern. The basis for identifying these vegetation categories is to consider if a landscape scale bushfire is likely to occur.

The assessment should contain a level of detail appropriate to the nature and scale of the proposal in relation to its contextual setting. The assessment is primarily concerned with classified vegetation (excluding Class G Grassland) that could support a landscape scale bushfire.

It is recognised that Class G Grassland presents a bushfire risk, as it can burn quickly, however there is generally little or no ember attack and can therefore generally be mitigated through the use of an Asset Protection Zone (APZ) and/or hazard separation, such as a perimeter road.

Landscape scale bushfires occur where there are large areas of contiguous vegetation. While difficult to concisely define due to the wide range of factors that influence bushfire, typical characteristics of a landscape scale bushfire include high intensity fire, high rates of spread, large active flaming zones and frequent spot fires. These characteristics combine to create a significant bushfire event that moves through the landscape as an 'area of fire', often with multiple active fire fronts rather than a single defined fire edge. They often impact many hectares and are difficult to control and defend against.

As a general guide, a contiguous extent of vegetation of one kilometre or more and 100 metres or more in width, has the potential to result in a landscape scale bushfire.

### B.1.2 UNDERTAKING AN OUTCOMES- BASED APPROACH FOR ELEMENT 1 – LOCATION

#### B.1.2.1 Methodology

An outcomes-based approach is detailed in policy measure 7.5 of SPP 3.7 and Section 2 of the Guidelines. The methodology used for an outcomes-based approach will be up to the bushfire practitioner, however, it is recommended that discussions are held with the decision-maker and the Department of Fire and Emergency Services (DFES), prior to preparation of the bushfire management plan (BMP).

The chosen methodology needs to be clear and transparent, as well as being replicable, robust and, where possible, supported by evidence. It has become evident that risk assessments in accordance with methodologies including ISO 3100 and the National Emergency Risk Assessment Guidelines (NERAG) are complex, difficult for decision-makers to interpret and may not be suitable for land use planning decision making.

Where a practitioner intends to prepare a risk assessment to accompany a BMP, discussions should be held with the decision-maker and DFES prior to undertaking the assessment, to ensure there is agreement on the proposed scope and methodology.

#### B.1.2.2 Bushfire scenario planning

Bushfire scenario planning is a useful way to examine the potential impact a bushfire will have around or within the planning proposal.

An output of bushfire scenario planning is the formulation of map(s), which provide a useful spatial representation for decision-makers. These maps should spatially identify: