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Project No: RNO19198.01

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AS 3959 Bushfire Attack Level (BAL) Compliance Report Various lots, Stage 3 Vivente Estate, Hammond Park



Site Details			
Address:	17 residential lots within Stage 3 Vivente Estate		
Suburb:	Hammond Park	State:	Western Australia
Local Government Area:	City of Cockburn		
Description of building works:	Residential development (Class 1a buildings with associated Class 10a buildings)		

Report details			
Report/Job number:	RNO19198.01	Report reference:	RNO19198_01 M001 Rev A
Assessment date:	9/04/2019	Report date:	16 April 2019
Endorsement/Review	Zac Cockerill BPAD Level 2: 37803		

Introduction

This Bushfire Attack Level (BAL) compliance report has been prepared for 17 residential lots within Stage 3 Vivente Estate, Hammond Park (hereon referred to as the project area), located in the City of Cockburn.

This report provides a post-subdivisional works update of the BAL ratings for individual lots within the project area and has been prepared for the benefit of the developer, future lot purchasers and decision-makers. BAL certificates for each individual lot (contained in Appendix 1) have been prepared based on the final site compliance check and are appended to this report for use at the building permit stage.

The BAL assessment outlined in this report is the most up to date assessment relating to the project area and therefore supersedes any previous Strategen BAL assessments undertaken within the project area.

The approach for preparation of this BAL compliance report is consistent with Section 4.2 and Appendix 3 of *Guidelines for Planning in Bushfire Prone Areas* (the Guidelines).

Should subdivision design or the classified vegetation extent be further modified prior to building construction, then an updated BAL assessment for the affected lots may need to be undertaken to account for these changes.

Site assessment and site plan

This BAL compliance assessment has been completed by a Level 2 accredited Bushfire Planning and Design practitioner (Zac Cockerill, BPAD37803) for the purposes of determining the Bushfire Attack Level in accordance with *AS3959–2018 Construction of Buildings in Bushfire-prone Areas Simplified Procedure* [Method 1]. Results are consistent with on-ground conditions observed at the time of inspection on 9 April 2019.

A site plan and site assessment results are depicted in Figure 1.

Vegetation classification

All land within 150 m of the project area was classified in accordance with Clause 2.2.3 of AS 3959 and the *Visual Guide for Bushfire Risk Assessment in Western Australia*. Each distinguishable vegetation classification and exclusion with the potential to determine the Bushfire Attack Level is identified in Table 1 and Figure 1.

No classified vegetation was identified within the project area or adjacent 150 m. Subdivisional works have resulted in the following exclusions within and adjacent to the project area:

- vegetation retained in POS to the north is less than 1 ha in size (0.37 ha) and situated greater than 100 m from any other classified vegetation and is therefore excluded from classification under Clause 2.2.3.2 (b)
- vegetation retained in POS to the south consists of multiple fragmented pockets less than 0.25 ha in size (0.11 ha and 0.024 ha) situated greater than 20 m from each other, the site and any other classified vegetation and is therefore excluded from classification under Clause 2.2.3.2 (c)
- the project area and remaining adjacent land within 150 m is in a cleared/managed, low fuel state and is excluded from classification under Clauses 2.2.3.2 (e) and (f), which includes non-vegetated land (i.e. dwellings, roads, footpaths, other built form/infrastructure) and low threat managed vegetation (i.e. road verge planting, turfed areas, managed gardens, etc).

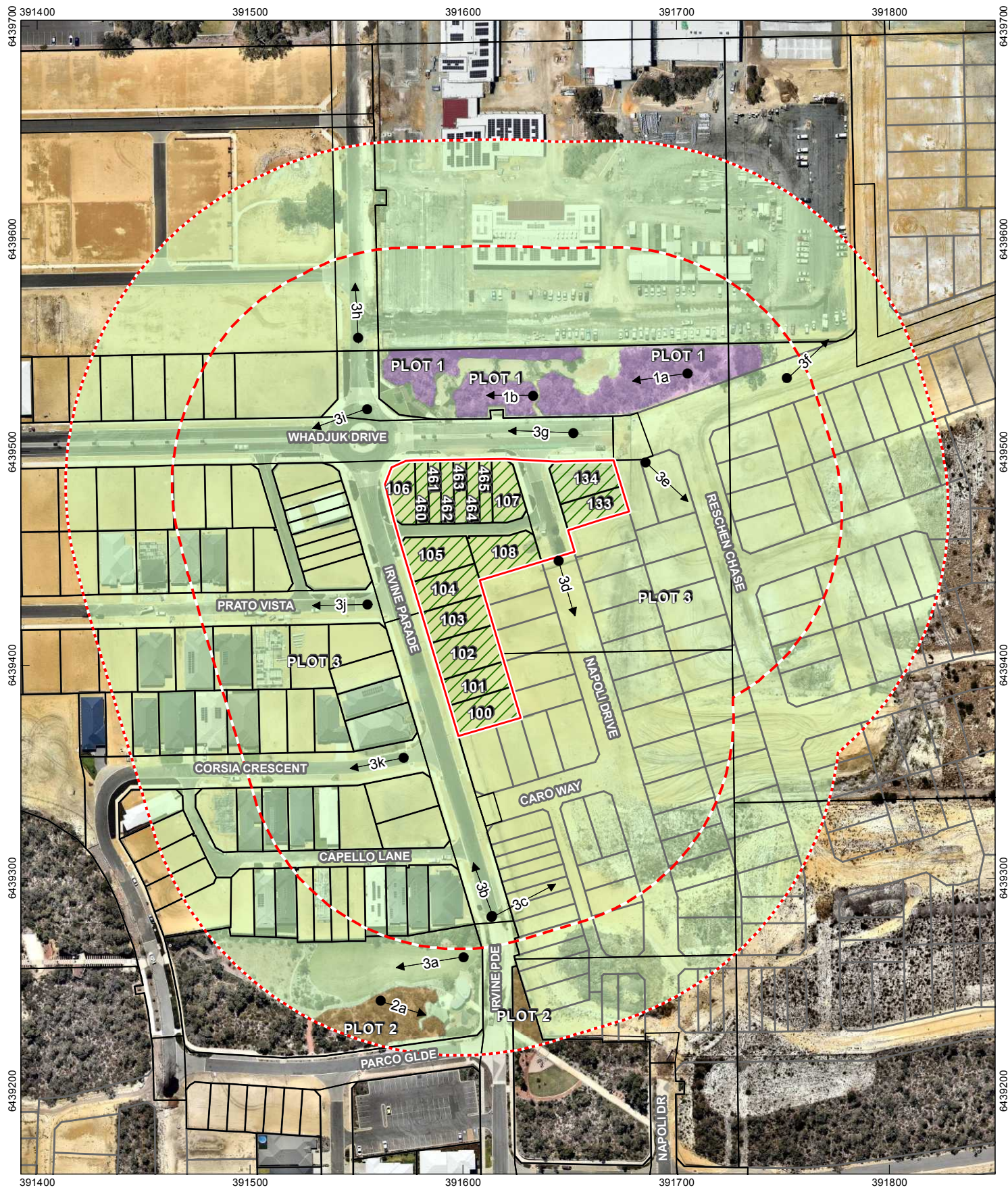
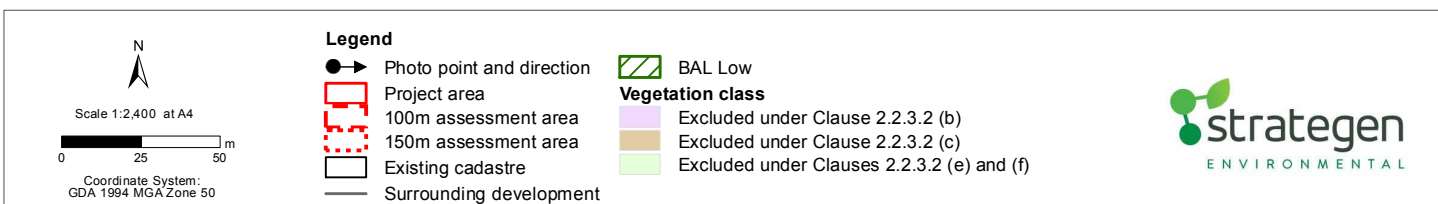


Figure 1: BAL compliance: Stage 3 Vivente



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Table 1: Vegetation classification

Plot 1:	Excluded under Clause 2.2.3.2 (b) of AS3959
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Photo 1a: Area of vegetation less than 1 ha in size (approximately 0.37 ha) and greater than 100 m from any other classified vegetation



Photo 1b: Area of vegetation less than 1 ha in size (approximately 0.37 ha) and greater than 100 m from any other classified vegetation

Plot 2: Excluded under Clause 2.2.3.2 (c) of AS3959



Photo 2a: Multiple areas of vegetation less than 0.25 ha (0.11 ha and 0.024 ha) situated greater than 20 m from the site, each other and other areas of classified vegetation

Plot 3: Excluded under Clauses 2.2.3.2 (e) and (f) of AS3959



Photo 3a: Low threat managed vegetation (central turf area and managed gardens right of shot)



Photo 3b: Combination of non-vegetated areas and low threat managed vegetation



Photo 3c: Non-vegetated areas



Photo 3d: Non-vegetated areas





Photo 3g: Combination of non-vegetated areas and low threat managed vegetation



Photo 3h: Combination of non-vegetated areas and low threat managed vegetation



Photo 3i: Combination of non-vegetated areas and low threat managed vegetation



Photo 3j: Combination of non-vegetated areas and low threat managed vegetation



Photo 3k: Combination of non-vegetated areas and low threat managed vegetation

Relevant Fire Danger Index

The fire danger index for this site/development has been determined in accordance with Table 2.1 of AS 3959 or otherwise determined in accordance with a jurisdictional variation applicable to the site.

Fire Danger Index

FDI 40 ☐

Table 2.4.5

FDI 50 ☐

Table 2.4.4

FDI 80 ☒

Table 2.4.3

FDI 100 ☐

Table 2.4.2

Potential bushfire impacts

The potential bushfire impact to the site/development from each of the identified vegetation plots are identified in Table 2.

Table 2: Method 1 BAL calculation

Classified vegetation	Effective slope	Separation distance (m)	BAL rating
Plot 1 Clause 2.2.3.2 (b) exclusion	N/A	20 m	BAL-Low
Plot 2 Clause 2.2.3.2 (c) exclusion	N/A	110 m	BAL-Low
Plot 3 Clause 2.2.3.2 (e) and (f) exclusions	N/A	N/A	BAL-Low

Determined Bushfire Attack Level

The Determined Bushfire Attack Level (highest BAL) for all proposed lots within the project area is BAL-Low, assessed in accordance with Clause 2.2.6 (Simplified Procedure [Method 1]) of AS3959 using the above analysis.

BAL certificates

BAL certificates are provided in Appendix 1 for all 17 residential lots within the project area as per the BAL compliance assessment outlined in Figure 1.

Conclusion and recommendations

This BAL compliance report has been prepared for 17 residential lots within Stage 3 Vivente Estate, Hammond Park to provide a final BAL check for individual lots for use at the building permit stage. Assessment results are consistent with current on-ground conditions.

In the absence of any change in development design or post-development classified vegetation extent, Strategen considers that the BAL assessment and BAL certificates outlined in this report are accurate to inform individual lot building permit applications.

Should the extent of classified vegetation change or new vegetation be introduced within 100 m of proposed development, then the BAL rating should be reassessed at the building permit stage to ensure accuracy with on-ground conditions.

The BAL assessment outlined in this report is the most up to date assessment relating to the project area and therefore supersedes any previous Strategen BAL assessments undertaken within the project area.

Ongoing requirements of the current City of Cockburn annual firebreak notice should continue to be implemented as required, particularly with regards to ongoing fuel management of vacant land.