

# BUSH FIRE ASSESSMENT REPORT

**-Serene Paradise-  
Tourist Accommodation  
362 Luskintyre Road  
LUSKINTYRE**



**PREPARED BY:**



**JUNE 2023**



## PEAK LAND MANAGEMENT

Land management consulting services:

**-Bush Fire-**

**-Ecological-**

**-Environmental-**

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Cover Photo: View of subject site.



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### Document History

Document Id.	Prep. Date	Version	Submitted to
Bush Fire Report	1.6.23	1	Complete Planning

## AUTHOR DETAILS

Ted Smith is the director of PEAK LAND MANAGEMENT. He is a qualified Land Management Consultant with a Bachelor of Science Honours Degree in Physical Geography. He has over 25 years experience commercially consulting with PEAK LAND MANAGEMENT PTY LTD and working within state government.

Ted has completed a Graduate Diploma in Design for Bush Fire Prone Areas from the University of Western Sydney and is a member of the Fire Protection Association of Australia (FPA of Australia), being a BPAD Accredited Bush Fire Practitioner Level 3.

## CERTIFICATION

Ted Smith of PEAK LAND MANAGEMENT has carried out a Bush Fire Assessment including a site inspection on the subject property. A detailed Bush Fire Assessment Report is attached which includes the submission requirements set out in *Appendix 2 & 4 of Planning for Bush Fire Protection 2019* together with recommendations as to how the relevant specifications and requirements are to be achieved.

I hereby certify, in accordance with Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*:

1. That I am a person recognised by the *NSW Rural Fire Service* as a qualified consultant in Bush Fire Risk Assessment; and
2. That subject to the recommendations contained in the attached Bush Fire Assessment Report the proposed development conforms to the **relevant specifications and requirements** being the document entitled *Planning for Bush Fire Protection* prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other document as prescribed by Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*.



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Signature

1<sup>st</sup> June, 2023

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Date



## 1.0 INTRODUCTION

PEAK LAND MANAGEMENT has been engaged by Complete Planning on behalf of Serene Paradise to prepare a Bush Fire Assessment Report for proposed Tourist Accommodation over land located at Lot 40 DP 1079499/362 Luskintyre Road LUSKINTYRE (referred to hereafter as “subject site”).

Figures 1-5 show the subject site location, topographic map, vegetation assessment, site plan and Appendix 1 shows photos of the subject site.

Under the *Environmental Planning and Assessment Act, 1979* (and its regulations), and the *Rural Fires Act 1997* (and its regulations), councils are required to assess and control new developments in Bush fire prone areas. This land has been assessed as being part of a Bush Fire Prone Land Area as mapped by Council (Fig 5). In this case the actual tourist accommodation proposed site location is not over bush fire prone land. In these cases it is up to Council/NSW Rural Fire Service whether a hazard exists or not, and their determination. As a hazard has been assessed by the consultant, a report has been prepared.

It should be noted that Section 4.14 of the *Environmental Planning and Assessment Act 1979* requires Councils to be satisfied that developments in Bush fire Prone Areas comply with *Planning for Bush Fire Protection 2019* (PBP) guidelines, and relevant standards including the BCA which calls up AS 3959-2018 before granting development consent.

PBP 2019 states that Tourist Accommodation is classed as Special Fire Protection Development and falls under Section 100B of the Rural Fires Act. It should have required Asset Protection Zones to allow <10kw/m<sup>2</sup> radiant heat exposure, adequate access, water, and services as stated under the Act and comply with PBP 2019. It requires integrated development approval/ Bush Fire Safety Authority from the Rural Fire Service.

This report has been prepared in accordance with “*Planning for Bush fire Protection (PBP) 2019*” guidelines, and makes reference to AS 3959. Clause 46 of the *Rural Fires Regulation 2002* sets out these requirements, which are addressed in this report. A Bush Fire Assessment Report is required showing the current situation and recommending how the risk may be ameliorated.

## 2.0 BUSH FIRE ATTACK SITE ASSESSMENT SUMMARY

**FDI:**100

**PREDOMINANT VEGETATION TYPES WITHIN 140 METRE RADIUS OF SITE (as per PBP 2019 & AS 3959):** Managed Land.

**AVERAGE SIGNIFICANT SLOPE UNDER VEGETATION OUT TO 100 METRES:** See Table 1.

**BUSH FIRE ATTACK LEVEL (BAL- kW/m<sup>2</sup> Radiant Heat Flux):** BAL LOW.



Figure 1: Aerial photo showing subject site (imagery from Lands Department). North to top of all images.





Figure 2: Aerial photo showing subject site in more detail and vegetation assessment within 100m (imagery from Lands Department)



Figure 3: Topographic map showing subject site (imagery from Lands Department)

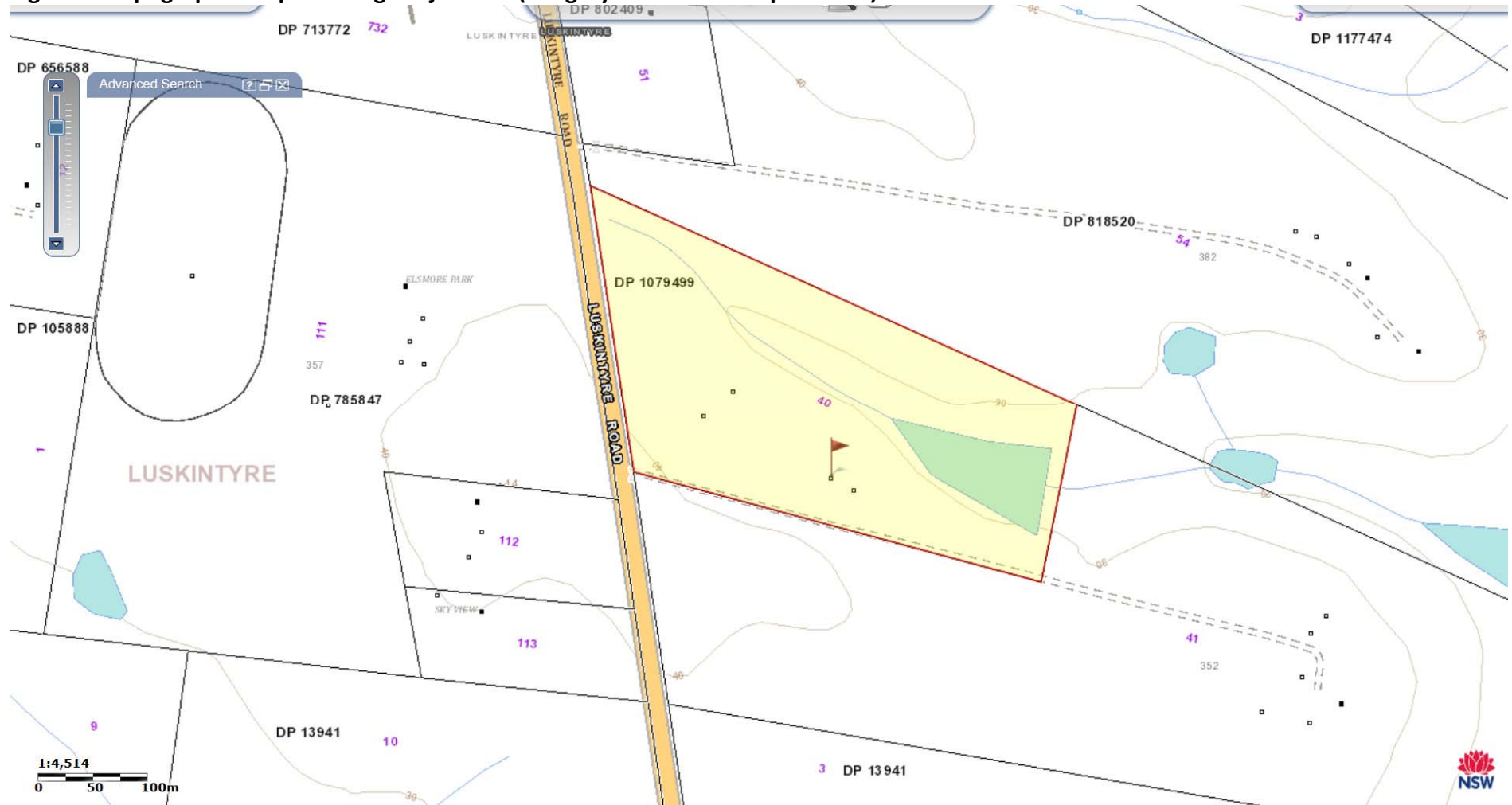
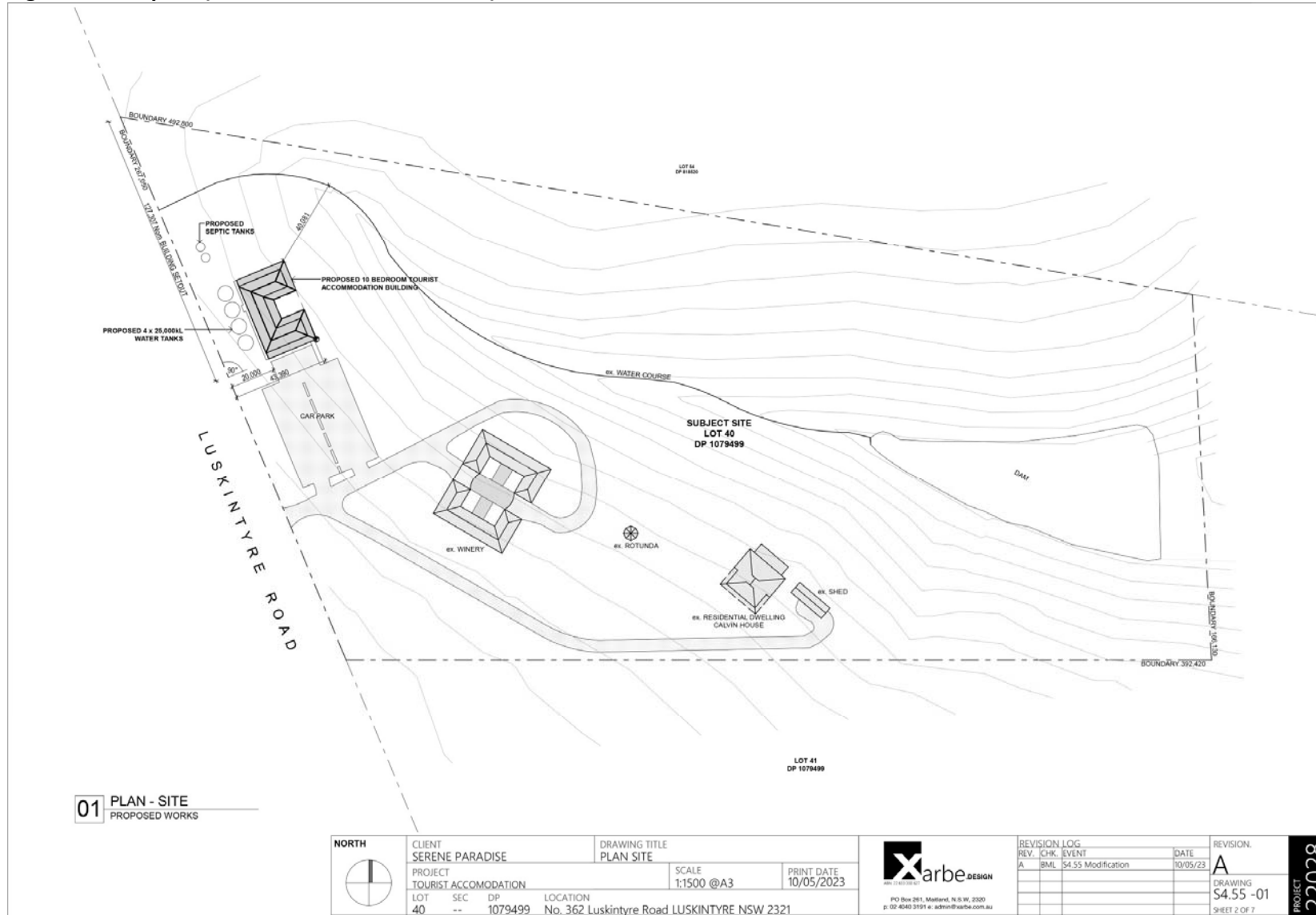




Figure 4: Site plan (from Xarbe, dated 10.5.23)



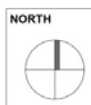
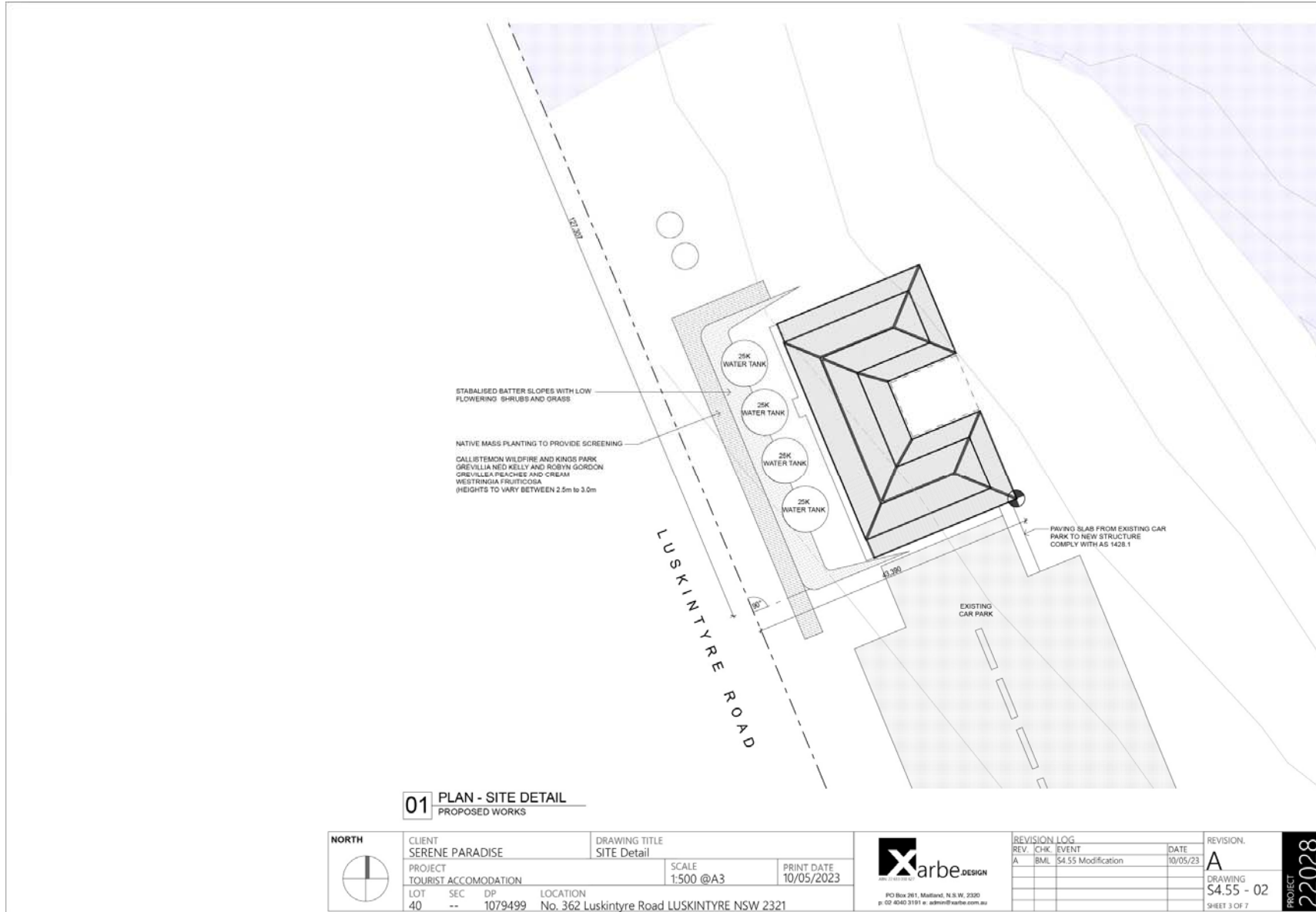
01 PLAN - SITE  
PROPOSED WORKS

<p>NORTH</p>	<p>CLIENT SERENE PARADISE</p>	<p>DRAWING TITLE PLAN SITE</p>
	<p>PROJECT TOURIST ACCOMODATION</p>	<p>SCALE 1:1500 @A3</p>
	<p>LOT SEC DP LOCATION 40 -- 1079499 No. 362 Luskintyre Road LUSKINTYRE NSW 2321</p>	<p>PRINT DATE 10/05/2023</p>

**Xarbe DESIGN**  
ARCHITECTURE  
 PO Box 261, Maitland, N.S.W. 2320  
 p: 02 4940 3191 w: admin@xarbe.com.au

REVISION LOG		DATE
REV.	CHK. EVENT	
A	BML S4.55 Modification	10/05/23

<p>REVISION: A</p>	<p>DRAWING S4.55 -01</p>
<p>SHEET 2 OF 7</p>	<p>PROJECT 22028</p>



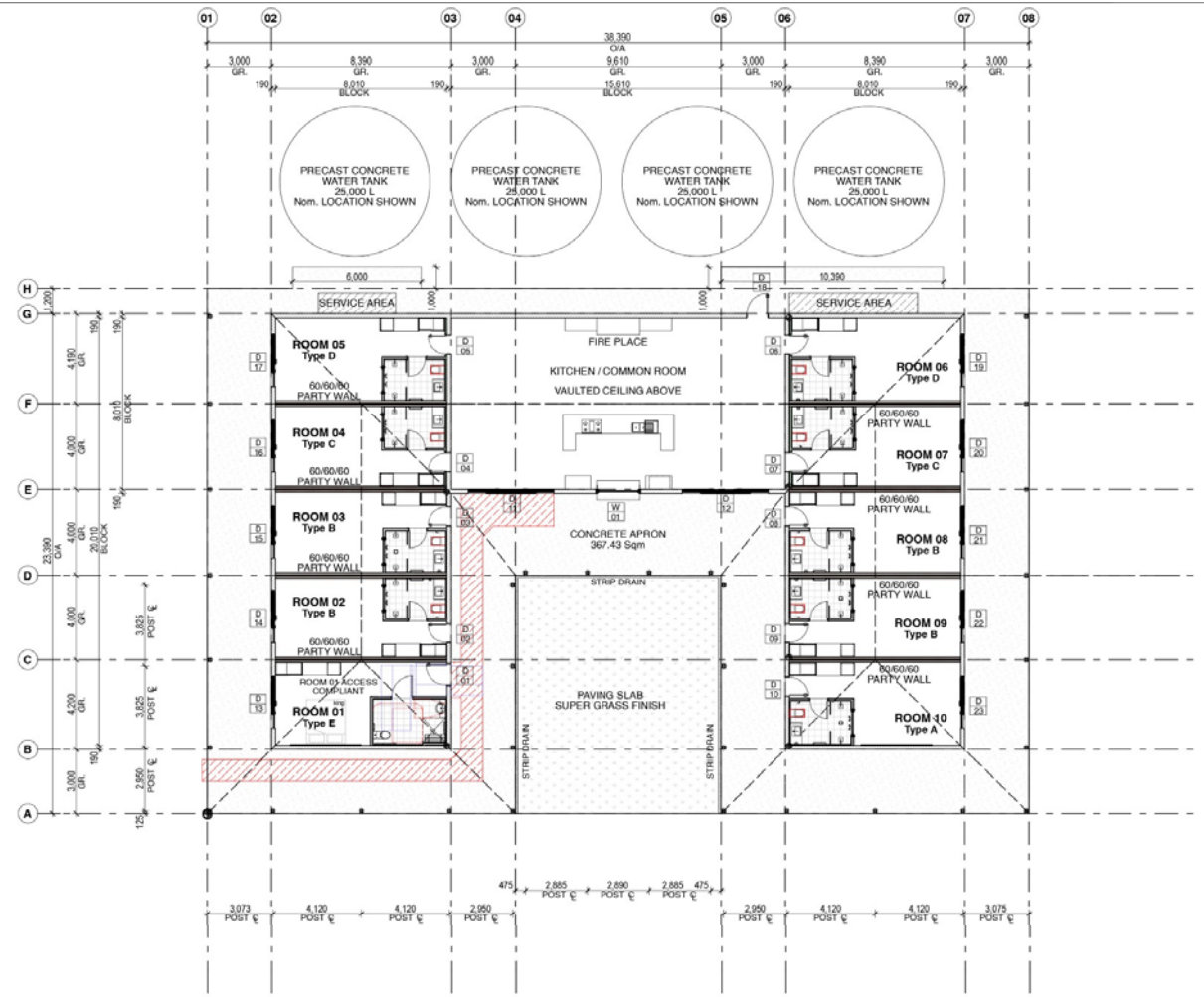
CLIENT SERENE PARADISE	DRAWING TITLE SITE Detail	SCALE 1:500 @A3	PRINT DATE 10/05/2023
PROJECT TOURIST ACCOMMODATION	LOT 40	SEC --	DP 1079499
LOCATION No. 362 Luskintyre Road LUSKINTYRE NSW 2321			



REVISION LOG			DATE
REV.	CHK.	EVENT	
A	BML	\$4.55 Modification	10/05/23

REVISION: <b>A</b>
DRAWING \$4.55 - 02
SHEET 3 OF 7

PROJECT  
**22028**



**NOTE:**  
**DO NOT SCALE DRAWING - REFER ONLY TO WRITTEN DIMENSIONS**  
 CONTRACTOR MUST VERIFY ALL DIMENSIONS AND LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS, ORDERING & OR MANUFACTURE OF ANY MATERIALS.  
 DRAWINGS TO BE READ IN CONJUNCTION WITH SPECIFICATIONS.  
 SHOULD DISCREPANCIES OR ERRORS BE DISCOVERED ON THE DRAWINGS OR SPECIFICATIONS, XARBE DESIGN MUST BE NOTIFIED IMMEDIATELY.  
 ALL BUILDING WORKS TO BE COMPLETED IN ACCORDANCE WITH THE NCC/BCA AND TO THE SATISFACTION OF THE LOCAL AUTHORITY AND OR BUILDING SURVEYOR

**01 PLAN - FLOOR**  
 PROPOSED WORKS

CLIENT <b>SERENE PARADISE</b>	DRAWING TITLE <b>PLAN - Floor 00</b>	
PROJECT <b>TOURIST ACCOMMODATION</b>	SCALE <b>1:200, 1:20 @A3</b>	PRINT DATE <b>10/05/2023</b>
LOT <b>40</b>	SEC <b>--</b>	DP <b>1079499</b>
LOCATION <b>No. 362 Luskintyre Road LUSKINTYRE NSW 2321</b>		



REVISION LOG			DATE
REV.	CHK.	EVENT	
A	BML	54 55 Modification	10/05/23

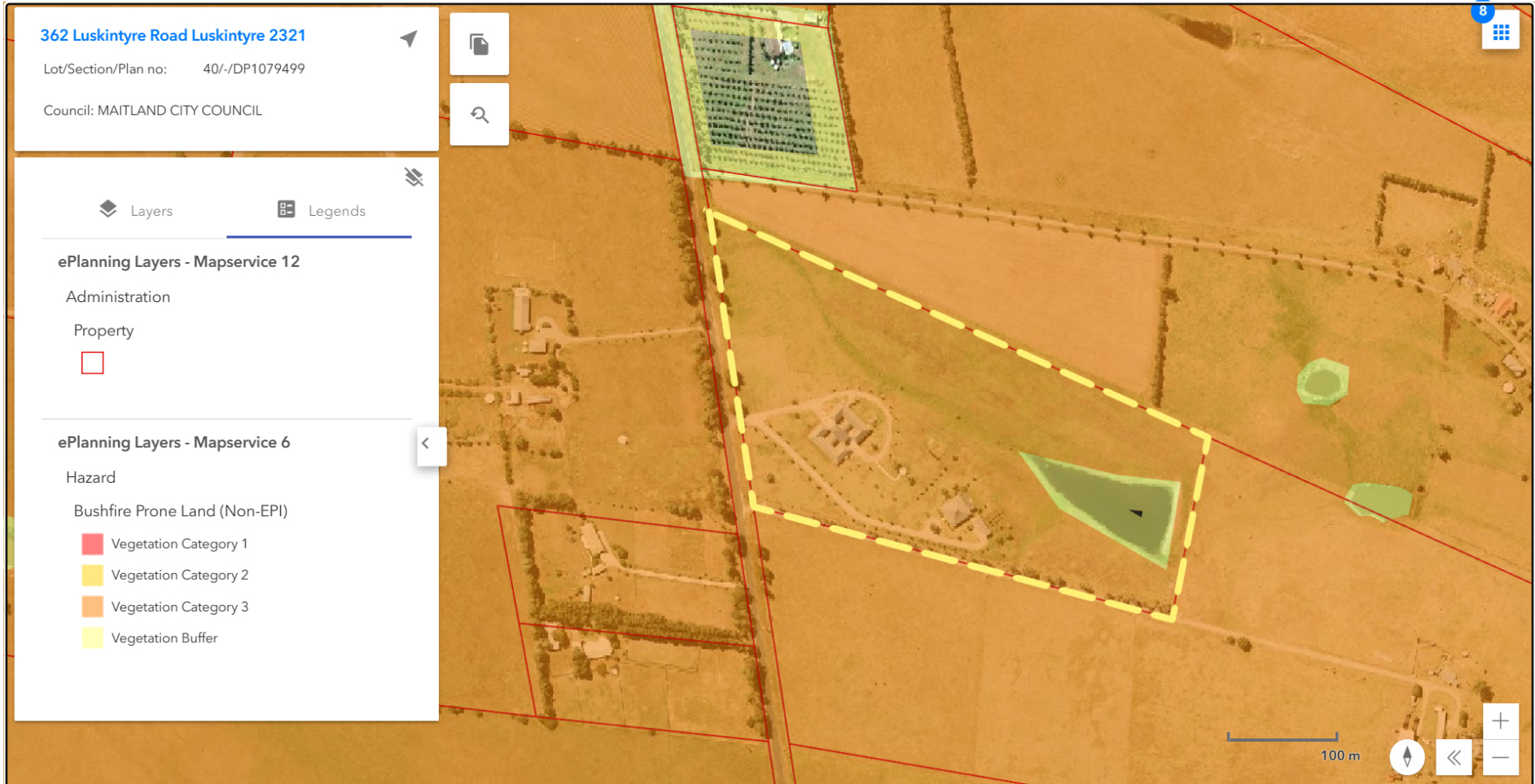
**AREA TABLE**  
 SOU (ACCOMMODATION) 320.56 Sqm  
 COMMON AREA 125.04 Sqm  
 TOTAL AREA 445.60 Sqm

REVISION:  
**A**  
 DRAWING  
**S4.55 -03**  
 SHEET 4 OF 7

PROJECT **22028**



Figure 5: Bush Fire Prone Land Map of subject site



### **3.0 SPECIFICATIONS, UTILITIES, ACCESS AND SURROUNDING LANDUSE**

#### **3.1 SCOPE OF WORKS**

Photos of the site and surrounds are shown in Appendix 1. The proposed Tourist Accommodation 10 room Accommodation Building is shown in Figure 4.

The proposed Tourist Accommodation building will be constructed in conformation with AS 3959 as detailed within this report, and councils consent conditions.

#### **3.2 SURROUNDING LAND USE**

The subject site and surrounding vegetation and landuse/topography are shown in Figures 1-5.

The site is located in a rural area, with rural land in all directions which is grazed and/or slashed and considered managed land.

#### **3.3 ACCESS**

The proposed tourist building is accessed from a short proposed access road (<30m long) from a Luskintyre Road, a two way through public road.

A turning area for fire tankers is located around/adjoining the subject tourist building over the carpark.

#### **3.4 UTILITIES/WATER SUPPLIES**

The proposed Tourist Accommodation building will be serviced by overhead electricity on timber poles, serviced either underground or overhead to the building.

The subject building is not serviced by reticulated water supplies, it will be serviced by static water tanks. Water supply will be provided from four concrete 25 000l water tanks.

As the building has no bush fire requirements dedicated water supply is not required. Nevertheless any of these tanks could be used. A nearby dam is also present to the east, around 1 megalitre capacity.

The dam is accessible by fire tanker (in excess of PBP, 2019 Table 5.3d water requirements).

### **3.0 VEGETATION**

**The predominant vegetation type within 140m is Managed Land assessed as per PBP 2019 (Figures 1-3, Appendix 1 - photos).**

Managed Grassland is present on all land surrounding the development within 140m. It was slashed and grazed intensively (see photos) and <100mm in height at time of inspection and is classified as Managed Land in accordance with NSW Rural Fire Service policy, and bush fire prone land mapping guidelines.

Note the bush fire prone land mapping (Fig 5) is incorrect in this instance.

#### 4.0 SLOPE

Slope assessment has been carried out under flammable vegetation within 100 metres of the building as specified under the Guidelines Assessment Procedure. The angles have been measured in the field by an inclinometer, and measure the slope under the vegetation. See Table 1.

PBP, 2019 states: - *“The effective slope is considered to be the slope under the vegetation which will most significantly influence the bush fire behaviour for each aspect. This is usually the steepest slope. In situations where this is not the case, the proposed approach must be fully justified. Vegetation located closest to an asset may not necessarily be located on the effective slope”.*

#### 5.0 ENVIRONMENTAL FEATURES

The subject site where the proposed Tourist Accommodation building & Asset Protection Zone are to be located is cleared and currently slashed. No clearing is proposed or required. There are therefore no environmental features affected directly by the proposal.

#### 6.0 ABORIGINAL FEATURES

An Aboriginal archeological survey/or AHIMS search has not been undertaken to the authors knowledge. The proposed development is however over cleared disturbed land.

#### 7.0 BUSH FIRE ASSESSMENT

The legislation as it relates to this site calls for asset protection zones (APZ) to be established around the proposed development, provision of adequate access, design staging and citing of the development and provision of appropriate water supply for bush fire fighting purposes.

##### 7.1 Setbacks including asset protection zones

Table 1 shows the bush fire assessment for the subject site.

**Table 1: Bush Fire Site Assessment –FDI 100**

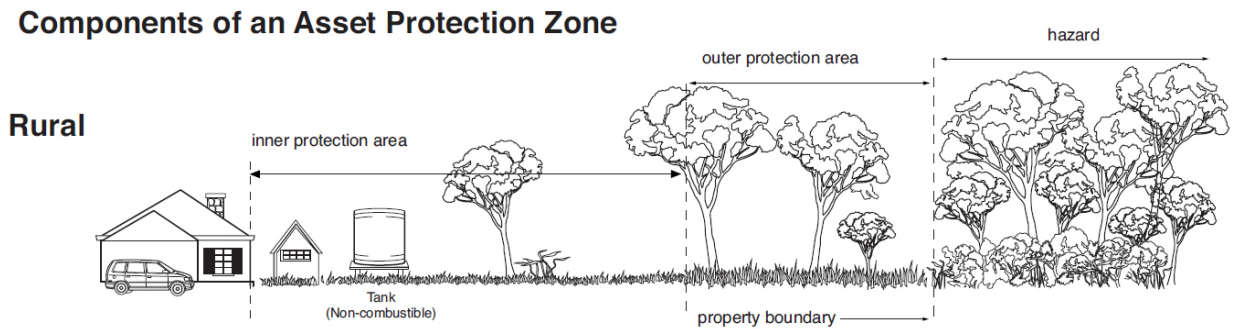
DIRECTION TO BUSH FIRE HAZARD	EFFECTIVE SLOPE	PREDOMINANT VEGETATION TYPE WITHIN 100m as per PBP 2019	Distance to edge of hazard	PBP 2019 required min. Asset Protection Zone (Table A1.12.2)	Bush Fire Attack Level (BAL) (from PBP, 2019)
All directions	N/A	Managed Land	-	-	BAL LOW



Note: BAL refers to the maximum Bush fire attack level expressed in kW/m<sup>2</sup> radiant heat flux exposure for the given slope, distance to hazard, and type of hazard (ie vegetation type and fuel load).

A lowering of one BAL is supported by PBP 2019 and AS 3959 where the elevation of the building is not exposed directly to the source of bush fire attack and/or is shielded by the building/other buildings/landforms, or is set back sufficiently to achieve the next lower BAL as described in AS 3959. This is not applicable in this case.

**Figure 6: Asset Protection Zone standard example(from PBP, 2006)**



## 8.0 BUSH FIRE RECOMMENDATIONS

The development complies with PBP, 2019 and will comply with AS 3959:

- ❑ Serviced by unreticulated tank /dam water supplies- complies with PBP, 2019/ Rural Fire Service policy.
- ❑ Serviced by overhead power—complies with PBP, 2019.
- ❑ Serviced by property access road – complies with PBP, 2019.
- ❑ Asset Protection Zone present- provides a defensible space available around the building- complies with PBP, 2019.
- ❑ Proposed development to be built in conformance with AS 3959 & PBP 2019 - complies with PBP, 2019.
- ❑ Landscaping- complies with PBP, 2019.

The following recommendations are made in order to comply with PBP, 2019:

- ❑ **Design and Construction:** - The intent of measures is that buildings are designed and constructed to withstand the potential impacts of bush fire attack. To achieve this, the following conditions are recommended:
  - The Tourist Accommodation building is assessed as BAL LOW, and has no bush fire requirements.
- ❑ **Asset Protection Zone:** - The intent of measures is to provide sufficient space and maintain reduced fuel loads to ensure radiant heat levels at the buildings are below critical limits and prevent direct flame contact. To achieve this, the following conditions should apply:
  - At the commencement of building works and in perpetuity the nominated Asset Protection Zone being the entire site within 50m of the building shall be managed to an Inner Protection Area Asset Protection Zone as outlined within Appendix 4 of *Planning for Bushfire Protection, 2019*.

*In summary PBP states “Asset Protection Zone should consist of mown grass, concrete, pavers, pebbles, small clumps of vegetation, isolated trees, etc. Lawns and garden should be maintained so that they do not become overgrown, vegetation does not grow over or touch the building, and canopy of trees do not touch or become continuous with the surrounding bushland (at least 2-5 metres between tree canopies).*

Note- all trees over the nominated Asset Protection Zone can be retained, and are not considered a hazard being akin to a windbreak which is classified as exempt or managed land under PBP, 2019.

- ❑ **Landscaping** - The intent of measures is landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions. To achieve this, the following conditions should apply:
  - Landscaping to the Asset Protection Zone is to comply with the principles of Asset protection zone standards - Appendix 4 of 'Planning for Bush Fire Protection 2019'.

The bush fire risk is considered to be adequately managed through the recommendations made above, and in conjunction with consent conditions from NSW Rural Fire Service and Council.

Report prepared by:



Ted Smith BSc (Hons), Grad Dip, BPAD-A Certified Bush Fire Practitioner -FPA Australia 17671  
PEAK LAND MANAGEMENT PTY LTD

**DISCLAIMER:** Whilst every effort is made to present clear and factual information based on fieldwork and current legislation no guarantee is made that the development or its occupants are safe from bush fire, or development will be approved or to the recommended BAL, as this is in the hands of the approving statutory authorities/certifier. No warranty or guarantee, whether expressed or implied, is made with respect to the observations, information, findings and inclusions expressed within this report. No liability is accepted for losses, expenses or damages occurring as a result of information presented in this document.



## 9.0 REFERENCES

Auld, BA & Medd, RW 1987, *Weeds*. Inkata Press.

Brooker, MIH and Kleineg, DA. 2019. *Field Guide to Eucalypts – South Eastern Australia, Volume 1*. Blooming Books.

Building Code of Australia.

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Keith, D., 2012. *Ocean shores to desert dunes: the native vegetation of NSW and the ACT*. NSW Department of Environment and Conservation.

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NSW Rural Fire Service, 2014. *10/50 Vegetation Clearing Code of Practice*. State of NSW.

NSW Rural Fire Service, 2019. *SHORT FIRE RUN Methodology for Assessing Bush Fire Risk for Low Risk Vegetation*.

NSW Rural Fire Service, 2019. *COMPREHENSIVE VEGETATION FUEL LOADS*.

NSW Rural Fire Service, 2019. *Planning for Bush Fire Protection Guidelines*.

Robinson, L. 2003 (3<sup>rd</sup> ed). *Field guide to the Plants of Sydney*. Kangaroo Press.

Standards Australia AS 3959-2018. *Construction of buildings in Bush Fire prone area*.

### Websites

[www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)  
Lands Department- SIX Maps  
ePlanning  
Maitland City Council

## APPENDIX 1: PHOTOS OF SITE AND SURROUNDS

Subject site – access road to existing building/carpark. Looking east



Subject site –proposed Tourist Accommodation building (in background).Looking north







Looking west over neighbours land showing managed land (slashed/grazed managed)

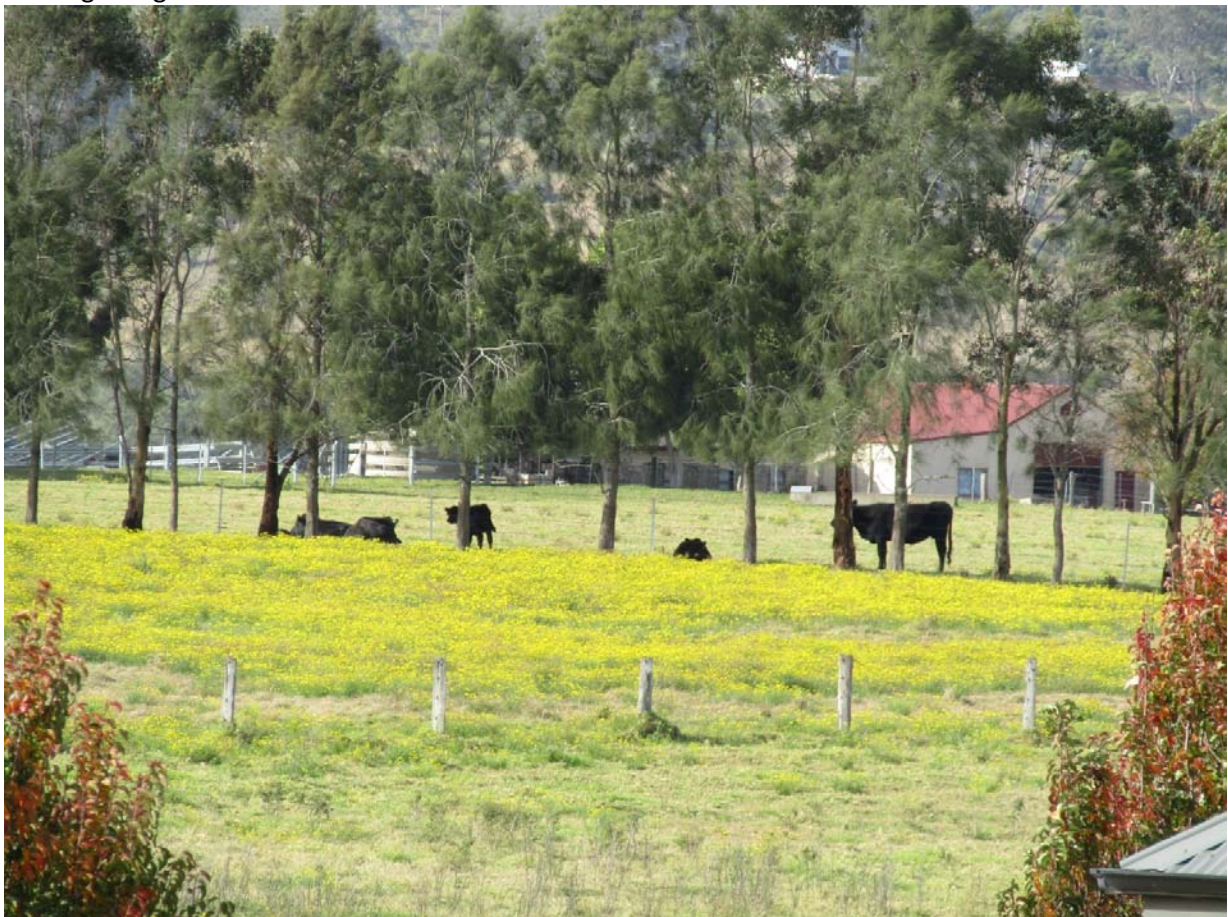




Looking north-east showing managed land



Cattle grazing





Looking east showing managed land and dam over subject site



Looking south showing managed land





Looking north east showing managed land & existing function centre



Luskintyre Rd

