




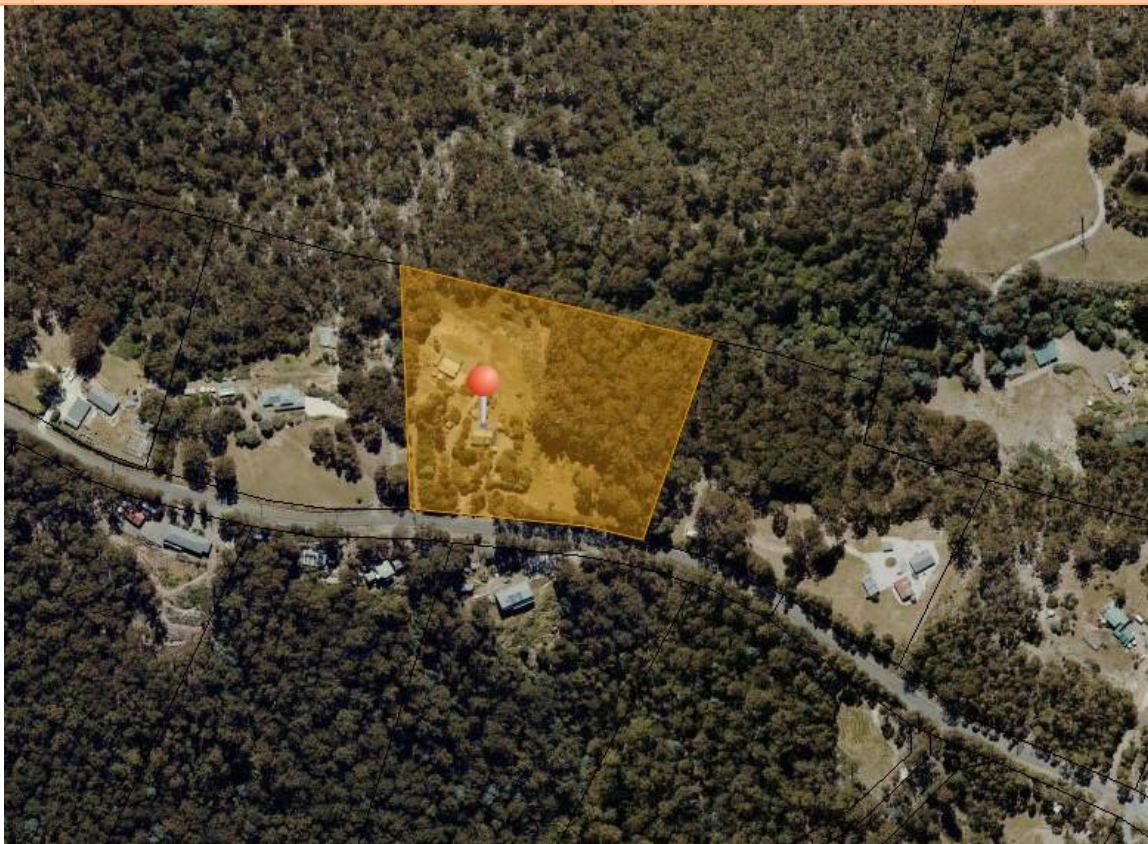
-  BUSHFIRE SITE ASSESSMENTS
-  BUSHFIRE REPORTS
-  HAZARD MANAGEMENT PLANS

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BUSHFIRE ASSESSMENT

Client	Mark and Sarah Mannock	Volume/Folio Number	31351/4
Site	210 Groombridges Road, Kettering, Tas, 7155	PID	7487595
Report By	Jason Van Zetten	Accreditation	BFP113
Date	18 th July, 2023 – version 2	Job Reference	7839



Proposal

The proposal is for retrospective approval of an existing ancillary dwelling which is located on the north western side of an existing dwelling, on a larger 2ha lifestyle lot.

Site Description

The site itself is located on the north side of Groombridges Road which runs east west along the ridgeline of a large hill on the western side of Kettering. The site is approx. 2km west of the Kettering Hotel. At the time of inspection the site was in a mix of managed state in the areas surrounding the dwellings and unmanaged areas.

To the north of the works is grassland extending down the hillside for approx. 20 metres where ferns and scrub become forest at approx. 43m from the works at the property boundary. Beyond the boundary is a larger forested lot which extends down the hillside becoming steeper for around 400m through to an area of lighter forested paddocks associated with lifestyle lots on Saddle Road, which extends to Little Oyster Cove Creek around 800m from the works.

To the east of the works is managed garden and grassland associated with the building itself, extending around 35m from the works to an area of ferns and scrub becoming forest at around 80m, which extends around 130m to the property boundary. Beyond the boundary are large areas of forest which extend across the steep hillsides with smaller cleared areas associated with residential uses, extending along Groombridges Road for around 1.8km through to an area of grassed lifestyle lots, with the southern end of residential Kettering beyond this.

To the south of the works is managed gardens and the existing dwelling itself which extends up the hillside for around 80m including the driveway associated with the dwelling, through to Groombridges Rd. Beyond the road, approx. 100m from the works, are lifestyle dwellings on larger forested lots which extend steeply down the adjacent hillside to Flights Creek, approx. 600m from the works. Beyond this, heavy forest extends to the south over the adjacent hillsides.

To the west of the works is managed garden which extends to the property boundary approx. 20m from the works. Beyond the boundary is an area which is partially managed and associated with the neighbouring property at 214 Groombridges Road, which extends to around 80m from the works where forest extends on the lower side of Groombridges Road for at least 650m from the works. A mix of forest and grassland areas extend across lifestyle properties on Saddle Road through to the northern end of the Farewell Hill Ridge, around 2.5km from the site.



Water Supply

There are no fire hydrants within the required distance of the works and therefore fire fighting water supply will be required.

This will require the installation of a water tank either steel or concrete with a capacity of 10,000 litre static water supply. The tank is to be fitted with Tas Fire approved 'Storz' fittings as per the requirements set out by Tas Fire. Signage on the tank and on the access gate to the property will be required as per the Tas Fire Specifications attached.

The tank is required to be installed at least 6 metres from the dwelling with access to the tank within 3 metres of an area suitable for fire truck access as per Building Act 2016 - Directors Determination – Requirements for Building in Bushfire Prone Areas.

Access

Access is via an existing driveway which is more than 30 metres in length and forks off to the existing dwelling and the proposed works. Large turning areas and parking bays exist, and it is envisaged that only minor modification would be required to meet the requirements.

The following design and construction requirements apply to property access greater than 30m in length or for access to a fire appliance to a firefighting water point:

- (a) All-weather construction;
- (b) Load capacity of at least 20 tonnes, including for bridges and culverts;
- (c) Minimum carriageway width of 4 metres;
- (d) Minimum vertical clearance of 4 metres;
- (e) Minimum horizontal clearance of 0.5 metres from the edge of the carriageway;
- (f) Cross falls of less than 3° (1:20 or 5%);
- (g) Dips less than 7° (1:8 or 12.5%) entry and exit angle;
- (h) Curves with a minimum inner radius of 10 metres;
- (i) Maximum gradient of 15° (1:3.5 or 28%) for sealed roads, and 10° (1:5.5 or 18%) for unsealed roads; and
- (j) Terminate with a turning area for fire appliances provided by one of the following: (i) A turning circle with a minimum outer radius of 10 metres; (ii) A property access encircling the building; or (iii) A hammerhead "T" or "Y" turning head 4 metres wide and 8 metres long.



Constraints & Opportunities

1. The dimensions referred to in the description are nominal to key features as determined by the author. There may be variation in these number however this does not change the final outcome.
2. Clearly defined managed areas already exist associated with the existing dwelling and the site.
3. Initially this report was issued at BAL 19, however, upon request from the council and subsequently then the client, the management area was reduced to BAL 29 setbacks and this report and hazard management plan updated.
4. Woodland has been deemed the key classifiable vegetation AS3959/2018 Table 2.3 Classification of Vegetation. to the south and the west based on much of the forest vegetation being removed and managed garden areas associate with this site and the neighbouring site to the west creating a lesser threat. Forest is the key classifiable vegetation to the north and east as per AS3959/2018 Table 2.3 Classification of Vegetation.
5. It is clear that the owners are managing the existing site surrounding the existing dwellings.
6. The slopes are undulating in all directions and may include localised areas steeper than those setout, however these are only small portions and are deemed to be of minimal consequence.

Bushfire Hazard Management Plan

The attached Bushfire Hazard Management Plan must be implemented prior to occupation of the new works.

Failure to meet the requirements of this report may invalidate your insurance policy in the event of a bushfire.

The highlighted area is required to be maintained as per the plan and in line with AS3959/2018.

Limitations

This report only deals with potential bushfire risk and all other statutory assessments are outside this report. All information provided was as at the time of inspection of the site, and this report is not to be used for further or future development of the site other than what has been provided by the plans attached. This report and/or management plan does not guarantee that the building will survive a bushfire.



Conclusion

As the proposed works are within 100m of 1 hectare or greater of classifiable vegetation and the site is within a bushfire prone mapped area, a BAL assessment is required for the purpose of these works.

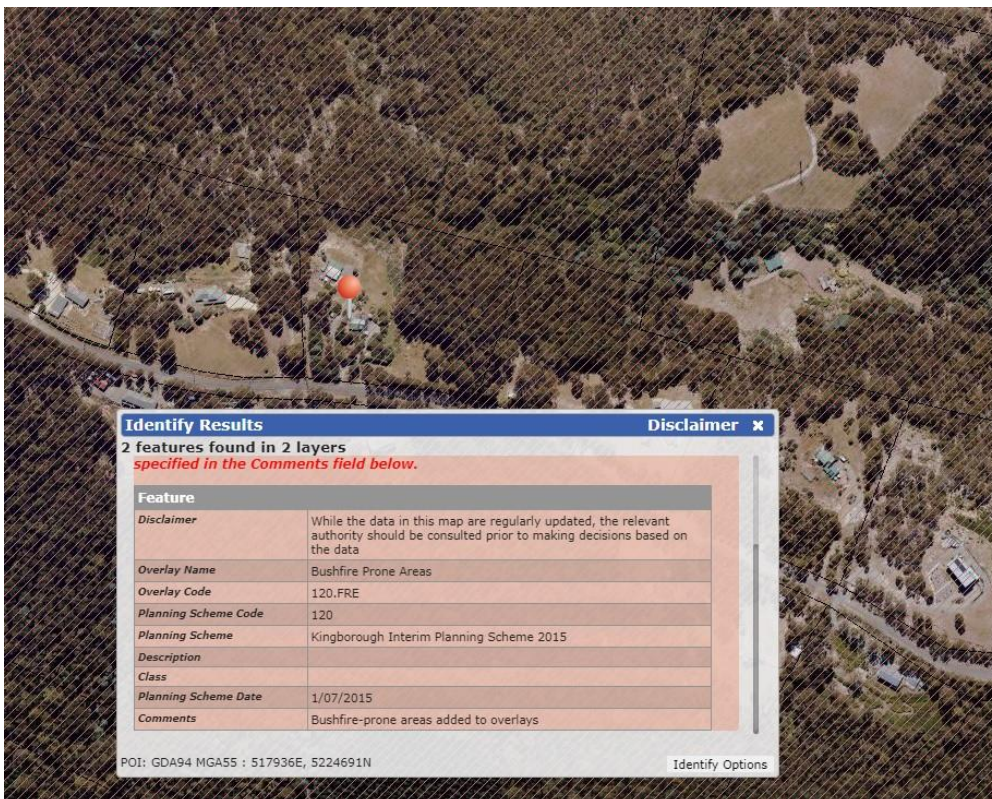
After consideration of slopes in all directions it is deemed that downslope of 10-15 degrees to be north and 5-10 degrees to the east be adopted across the undulating hillsides, while an upslope exists to the south and west where the adjacent land slopes uphill away from the works at a distance of 0-100 metres.

Based on this, with classifiable forest to the north and east and woodland being deemed the key classifiable calculator to the south and west, where forest is reduced surrounding dwellings and managed gardens, a BAL 29 classification can be adopted upon implementation of a bushfire hazard management plan extending 30 metres to the north 24m to the east and 10m to both the south and west. This has been based on the distances set out in AS3959/2018 Table 2.6 Determination of BAL FDI 50.

BAL 29 to AS3959-2018

Bushfire Mapping

This site is considered bushfire prone as per LISTmap.





Photos



Photos



Photos



Bushfire Site Assessment

Vegetation classification AS3959	North	East	South	West
Group A	Forest	Forest	Forest	Forest
Group B	Woodland	Woodland	Woodland	Woodland
Group C	Shrub-land	Shrub-land	Shrub-land	Shrub-land
Group D	Scrub	Scrub	Scrub	Scrub
Group E	Mallee-Mulga	Mallee-Mulga	Mallee-Mulga	Mallee-Mulga
Group F	Rainforest	Rainforest	Rainforest	Rainforest
Group G	Grassland	Grassland	Grassland	Grassland
Predominant Feature	Forest	Forest	Woodland	Woodland
Excluded	Managed area around dwelling	Managed area around dwelling	Managed area around dwelling	Managed area around dwelling
Effective slope (degrees)	Up/0°	Up/0°	Up/0°	Up/0°
	>0-5°	>0-5°	>0-5°	>0-5°
	>5-10°	>5-10°	>5-10°	>5-10°
	>10-15°	>10-15°	>10-15°	>10-15°
	>15-20°	>15-20°	>15-20°	>15-20°
Distance to classified vegetation	20 metres (nominal)	20 metres (nominal)	20 metres (nominal)	20 metres (nominal)
Distance Required for Onsite Bushfire Hazard Management	30 metres	24 metres	10 metres	10 metres
Likely direction of bushfire attack	North	East	South	West
Prevailing winds	North	East	South	West
BAL Value (FDI 50)	BAL – 29	BAL – 29	BAL – 29	BAL – 29

The values have been achieved from the location proposed, within the constraints of the site. If the location or nature of the proposal is to be altered for any reason this report will need to be amended to suit



Appendix 1: General Overview of Bushfire Attack Level Classifications

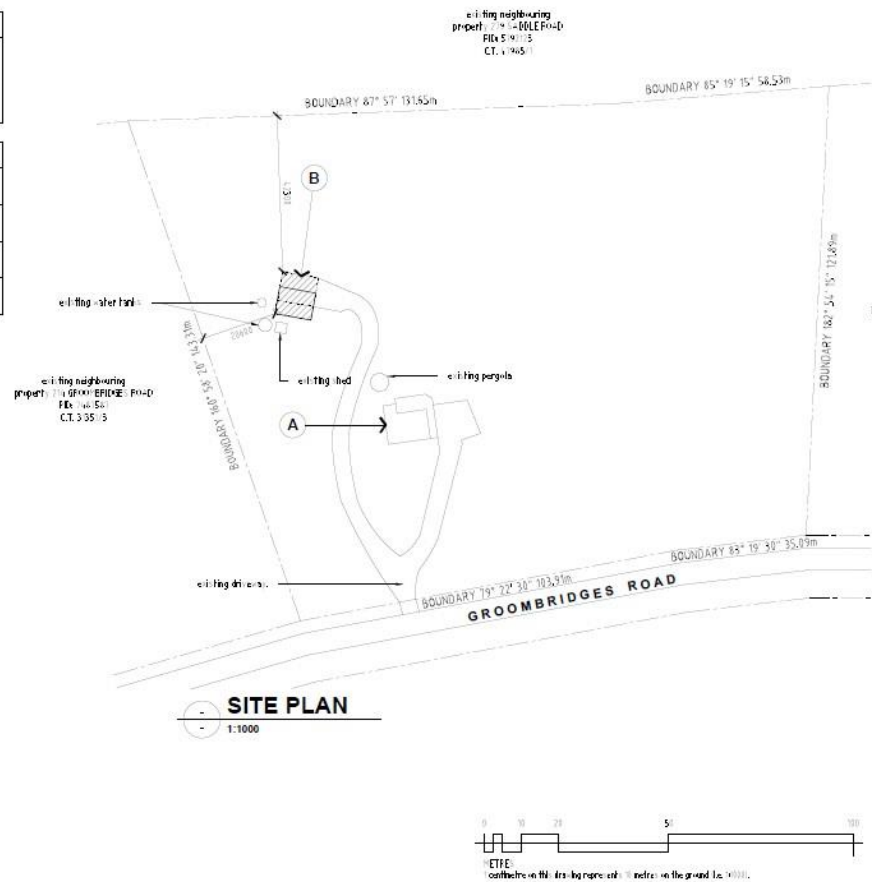
BAL – LOW	<p>The risk is considered to be VERY LOW.</p> <p>There is insufficient risk to warrant any specific construction requirements but there is still some risk.</p>
BAL – 12.5	<p>The risk is considered to be LOW.</p> <p>There is a risk of ember attack. The construction elements are expected to be exposed to a heat flux not greater than 12.5 kW/m².</p>
BAL – 19	<p>The risk is considered to be MODERATE.</p> <p>There is a risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 19 kW/m².</p>
BAL – 29	<p>The risk is considered to be HIGH.</p> <p>There is an increased risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to an increased level of radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 29 kW/m².</p>
BAL – 40	<p>The risk is considered to be VERY HIGH.</p> <p>There is a much increased risk of ember attack and burning debris ignited by windborne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux not greater than 40 kW/m².</p>
BAL – FZ	<p>The risk is considered to be EXTREME.</p> <p>There is an extremely high risk of ember attack and burning debris ignited by windborne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux greater than 40 kW/m².</p>

Appendix 2 – plan as provided by client

SITE NOTES	
Property Address:	210 GROOMBRIDGES ROAD
Property ID:	7487555
Title Reference:	3135/14
Site Area:	2.105 HA
Municipality:	KINGBOROUGH COUNCIL
Owner:	MARK & SARAH MANNOCK

SITE KEY	
A	OUTLINE OF EXISTING BUILDING
B	PROPOSED DOUBLE GARAGE WITH EFFECTIVE AFFRONTAL EASEMENT HATCH

FLOOR AREAS	
EXISTING BUILDING FOOTPRINT AREA	= 10.11 sqm
PROPOSED BUILDING FOOTPRINT AREA	= 13.65 sqm
PROPOSED DECK AREA	= 11.24 sqm
EX. LOT SIZE	= 2.105 Ha



SHEET No. 2 OF 6	
DATE	DRAWN
DESCRIPTION	
ISSUE	
A	PROPOSED RETROSPECTIVE APPROVAL
	210 GROOMBRIDGES ROAD, KESTER
	MARK AND SARAH MANNOCK
	SITE PLAN
	Drawn
	Checked
	Design

SCALE	5545
DATE	A02
DRAWN	EJ
CHECKED	

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