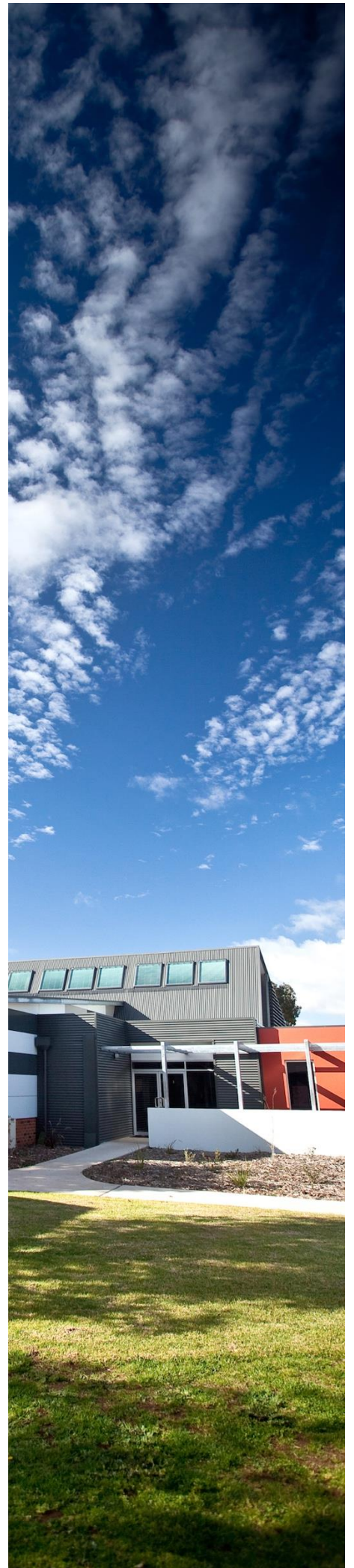




Bush Fire Assessment Report

Café and Plant Nursery
391 Brogans Creek
Clandulla NSW 2848

(Our Reference: 37614-BR01_A)
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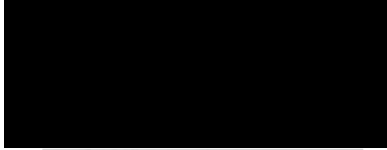
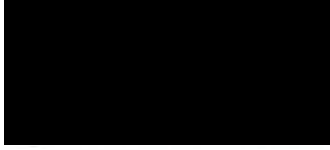


Disclaimer

This report has been prepared solely for Irene Ye (the client) in accordance with the scope provided by the client and for the purpose(s) as outlined throughout this report.

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Project Name:	Café and Plant Nursery
Client:	Irene Ye
Project No.	37614
Report Reference	37614-BR01_A
Date:	29.3.22
Revision:	Final

Prepared by:	Reviewed by:
	
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1 INTRODUCTION

1.1 Background

This Bush Fire Assessment Report (BFAR) has been prepared to accompany a Development Application (DA) for a proposed Café and associated plant nursery on Lot 17 DP 259893, known as 391 Brogans Creek Road, Clandulla, NSW 2848. The purpose of this report is to provide a bushfire assessment for the proposed development, and to ensure the development is consistent with *Planning for Bushfire Protection 2019* (PBP).

1.2 Proposed Development

The development site is located approximately 4.4km south of the township of Clandulla within the Mid-Western Regional Local Government Area. The proposed development seeks consent for alterations and additions to an existing shed to be used as a café and plant nursery.

The café contains the following attributes:

- Retrofitting the existing southern portion of the shed into:
 - A Display area on the southern end connecting to the entry;
 - Café/servery;
 - Kitchen with storage, double sink & hand wash sink;
 - The proposed approximate floor area for the development is 429.93m²
- Outdoor dining area;
- Dining area;
- Two (2) male toilets including showers;
- Two (2) female toilets including showers;
- One (1) accessible toilet;
- Cleaners storage;
- Brick retaining wall and timber pergola area;
- Small identification signage;
- Proposed small scale landscaping; and
- One (1) disabled parking space and shared zone.

Refer to the Development Plans in **Appendix A** of this report.

1.3 Legislative Requirements

1.3.1 Environmental Planning and Assessment Act 1979

1.3.1.1 Consultation and Development Consent - Certain Bush Fire Prone Land

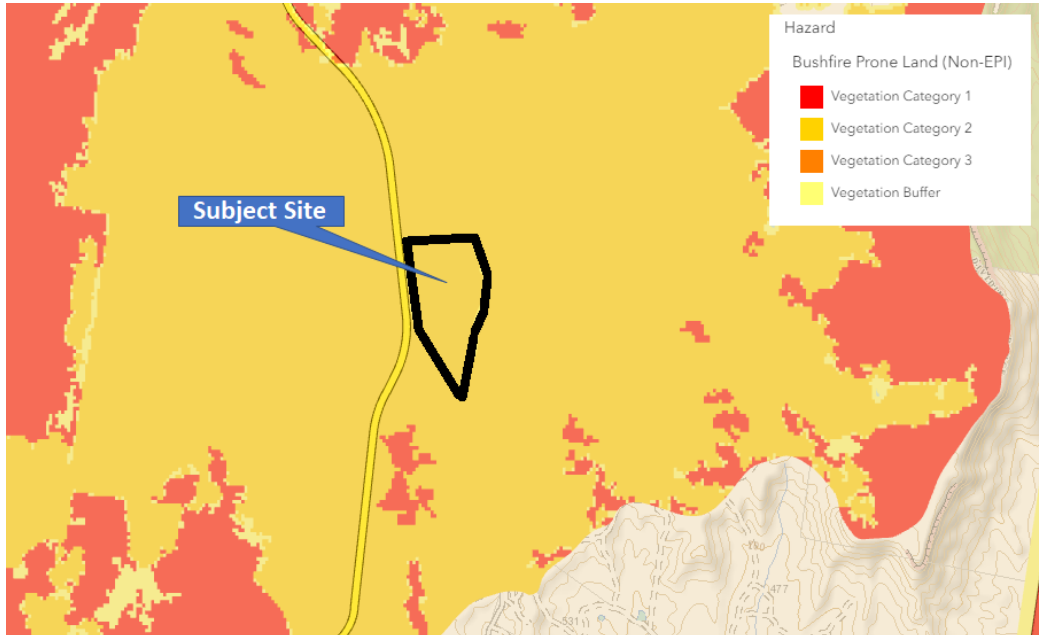
Section 4.14 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) requires that development consent for the carrying out of development, other than subdivision of land, cannot be granted unless the consent authority:

- (a) *is satisfied that the development conforms to the specifications and requirements of the version (as prescribed by the regulations) of the document entitled Planning for Bush Fire Protection prepared by the NSW Rural Fire Service in co-operation with the Department (or, if another document is prescribed by the regulations for the purposes of this paragraph, that document) that are relevant to the development (the relevant specifications and requirements), or*
- (b) *has been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements.*

This report has been prepared to provide the consent authority with sufficient information in order to demonstrate the development complies with the *Planning for Bush Fire Protection 2019* guidelines.

1.3.1.2 Bush Fire Prone Land

The subject site is designated as bush fire prone land, pursuant to Section 10.3 of the EP&A Act. The site is identified as containing Vegetation Category 2 on the Bush Fire Prone Land Map as shown in **Figure 1** below.



Source: (NSW Planning & Environment, 2021)

Figure 1 – Bush Fire Prone Land Map

1.3.1.3 Planning for Bush Fire Protection

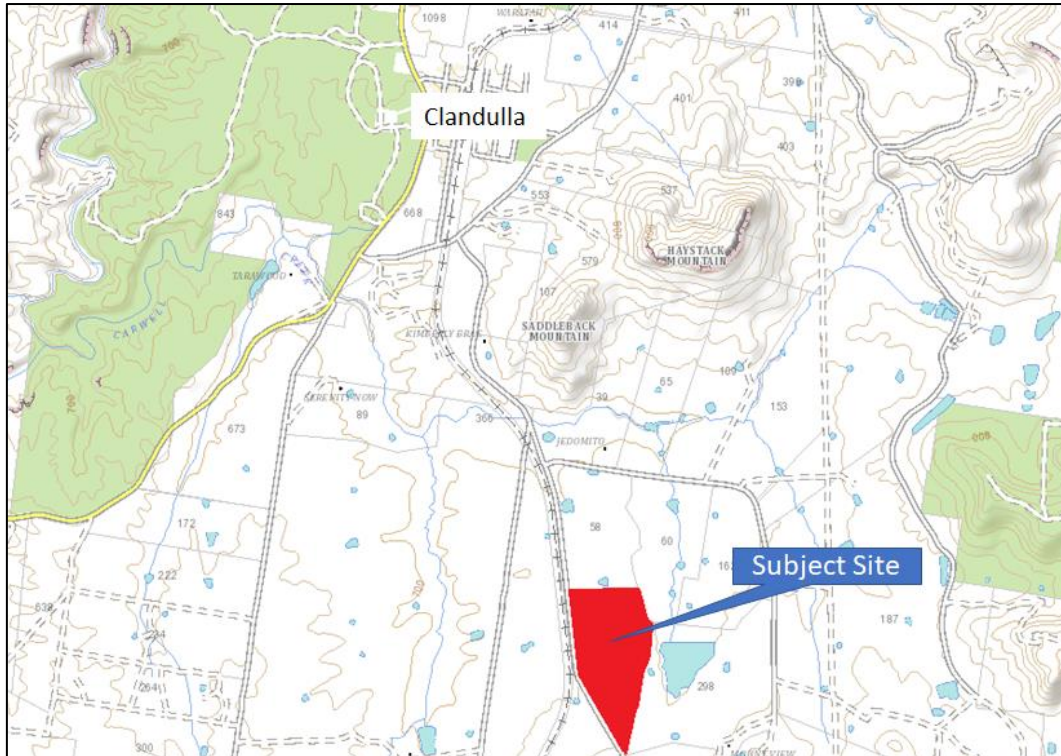
The New South Wales' Rural Fire Service's (RFS) *Planning for Bush Fire Protection 2019* (PBP) applies to all DAs in bush fire prone land.

This report has been prepared to address the requirements of PBP as 'Other Development'. Considering the nature of the development proposal, a merits-based assessment of PBP has also been undertaken.

2 THE SITE & ITS SURROUNDS

2.1 Site Location

The site is located in a rural area, approximately 4.4km south of Clandulla, as shown in **Figure 2** below. The site is located in the Mid-Western Regional Local Government Area.



Source: (NSW Government Spatial Services, 2021)

Figure 2 – Site Location

2.2 Site Details

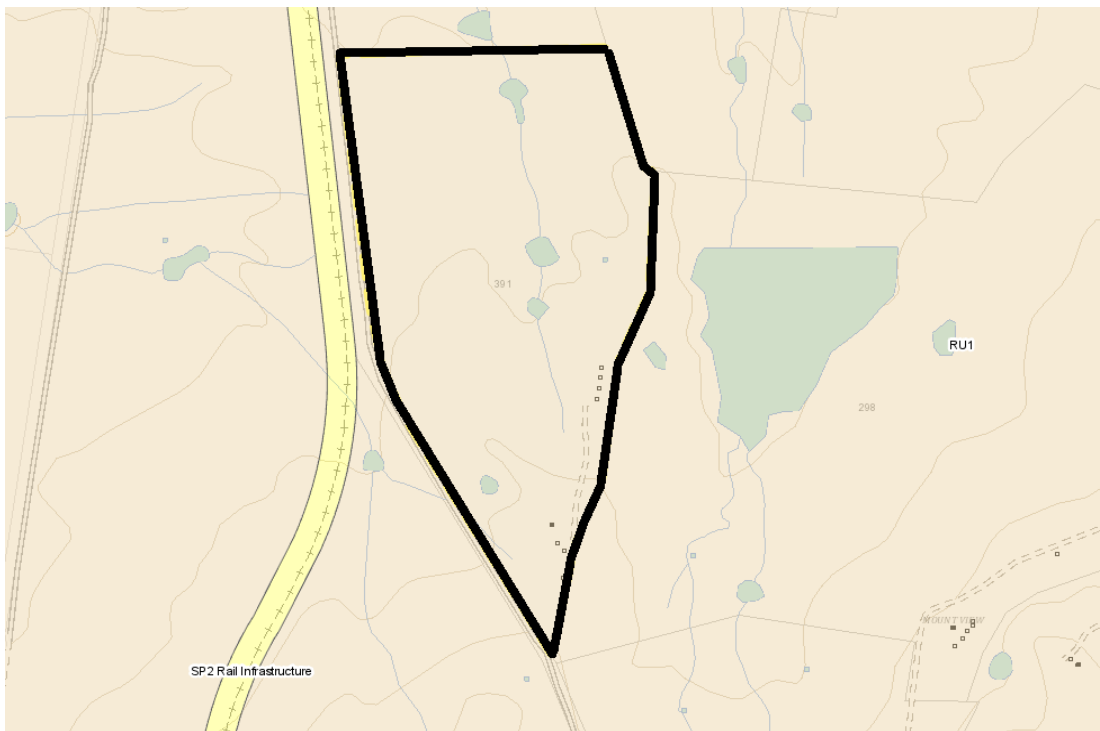
The site is comprised of Lot 17 DP 259893 and has an overall area of 40.79ha. A Detail Survey is provided in **Appendix C** of this report.

The site has direct frontage to Brogans Creek Road, which is a bitumen sealed local road. There are trees and other tracts of vegetation scattered throughout the site, as shown in **Figure 3** below.



Source: (NearMaps, 2020)

Figure 3 – Site Aerial



Source: (NSW Planning & Environment, 2021)

Figure 4 – Zoning Map

The site is zoned RU1 Primary Production under the *Mid-Western Regional Local Environmental Plan 2012* as shown in **Figure 4** above. The wider locality is generally zoned RU1 Primary Production with SP2 Infrastructure 'to the west as a rail corridor is present.

2.3 Environmental Considerations

2.3.1 Environmentally Significant Features

The subject site is not identified as containing any environmentally sensitive features under the LEP mapping.

2.3.2 Threatened Species, Populations and Ecological Communities

The proposed development shall not disturb threatened species, population, and ecological communities.

2.3.3 Indigenous Heritage

The development area that will be impacted as a result of the subdivision is limited to land that has been historically cleared, cultivated and used for grazing. Given the highly disturbed nature of the area, an Aboriginal Archaeological Assessment was not required. An AHIMS search was undertaken and there are no known artefacts or sites recorded in the vicinity of the development, as confirmed within the AHIMS Search in **Appendix B** of this report.

3 BUSH FIRE ASSESSMENT

3.1 Methodology

The methodology utilised for the bush fire assessment is outlined in A1.1 of the PBP. The following provides the required information in accordance with the methodology.

3.2 Bush Fire Fuels

Pursuant to Appendix 1 of PBP, all vegetation within 140m of the site (assessment area) has been classified in accordance with *Ocean Shores to Desert Dunes* (Keith, 2004) and Figure 2.3 of AS3959. Given the scale of the property and associated development, a generalised approach has been adopted for mapping the vegetation (refer to **Figure 5** below). Photographs of the vegetation from the site inspection carried out on 26th November 2021 are provided in the following plates for each assessment plot.

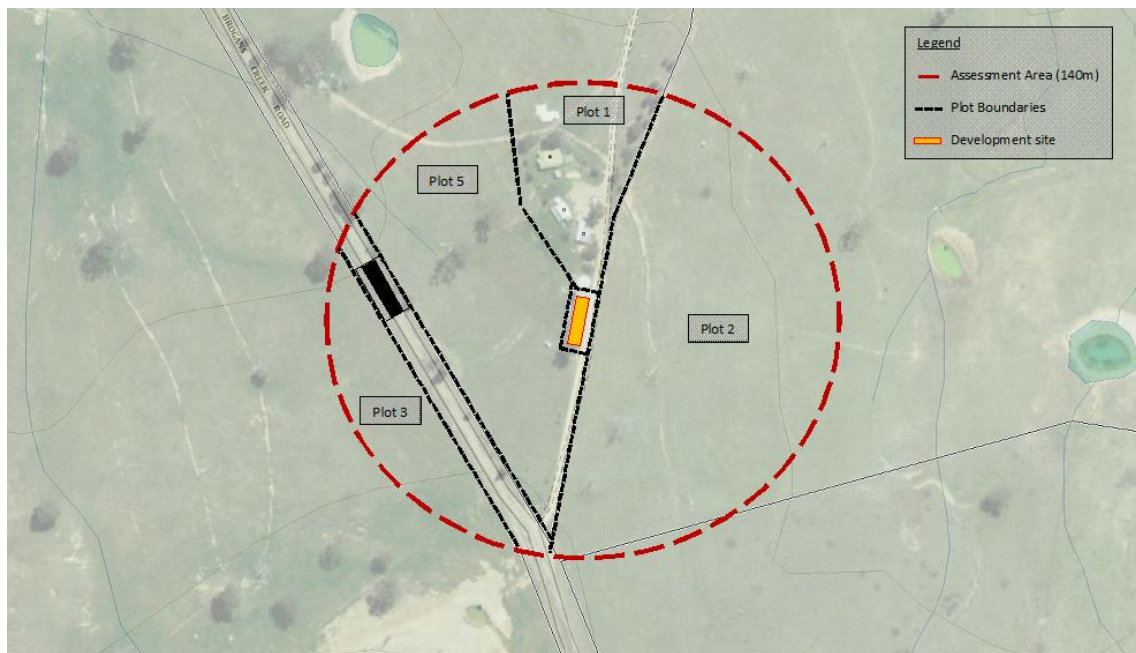




Figure 5 – Vegetation Classification

Plot 1	
Existing Classification:	Residence with scattered bushes and eucalypts
Post Development Classification:	Residence with scattered bushes and eucalypts
Description:	Existing developments which will not be manipulated by the development.

	
<p>Plate 1 – Plot 1</p>	<p>Plate 2 – Plot 1</p>

<p>Plot 2</p>	
<p>Existing Classification:</p>	<p>Grassland, scattered isolated trees and farmland</p>
<p>Post Development Classification:</p>	<p>Grassland, scattered isolated trees, and farmland</p>
<p>Description:</p>	<p>Dominated by vacant grassland and cropping with some tracts of scattered isolated trees, generally however this plot is well managed.</p>
	
<p>Plate 3 – Plot 2</p>	<p>Plate 4 – Plot 2</p>

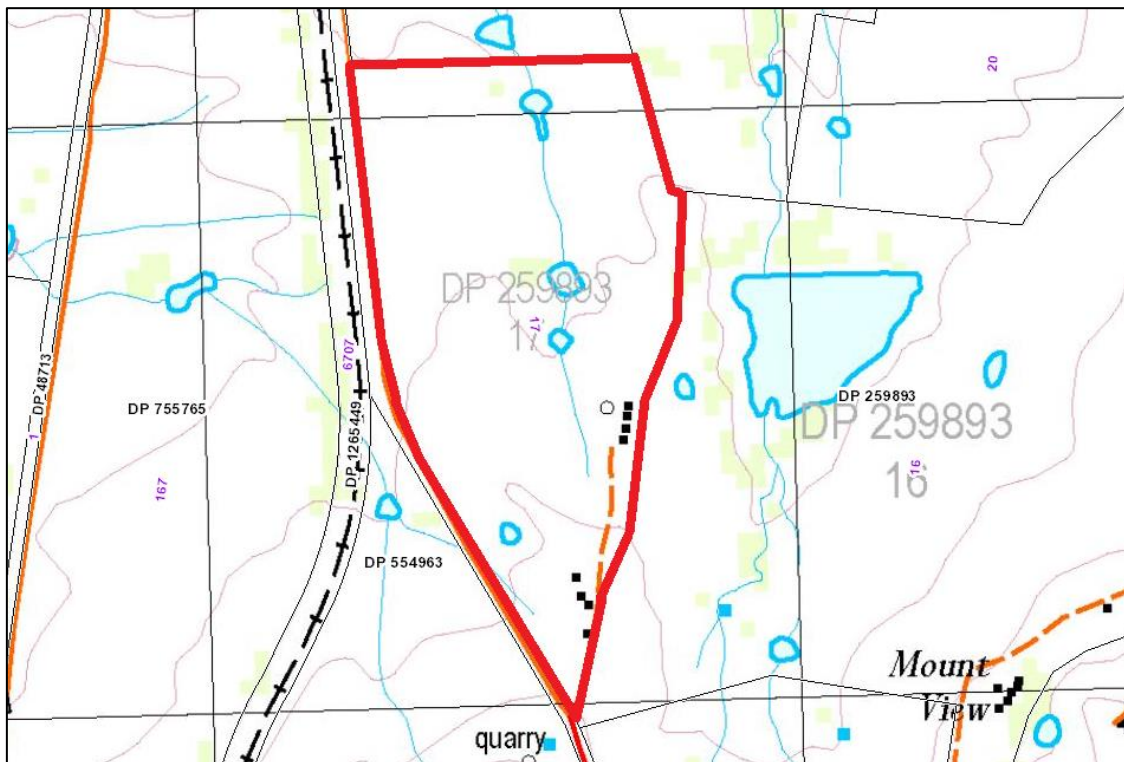
<p>Plot 3</p>	
<p>Existing Classification:</p>	<p>Grassland, scattered isolated trees and farmland</p>
<p>Post Development Classification:</p>	<p>Grassland, scattered isolated trees and farmland</p>
<p>Description:</p>	<p>Similar to Plot 2, it is dominated by vacant grassland and cropping with some tracts of</p>

	scattered isolated trees, it is generally well managed.
No PHOTOS	No PHOTOS
Plate 5 – Plot 3	Plate 6 – Plot 3
Plot 4	
Existing Classification:	Sealed Two-way Road with scattered trees
Post Development Classification:	Sealed two-way road with scattered trees
Description:	Plot 4 is the road corridor (Brogans Creek Road), it has some trees- Mostly eucalyptus along the boundary.
No PHOTOS	No PHOTOS
Plate 7 – Plot 4	Plate 8 – Plot 4
Plot 5	
Existing Classification:	Grassland, scattered isolated trees and farmland
Post Development Classification:	Grassland, scattered isolated trees and farmland
Description:	Plot 4 is the road corridor (Brogans Creek Road), it has some trees- Mostly eucalyptus along the boundary.
	
Plate 9 – Plot 5	Plate 10 – Plot 5

3.3 Topography

Pursuant to Appendix 1.4 of PBP, contour data has been sourced from the NSW Spatial Information Exchange Mapping system. The contour data was verified by ground truthing during the site inspection. A Detail Survey of the site has also been prepared and is provided in **Appendix C** of this report.

The proposed development is located in the south-eastern portion of the site. The land to the south and east enjoys a slightly higher elevation and the land to the west has a very slight fall. The remainder of the site is relatively flat throughout. Refer also to **Figure 6**.



Source: (NSW Government Spatial Services, 2021)

Figure 6 – Topography

3.4 Fire Weather Area

The subject site is located within the Mid-Western Regional Council LGA. Pursuant to Table A1.6 of the PBP, the relevant Forest Fire Danger Index (FFDI) for the site is 80.

3.5 Asset Protection Zone Determination

The relevant Asset Protection Zone (APZ) are to be determined based on Table 1.12.3 of PBP. Accordingly, an assessment is provided in **Table 1** below.

Table 1 – Asset Protection Zone Determination

Plot	Vegetation Class	Effective Slope	APZ
1	Residence with scattered bushes and eucalypts	Upslope/Flat	10
2	Grassland, scattered trees and farmland	Upslope/Flat	10m
3	Grassland, scattered trees and farmland	Downslope >0-5°	11m
4	Sealed Two-way Road with scattered trees	N/A	N/A
5	Grassland, scattered trees and farmland	Downslope >0-5°	11m

The worst case APZ required for the proposed structures is 11m, however, considering the scale of the development, it is recommended that a 20m APZ is applied.

3.6 Bushfire Attack Level Assessment

The Bushfire Attack Level (BAL) assessment has been determined as per Table A1.12.6 of PBP. The inputs used in the calculation of the BAL are outlined in **Table 2** below. The relevant BAL is applicable to the proposed buildings on the site.

Table 2 – BAL Inputs

Requirement	Input Used
Relevant FDI (table 2.1 of AS3959)	80
Classified vegetation	As per Section 3.2 of this report, Keith (2004) and Figure 2.3 of AS3959.
Separation Distance	As provided below.
Effective Slope	As per Table 1.

Using the inputs outlined above, the BAL has been calculated for each of the Plots identified in **Section 3.2**.

Table 3 – Bushfire Attack Levels

Plot	Vegetation Class	Separation Distance (adopted 20m APZ)	Effective Slope	BAL
1	Residence with scattered bushes and eucalypts	20m	Upslope/Flat	BAL-12.5
2	Grassland, scattered trees and farmland	20m	Upslope/ Flat	BAL-12.5
3	Grassland, scattered trees and farmland	20m	Downslope >0-5°	BAL-12.5

Table 3 – Bushfire Attack Levels				
Plot	Vegetation Class	Separation Distance (adopted 20m APZ)	Effective Slope	BAL
4	Sealed Two-way Road with scattered trees	20m	Downslope >0-5°	BAL-12.5
5	Grassland, scattered trees and farmland	20m	Downslope >0-5°	BAL-12.5
Worst Case BAL				BAL-12.5

It has been assumed that a 20m APZ in perpetuity of the proposed structure shall be provided for the inputs used in Table 3. As such, the worst case and therefore the applicable BAL for the proposed development is **BAL-12.5**. The relevant construction standards for BAL-12.5 are outlined in Sections 3 and 5 of AS3959.

4 NURSERY & CAFÉ - BUSH FIRE PROTECTION MEASURES

4.1 Introduction

Planning for Bushfire Protection 2019 provides deemed-to-satisfy provisions for fire protection measures for residential development and special fire protection purpose developments. As the proposed development does not fall within these provisions, a merits-based assessment against the provisions under the PBP has been provided in this section.

Generally, the proposed development needs to meet the aims and objectives of PBP, as follows:

The aim of PBP is:

To provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.

The objectives of PBP are to:

- *Afford buildings and their occupants protection from exposure to a bush fire,*
- *Provide for a defensible space to be located around buildings,*
- *Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings,*
- *Ensure that appropriate operational access and egress for emergency service personal and occupants is available,*
- *Provide for ongoing management and maintenance of BPMs; and*
- *Ensure that utility services are adequate to meet the needs of firefighters.*

4.2 Consistency with PBP Objectives

A review of consistency with the objectives of *Planning for Bushfire Protection 2019* is provided in **Table 4** below.

Table 4 Café and Nursery - Consistency with PBP Objectives		
Objective	Acceptable Solution/Comment	Consistent
Afford buildings and their occupants protection from exposure to a bush fire;	The proposed Café will be located in an existing shed which will be retrofitted to suit the café's requirements. It is in an area that contains managed grassland vegetation. It is recommended that a 20m Asset Protection Zone be provided to the structure and shall be established in accordance with Appendix 1 of PBP.	✓

<p>Provide for a defensible space to be located around buildings;</p> <p>Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings;</p>	<p>The location of the development provides for a defensible space to all aspects, which reduces the direct bushfire impact on the structures.</p> <p>It is recommended that a 20m wide Asset Protection Zone around the perimeter of this structure be provided and maintained in accordance with Appendix 1 of the PBP. This managed area shall be maintained by mowing/slashing with grass heights less than 100mm in height.</p>	<p>✓</p>
<p>Ensure that appropriate operational access and egress for emergency service personnel and occupants is available</p>	<p><u>Public Roads</u></p> <p>The development has direct access to Brogans Creek Road, which is a bitumen sealed, two-way road. The road provides for suitable heavy articulated vehicles and therefore can cater for fire-fighting vehicles and appliances.</p> <p><u>Fire Trail Access</u></p> <p>There are no Fire Trails proposed or required as part of this development. Existing farm tracks are to continue to be maintained to provide access throughout the complex.</p> <p><u>Emergency Response Access/Egress</u></p> <p>The property has an existing access off Brogans Creek Road via a crossover and driveway.</p> <p>The existing road network is sufficient for the access of emergency vehicles with them able to enter and exit in a forward direction.</p>	<p>✓</p>
<p>Provide for ongoing management and maintenance of BPMs</p>	<p>Before the commencement of the Bushfire Danger Period, a review of vegetation on the site and applied Bushfire Protection Measures is recommended to be undertaken. Fuel reduction is recommended throughout the site.</p> <p>The nursery/ café and surrounding area shall be regularly maintained (and mulched if required) to minimise rapid grass growth.</p> <p>It is recommended that a Fire Management Plan (FMP) be prepared for the property that is reviewed and updated annually.</p>	<p>✓</p>
<p>Ensure that utility services are adequate to meet the needs of firefighters</p>	<p>The water required for firefighting shall be supplied via a new rainwater tank. In order to provide adequate storage, the following is recommended:</p>	<p>✓</p>

	<ul style="list-style-type: none"> • A minimum 20,000L static water supply shall be provided via a concrete tank or steel tank. This tank shall be provided with a ball valve and Storz outlet; • Portable fire extinguisher shall be installed as per NCC and AS2444-2004; • Bottled gas (if any) is to be installed and maintained in accordance with AS1596. Metal piping must be used and the bottles shall not be located near any flammable materials. 	
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4.3 Emergency Management

PBP does not provide any specific Emergency Management Arrangement requirements for these developments. Nevertheless, it is strongly recommended that a Bush Fire Survival Plan and/or Evacuation Plan be prepared for the complex.

5 INFILL DEVELOPMENT - BUSH FIRE PROTECTION MEASURES

5.1 Introduction

The proposed development does not necessarily constitute infill development under PBP. However, considering the proposed patronage of the facility, a merits-based assessment against Section 7.4 of PBP is provided in this section. There are eight key BFPMs outlined by PBP for infill development:

- Asset Protection Zones,
- Access,
- Water Supplies,
- Electricity Services,
- Gas Services,
- Construction Standards,
- Landscaping, and
- Emergency Management.

The relevant BFPMs are addressed throughout **Section 5** of this report.

5.2 Aims and Objectives of PBP

The aim of PBP is:

To provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.

The specific objectives of PBP are to:

- *Afford buildings and their occupants protection from exposure to a bush fire,*
- *Provide for a defensible space to be located around buildings,*
- *Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings,*
- *Ensure that appropriate operational access and egress for emergency service personnel and occupants is available,*
- *Provide for ongoing management and maintenance of BFPMs, and*
- *Ensure that utility services are adequate to meet the needs of firefighters.*

The proposal has considered radiant heat levels of less than 29kW/m² to avoid flame contact, that would provide for appropriate separation to the hazards. The development in conjunction with the bush fire protection measures will provide for safe operational access and egress for

emergency service personnel and patrons as well as sufficient water supply. Therefore, the proposed development is considered to be consistent with the objectives of PBP.

5.3 Objectives for Infill Development

Section 7.3 of PBP contains the specific objectives for infill development:

- *Provide a defensible space to enable unimpeded access for firefighting around the building,*
- *Provide better bush fire outcomes on a redevelopment site than currently exists, commensurate with the scale of works proposed,*
- *Design and construct buildings commensurate with the bush fire risk,*
- *Provide access, services and landscaping to aid firefighting operations,*
- *Not impose an increased bush fire management and maintenance responsibility on adjoining land owners; and*
- *Increase the level of bush fire protection to existing dwellings based on the scale of the proposed work and level of bush fire risk.*

In being consistent with the BFPMs, the proposed development complies with objectives for infill development, as outlined above.

5.4 Asset Protection Zones

The following table outlines the Performance Criteria and associated Acceptable Solutions for the APZ BFPM in accordance with Table 7.4a of PBP.

Table 5 Asset Protection Zones		
Performance Criteria	Acceptable Solution/Comment	Compliance
APZs are provided commensurate with the construction of the building; and A defensible space is provided.	An Asset Protection Zone of 20m is applied for the proposed development and shall be established in accordance with Appendix 1 of PBP.	✓
APZs are managed and maintained to prevent the spread of a fire to the building.	The APZ shall be managed in accordance with Appendix 4 of PBP.	✓
The APZ is provided in perpetuity. APZ maintenance is practical, soil stability is not compromised	The APZ shall be provided in perpetuity of the development and completely within the boundaries of the site.	✓

and the potential for crown fires is minimised.		
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5.5 Access Standards

The following table outlines the Performance Criteria and associated Acceptable Solutions for Access in accordance with Table 7.4a of PBP.

Table 6 Access		
Performance Criteria	Acceptable Solution/Comment	Compliance
Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.	Access throughout the site shall be designed and constructed as follows: <ul style="list-style-type: none"> From Brogans Creek Road to Nursery/café– 4m width with a carrying capacity of 23 tonnes GVM. No trees or potential overhanging vegetation within 8m carriageway of the road. 	✓
The capacity of access roads is adequate for firefighting vehicles.	The capacity of the proposed driveway will be sufficient to carry full loaded firefighting vehicles up to 23 tonnes.	✓
There is appropriate access to water supply.	It has been recommended that at least 20,000L of water storage be provided via a concrete or metal tank for the proposed development.	✓
Firefighting vehicles can access the dwelling and exit the property safely.	It is recommended that the following be implemented for the development: <ul style="list-style-type: none"> Internal roads have an established minimum carriage width of 8m with 4m wide sealed (gravel or otherwise); All internal roads to have a 4m vertical clearance to any overhanging obstructions (i.e. tree branches); 	✓

5.6 Water Supplies

The following table outlines the Performance Criteria and associated Acceptable Solutions for Water supply in accordance with Table 7.4a of PBP.

Table 7 Water Supply		
Performance Criteria	Acceptable Solution/Comment	Compliance
An adequate water supply is provided for firefighting purposes.	A minimum 20,000L static water supply shall be provided in a concrete or steel storage tank for the development.	✓

water supplies are located at regular intervals; and the water supply is accessible and reliable for firefighting operations.	The water supply will be easily accessible for fire fighting vehicles.	✓
Flows and pressure are appropriate.	Not applicable.	N/A
The integrity of the water supply is maintained.	All above-ground water service pipes including taps etc shall be constructed of metal material.	✓
A static water supply is provided for firefighting purposes in areas where reticulated water supply is not available.	The development complies with this part, as follows: <ul style="list-style-type: none"> • 20,000L rainwater tanks shall be provided, • The firefighting connections are located away from the structure and shall consist of a 65mm Storz outlet with ball valve fitted, • The ball valve and pipes are to be metal and shall provide adequate water flow, • Hardened access driveways to be provided to the tanks, • The tanks are to be constructed of metal or concrete, • Unobstructed access to the tanks shall be provided; and • All exposed water pipes and fittings externally to the buildings are to be metal material. 	✓

5.7 Electricity and Gas Services

The following table outlines the Performance Criteria and associated Acceptable Solutions for the Electricity and Gas Services in accordance with Table 7.4a of PBP.

Table 8 Electricity and Gas Services		
Performance Criteria	Acceptable Solution/Comment	Compliance
Location of electricity services limited the possibility of ignition of surrounding bush	Vegetation around any existing/ new transmission lines are to be maintained in accordance with the specifications in <i>ISSC3 Guideline for Managing Vegetation Near Powerlines</i> .	✓

land or the fabric of buildings.		
Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	<p>The structures are to be connected to bottled gas (if required). The following recommendations are provided:</p> <ul style="list-style-type: none"> • Installed and maintained in accordance with AS/NZS 1596:2004 with metal piping used, • All fixed cylinders are to be kept clear of flammable materials to a distance of 10m, and • All connections are to be of metal construction. 	✓

5.8 Construction Standards

The following table outlines the Performance Criteria and associated Acceptable Solutions for Construction Standards in accordance with Table 7.4a of PBP.

Table 9 Construction Standards		
Performance Criteria	Acceptable Solution/Comment	Compliance
The proposed building can withstand bush fire attack in the form of embers, radiant heat and flame contact.	As detailed in Section 3.6, the worst case and therefore the applicable BAL for the proposed development is BAL-12.5 .	✓
Proposed fences and gates are designed to minimise the spread of bush fire.	N/A- Not proposed	N/A
Proposed Class 10a buildings are designed to minimise the spread of bush fire.	N/A	N/A

5.9 Landscaping

The following table outlines the Performance Criteria and associated Acceptable Solutions for Landscaping in accordance with Table 7.4a of PBP.

Table 10 Landscaping		
Performance Criteria	Acceptable Solution/Comment	Compliance

<p>Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.</p>	<p>The applied APZs shall be established and maintained in accordance with Appendix 4 and the applicable <i>Asset Protection Zone Standards</i>.</p> <p>There shall be no branches overhanging the roof and new plantings shall be established to ensure that there are no continuous tree canopies.</p>	<p>✓</p>
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5.10 Emergency Management

PBP does not provide any specific Emergency Management Arrangement requirements for residential developments. Nevertheless, it is strongly recommended that a Bush Fire Survival Plan be prepared by the residents of the property in accordance with the NSW RFS' guidelines located on the following webpage <http://www.rfs.nsw.gov.au/resources/bush-fire-survival-plan>.

6 RECOMMENDATIONS

The assessment of the proposed development carried out in this report has assumed the development will be carried out in accordance with a number of bush fire protection measures (BFPMs). The following provides a summary of the BFPMs that must be incorporated into the development to ensure it best protects the development from the effects of bushfire in accordance with the requirements of PBP and other best practice guidelines.

- Asset Projection Zone/ Defendable Space:
 - The development shall be afforded with an Asset Protection Zone of 20m in perpetuity.
- Access
 - Access to water tank/s shall be kept clear at all times;
 - The capacity of all access driveways and internal roads shall be capable of carrying a fully loaded firefighting vehicle up to 23 tonnes;
 - No tree plantings or obstructions shall occur on either side of the access roads that would prohibit access to and from the site in the event of fire;
- Services
 - Water:
 - A minimum 20,000L static water supply shall be provided via a concrete or steel tank. The tank/s shall be fitted with firefighting accessories;
 - Hardened access driveway/landings are to be provided for all tank/s;
 - All tank/s shall be provided with connections for firefighting purposes including a 65mm Storz outlet with gate/ball valve;
 - Valves and pipes are to be metal and adequate for water flow;
 - All above ground pipes and taps are to be metal; and
 - Pumps are to be shielded.
 - Electricity and Gas:
 - Vegetation around existing/new transmission lines are to be maintained in accordance with the specifications in *ISSC3 Guideline for Managing Vegetation Near Powerlines*;
 - Any proposed gas bottles shall be installed and maintained in accordance with AS/NZS 1596:2004 with metal piping used;
 - All fixed cylinders are to be kept clear of flammable materials to a distance of 10m (or appropriately shielded);
 - All connections are to be of metal construction.
- Construction Standards:

- The retrofitted shed (i.e. the area that will be frequently used by the patrons) are to be constructed to a BAL 12.5 standard and in accordance with PBP/AS 3959:2009.
- Landscaping:
 - The applied Asset Protection Zones shall be established and maintained in accordance with Appendix 4 of PBP and the applicable *Asset Protection Zone Standards*;
 - There shall be no branches overhanging the roof of any proposed structures and new plantings shall be established to ensure that there are no continuous tree canopies.
- Bushfire Danger Period:
 - Before the commencement of the Bushfire Danger Period, a review of the vegetation on the site and applied BFPs is recommended to be undertaken. Fuel reduction measures are recommended throughout the site;
 - The areas surrounding the café and nursery will require regular mowing (and mulched if required) to minimise rapid grass growth.
- Emergency Evacuation Plans:
 - Preparation of a Bush Fire Survival Plan, in accordance with RFS requirements;
 - A Fire Management Plan (FMP) should be prepared for the property that is reviewed and updated annually.

7 CONCLUSION

The proposed development, on completion, will ensure that the habitable development and recreational facility is located in an area that has a low to moderate bushfire hazard level. With the implementation of the recommendations, as outlined in **Section 6**, it is considered that the proposed development is appropriately protected from bushfire and complies with the requirements of PBP. The proposed development is not expected to increase the bushfire risk.

8 REFERENCES

- NearMaps. (2021, November 16). *NearMaps*. Retrieved from <http://maps.au.nearmap.com/>
- NSW Government. (2021, September 1). *Biodiversity Value Map*. Retrieved from <https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap>
- NSW Government Spatial Services. (2021, November 16). *Six Maps*. Retrieved from <http://maps.six.nsw.gov.au/>
- NSW Planning & Environment. (2021, November 16). *Planning Viewer*. Retrieved from <https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/lot>
- NSW Rural Fire Service. (2019). *Planning for Bush Fire Protection: A Guide for Council's, Planners, Fire Authorities and Developers*. Sydney: NSW RFS.

Appendix A - Development Plans



PROPOSED NURSERY AND CAFE

391 BROGANS CREEK ROAD CLANDULLA 2848



BARNSON PTY LTD
 Unit 1/36 Darling Street
 Dubbo NSW 2830
Contact Us
 t 1300 BARNSON (1300 227 676)
 e generalenquiry@barnson.com.au
 w www.barnson.com.au
 Bathurst | Coffs Harbour | Dubbo | Mudgee | Orange | Sydney | Tamworth

Client: IRENE YE
 Project: PROPOSED NURSERY AND CAFE @ 391 BROGANS CREEK ROAD CLANDULLA 2848
 Title: COVER SHEET
 Drawing Number
37614 - A00
 Revision
C

drawing schedule

A 00	COVER SHEET	REV C	DATED 17.03.2022
A 01	SITE LOCALITY	REV C	DATED 17.03.2022
A 02	PART SITE PLAN	REV C	DATED 17.03.2022
A 03	EXISTING FLOOR PLAN	REV C	DATED 17.03.2022
A 04	PROPOSED FLOOR PLAN	REV C	DATED 17.03.2022
A 05	ELEVATIONS	REV C	DATED 17.03.2022

In addition to the National Construction Code series, Building Code of Australia Vol. 1, 2019, the Plumbing Code of Australia, 2019 & the building regulations applicable to the state of New South Wales, the following applicable Australian Standards & codes of practice are to be adhered to through the documentation & construction works;

- AS1668 – Mechanical ventilation & air conditioning in Buildings
- AS3000 – Electrical installations; buildings, structures & premises (known as the saa wiring rules)
- AS1428.1 – General requirements for access – buildings
- AS2890.6 – Off-street parking; mandatory requirements
- AS1680.0 – Interior lighting - safe movement

These drawings shall be read in conjunction with all architectural & other consultants drawings & specifications & with such other written instructions as may be issued during the course of the contract. All discrepancies shall be referred to 'Barnson Pty Ltd' for a decision before proceeding with the work.

All dimensions are in millimetres unless stated otherwise & levels are expressed in metres. Figured dimensions are to be taken in preference to scaled dimensions unless otherwise stated. All dimensions are nominal, and those relevant to setting out & off-site work shall be verified by the contractor before construction & fabrication.

For the purpose of the Building Code of Australia, Vol. 1, 2019, the development may be described as follows:

classification - BCA 'part A6'
 The building has been classified as a 'Class 6' building

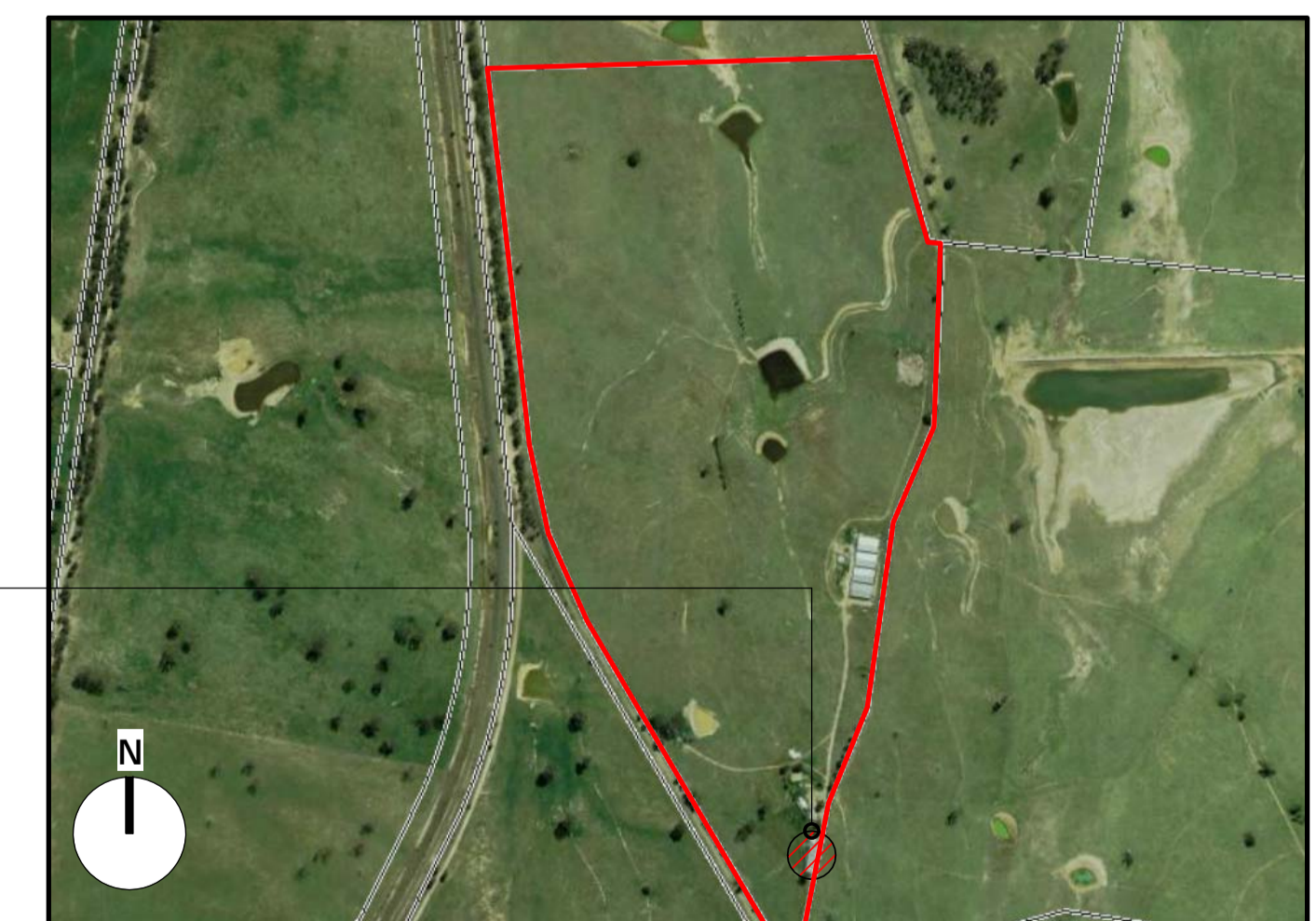
rise in stories - BCA 'part C1.2'
 The building has a rise in stories of one.

effective height - BCA 'schedule 3 definitions'
 The building has an effective height of zero, ie less than 25.0m.

type of construction required - BCA 'part A6, part C1.1 - table C1.1'
 Class 6 building - Type 'C' construction. The building has been deemed 'conditioned' excluding the toilets & airlocks.

climate zone - BCA 'schedule 3 definitions'
 The building is located within climate zone 4.

proposed area of works
 391 brogans creek road, clandulla
 lot 17, dp259893



PROPOSED NURSERY AND CAFE
ISSUED FOR DA, 17.03.2022

Appendix B - AHIMS

Phoebe Wilkinson
1/36 Darling Street
Dubbo New South Wales 2830

Date: 20 October 2021

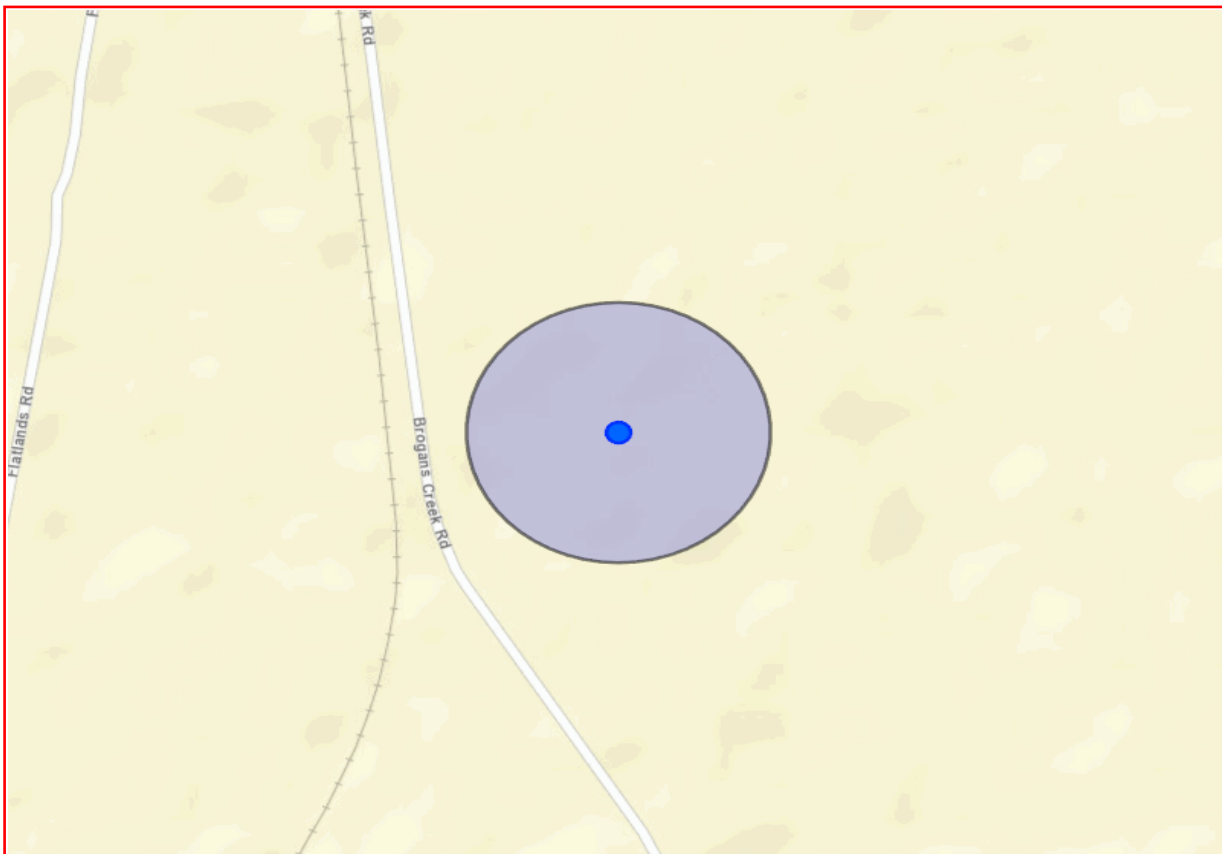
Attention: Phoebe Wilkinson

Email: pwilkinson@barnson.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Address : 391 BROGANS CREEK ROAD CLANDULLA 2848 with a Buffer of 200 meters, conducted by Phoebe Wilkinson on 20 October 2021.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

Appendix C - Detail Survey

- NOTES:
- THE BOUNDARY INFORMATION SHOWN ON THIS PLAN BEEN PLOTTED AS REQUIRED UNDER DIVISION 1, SECTION 9.(1) OF THE "SURVEYING AND SPATIAL INFORMATION REGULATION 2017". IT HAS NOT BEEN DETERMINED BY AN ACCURATE BOUNDARY SURVEY.
 - A DETAIL & LEVEL SURVEY IS NOT A "LAND SURVEY" AS DEFINED BY THE SURVEYING AND SPATIAL INFORMATION ACT 2002. IF ANY CONSTRUCTION OR DESIGN WORK WHICH RELIES ON CRITICAL SETBACKS FROM THE STREET OR BOUNDARIES IS PLANNED, IT WOULD BE IMPERATIVE TO CARRY OUT FURTHER SURVEY WORK TO DETERMINE THE BOUNDARY DIMENSIONS.
 - THE LOCATIONS AND DEPTHS OF UNDERGROUND SERVICES ARE NOT ASSURED BY BARNSON. SERVICE AUTHORITIES SHOULD BE CONSULTED BEFORE ANY EXCAVATION, DEMOLITION OR CONSTRUCTION COMMENCES.
 - THERE MAY BE UNDERGROUND SERVICES THAT HAVE NOT BEEN SHOWN HEREON.
 - BARNSON TAKES NO RESPONSIBILITY FOR LOSSES, DAMAGES OR INJURIES TO ANY PERSON OR ORGANISATION THAT MAY OCCUR DUE TO THE RELIANCE ON THIS PLAN FOR THE LOCATION OF UNDERGROUND SERVICES.

LEGEND

	EXISTING SUBJECT CADASTRAL BOUNDARIES
	EXISTING FENCE LINE
	EXISTING GATE
	EXISTING TOP / BOTTOM OF BANK AS NOTED
	CENTRELINE OF EXISTING GRAVEL ROAD
	EXISTING OVERHEAD ELECTRICITY CABLES
	SPOT HEIGHT - TOP OF BANK
	SPOT HEIGHT - BOTTOM OF BANK
	SPOT HEIGHT - CENTRELINE OR ROAD
	SPOT HEIGHT - EDGE OF GRAVEL AREA

DATE OF SURVEY : 15th DECEMBER 2021
 SURVEY BY : R. Boylan

DATUM : ASSUMED A.H.D.
 ORIGIN : CORSNET N.S.W.
 MAJOR CONTOUR INTERVAL : 1 METRE
 MINOR CONTOUR INTERVAL : 0.25 METRES

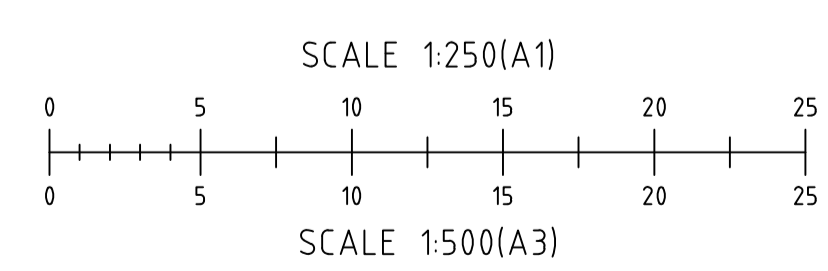
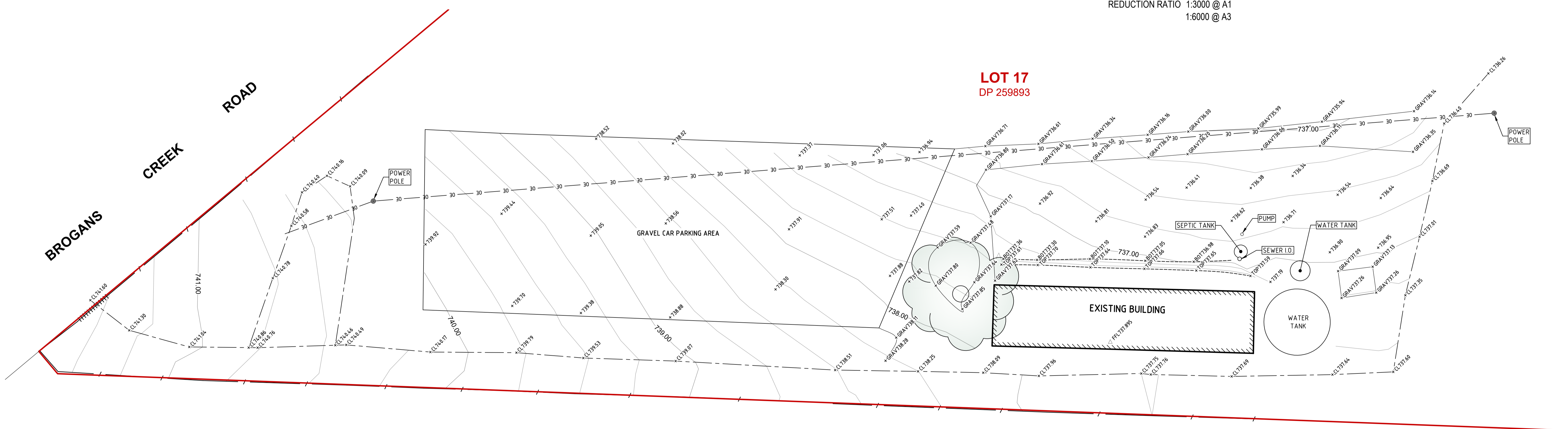
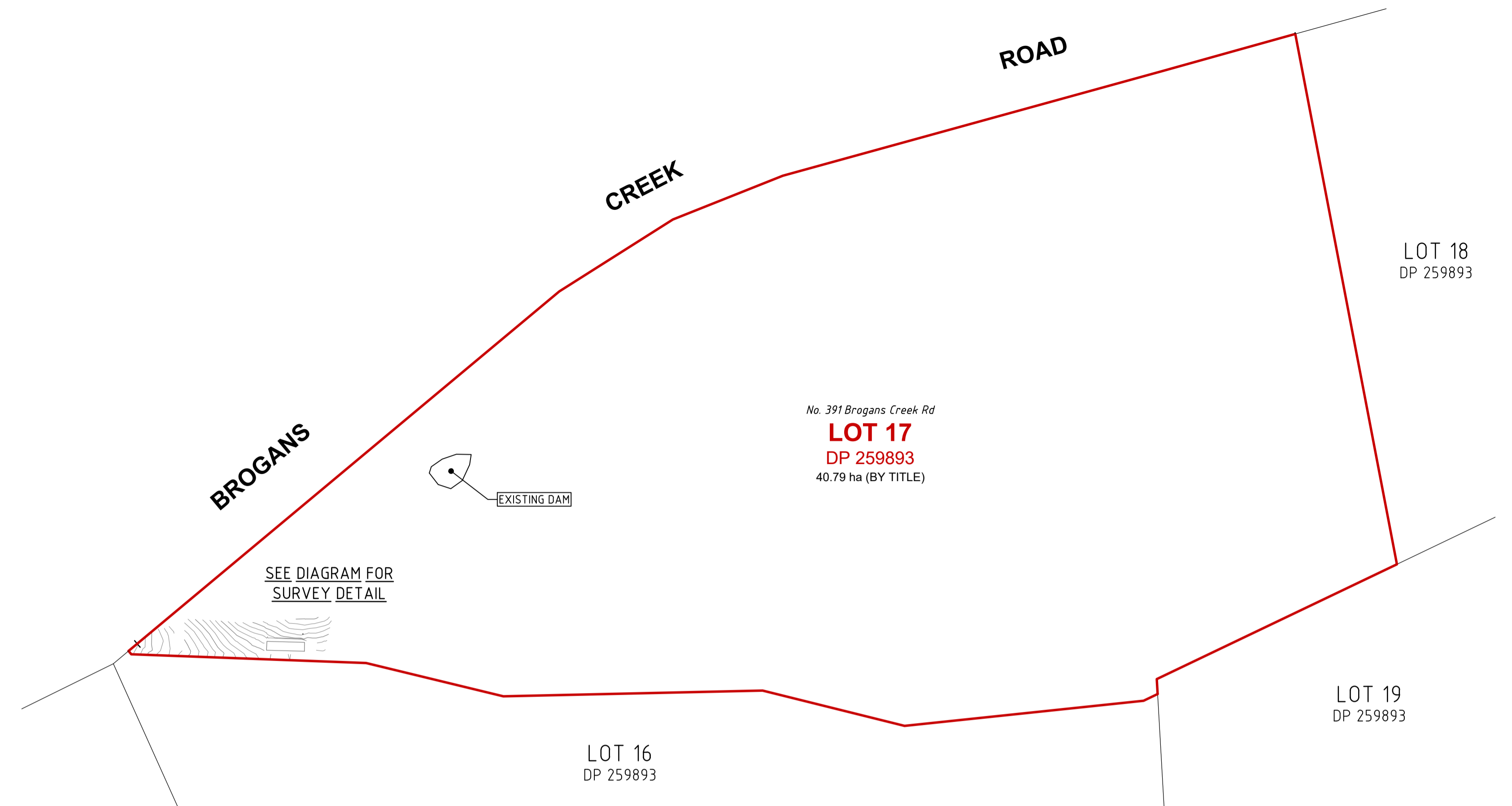
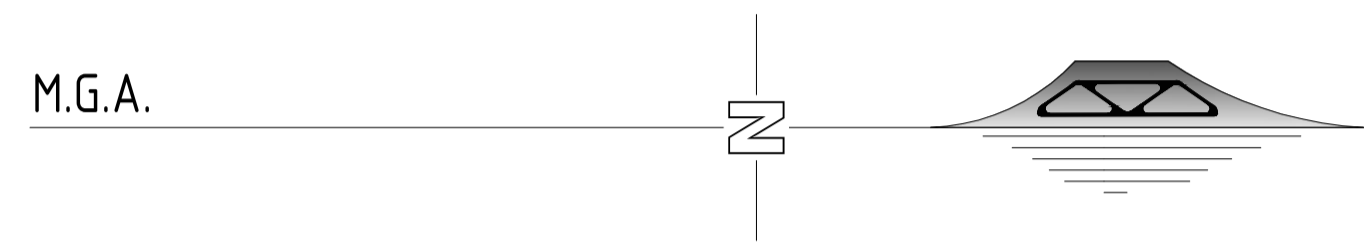


DIAGRAM
 REDUCTION RATIO 1:250 @ A1
 1:500 @ A3

ISSUED TO CLIENT



BARNSON PTY LTD
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 e generalenquiry@barnson.com.au
 w www.barnson.com.au

Bathurst | Dubbo | Mudgee | Sydney | Tamworth

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH GENERAL BUILDING DRAWINGS, SPECIFICATIONS & OTHER CONSULTANTS DRAWINGS APPLICABLE TO THIS PROJECT. DO NOT SCALE. DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. REPORT DISCREPANCIES TO BARNSON PTY LTD. NO PART OF THIS DRAWING MAY BE REPRODUCED IN ANY WAY WITHOUT THE WRITTEN PERMISSION OF BARNSON PTY LTD.

Client: Irene Ye
 Project: DA FOR CAFE AND PLANT NURSERY
 391 BROGANS CREEK ROAD
 LOT 17 IN DP 259893
 Drawing Title: LEVEL AND DETAIL SURVEY PLAN
 OVER PART OF LOT 17 IN DP 259893

Rev	Date	Amendment
A	20/12/2021	ISSUED TO CLIENT

Survey	RB	Certification	
Drawn	JC		
Check	RB	Drawing Number	
Original Sheet Size = A1		37614 - L01	Revision A