

Ms S Hamson & Mr M P Rose & Mr S D Proctor

**208C Roughit Lane,  
ROUGHIT, 208D  
Roughit Lane  
ROUGHIT, 208E  
Roughit Lane  
ROUGHIT.**

Lot: 2 DP:1058431, Lot: 3 DP: 1058431, Lot: 4 DP: 1058431





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## EXECUTIVE SUMMARY

<b>Local Government Area:</b>	Singleton Council (SC)
<b>Name of the Draft Local Environmental Plan (LEP):</b>	Planning proposal for 208C Roughit lane, 208D Roughit Lane and 208E Roughit Lane, Sedgefield.
<b>Subject land:</b>	Lot: 2 DP: 1058431, Lot: 3 DP: 1058431, Lot: 4 DP: 1058431 – 208C Roughit Lane ROUGHIT, 208D Roughit Lane ROUGHIT, 208E Roughit Lane ROUGHIT
<b>Land owner(s):</b>	Mr M.P. Rose (Lot 2);  Mr R.J. & Mrs S.N. Hamson (Lot 3); and  Mr S.D. & Mrs J.L. Proctor (Lot 4).
<b>Applicant:</b>	Mr M P Rose, Mr R J & Mrs S N Hamson and Mr S D & Mrs J L Proctor.
<b>Council file reference:</b>	55.2019.1
<b>CM9 document reference:</b>	20/73983
<b>NSW Department of Planning &amp; Environment (DP&amp;E) reference:</b>	N/A
<b>Version:</b>	1.0
<b>Date:</b>	13/11/2020
<b>Officer:</b>	A Tinlin
<b>Manager:</b>	Mary-Anne Crawford

## PART 1 – OBJECTIVES OF THE PLANNING PROPOSAL

The objective of this planning proposal is to amend the Singleton Local Environmental Plan 2013 to:

- Rezone lots 2,3 & 4 of DP 1058431 from RU1 Primary Production zone to E4 Environmental Living zone; and
- Amend the minimum lot size requirements for subdivision from 40 hectares to 5 hectares.

Subdivision of the land to create one additional lot per property (three additional lots in total) for low impact residential purposes, consistent with the environmental living zone.

## PART 2 – EXPLANATION OF THE PROVISIONS

The proposed objectives of the planning proposal will be achieved by amending the SLEP 2013 as outlined below:

Item no.	Explanation of provisions
1	<ul style="list-style-type: none"><li>• Amend Land Zoning Map Sheets LZN_014 and LZN_015 to remove the RU1 Primary Production zone and replace with E4 Environmental Living zone on Lots 2,3 &amp; 4 DP 1058431.</li></ul>
2	<ul style="list-style-type: none"><li>• Amend Lot Size Map Sheet LSZ_014 and LSZ_015 to remove 40 hectares minimum lot size and replace with 5 hectare minimum lot size on Lot 2,3 &amp; 4 DP 1058431</li></ul>

## PART 3 – JUSTIFICATION OF THE PROVISIONS

### SECTION A: NEED FOR THE PLANNING PROPOSAL

***1. Is the planning proposal a result of an endorsed local strategic planning statement, strategic study or report?***

The subject site of this proposal is comprised of Lot 2,3 & 4 DP 1058431 which are adjoining lots all located within the Sedgefield Candidate Area (SCA) as identified in the Singleton Land Use Strategy 2008 and subsequently in the Sedgefield Structure Plan (SSP) adopted by Council on 9 February 2009. This plan was endorsed by the Department of Planning on 25 March 2009. The SSP identified a minimum average lot size of 5ha, with an absolute minimum of 2ha. The Department of Planning, Industry and Environment now requires an absolute minimum of 5ha. The subject site of this proposal is located within the candidate area as illustrated in the locality map Appendix A.

**2. *Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?***

The following options were considered in the preparation of the planning proposal:

**Option 1:** Prepare a planning proposal proposing to rezone each lot from RU1 Primary production zone to E4 Environmental Living zone and to amend the minimum lot size of each of the lots from 40 hectares to 5 hectares to allow for environmental living consistent with adjoining land..

**Option 2:** Not proceed with the planning proposal and notify the proponents accordingly. The site would remain zoned RU1 Primary Production.

Option one is considered to be the best means of achieving the objectives of the proposal and of the SSP.

## **SECTION B: RELATIONSHIP TO STRATEGIC PLANNING FRAMEWORK**

**1. *Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy (including any exhibited draft plans or strategies)?***

### **Hunter Regional Plan 2036**

#### **Direction 10 – Protect and enhance agricultural productivity**

Currently the site is being used for residential accommodation. The proposal is not consistent with Direction 10 because the proposal seeks to rezone the site from RU1 Primary Production to E4 Environmental Living in accordance with the Sedgefield Structure Plan (SSP). The Environmental living zone is recommended as it would accommodate low impact residential development, maintain the aesthetic values of the area and the rural amenity of the wider area. Given each of the lots have an area of approximately 10 hectares it is unlikely the land could sustainably accommodate agricultural enterprises over the long-term. The proposal is consistent with adjoining and surrounding land zoning and with the Singleton Land Use Strategy 2008.

#### **Direction 13 – Plan for greater land use compatibility**

The proposal is consistent with Direction 13 as the proposal seeks to provide for low impact residential accommodation in accordance with the SSP. While it is fundamental to protect important agricultural land, it is also important to facilitate development for residential diversity in areas where co-location of agricultural and low impact residential land uses may be appropriate to reduce land use conflict and protect biodiversity values.

#### **Direction 14 – Protect and connect natural areas**

The proposal is consistent with Direction 14. Rezoning the site to E4 Environmental Living would provide for existing and future low impact residential development. Indicative

development envelopes (**Appendix B**) have been identified for each property in the Biodiversity Assessment Report (**Appendix C**) ensuring each site protects vegetation communities including Central Hunter Ironbark Spotted Gum Grey Box NSW Endangered Ecological Communities (EEC), Hunter Lowland Redgum Forest EEC and Hunter Valley River Oak Forest.

The indicative development envelopes are approximately 0.47 hectares in size and reflect the area of disturbance necessary on each site to accommodate a dwelling and ancillary development (including on-site waste water management). All vegetation outside the nominated building envelopes would likely be required to be retained. Application of the E4 zone would maintain and protect the important ecological values of the site.

#### Direction 22 – Promote housing diversity

Application of the E4 zone would accommodate the existing residence and associated infrastructure located on one lot and an additional two lots. This would allow for additional opportunity for low impact environmental living development and promote alternative housing choice as opposed to standard residential lots. Application of an E4 zoning would be consistent with the Singleton Land Use Strategy 2008 and with the surrounding area.

#### **Upper Hunter Strategic Regional Land Use Plan (UHSRLUP) 2012**

Housing and settlement is referred to in Chapter 6 of the UHSRLUP, which refers to facilitating a range of housing types through land use zoning. The UHSRLUP recognises the need to provide a mix of housing to cater for population growth and ongoing demand. The proposal would provide opportunity for a limited amount of environmental living development. The proposed zoning would assist in the maintenance of the ecological and aesthetic values of the subject site.

#### ***2. Will the planning proposal give effect to a council's endorsed local strategic planning statement, or another endorsed local strategy or strategic plan?***

##### **Singleton Local Strategic Planning Statement 2041**

Priority 2.3 the housing stock is high-quality, affordable and provides for a range of accommodation choices

This planning proposal would result in the ability to provide additional diverse housing opportunities within the LGA and in close proximity to the Singleton town centre. This is consistent with the Singleton Land Use Strategy 2008 and the Sedgefield Structure Plan.

Priority 3.1 Biodiversity is valued, protected and enhanced

The proposed change in zone from RU1 Primary Production to E4 Environmental Living will provide an additional level of protection for the biodiversity values on the site with changes in permissible land uses resulting in development considered to primarily be incompatible with maintaining and enhancing vegetated areas would not be permissible.

##### **Singleton Land use Strategy (SLUS) 2008**

The site is within the Sedgefield Candidate Area (SCA) as identified by the SLUS. The proposed rezoning and minimum lot size amendments are consistent with the recommendations of the strategy and with the surrounding land.

### **3. Is the planning proposal consistent with applicable State Environmental Planning Policies?**

**Appendix D** contains an assessment of consistency with applicable State Environmental Planning Policies (SEPPs). SEPPs relevant to this proposal are discussed in more detail below:

#### **SEPP Koala Habitat Protection 2019**

This SEPP applies to land within each LGA listed in Schedule 1 that is not National Park or Forestry Reserve.

This policy aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline.

A biodiversity report has been undertaken for the site with an Addendum to this report provided to address this SEPP.

The Local Government Area including the subject site is identified as Central Coast Koala management area in the SEPP. There is no Koala Plan of Management (KPoM) known to exist over this site.

There are Koala feed trees present and the site is identified as potential highly suitable koala habitat. An analysis of Bionet records was undertaken for the site. It showed there are no koala records within 2.5 kms of the site. Additionally no scats, tree use marks or visual sightings of koalas were seen on or around any part of the site. The development control provisions of the SEPP therefore would not apply to any future development as the subject lot is not assessed as Core Koala Habitat. No further koala studies are considered to be required under this SEPP.

#### **SEPP 55 – Remediation of Land**

This SEPP applies to land across NSW and states that land must not be developed if it is unsuitable for a proposed use because of contamination.

The previous use of the land has been limited to residential with light agricultural practices only and it is unlikely to contain any contaminants.

#### **SEPP Mining, Petroleum Production and Extractive Industries 2007**

The SEPP aims to provide proper management of mineral, petroleum and extractive material resources and ESD.

The site is not located within a mine subsidence area and is not within vicinity of any existing or approved mining operations or leases. The buffer zone imposed on the SSP by the

Department of Primary Industries has been removed. It is noted that these properties were not located within the buffer area. Given the proximity of the site to the new and existing environmental living housing estates it is considered highly unlikely that the land would be suitable for mining purposes.

The Queensland Hunter Gas Pipeline (QHGP) an underground natural gas pipeline, some 825km in length, is proposed for southern central Queensland to the Hunter NSW. Around 603km of that pipeline would be in NSW. The Singleton LGA forms part of the study area for the pipeline route. An alignment route for the pipeline has been proposed within the Singleton LGA. Although the pipeline corridor does pass through the LGA, the site does not appear to be within the corridor.

#### **SEPP (Vegetation in Non-Rural Areas) 2017**

The SEPP applies to non-rural land.

The site is currently zoned RU1 Primary Production however this proposal is seeking to amend the zone to E4 which would trigger this SEPP. The site is identified as being part of the Sedgefield Candidate Area (SCA). Vegetation and vegetation linkage/corridors and corridor management are addressed as part of the Sedgefield Structure Plan (SSP). A site specific Biodiversity Assessment Report has been prepared for the site and this assessment has resulted in the identification of indicative development envelopes for each lot able to be created which will limit disturbance/clearing. The areas are all below the maximum clearing threshold permitted under the Biodiversity Conservation Act 2016.

#### **SEPP (Primary Production and Rural Development) 2019**

The SEPP aims to facilitate economic use and development of rural lands, reduce land use conflicts, identifies State Significant Agricultural Land, encourage sustainable agriculture and aquaculture.

The SEPP applies to the site. The site is identified in the Sedgefield Candidate Area as being suitable for rural residential development under the Singleton Rural Residential Development Strategy 2005 and later the Singleton Land Use Strategy 2008.

The proposal seeks to rezone the land from RU1 Primary Production to E4 Environmental Living. The rezoning will result in the loss of a small portion of land zoned for rural purposes. It is noted that the subject site has limited agricultural suitability. The proposed changes under this planning proposal are considered to be consistent with the intent of this SEPP.

#### **4. Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?**

**Appendix E** contains an assessment of consistency with applicable s9.1 Ministerial Directions. Directions relevant to this proposal are discussed in more detail below:



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## **1.2 Rural Zones**

The objective of this direction is to protect the agricultural production value of rural land. The proposal seeks to rezone the land from RU1 Primary Production to E4 Environmental Living. The planning proposal is consistent with the recommendations of the Sedgefield Structure Plan (SSP) 2009 adopted by Singleton Council and endorsed by The Department of Planning. The land the site is not prime agricultural land and can be developed without adversely impacting on adjoining rural lands. The amendment is considered of minor significance and its impacts to the rural zone also negligible.

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## **1.3 Mining, Petroleum Production and Extractive Industries**

The objective of this direction is to ensure that the future extraction of State or Regionally significant reserves of coal, other minerals, petroleum and extractive materials is not compromised by inappropriate development.

This planning proposal seeks to rezone the land to E4 Environmental Living which does not permit extractive industries. Given the proximity of the site to the new and existing environmental living housing estates it is considered highly unlikely that the land would be suitable for future mining. The site has been identified in the adopted SSP 2009 as the preferred candidate area of rural residential housing, and the proposal is not viewed as restricting the potential development of resources of coal or other extractive minerals of State or Regional significance (as confirmed by the Department of Primary Industries removal of the buffer area). The planning proposal is considered to be consistent with the intent of this direction.

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## **1.5 Rural Lands**

The objective of this direction is to protect the agricultural production value of rural land and facilitate the economic development of rural lands for rural related purposes.

The proposal seeks to rezone the land from RU1 Primary Production to E4 Environmental Living zone. It would also change the minimum lot size for subdivision of the land from 40ha to 5ha. The proposal would allow for 3 additional allotments to be created by potential subdivision of each of the existing lots into two lots, for low impact residential development in an area of ecological and aesthetic value.

The site is considered to be of limited opportunity for productive and sustainable agricultural development due to the topography and size of the land.

The SLUS and SSP identify the land as a candidate area for rezoning for environmental living purposes, taking into account demand for such land and the need to protect prime agricultural land.

Development of the site is constrained by native vegetation and biodiversity with impacts mitigated through the use of indicative development envelopes on the potential vacant lots. The low density and limited permissible land uses of the E4 zone are unlikely to result in significant adverse impacts on water resources.

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The proposal would provide opportunities for semi-rural housing and have minimal impacts on services or infrastructure.

The proposal is considered to be consistent with the requirements of Direction 1.5. any perceived inconsistency is considered to be of minor significance and justified by the SLUS.

### 2.1 Environment Protection Zones

The objective of this direction is to protect and conserve environmentally sensitive areas. The proposal seeks to change the zoning from RU1 Primary Production to E4 Environmental Living triggering this direction. The Biodiversity Assessment Report identifies parts of the site as being environmentally sensitive. Building envelopes have been identified aiming to demonstrate suitable area is available to accommodate development on the site while limiting vegetation disturbance. The planning proposal is considered to be consistent with the intent of this direction.

### 2.3 Heritage Conservation

The objective of this direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.

As discussed in Section C, an Aboriginal Cultural Heritage Assessment has been prepared and is provided as **Appendix F**. The Assessment included site inspections by the archaeologist in conjunction with the Wannaruah Local Aboriginal Land Council (LALC). One Aboriginal object (cream mudstone scraper/modified flake 65x40x20mm) was identified on Lot 4, in the south east corner some 230m from the indicative development envelope. The planning proposal will not impact on this artefact, nor will future use of the indicative development envelope. Wannaruah LALC have indicated that they would prefer to collect the artefact if the planning proposal is approved. The identified artefact on Lot 4 has been recorded on AHIMS and given the site number 37-6-3964.

The planning proposal is considered to be consistent with the intent of this direction.

### 3.1 Residential Zones

This direction aims to:

- encourage a variety of housing types to provide for existing and future needs of residents,
- make efficient use of existing infrastructure and services
- ensure that new housing has appropriate access to infrastructure and services, and
- minimise the impact of residential development on the environment and resource lands.

The proposal seeks to rezone the land to E4 Environmental Living. The planning proposal is consistent with the recommendations of the SSP 2009 adopted by Singleton Council and endorse by DPIE. The site is identified as the preferred candidate area for environmental housing in Singleton and is required to increase the diversity of housing options. There is adequate infrastructure and service availability. The planning proposal is considered to be

consistent with the intent of the direction, any perceived inconsistencies are considered to be of minor significance.

### **3.4 Integrated Land Use and Transport**

The objective of this direction is to ensure that urban structures, building form, land use locations, development designs, subdivision and street layouts achieve the sustainable transport objectives.

The site is located within close proximity to Singleton and is well placed to be serviced by existing facilities. The site will generate traffic once developed; however, the existing and newly constructed public roads will be capable of accommodating the additional traffic.

The proposal is considered to be consistent with the aims, objectives and principles of 'Improving Transport Choice- guidelines for planning and development'.

The planning proposal would result in a minor addition of traffic to the locality that could be accommodated without the need for any augmentation to the existing street network. The planning proposal is considered to be consistent with this direction.

### **4.4 Planning for Bushfire Protection**

The objective of this direction is to protect life, property and the environment from bush fire hazards by discouraging the establishment of incompatible land uses in bush fire prone areas and to encourage sound management of bush fire prone areas.

The site is mapped as being bushfire prone as such this direction applies. A Bushfire Assessment Report has been prepared and is submitted under **Appendix G**. The Bushfire Assessment Report confirms that the proposed new lots with indicative development envelope will comply with Planning for Bushfire Protection requirements (As discussed further in Section C

### **5.10 Implementation of Regional Plans**

The objective of this direction is to give legal effect to the vision, land use strategy, goals, directions and actions contained in regional strategies.

The planning proposal is affected by this direction as the Hunter Regional Plan 2036 applies. Consideration has been given to the application of the HRP 2036 under section 3.3.2 of this report.

## SECTION C: ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACT

- 1. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?**

A Biodiversity Assessment Report (BAR) has been prepared by Peak Land Management and is included in **Appendix C**. The BAR Concluded:

*The ecological instigations and assessment of impact have found that there is no significant impact on any threatened species, Endangered Ecological Community, critical habitat, or endangered populations by the proposed works on any NSW or nationally listed species under the EP&BC Act 1999, or BC Act 2016 if the proposal adopts the recommendations of this report.*

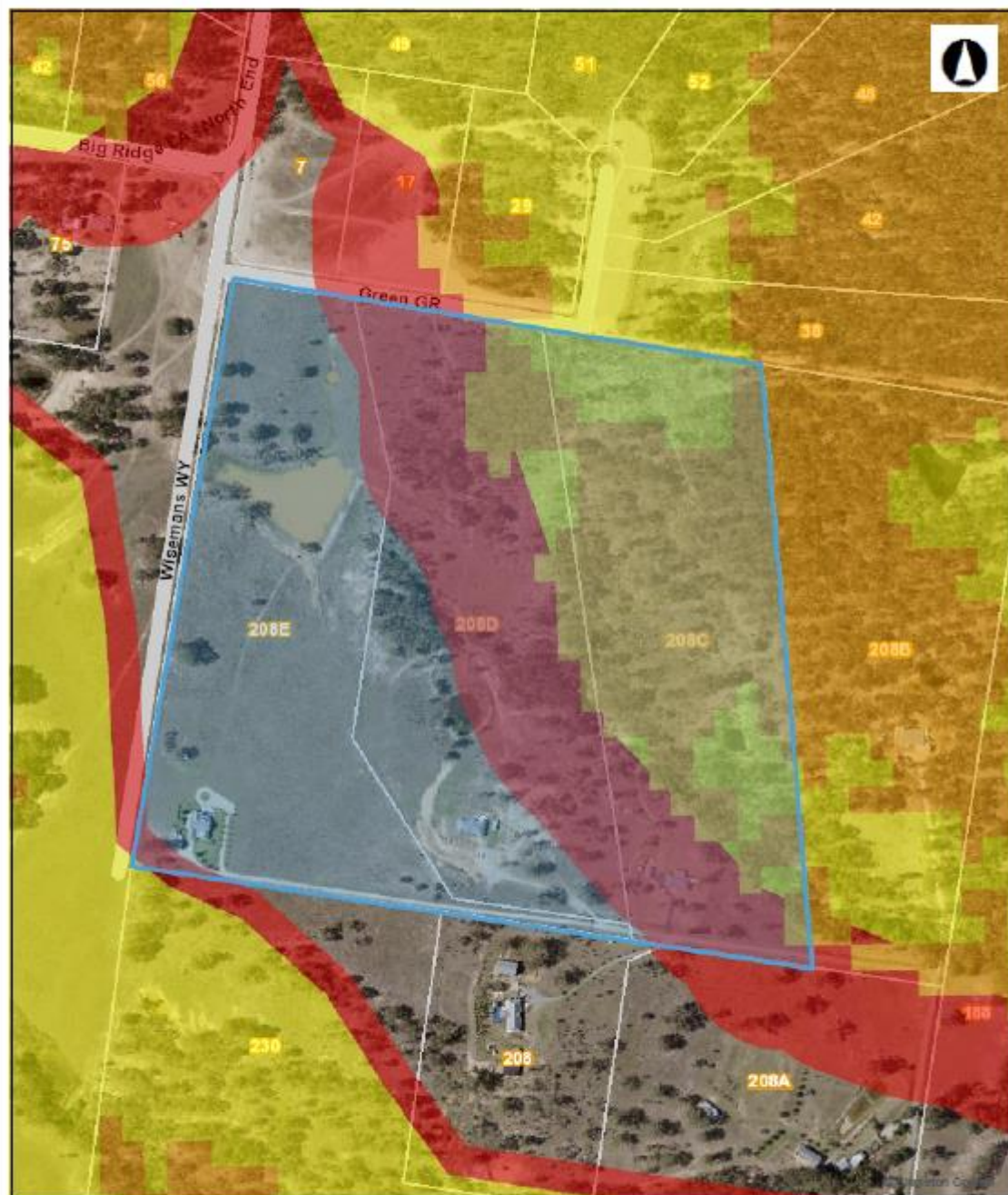
*The proposed change in zone from RU1 to E4 would provide increased protection for the ecological values on the subject site. The indicative 0.47ha/lot development envelopes have been sited to demonstrate limited impact on vegetation and ecological values could be achieved.*

- 2. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?**

### **Bushfire**

The site is mapped as being bushfire prone as illustrated in **Figure 1** below.

# Bushfire Map



246.0 p 122.96 246.0 Meters

Date: 03-Nov-2020  
Projection: GDA\_1994\_MGA\_Zone\_56

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Figure 1. Bush Fire Map

A Bushfire Assessment Report has been prepared by Peak land Management and is included in **Appendix H**. The Bushfire Assessment Report found that the proposed rezoning and future subdivision has adequate provision for all bushfire planning principles. These include:

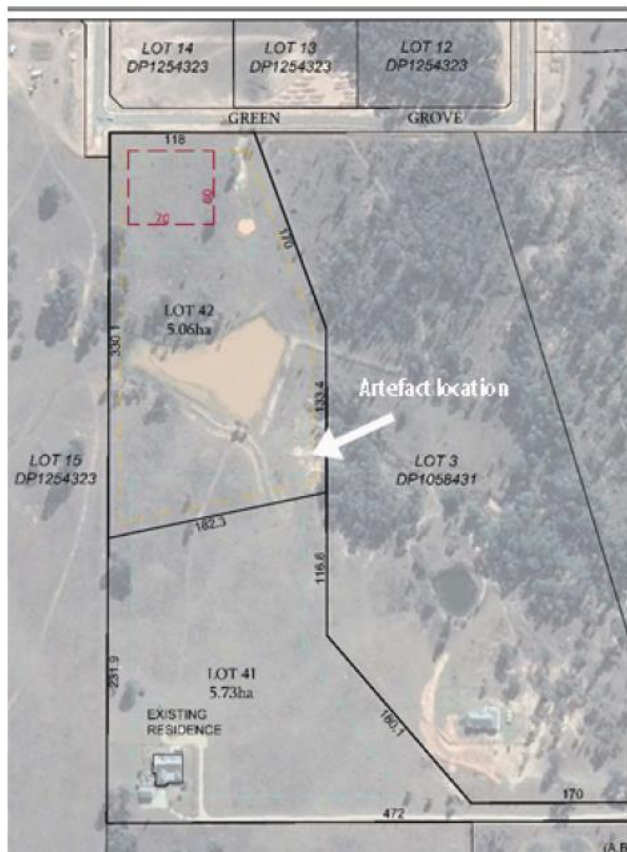
- Asset protection Zones – adequate land over each proposed site/new lot available for Asset Protection Zones varying in width from 10m (adjoin grassland) to 25m adjoining forest;
- Property access roads are short (less than 50m), located in cleared areas, from a public road, with Asset Protection Zones/reduced vegetation zones and defensible space in order to allow fire services to turn around etc;
- Proposed lots and development envelopes have been designed to allow adequate Asset protection Zones to bushfire prone vegetation;
- Modern services will be provided including underground/or above ground power (or solar power may be used) to each development envelope, tank water to be used for each dwelling;
- The subdivision will comply with subdivision requirements as per Planning for Bushfire Protection 2006 and all future dwellings will also be subject to Planning for Bushfire Protection and AS 3959 and comply with those requirements.

The bushfire risk is considered to be adequately managed through the planning provisions designed for the development as shown above. The proposed rezoning development meets the intent of Planning for Bushfire protection 2006.

### **Aboriginal Cultural Heritage**

An Aboriginal Cultural Heritage Assessment was prepared by Insite Heritage (May 2020) and is included as **Appendix F**. The Assessment included a site inspection by the archaeologist in conjunction with Wannaruah Local Aboriginal Land Council (LALC).

An aboriginal object was identified on Lot 4 DP 1058431. Wannaruah LALC have indicated that they would prefer to collect the artefact if the planning proposal to proceed (**Appendix F** of the Aboriginal Cultural Heritage Report). This process would require an AHIP. The object has been recorded in the AHIMS database as outlined in the Assessment.



**Figure 2:** Aboriginal Object Location

### **Land capability**

The site has been mapped as containing Class IV land capability. The land has most recently been used for housing and prior to that light grazing purposes only commensurate with the limited agricultural capability. There will be no loss of productive agricultural land as a result of this rezoning.

### **Land use conflict**

The land surrounding the site is predominantly zoned E4 Environmental Living and will be compatible with the future use of the site. Land uses in the vicinity of the site are not likely to conflict with the proposed E4 Environmental Living zone.

### **Flooding and drainage**

The site is not identified as being within a designated floodplain. As illustrated in **Figure 3** there are a number of minor drainage lines in the northern half of Lot 4 that feed into the dam on site. The overflow from the dam flows south east through Lot 3 and Lot 2. There is also a separate drainage line that connects into this central drainage line from the south within Lot 4 and 3. Given the size of the site and lot potential lot yield, there is sufficient opportunity for the land to be subdivided such that building envelopes could avoid impacting on existing drainage lines.



# Minor Drainage Lines Map



246.0      0      122.98      246.0      Meters

Date: 03-Nov-2020  
Projection: GDA\_1994\_MGA\_Zone\_56

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**Figure 2. Minor Drainage Lines Map**

Visual amenity



Overall character associated with the site and surrounds is rural with low impact residential holdings. As potential lot yield from development is low (i.e. three additional lots), future development of the site has the capacity to be designed to contribute positively to the rural context, with the indicative development envelope setbacks to Green grove consistent with the established and future character of the area.

Singleton DCP provisions required that any future development of the site achieves good design outcomes to ensure views and visual amenity is preserved and this will be enforced through the development application process for a dwelling.

### **Air quality**

The site is located approximately 2km from the Singleton Council Waste Management Facility. The site is not mapped as being within the designated buffer areas referred to in Clause 7.4 of the Singleton Local Environmental Plan 2013. Given the physical separation it is unlikely that the Singleton Waste Facility would generate dust or odour that would impact the site. The Sedgefield Structure Plan does not identify any air quality impacts for land within the Sedgefield Candidate Area. The site already contains residential housing and there is no history of complaints associated with air quality at the site.

### ***3. Has the planning proposal adequately addressed any social and economic effects?***

The planning proposal is consistent with the Singleton Land Use Strategy (SLUS) 2008 and Sedgefield Structure Plan (SSP) 2009 and which addressed the social and economic effects associated with the rezoning of the SCA. The planning proposal is not expected to generate any significant adverse social or economic impacts. The proposed E4 Environmental Living zone and 5ha minimum lot size is consistent with surrounding land and the recommendations of the SSP and SLUS.

## **SECTION D: STATE AND COMMONWEALTH INTERESTS**

### ***1. Is there adequate public infrastructure for the planning proposal?***

#### **Local and State road network**

The site is accessed by an existing local road network. Green Grove provides direct access to the site, which is accessed via Big Ridge Lane and Gresford Road. Any future subdivision and development of the site could be adequately designed to utilise Green Grove as illustrated in the indicative subdivision plans provided in Appendix A. Further detailed traffic assessment in accordance with Singleton DCP provisions for access to public road, would be required during the development application process, should the proposal be approved.

#### **Electricity Supply**

Electricity supplies are provided to the site. Any future development of the site has capacity to connect to existing supplies at the expense of the site owner. Connection would be subject to the requirements of the owner of that infrastructure.

#### **Gas Supply**

Gas supply is not currently available to the site.

### **Telecommunications**

Telecommunication is provided to the site. Supply could be provided to any future lots created by the rezoning and subsequent development of the site at the owner's expense.

### **Reticulated water Supply**

The site is not serviced by reticulated water supplies. Existing residents rely on on-site rainwater storage tanks for all potable water requirements.

### **Sewer**

The site is not serviced by reticulated sewer. Existing residents use an on-site sewage management systems for effluent dispersal.

### **Waste Management Services**

Singleton Council provides fortnightly kerbside waste bin collections to the Sedgefield area and site respectively.

### **Health, education and other public services**

Health education and other public services are not located within the Sedgefield area. The subject site is within approximately 6km of Singleton township providing a range of health, education and other public services.

### **Emergency Services**

The site is located approximately 6km from the Singleton township. Police, Ambulance, Fire and State Emergency Services (SES) are within close proximity to the site and can provide good response if required.

## ***2. What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?***

Consultation with relevant State and Commonwealth Agencies will be undertaken following a Gateway Determination. It is anticipated the following agencies may be consulted with during the consultation period regarding the proposal:

- NSW Rural Fire Service
- Heritage NSW
- NSW Planning, Industry and Environment – Biodiversity and Conservation

## **PART 4 – MAPPING**

Part 2 of this planning proposal describes the effect of the proposal in terms of LEP mapping. Maps showing the site context and proposed LEP map changes are contained in *Appendix C*.

To achieve the intent of the planning proposal, it is proposed to amend the following LEP maps:

Map Sheet	Map Identification Number
Land Zoning Map Sheet LZN_014	7000_COM_LZN_014_080_20181201
Land Zoning Map Sheet LZN_015	7000_COM_LZN_015_080_20141002
Lot Size Map Sheet LSZ_014	7000_COM_LSZ_014_080_20190205
Lot Size Map Sheet LSZ_015	7000_COM_LSZ_015_080_20140321

## PART 5 – COMMUNITY CONSULTATION

The Gateway Determination will specify the community consultation that must be undertaken for the planning proposal and any referrals required.

Community Consultation will be undertaken in accordance with the Department's "A guide to preparing local environmental plans" and Singleton Council's Community Participation Plan (CPP) (adopted November 2019). The CPP state the following consultation may be undertaken for a Planning Proposal to amend the Local Environmental Plan:

- Public Exhibition for 28 days (unless otherwise specified by the Gateway Determination)
- Written notification to owners of adjoining and adjacent allotments
- Notice in the local papers;
- Planning Proposal and relevant documents to be made available on Council's website; and
- A community workshop may be held at Council's discretion.

## PART 6 – PROJECT TIMELINE

Anticipated timeframes for Gateway Determination and making of the amendment to Singleton LEP 2013 are outlined below:

Task	Timeline
Anticipated commencement date (date of Gateway determination)	20/11/2020
Anticipated timeframe for the completion of required technical information	2-6 weeks
Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)	To be specified in Gateway determination. The typical public authority referral timeframe is minimum 28 days.
Commencement and completion dates for public exhibition period	To be specified in the Gateway determination. The exhibition period is typically 28 days.
Timeframe for consideration of submissions	Approximately 3 weeks
Timeframe for the consideration of a proposal post exhibition	Approximately 4 weeks

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Date of submission to the Department to finalise the LEP 30/04/2021

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Anticipated date RPA will make the plan (if delegated) 30/05/2021

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Anticipated date RPA will forward to the Department for notification. 7/6/2021

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## CONCLUSION AND RECOMMENDATION

The objective of this planning proposal is to amend the Singleton Local Environmental Plan 2013 to:

- Rezone Lots 2, 3 & 4 of DP 1058431 from RU1 Primary Production zone to E4 Environmental Living zone; and
- Amend the minimum lot size requirements for subdivision from 40 hectares to 5 hectares.

This amendment would enable future subdivision of the land to create one additional lot per property (three additional lots in total) for low impact residential purposes, consistent with the environmental living zone.

The planning proposal is consistent with the Singleton Land Use Strategy 2008 and the Sedgefield Structure Plan 2009. The assessment undertaken for this proposal demonstrates the suitability of the subject site for the proposed change and the proposal is recommended for forwarding to the Department of Planning, Industry and Environment for a Gateway determination.

This planning proposal has been prepared to explain the intended effect of the proposed amendment to the Singleton Local Environmental Plan 2013 and sets out the justification for making that amendment.

Pursuant to Section 58 of the Environmental Planning and Assessment Act 1979, Council may, at any time, vary the proposal as a consequence of its consideration of any submission or report during community consultation or for any other reason. It may also, at any time, request the Minister to determine that the matter not proceed.

This planning proposal (version:1.0) has been reviewed by the Sarah Hyatt, Coordinator Planning and Development Services and is deemed suitable for the purposes of lodgement for Gateway determination.

Angela Tinlin		Sarah Hyatt

Strategic Land Use Planner		Coordinator Planning and Development Services
----------------------------	--	---

## **APPENDIX:**

### **ANNEX A - LOCALITY MAPS**



# SINGLETON COUNCIL

208C, 208D & 208E Roughit Lane -  
Locality Map &  
Sedgefield Candidate Area

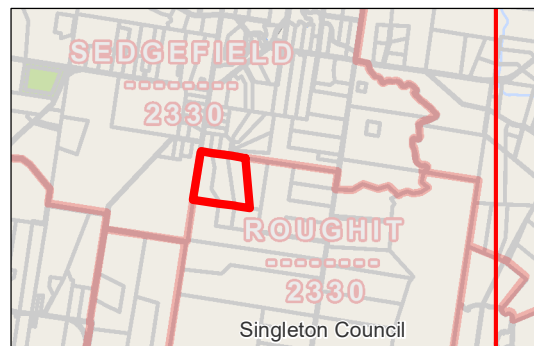
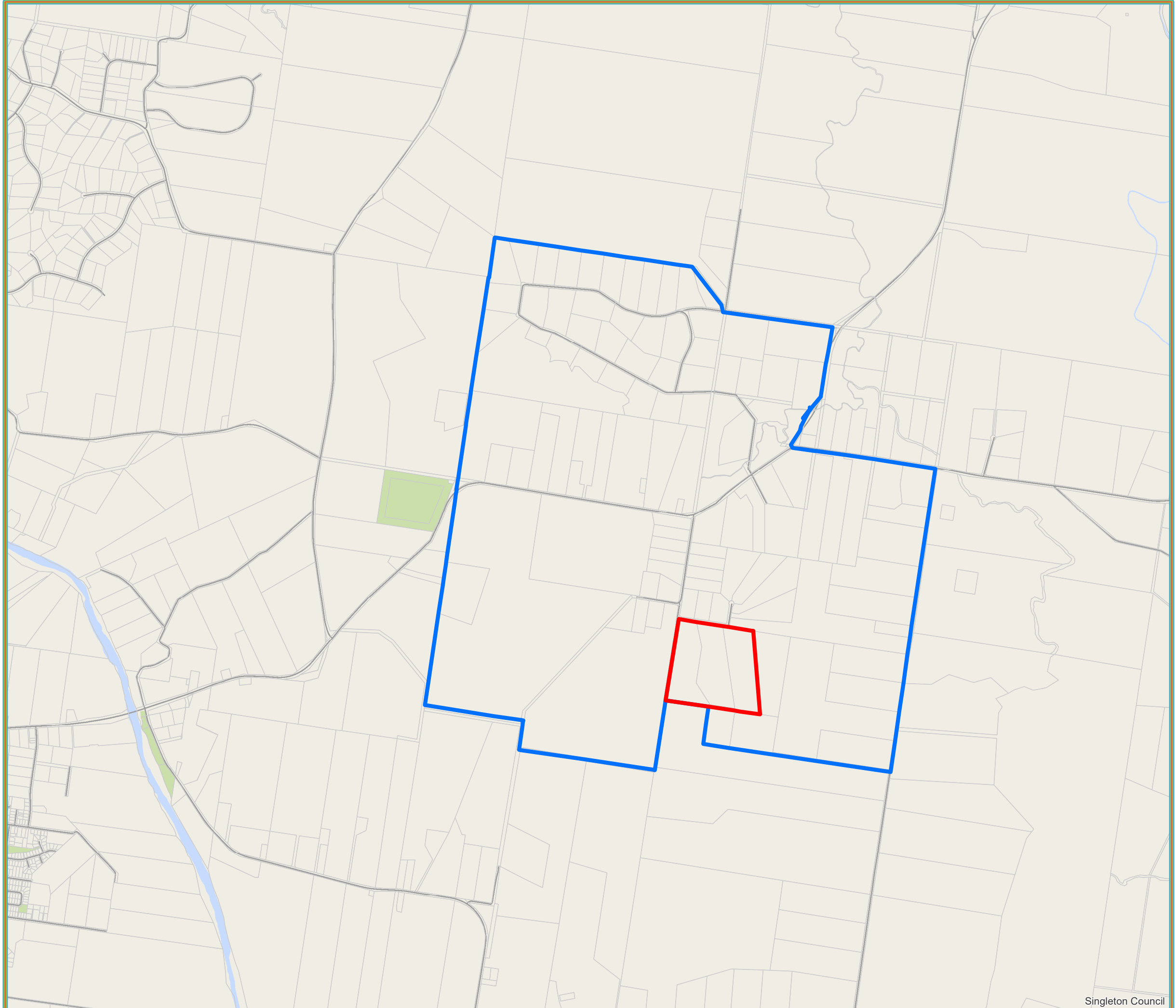
## Legend



Site



Sedgefield Candidate Area



N



0 200 400 600 800 1,000 Metres

Scale: 1:10,000 @ A3

Projection: GDA 1994  
MGA Zone 56

Document Name: DP1058431 Locality  
Author:  
Document Created By: mtrappel 22/09/2020 1:07:42 PM

Singleton Council

## **ANNEX B - BIODIVERSITY ASSESSMENT REPORT**



# **BIODIVERSITY ASSESSMENT REPORT**

**-incl 5 Part Test Assessment of Significance-**

**-Orbit Planning-  
208C,D & E Roughit Lane  
Roughit**



**PREPARED BY:**



**OCTOBER 2019**

## PEAK LAND MANAGEMENT

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Cover Photo: View of subject site.

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### Document History

Document Id.	Prep. Date	Version	Submitted to:
Draft Biodiversity Assessment Report	5.9.19	1	Orbit Planning
Biodiversity Assessment Report	24.9.19	2	Orbit Planning
Biodiversity Assessment Report	17.10.19	3	Orbit Planning
Biodiversity Assessment Report	24.10.19	4	Orbit Planning

## AUTHOR DETAILS

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**PEAK LAND MANAGEMENT** is an independent company specialising in providing quality consulting services in natural resource/land management including bush fire assessment. The company is a consultant member of the NSW Ecological Association, and accredited BAM Assessor and abides by both the NSW Ecological Association & NSW Office of Environment and Heritage professional code of conduct and ethics. PEAK LAND MANAGEMENT is licenced with Office of Environment and Heritage for survey and collection of threatened flora (SL 100640).

Some examples of the type of work PEAK LAND MANAGEMENT PTY LTD undertakes includes Review of Environmental Factors, Flora & Fauna Surveys/ Ecological Assessments, Bushland/Vegetation Management Plans, and Bush Fire Assessment Reports.

**Mr Ted Smith** is the Director of **PEAK LAND MANAGEMENT PTY LTD**. Ted has a Bachelor of Science Degree with Honours majoring in Physical Geography from the University of New South Wales, and a Graduate Diploma in Design for Bushfire Prone Areas from the University of Western Sydney. He is a qualified & experienced Ecologist being a Certified Practising Ecological Consultant Ecologist (under the NSW Ecological Association -006); Certified Bushfire Practitioner (FPA Aust-17671), and accredited Biodiversity Assessment Method (BAM) Assessor with Office of Environment and Heritage (BAAS 17076).

Ted Smith was the author of this work, and conducted all fieldwork.



## TERMS AND ABBREVIATIONS

Abbreviation	Meaning
APZ	Asset Protection Zone
AS3959-2009	Australian Standard – Construction of Buildings in Bush Fire Prone Areas
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2016</i>
BAR	Biodiversity Assessment Report incld 5 Part Test. Prepared when under the clearing threshold, not on BV Map (or incorrectly mapped), no significant impact on any threatened species or Endangered Ecological Community or over a declared Outstanding Biodiversity Area, or a Part 5 activity where authority chooses not to opt in to BOS scheme.
BCAR	Biodiversity Conservation Assessment Report
BDAR	Biodiversity Development Assessment Report
BSSAR	Biodiversity Stewardship Site Assessment Report
BTA	Bushfire Threat Assessment
Defendable Space	An area within the asset protection zone that provides an environment in which a person can undertake property protection after the passage of a bush fire with some level of safety.
Development site	The area of native vegetation impact from the proposed development footprint.
DPIE	NSW Department of Planning, Infrastructure and Environment
Ecological community	An assemblage of species occupying a particular area.
Ecosystem credit species	A measurement of the value of vegetation communities, EECs, CEECs and threatened species habitat for species that can be reliably predicted to occur with a PCT. Ecosystem credits measure the loss in biodiversity values at a development.
EEC	Endangered Ecological Community
EPA Act	<i>NSW Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>
FDI	Fire Danger Index
Ha	Hectare
Habitat	(a) an area periodically or occasionally occupied by a species or ecological community, and (b) the biotic and abiotic components of an area.
IPA	Inner Protection Area
Key threatening process	A threatening process listed in Schedule 4 of the Biodiversity Conservation Act 2016.
LEP	Local Environment Plan
LGA	Local Government Area
LLS Act	<i>Local Land Services Amendment Act 2016</i>
Native Vegetation	Native vegetation means any of the following types of plants native to New



Abbreviation	Meaning
	South Wales: (a) trees (including any sapling or shrub or any scrub), (b) understorey plants, © groundcover (being any type of herbaceous vegetation), (d) plants occurring in a wetland.
Native Vegetation clearing	Clearing native vegetation means any one or more of the following: (a) cutting down, felling, uprooting, thinning or otherwise removing native vegetation, (b) killing, destroying, poisoning, ringbarking or burning native vegetation.
Native vegetation regulatory map	A native vegetation regulatory map prepared and published under Division 2 of the LLS Act 2016.
OEH	NSW Office of Environment and Heritage
OPA	Outer Protection Area
PBP 2006	Planning for Bushfire Protection 2006
PCT	Plant Community Type
Preferred Koala Feed Trees	Tree species used preferentially as forage for Koalas. In the context of SEPP 44 these species include Swamp Mahogany ( <i>Eucalyptus robusta</i> ), <i>Eucalyptus punctata</i> (Grey Gum), Parramatta Red Gum ( <i>Eucalyptus parramattensis</i> ), Scribbly Gum ( <i>E. haemastoma</i> ), Tallowood ( <i>E. microcorys</i> ) and Forest Red Gum ( <i>Eucalyptus tereticornis</i> ).
Protected Animal	Any of the following that are native to Australia or that periodically or occasionally migrate to Australia (including their eggs and young): amphibians—frogs or other members of the class amphibia. Birds—birds of any species. Mammals—mammals of any species (including aquatic or amphibious mammals but not including dingoes). Reptiles—snakes, lizards, crocodiles, tortoises, turtles or other members of the class reptilia.
Protected plant	a) a plant that is of a threatened species, or (b) a plant that is part of a threatened ecological community, or (c) a protected plant (as listed in Schedule 6 of the BCA 2016).
RoTAP	Rare or Threatened Australian Plant
RF Act	<i>Rural Fires Act 1997</i>
RF Regulation	Rural Fires Regulation
Species/candidate credit species	Threatened species or components of species habitat that are identified in the Threatened Species Data Collection as requiring assessment for credit species. These species can not be reliably predicted to use an area of land based on habitat surrogates.
Subject site	The entire extent of the land holdings associated with the development. Includes vegetation and land that is not being developed, but may have indirect impacts upon it.
Threatening process	A process that threatens, or that may threaten, the survival or evolutionary development of species or ecological communities
VIS	NSW Vegetation Information System
VMP	Vegetation Management Plan



## 1.0 INTRODUCTION AND BACKGROUND

---

PEAK LAND MANAGEMENT has been engaged by Orbit Planning to prepare a Biodiversity Assessment Report (BAR) for a proposed 1 into 2 lot subdivision/rezoning proposal over each respective lot located at Lots 2,3,4 DP 1058431/ 208C, D & E Roughit Lane, Roughit. Figures 2-3 & 6a-6c show the proposal including site plan.

Each proposed rezoning over each lot has been addressed separately within this report, and they are to be treated as separate rezoning applications. They are all assessed within this report for ease of reporting.

Each separate lot (Lots 2, 3, 4) is referred to as “subject site”, the overall 3 lots together is termed “study area”, and proposed development site over each subject site where clearing proposed is termed “development site.” The subject site is currently zoned RU1 Primary Production under the Singleton LEP 2011. The rezoning proposal is for a proposed E4 Environmental Management zoning, permitting smaller lots minimum size of 5Ha.

The report has been prepared in accordance with the Biodiversity Conservation Act 2016 (BC Act), which is applicable for Singleton LGA. The purpose of this assessment is to apply the NSW Biodiversity Assessment Method (BAM [OEH 2017a]) to the proposed rezoning development site in accordance with the *Biodiversity Conservation Act 2016* (BC Act), and provide Orbit Planning with a Biodiversity Assessment Report (BAR). The BAR is to be submitted to Singleton Council & NSW Department of Planning, Infrastructure and Environment (DPIE) as the approval authority, as part of a Part 3 Rezoning Application (DA) for proposed development.

In this case the area of impact proposed for native vegetation removal is <0.5Ha/proposed rezoning application over each lot. The total impact area is therefore under the 0.5Ha threshold for the new minimum lot size which will be 5Ha (see Section 2.2 re: determination), and is not located within an area mapped on the Biodiversity Values Map, and has a low impact on threatened species and low impact over a NSW & Federally listed Endangered Ecological Community. The development does not trigger the BOS, and does not require a BDAR.

Each building envelope has been reduced in size and sited to reduce clearing (Fig 6a, 6b, 6c), by being located close to Green Grove Road, located in predominantly previously cleared land, reducing & avoiding impact where feasible in conformation with the BC Act.

A Bushfire Report has also been prepared by PEAK LAND MANAGEMENT (September, 2019) for the proposed rezoning which should be read in conjunction with this report. An Asset Protection Zone map is shown in Figure 8. It has requirements for Asset Protection Zones/clearing over the development site.

This report includes all ecological assessments required under the provisions of the *Environmental Planning and Assessment Act 1979*, *EP&BC Act 1999*, and *BC Act 2016*. Please note this BAR includes a 5 Part Test, and meets all requirements under the BC Act, and can be assessed by Council. It is not a Biodiversity Development Assessment Report as it is not

triggered in this instance (STCA) and not required under the BC Act 2016, nor is any referral with Office of Environment and Heritage (OEH) required.

## **1.1 SCOPE OF WORKS**

The proposal is for:

- Rezoning Lots 2, 3, 4 to permit a 1 into 2 lot rural residential subdivision of each separate lot. This report addresses each lot separately. The rezoning consent authority should treat each lot separately for the purposes of this BAR.
- Each existing lot has an existing dwelling over it. Land is cleared around each dwelling, and no further clearing or assessment has been made of these dwellings.
- Allowance has been made over each new proposed lot for a building envelope which contains a dwelling footprint, Asset Protection Zone, effluent disposal area, property access road, and new boundary fencing between the proposed lots, 1m wide, which over most lots is already cleared land. The maximum area of clearing to provide for all these proposed activities is 0.49Ha.
- All area measurements have been made using a Geographic Information System (GIS), from georeferenced Nearmap images, and the site ground truthed, and reference made to the surveyors subdivision plan which has accurate measurements.

## **2.0 PLANNING INSTRUMENTS**

---

### **2.1 FEDERAL**

#### *Environment Protection and Biodiversity Conservation Act 1999*

This Act is related to actions which may have a detrimental impact on matters of National Environmental Significance (NES). This includes:

- Nationally Threatened Species (including koala) and Ecological Communities,
- Listed Migratory Species which may be relevant to this site
- Declared world heritage sites
- Ramsar Wetlands
- Nuclear actions
- Actions in a Commonwealth marine area.

For the purposes of this Act this report should be used by Council to allow an Assessment of whether the site requires approval from Department of Environment. It is an offence to carry out an action that will or is likely to have a significant impact on one of the above NES matters without first obtaining an approval from the Commonwealth Environment Minister except where an exemption in the EPBC Act applies. A Bionet database search which includes listed locally recorded federal threatened species has been produced (Appendix 3).

The site is not a Declared World Heritage Site, Ramsar Wetland, has one Federal listed Critically Endangered Ecological Community present, and Nuclear Actions/Actions in a Commonwealth marine area are not relevant. There is habitat present for some listed EPBC threatened species, which are addressed within the 5 Part Test where applicable. The proposal in the consultant's opinion conforms to the *EP&BC Act 1999* and does not need referring to Federal Department of Environment.

### **2.2 STATE**

#### *Environmental Planning and Assessment Act 1979*

Austlii state:- *"Under Section 55AA of the EP& A Act - Application of Part 7 of Biodiversity Conservation Act 2016 and Part 7A of Fisheries Management Act 1994.*

*This Act has effect subject to the provisions of Part 7 of the Biodiversity Conservation Act 2016 and Part 7A of the Fisheries Management Act 1994 that relate to the operation of this Act in connection with the terrestrial and aquatic environment".*

*Note. Those Acts contain additional requirements with respect to assessments, consents and approvals under this Act.*

The *BC Act 2016* has been addressed within this report, and therefore the relevant biodiversity sections of the *EP& A Act 1979* have been addressed also.



Figure 1: Aerial photo showing subject sites and surrounds (imagery from Department of Lands). North to top of all figures unless otherwise shown.





Figure 2: Aerial photo showing subject site

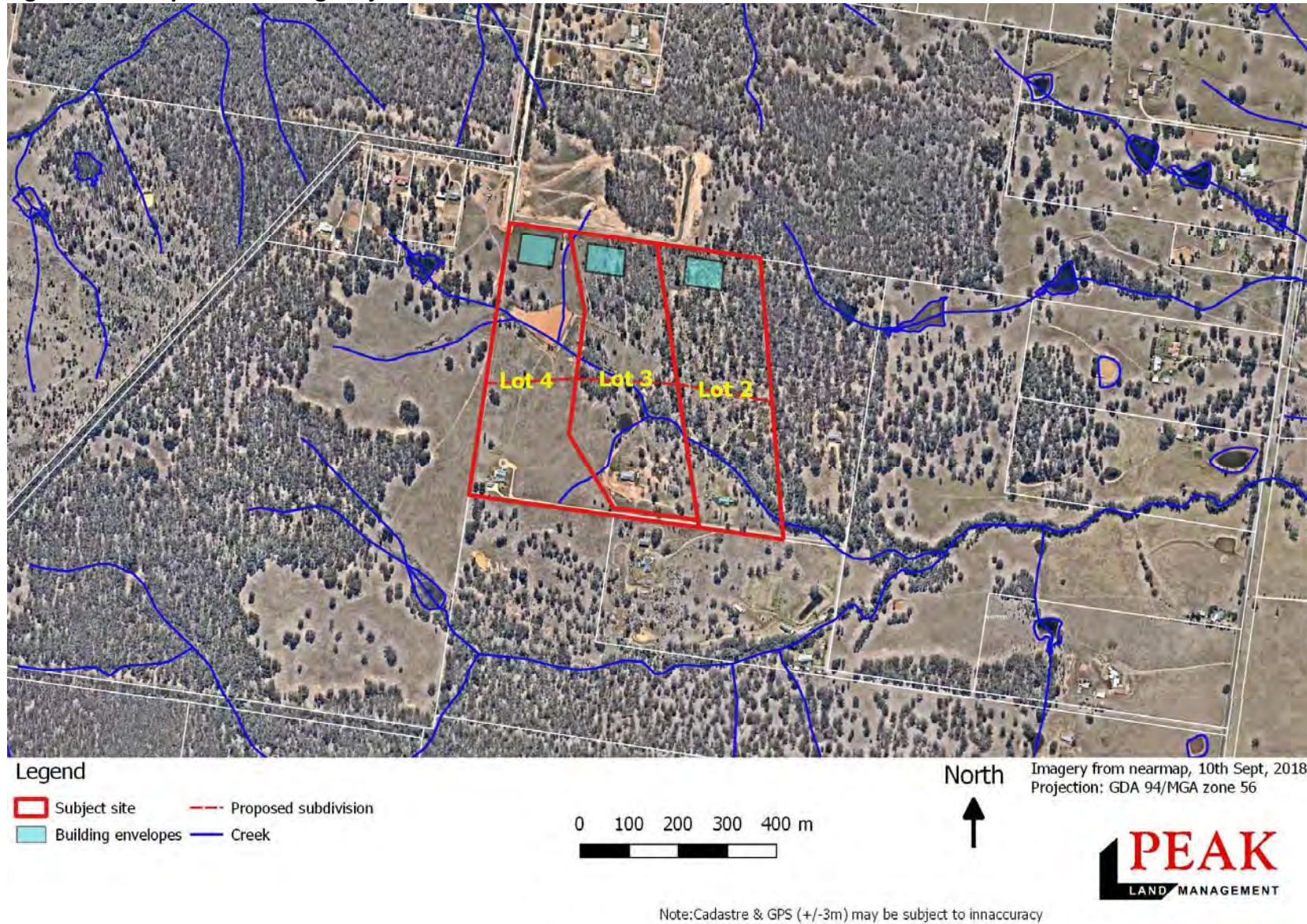
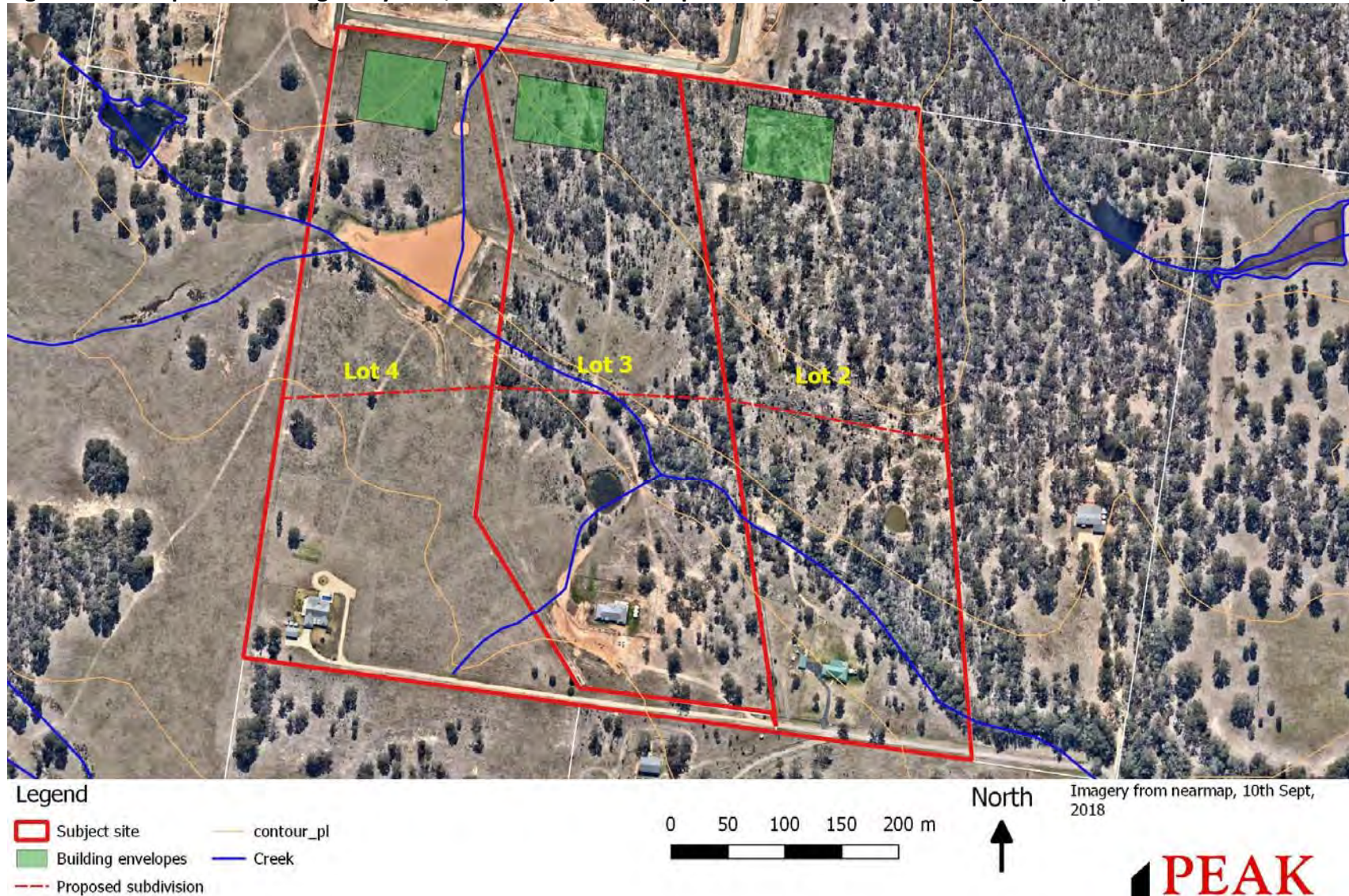




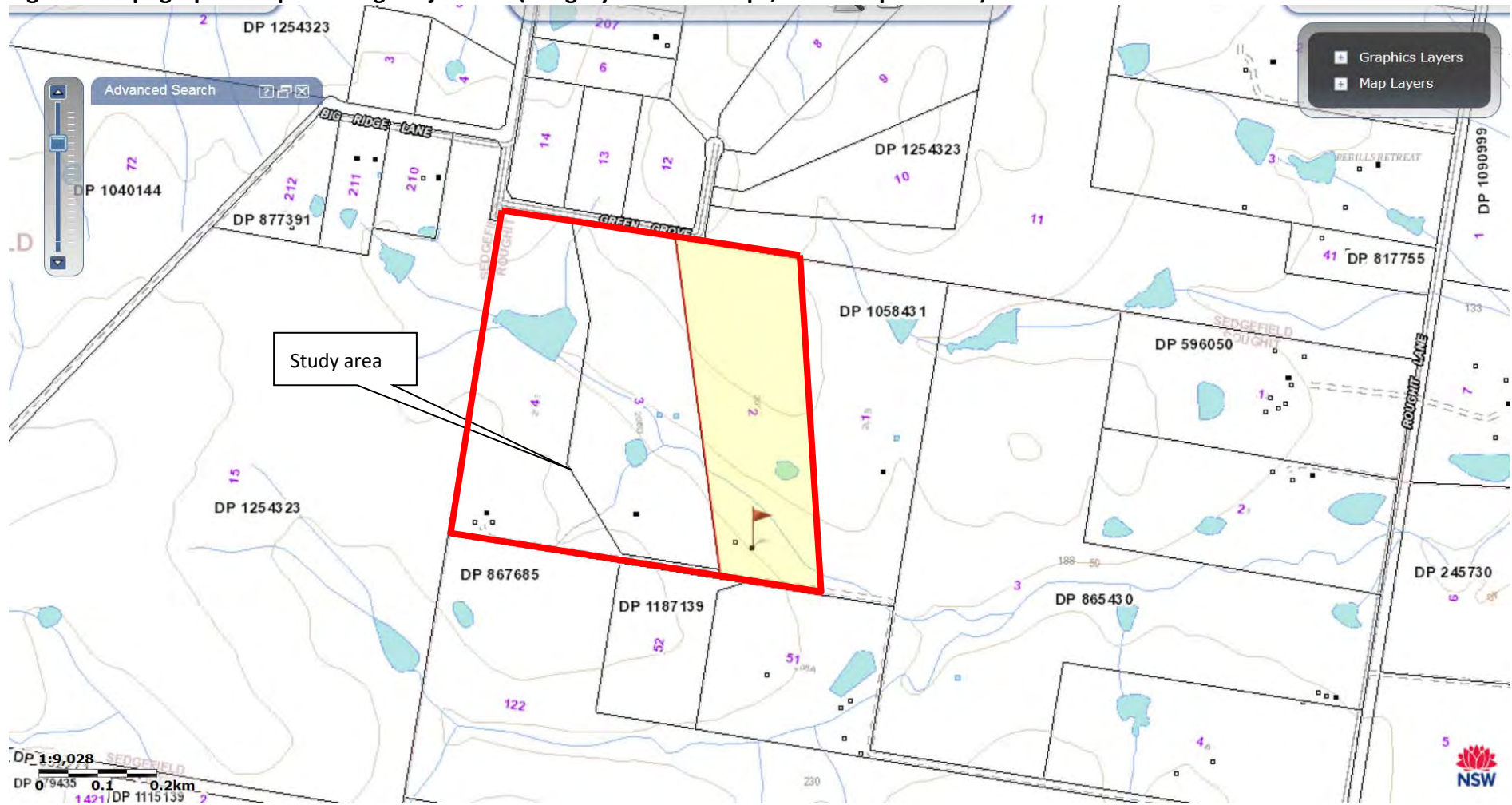
Figure 3: Aerial photo showing study area, each subject site, proposed subdivision & building envelopes/development site



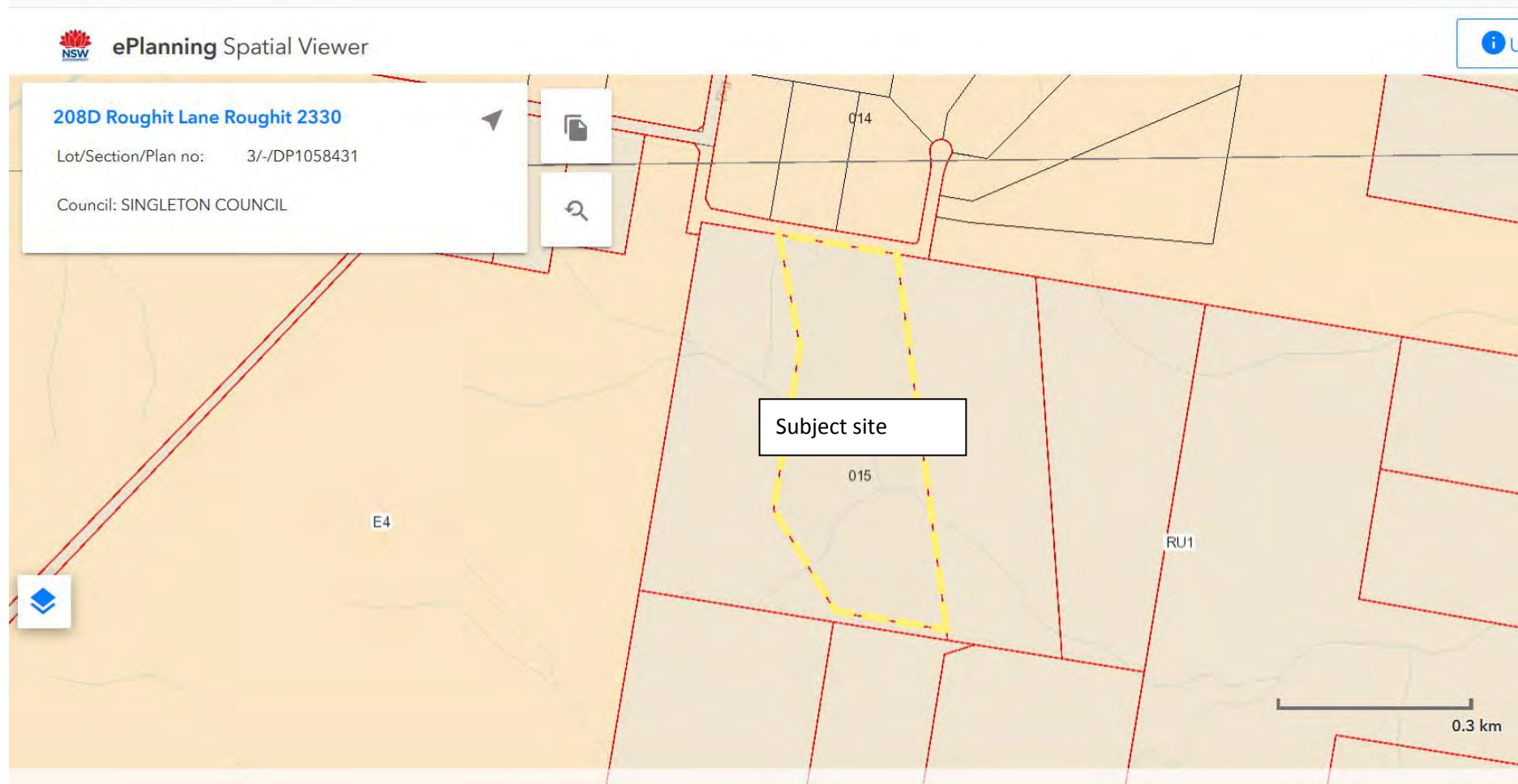
Note: Cadastre & GPS (+/-3m) may be subject to innaccuracy



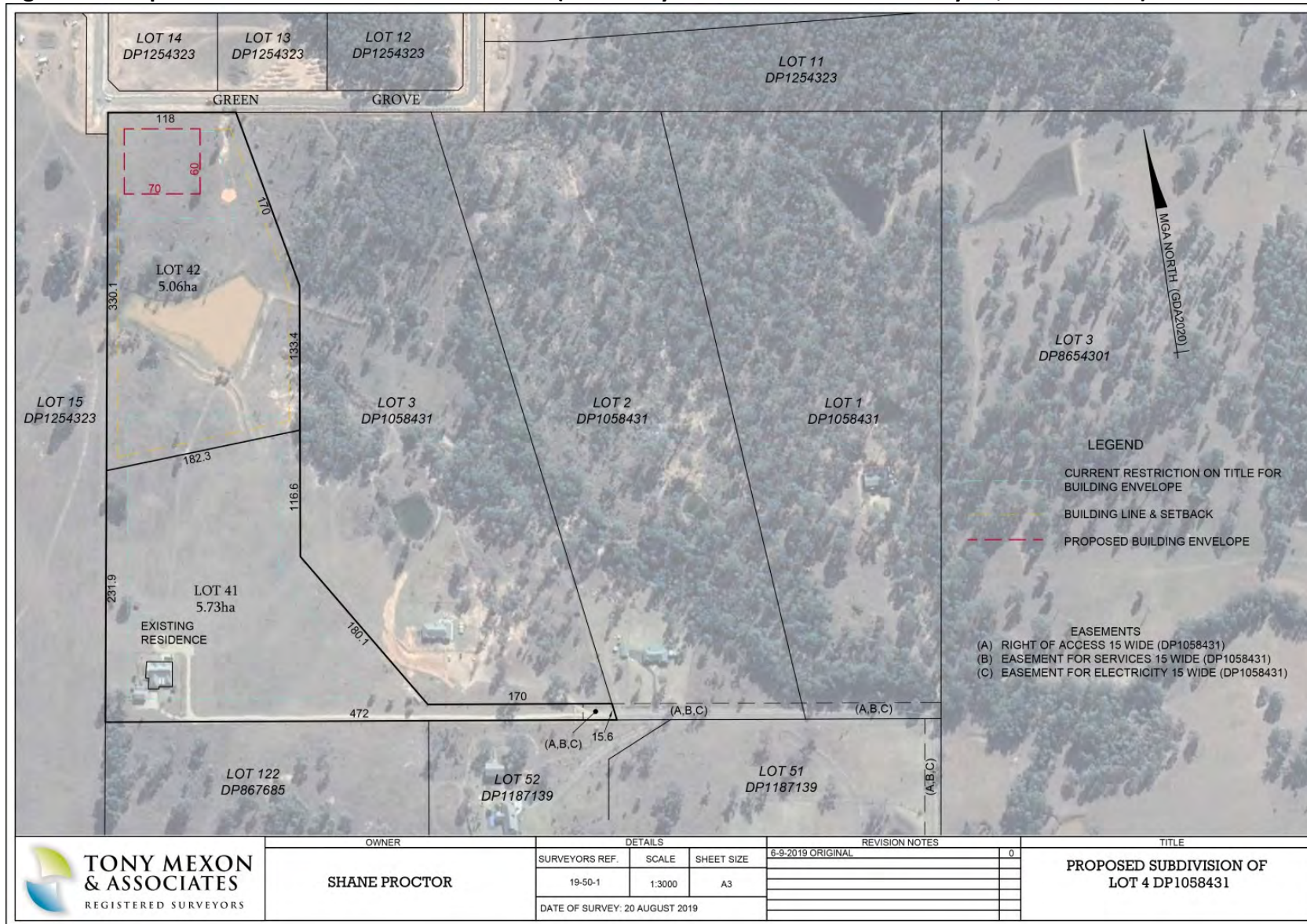
Figure 4: Topographic map showing subject site (imagery from SIX maps, Lands Department)



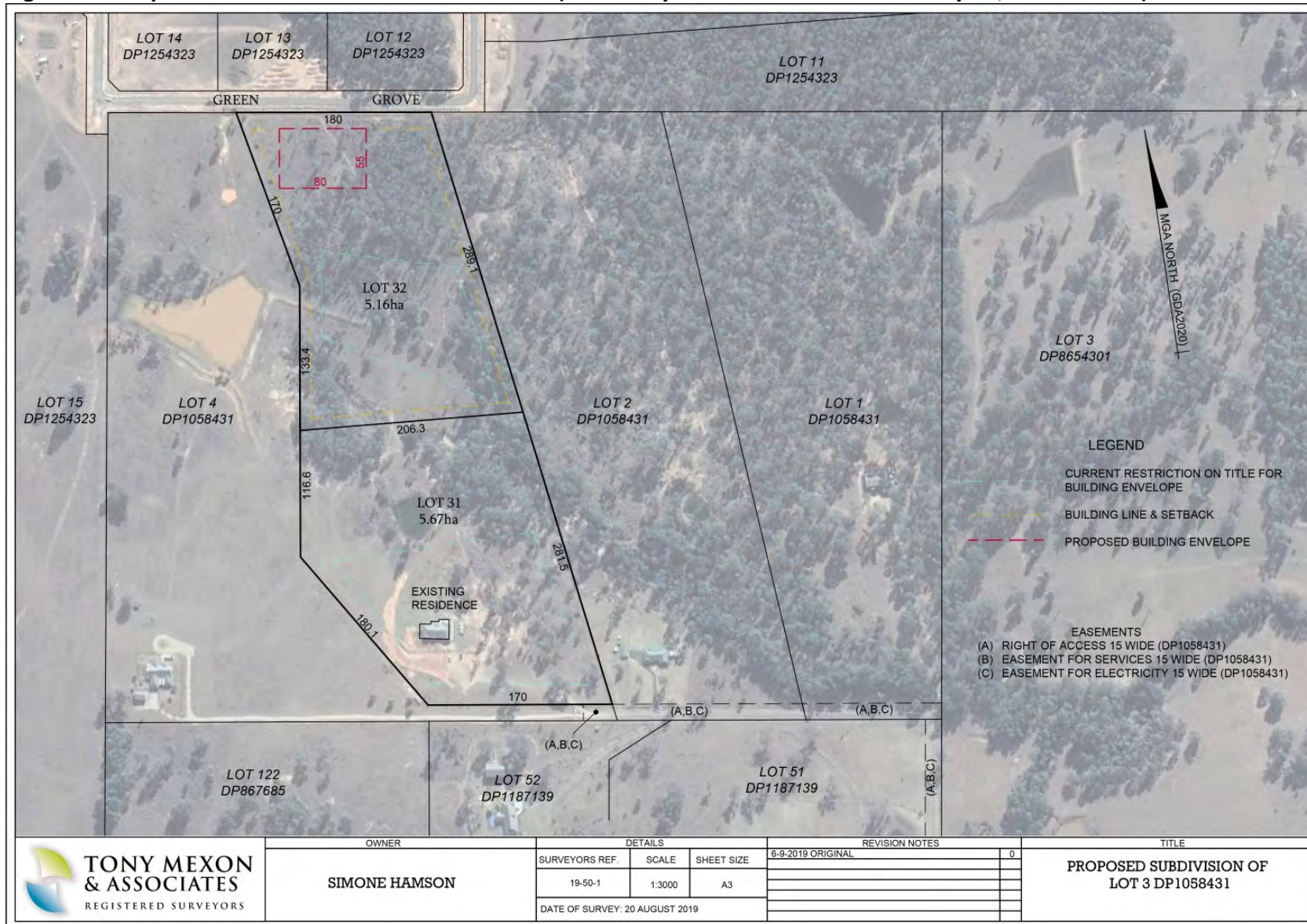
**Figure 5: LEP zoning of subject site (from eplanning portal, NSW Government)**



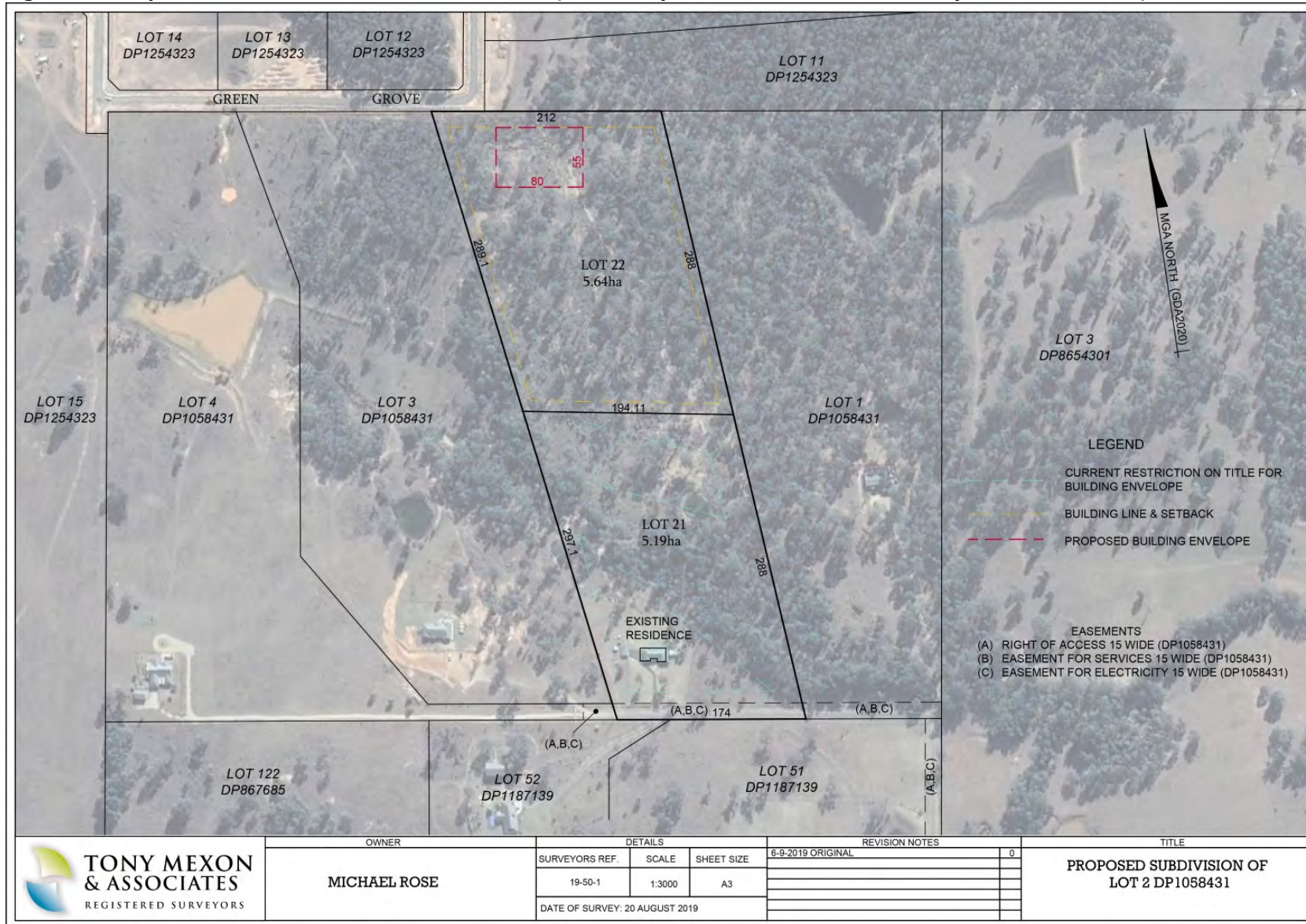


**Figure 6a: Proposed subdivision of Lot 4 DP 1058431 (from Tony Mexon & Associates Surveyors, dated 6.9.19)**



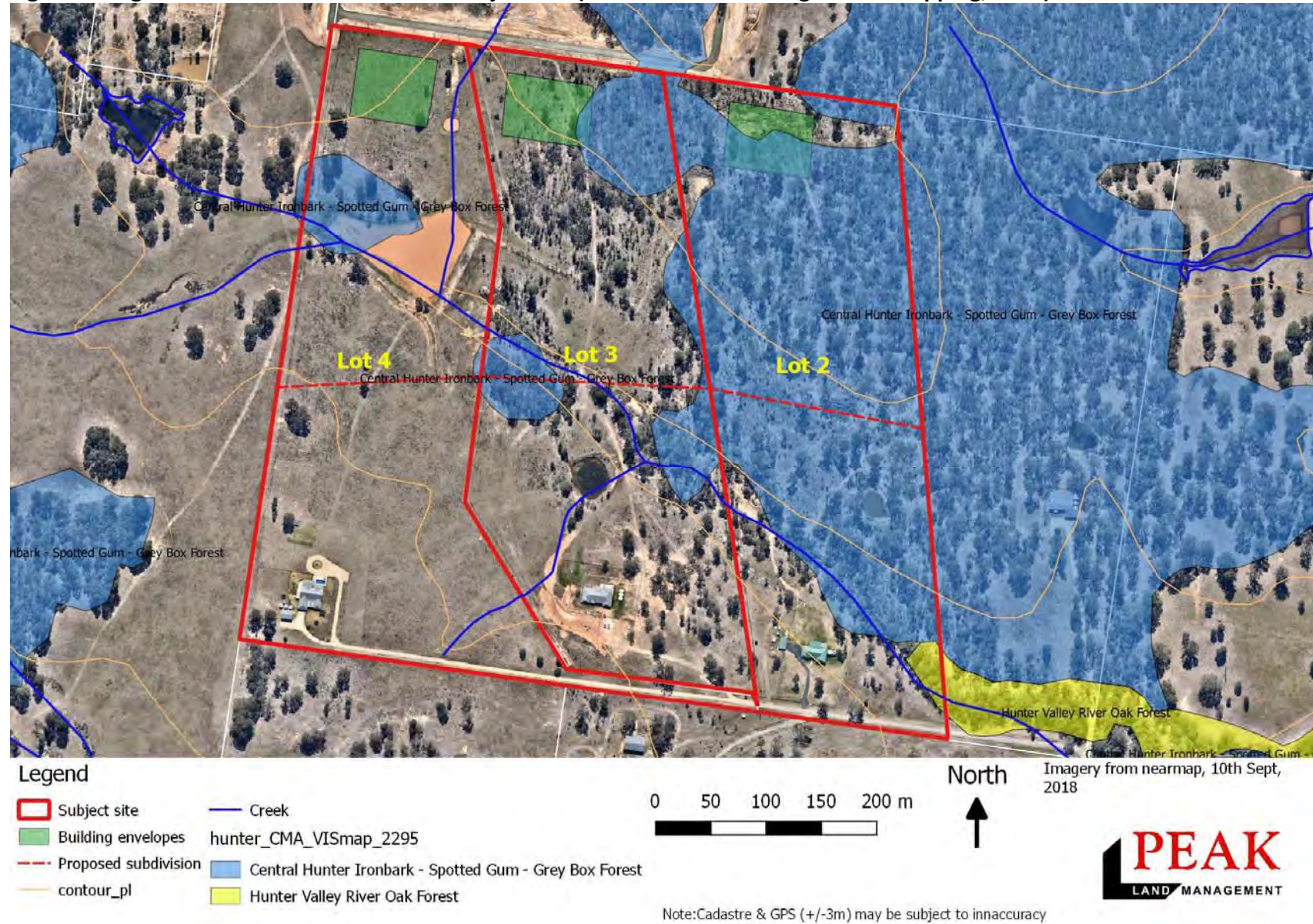
**Figure 6b: Proposed subdivision of Lot 3 DP 1058431 (from Tony Mexon & Associates Surveyors, dated 6.9.19)**



**Figure 6c: Proposed subdivision of Lot 2 DP 1058431 (from Tony Mexon & Associates Surveyors, dated 6.9.19)**

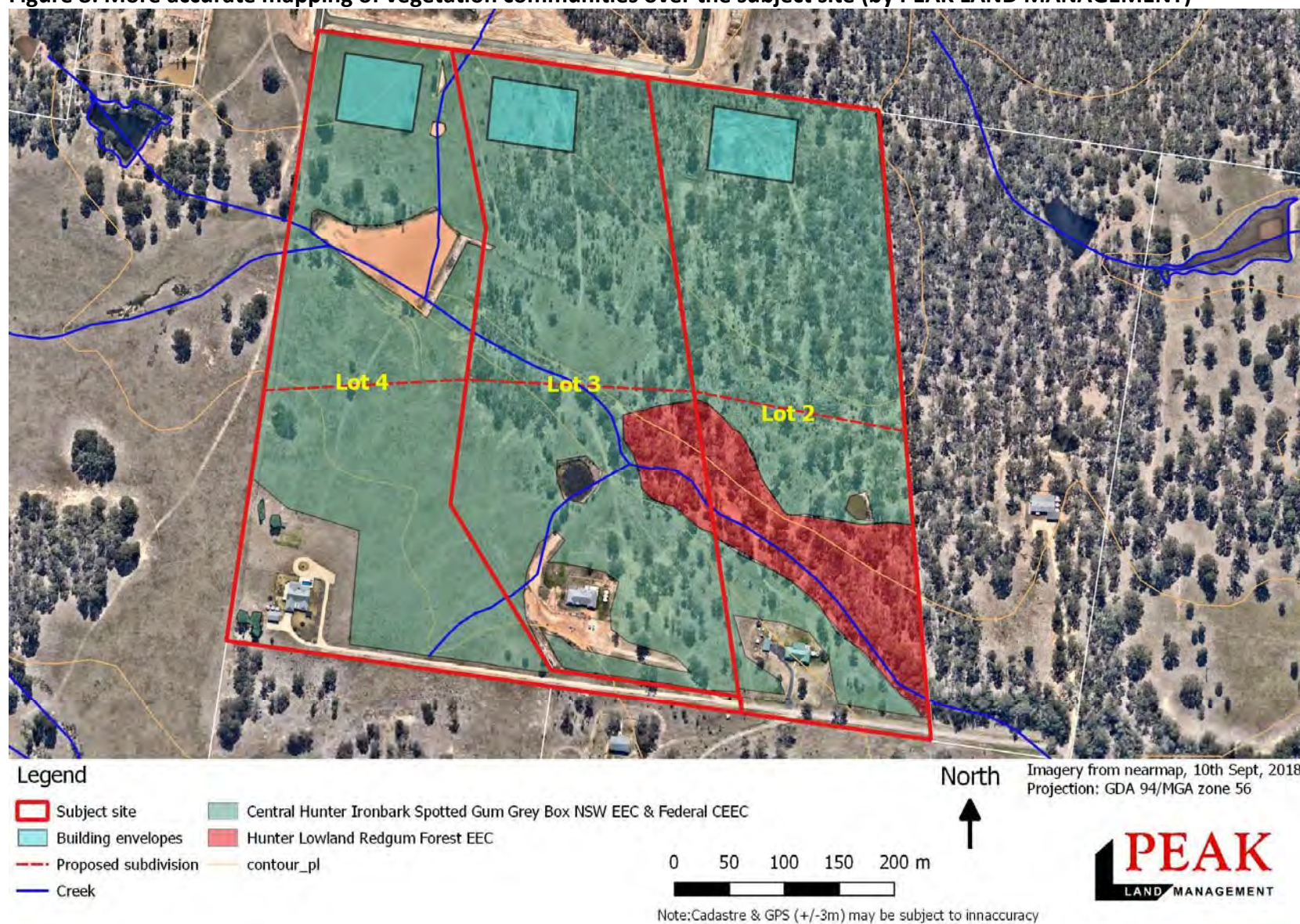


**Figure 7: Vegetation Communities over the subject site (from Hunter CMA Vegetation Mapping, 2006)**





**Figure 8: More accurate mapping of vegetation communities over the subject site (by PEAK LAND MANAGEMENT)**





**Figure 9: Proposed development impact area**

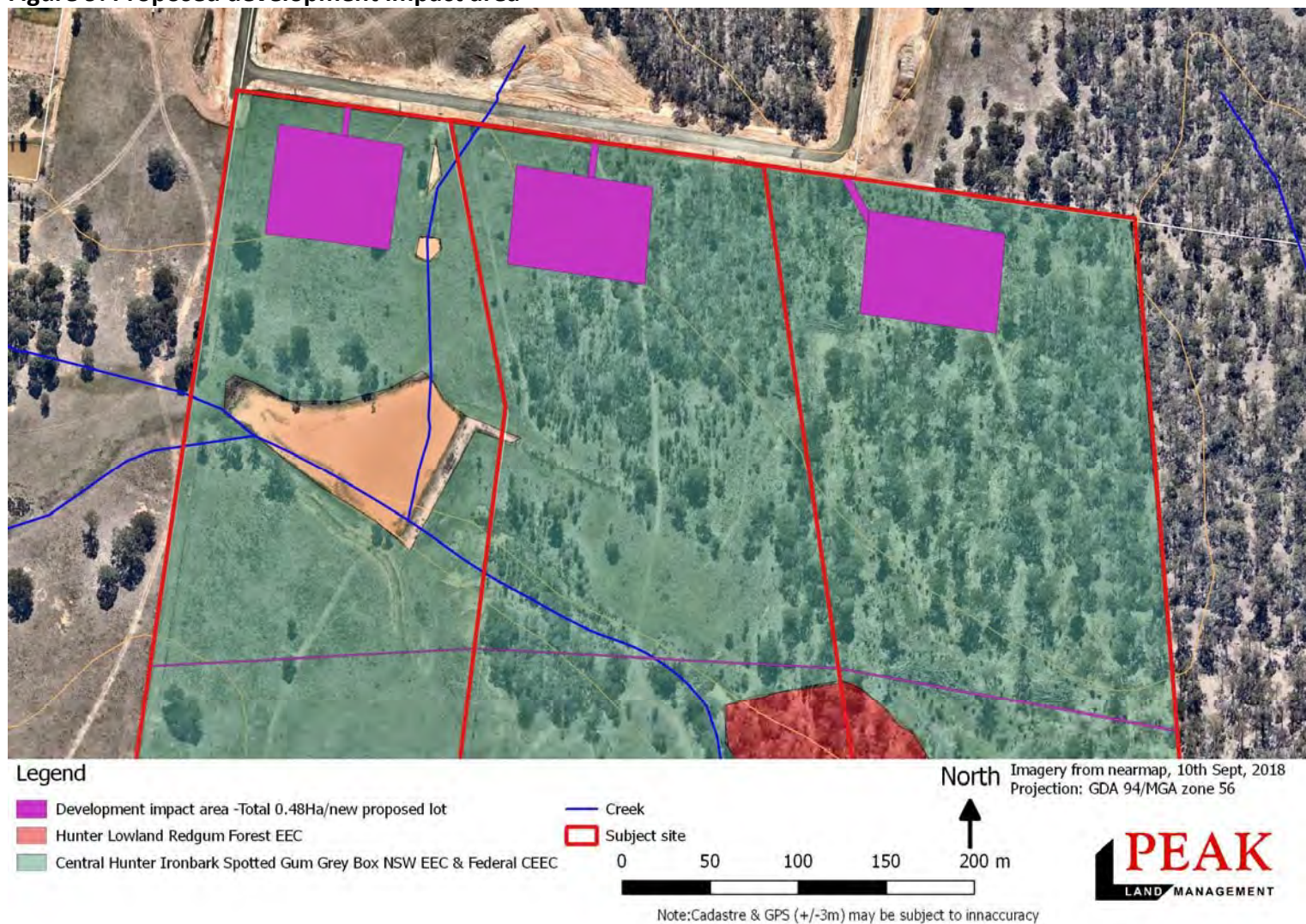




Figure 10: Dwelling footprint area & Asset Protection Zone (from Bush Fire Rezoning Report prepared by PEAK LAND MANAGEMENT, Oct, 2019)

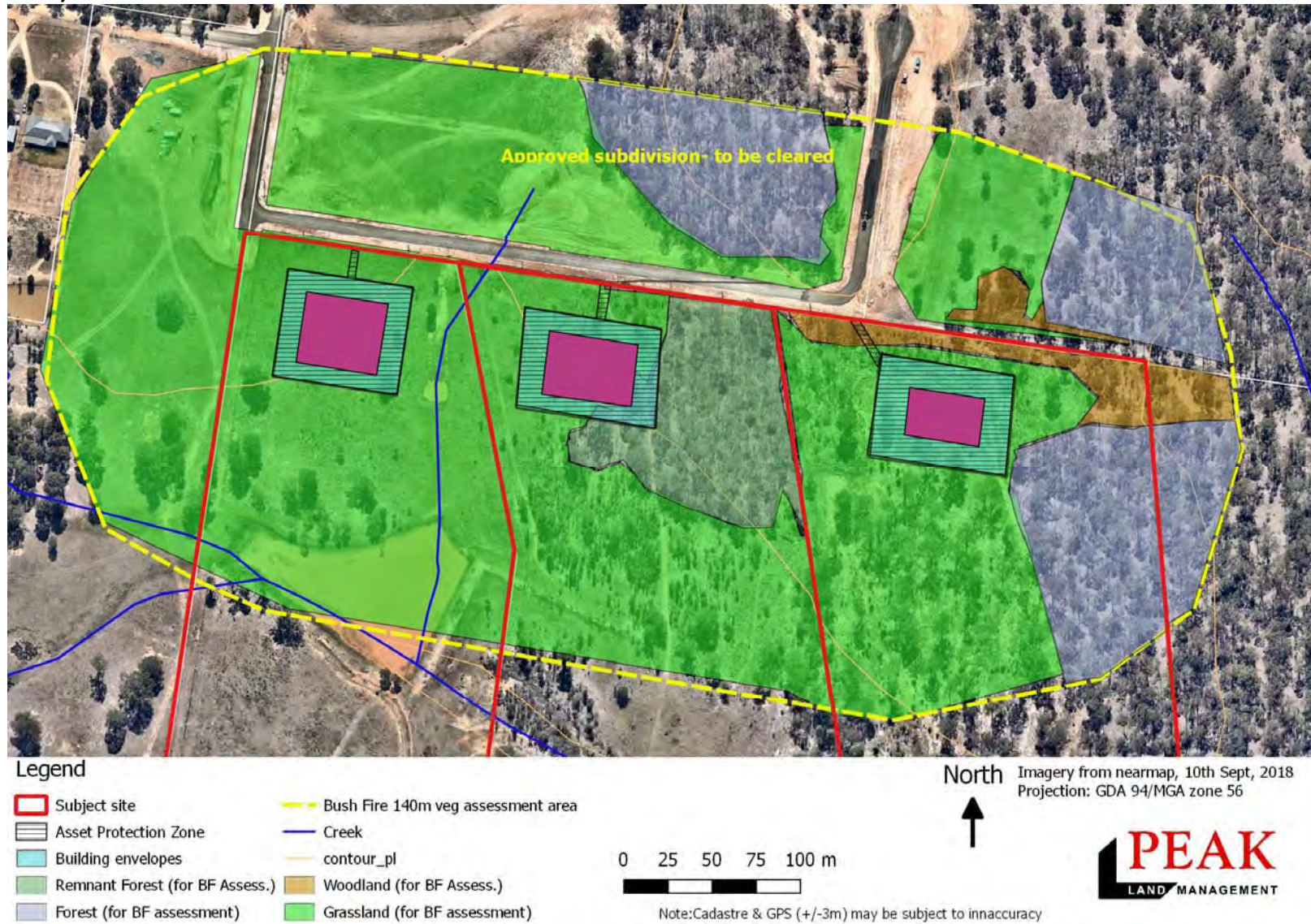
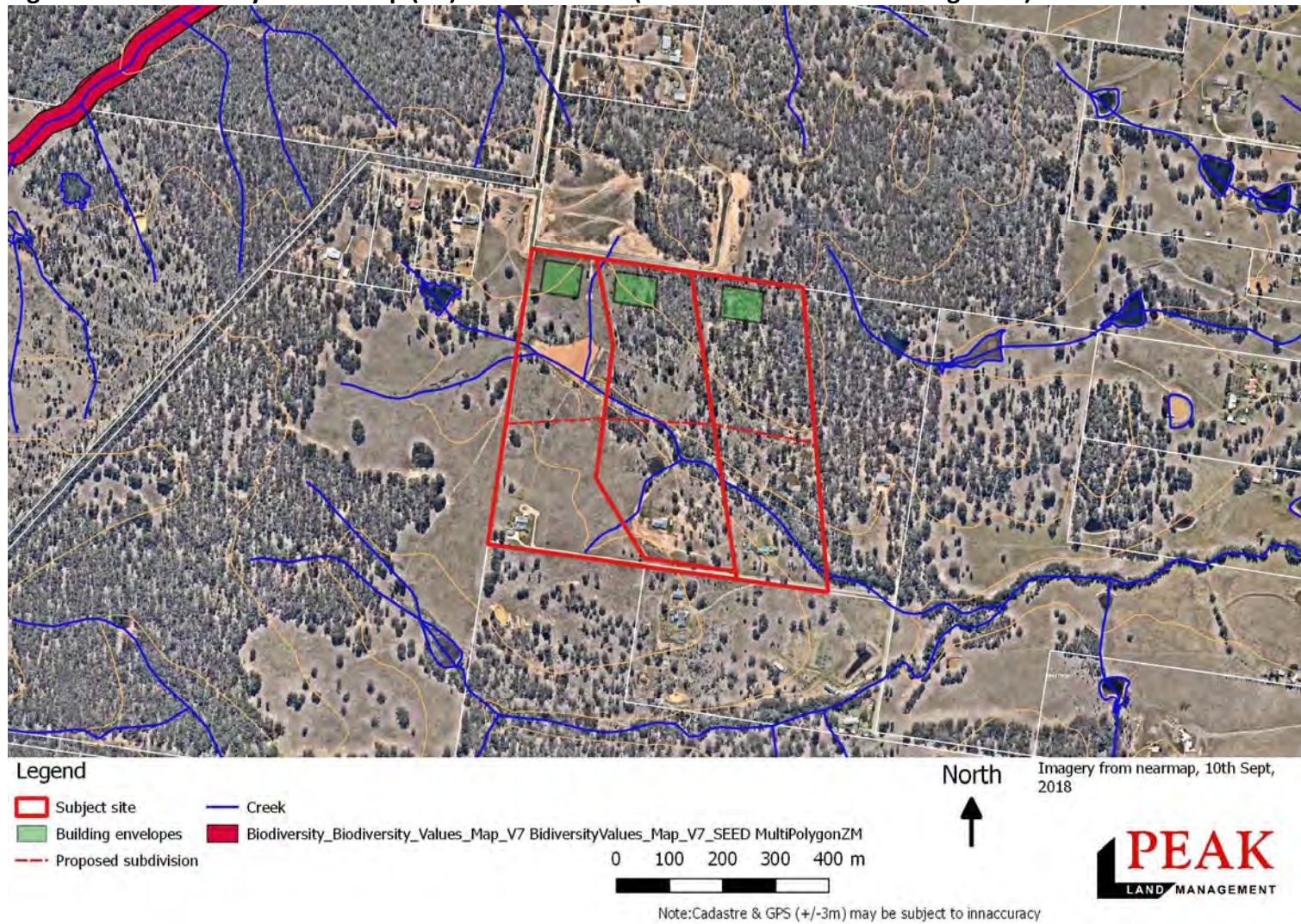




Figure 11: Biodiversity Values Map (V7)—site not listed (data from [www.lmbc.nsw.gov.au](http://www.lmbc.nsw.gov.au))





**Biodiversity Conservation Act 2016.**

*The BC Act 2016 repeals the Threatened Species Conservation Act 1995 (NSW), the Native Vegetation Conservation Act, Nature Conservation Trust Act 2001 (NSW) and parts of the National Parks and Wildlife Act 1974 (NSW).*

The BC Act establishes a new regulatory framework for assessing and offsetting biodiversity impacts on proposed developments. Where development consent is granted, the authority may impose as a condition of consent an obligation to retire a number and type of biodiversity credits determined under the new Biodiversity Assessment Method (**BAM**).

The purpose of the Act (from Austlii, Aug,2017) relevant to this Biodiversity Assessment Report is:

*The purpose of this Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.*

OEH state: - *“The test of significance detailed in section 7.3 of the Biodiversity Conservation Act 2016 must be used to determine whether a local development is likely to significantly affect threatened species.*

*Proponents will need to supply evidence relating to the triggers for the Biodiversity Offsets Scheme (BOS) Threshold and the test of significance when submitting their application to the consent authority.*

**Area clearing threshold**

*The area threshold varies depending on the minimum lot size (shown in the Lot Size Maps made under the relevant Local Environmental Plan (LEP)), or actual lot size (where there is no minimum lot size provided for the relevant land under the LEP).*

*The area threshold applies to all proposed native vegetation clearing associated with a development proposal – for example in the case of a subdivision; all future clearing across the lots subject to the subdivision, must be considered”. Table 2 shows the proposed clearing amount, and other details.*

**Table 1: Area clearing thresholds (from BC Act 2016)**

Minimum lot size associated with the property	Threshold for clearing, above which the BAM and offsets scheme apply
Less than 1 ha	0.25 ha or more
1 ha to less than 40 ha	0.5 ha or more
40 ha to less than 1000 ha	1 ha or more
1000 ha or more	2 ha or more

## **Biodiversity Values Map (BV Map)**

OEH 2018 ([www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap](http://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap)) state: - *“The Biodiversity Values Map (BV Map) identifies land with high biodiversity value, as defined by the Biodiversity Conservation Regulation 2017. The Biodiversity Offsets Scheme applies to all local developments, major projects or the clearing of native vegetation where the State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 applies. Any of these will require entry into the Biodiversity Offsets Scheme if they occur on land mapped on the Biodiversity Values Map. Exempt and complying development or private native forestry are not subject to the Biodiversity Offsets Scheme”.*

The subject site is not mapped on the Biodiversity Values Map (Fig. 8).

Therefore this proposal does not trigger the BC Act full BDAR assessment (Table 2) under this criteria.

## **5 Part Test**

Under the *Biodiversity Conservation Act 2016 (Sect 7.3)*, a 5 Part Test is undertaken to determine whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats.

Under the *Biodiversity Conservation Act 2016* Part 4 development work will require a 5 Part Test for any clearing of native vegetation, impacts over threatened flora/fauna species and Endangered Ecological Communities.

The “Five Part Test of Significance” was required in this instance as this proposed development is Part 3 (LEP Amendment) and Part 4 (DA for subdivision and future dwellings) under the Act, and proposes vegetation clearing, which also provides habitat for some threatened species.

It found there was no significant impact over any threatened species (subject to Council approval), Endangered Ecological Communities or Endangered Populations (see Section 6).

This report has also addressed other relevant ecological factors over the site such as threatened species observations, Endangered Ecological Communities, hollow bearing habitat trees, other habitat features such as caves, hollow logs, connectivity, water bodies/creeks, and details amount of native vegetation clearing proposed for the development.

**Table 2: Summary of BC Act triggers applicable to the subject site**

Land zone & Development type (under EP& A Act)	Minimum lot size associated with the property	Applicable threshold for clearing, above which the BAM and offsets scheme apply	Biodiversity Values mapped over site?	Proposed clearing (Ha)	5 Part Test Assessment of significance required?	Full BDAR required
• RU1, to be rezoned to E4, Part 3	Currently 40Ha, to be E4,, 5Ha	0.5Ha or more	No	0.047Ha/new proposed lot	Yes	No*

\*See 5 Part Test results, no significant impact on any threatened species, Endangered Ecological Community or critical habitat was found.

\* This assessment is based on new minimum lot size of 5Ha.

### **Water Management Act, 2000 – Riparian Management**

This Act is administered by the Office of Water and controls works along rivers and foreshore areas of streams or drainage lines. No creeks are present over the development site. No part of the proposal has any impact over any direct impact over any riparian zones, and therefore this Act is addressed.

### **SEPP 44: Koala Habitat Protection**

Austlii state:

*“This Policy aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline:*

*(a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and*

*(b) by encouraging the identification of areas of core koala habitat, and*

*(c) by encouraging the inclusion of areas of core koala habitat in environment protection zones.*

In this Policy:

*“core koala habitat” means an area of land with a resident population of koalas, evidenced by attributes such as breeding females (that is, females with young) and recent sightings of and historical records of a population.*

*“guidelines” means the guidelines, as in force from time to time, made for the purposes of this Policy by the Director.*

*“potential koala habitat” means areas of native vegetation where the trees of the types listed in Schedule 2 constitute at least 15% of the total number of trees in the upper or lower strata of the tree component”.*

This SEPP applies across NSW to land which is greater than 1 hectare in extent, including adjoining land in the same ownership whether or not the proposal applies to the whole or only part of the land, and is not a National Park or Forestry Reserve. Therefore this SEPP applies, and will be addressed here.

No scats, tree use marks or visual sightings of koalas were seen on or around the site. Feed trees as listed under this SEPP do occur over the site (*Eucalyptus tereticornis*, *Eucalyptus punctata*), at densities below 15%, over or near the development site. There is potential Koala habitat over the Hunter Lowland Redgum Forest, which is unaffected by the proposal. Therefore the development site is not considered Potential Koala Habitat, or core Koala habitat, as there are no records of breeding Koala present in this area.

It is considered that the proposed works conform to this SEPP, and that no further SEPP 44 koala studies are considered warranted or required under this SEPP.

## **2.3 LOCAL**

The relevant local government is Singleton Shire Council, under the Singleton LEP 2013. The land is zoned RU1, minimum lot size 40Ha, with proposed rezoning to E4. Environmental reporting is required on land where any development, and particularly any native vegetation removal, is proposed, which this report addresses.

### **2.3.1 DRAFT LOCAL ENVIRONMENTAL PLANNING INSTRUMENTS**

No other draft planning instruments have been identified.

### **3.0 SITE ASSESSMENT**

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#### **3.1 DISTURBANCE HISTORY**

The development sites have a variety of disturbance processes occurring including:

- Past part or full clearing of the proposed building envelopes sites and Asset Protection Zones;
- Planting of exotic understorey (carpet grass etc) in some areas, but limited and other landscaping/dam building, fencing, etc;
- Cattle & horse grazing;
- Past logging /clearing operations over large areas of each existing lot;
- Feral animals—almost certainly domestic & wild dogs, foxes, rats/mice, & cats present.

Land surrounding the study area is part forested/part cleared agricultural land. A new subdivision has been approved and is being developed to the north, with lots shown in Figure 4. Lots are for sale, and it is likely that further clearing will occur over these lots, for dwellings, access roads, etc.

#### **3.2 CONNECTIVITY**

Native vegetation occurs over the eastern slopes adjoining Lot 2, and to the north of Lot 2, and over parts of each site. Lot 2 has large & ecologically significant old growth hollow bearing trees, and both Lots 2 & 3 have a vegetated riparian zone along the creek.

The subject sites have wildlife connectivity along the riparian zone, and over the eastern side of Lot 2.

The proposal is not anticipated to affect wildlife corridor connectivity over the subject property with retention of all vegetation outside of each 0.5Ha development area.

#### **3.3 WATER COURSES**

None affected either directly or indirectly by the proposal, with creek over 200m away from the development sites/building envelopes.

#### **3.4 SOILS, GEOLOGY AND TOPOGRAPHY**

Soils occur on the property as a result of parent material, geology, slope, landscape position, landuse, aspect, time, and to a lesser degree vegetation and climate. The soil landscapes have been mapped for this area by Kovac and Lawrie 1985. Soil landscapes are mapped using a combination of slope, soil type, and terrain to give a broad picture of major soil groups occurring over the landscape.

The soil landscape over the subject site is mapped by Kovac and Lawrie 1985 as:

- Sf (Sedgefield):- Yellow Soloths on upper slopes, Yellow Solodics on lower slopes and drainage lines. Permian mudstone, sandstone, conglomerate, siltstone, shale and coal seams geology.

## **4.0 FAUNA AND HABITAT SURVEY**

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### **4.1: METHODOLOGY LIMITATIONS**

A fauna survey was conducted for birds (voice- recorded where necessary for identification, and visual by binoculars), amphibians (voice, recorded where necessary for identification), mammals (visual, scats, tree scratch marks, burrows, footprints), and reptiles (visual) on the day of survey.

No trapping, hair sampling, pit fall traps, owl or anabat call detection, or spotlighting occurred. Hollow bearing habitat trees were recorded, but are well away from the development sites and unaffected by the proposal.

This reduced fauna survey effort was considered satisfactory given relatively small area of clearing, and no requirements to do so under the BC Act.

In addition to on site fauna survey, habitat assessment, and research using Bionet records, and other records where available have been used to determine possible occurrence of threatened species. If suitable habitat is present, and Wildlife Atlas- Bionet records occur in the local area, an assumption has been made that potential threatened fauna species listed in Appendix 3 Bionet search may occur.

Several factors limit the ability of surveys such as this ecological investigation to fully determine the occurrence of all species of fauna which may utilise the subject site. Surveys undertaken over a short time period are unlikely to document the full inventory of fauna species which may occur in the study area.

In the case of highly mobile fauna such as birds and bats, many species may utilise the site only temporarily as a component of their larger foraging range, or may occur in the study area or locality during particular periods of the year, such as their seasonal migratory path.

### **4.2: SURVEY RESULTS**

Survey was undertaken on the 21<sup>st</sup> August, 2019. Weather for survey was cool mild, being around 15<sup>0</sup>C-19<sup>0</sup>C. Survey was conducted during the morning. Survey was conducted during clear weather, low humidity, and a moderate to high wind. No rain present, drought conditions. Transect location is shown in Figure 9.

A limited number of birds and other fauna were recorded over or near the subject site. In this case no threatened species were recorded (Appendix 2). The survey covered lands over the development site & nearby surrounds only, including proposed fence line.

In summary:

- The site proposed clearing / habitat loss is limited to around 0.47Ha/lot, being <1.5Ha in total, of remnant natural vegetation, with around 0.2Ha of this being regenerating Forest,

and the remainder being either completely cleared with grazed/>50% groundcover, or previously cleared and limited to scattered trees and regrowth understorey.

- The study area offers connectivity, along the riparian zone of each site, and over the eastern side of Lot 2. The proposal is not anticipated to affect wildlife corridor connectivity over the study area with retention of all vegetation outside of each 0.5Ha development area.
- Hollow bearing trees are present over Lot 2 only (Fig 12 & Table 3), with a variety of hollow sizes including larger hollows with stags and live trees, and have little understorey remaining around the trees. No HBT's are impacted by the proposal;
- SEPP 44 koala feed trees present, in low densities <15%, with no feed trees affected by the proposal.
- The development site offers suitable foraging & limited shelter habitat, and no hollows for hollow dependant fauna, for a very limited range of threatened species including some birds, microbats, limited mammals (potentially Squirrel Glider), reptiles, and no amphibians (as lacking records for these species in this remnant and not close to any creek or water source).
- The development site has no hollow fallen logs, no rocks & caves present, and does have dams & a creek over 200m from the nearest development site.

From this assessment and Wildlife Atlas records there is potential habitat over the subject site for:

- Bats :-Suitable foraging habitat present. Bats can exist quite well in scattered paddock trees/remnant patches of bushland with flyways present through the forest, and microbats such as Eastern Bentwing Bat and Little Bent Wing Bat and larger Grey Head Flying Fox are likely to forage over the site from time to time. Hollows/crevices were recorded off the development site for roosting. The proposed development will have a very low impact on bats and they are tested further within the 5 Part Test.

Birds, including owls:- Suitable foraging habitat over the site, including winter flowering gums such as Forest Redgum, hollows present for nesting/roosting for birds recorded, but not over the development sites. There is habitat present for Owls, & some other listed Forest birds (ie most raptors, Varied Sitella, Little lorikeet, Grey Crowned Babbler, Speckled Warbler), all mainly off the development sites but could utilise these areas from time to time for foraging.

These selected birds with high habitat presence are tested within the 5 Part Test.

- Reptiles/amphibians:-

There is no habitat present for amphibians, however habitat is present for threatened reptiles within the proposed development site. No dams or creek lines nearby or affected, therefore no habitat for threatened amphibians.

No threatened reptile species are listed on Bionet, and impact is negligible due to clearing over most development sites. They are not tested within the 5 Part Test.



- Mammals:-

Habitat is considered marginal for mammal species including Squirrel Glider, Koala, Brush Tailed Phascogale and Spotted Tailed Quoll, with low impact from native vegetation removal and possible minor indirect impacts. As there are no hollows over the development sites locally there is no denning habitat present for Gliders. Squirrel Glider have no records locally, however habitat is considered suitable, although understorey has been removed in many areas. Habitat is marginal for Phascogale due to recent understorey removal over some areas, however habitat still persists over some areas and they may be present.

Koala, Squirrel Glider, Phascogale and Spotted Tailed Quoll are therefore tested only within the 5 Part Test.

**Table 3: Hollow bearing habitat tree details over subject sites (over new proposed lots only). All to be retained**

Tree Species	Common name	Number – see Figure 7	Hollow details	Other
<i>Corymbia maculata</i>	Spotted Gum	5	1L, 1M, 2S	No impact- to be retained
<i>Eucalyptus crebra</i>	Narrow leafed Ironbark	4	1L, 2M, 2S	No impact- to be retained
<i>Eucalyptus fibrosa</i>	Broad Leaved ironbark	1,3	1S 1M, 3-4S	No impact- to be retained
<i>Eucalyptus punctata</i>	Grey Gum	2	1S	No impact- to be retained
Dead /stag		6	2L	No impact- to be retained
<b>TOTAL</b>		<b>6</b>		

Hollow sizes:

Small (S) <15cm

Medium (M)- 15-30cm diameter

Large (L)- >30cm diameter

Fissure (F) -crack in trunk suitable for microbats

Spout (SP)

## 5.0 FLORA SURVEY RESULTS

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### 5.1: METHODOLOGY AND LIMITATIONS

Vegetation was assessed on site by a transect (after Cropper 1993) over the development site and surrounds. All transects, and any hollow bearing trees or threatened species were recorded by a Garmin handheld GPS 60CSx unit, generally accurate to within 3m depending on canopy cover (reading +/- 3m accuracy at time of survey). Broad 10m wide transects were undertaken over the development site including Asset Protection Zone where habitat remained. Figure 9 shows the results. Special attention was paid to any potential threatened species. This has enabled identification and assessment of most species on the development site immediate surrounds. The survey is limited by:

- Non flowering of cryptic orchid/grass/other species at time of survey as described above making identification impossible/problematic.

To help overcome these limitations surveys are carried out where feasible during known flowering seasons, and if this cannot occur and habitat requirements are suitable for a species to be present then an additional targeted survey will be recommended if impact is expected. Any plants that were not readily identifiable in the field were sampled and analysed in the office. Potential threatened species are sent to NSW Herbarium for identification /ratification, and Office of Environment and Heritage informed of locations for recording on the NSW Bionet database as per NPWS scientific licence requirements. This was not required in this instance.

### 5.2: RESULTS

In summary:-

- 81 flora species were recorded on the site (Appendix 1), comprising 59 native flora species, no threatened species, and 22 weed species including 3 declared priority weeds.
- Study area has moderate flora biodiversity, with two native vegetation communities present (*Central Hunter Ironbark Spotted Gum Grey Box Forest* – Fig. 5 & 6) which is equivalent to a NSW listed Endangered Ecological Community, and *Hunter Lowland Redgum Forest* which is equivalent to a NSW listed Endangered Ecological Community.
- *Central Hunter Ironbark Spotted Gum Grey Box Forest* is also equivalent to a nationally protected EPBC Act listed Critically Endangered Ecological Community being *Central Hunter Valley eucalypt forest and woodland*.
- Low weed presence, clearing & drought with bare soil present over large areas of Lot 2.

Floristics are shown in Tables 4 & 5. The LHCCREMS map is considered mainly accurate in this case, however a more accurate map has been prepared by PEAK LAND MANAGEMENT (Fig. 5) with nearly the entire site being *Central Hunter Ironbark Spotted Gum Grey Box Forest*. This revised mapping takes into account understorey composition, and where >50 % native cover

is present it has been assessed as equivalent to this Endangered Ecological Community in conformation with OEH BAM guidelines.

**Table 4: Floristics for NSW listed Central Hunter Ironbark—Spotted Gum—Grey Box Forest in the New South Wales North Coast and Sydney Basin Bioregions EEC & National listed Critically Endangered Ecological Community - Central Hunter Valley eucalypt forest and woodland.**

Canopy cover	Tree species dominating & tree height	Mid storey	Shrub and ground storey	Hollows / Fallen logs/caves	Other
Ranges from approx 0-70% in natural areas	<i>E. crebra</i> , <i>E. tereticornis</i> , <i>E. fibrosa</i> mainly around 10-25m tall.	Predominantly cleared over the entire development site, some <i>Bullock</i> present to around 4-6m height.	Mainly cleared over development site but natural understorey still remaining over most of site dominated by native shrubs, vines, ferns and grasses approx. >50% groundcover	No , HBT's off the development site over Lot 2.	Part cleared & slashed/grazed with bare soil over most of subject development sites including Lot 2, partly forested over Lot 3, and completely cleared with >50% native grasses/groundstorey only over Lot 4.  Thick regrowth of <i>E. crebra</i> over Lot 3.





**Table 5: Hunter Lowland Redgum Forest Endangered Ecological Community**

<b>Hunter Lowland Redgum Forest EEC</b>	
Vegetation formation	Forested Wetlands
Vegetation Class	Coastal Floodplain Wetlands
Area within subject site	N/A
Area to be retained	Ha
Area within development site	0Ha
Condition	Generally Moderate to Good as tree cover & some native understorey remaining
Description	<p>Forest Red Gum grassy open forest on floodplains of the lower Hunter</p> <p>Dominated by a canopy of <i>Eucalyptus tereticornis</i> to 20-25m, with native mid &amp; under storey, confined to the creek line &amp; surrounding floodplain areas over Lot 2 &amp; 3.</p>
TEC status	<p>EPBC- not listed</p> <p>NSW BC Act – <i>Hunter Lowland Redgum Forest EEC</i></p>
% Cleared (from Bionet Veg. Class.)	From the Scientific Committee description 73% has been cleared.



**NSW listed Endangered Ecological Community - *Central Hunter Ironbark—Spotted Gum—Grey Box Forest in the New South Wales North Coast and Sydney Basin Bioregions.***

This community was located over those areas of the site as shown in Figure 6. Trees were to 20-25m in height, dominated by *Corymbia maculata*, *Eucalyptus tereticornis*, *Eucalyptus crebra* and *Eucalyptus fibrosa*. It was predominantly altered and cleared over most sites, with remnant trees and limited understorey present over Lot 2, regrowth present with little disturbance over Lot 3, and completely cleared with >50% native cover over Lot 2.

Lot 2 had horses grazing actively over the proposed development site and surrounds over the subject site.

No grazing was evident on other lots.

This community is described by the Scientific Committee, 2010 as:

- *Central Hunter Ironbark-Spotted Gum-Grey Box Forest occurs in the central Hunter Valley mainly between Maitland and Muswellbrook. It has been recorded from Singleton, Cessnock and Muswellbrook LGAs but may occur elsewhere within the North Coast and Sydney Basin Bioregions.*
- *Central Hunter Ironbark-Spotted Gum-Grey Box Forest occupies undulating country including low rises and slopes, occurring on all aspects. It may also occur on alluvial and colluvial soils in valleys.*
- *It mostly occurs on clayey soils found on Permian sediments.*
- *Central Hunter Ironbark - Spotted Gum - Grey Box Forest occupies an area of less than 2000 km<sup>2</sup> based on 2 x 2 km grid cells, the scale of assessment recommended for species by IUCN (2008). It has been mapped as being recorded in Bellfield National Park and in the Singleton Military Area.*
- *Land clearing, primarily for agriculture has led to a large reduction in geographic distribution of the community. The mapped area of the community is approximately 18,300 ha which is estimated to be 29% of the pre-European distribution (Peake 2006). Mapped occurrences of the community include 34 remnants greater than 100 ha and more than 1000 small remnants less than 10 ha indicating a high level of fragmentation (Peake 2006).*
- *Central Hunter Ironbark-Spotted Gum-Grey Box Forest has been subject to intensive livestock grazing and clearing which has made it vulnerable to weed invasions. The community has been invaded by a range of woody and herbaceous weed species including *Olea europaea* subsp. *cuspidata* (African Olive), *Lantana camara* (Lantana), *Hyparrhenia hirta* (Coolatai Grass), and *Sporobolus africanus* (Giant Parramatta Grass) (Peake 2006). *Lantana* (*Lantana camara*) has been demonstrated to increase following disturbances associated with fire or grazing (Gentle and Duggin 1997a). *Lantana* (*Lantana camara*) poses a threat through structural alteration, invasion and allelopathic suppression of tree seedlings (Gentle and Duggin 1997b).*

**EPBC/National listed Critically Endangered Ecological Community - *Central Hunter Valley eucalypt forest and woodland.***

This community is considered to occur over the subject site, and is mapped as such within Figures 4 & 5. There is *Eucalyptus fibrosa*, *Corymbia maculata*, *Eucalyptus moluccana* and *Eucalyptus crebra* present on site, however the other determinant species (*Eucalyptus acmenoides* & *Allocasuarina torulosa*) are not present. An analysis of the guide entitled *Central Hunter Valley eucalypt forest and woodland: a nationally-protected ecological community*, Commonwealth of Australia 2016 states.

*“The Central Hunter Valley eucalypt forest and woodland ecological community was listed in May 2015 as critically endangered under Australia’s national environment law, the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).*

*The national Threatened Species Scientific Committee found that the ecological community is highly threatened. Its extent has declined severely—by more than 70 per cent—resulting in a highly fragmented and restricted distribution, the loss of many animals and the subsequent loss of ecosystem function.*

*The Central Hunter Valley eucalypt forest and woodland ecological community is an open forest or woodland—typically with a tree canopy dominated by eucalypt species; an open to sparse mid-layer of shrubs; and a ground layer of native grasses, forbs and small shrubs. The composition of a particular area (patch) of the ecological community is influenced by its size, recent rainfall, drought conditions and by its disturbance history (e.g. clearing, grazing and fire).*

*The ecological community can be identified by the following general landscape, soil and vegetation features:*

- *Typically occurs on lower hillslopes and low ridges, or valley floors in undulating country; on soils derived from finer grained sedimentary rocks.*
- *Soils typically have a high clay content and are medium in fertility, relative to nearby deep alluvial loam soils—which are more fertile—and to the skeletal soils of the bordering escarpment landscape—which is made up of less fertile, coarser-grained and sandier soils.*
- *Does not occur on alluvial flats, river terraces, windblown sands, Triassic sediments, or escarpments.*

#### **Vegetation**

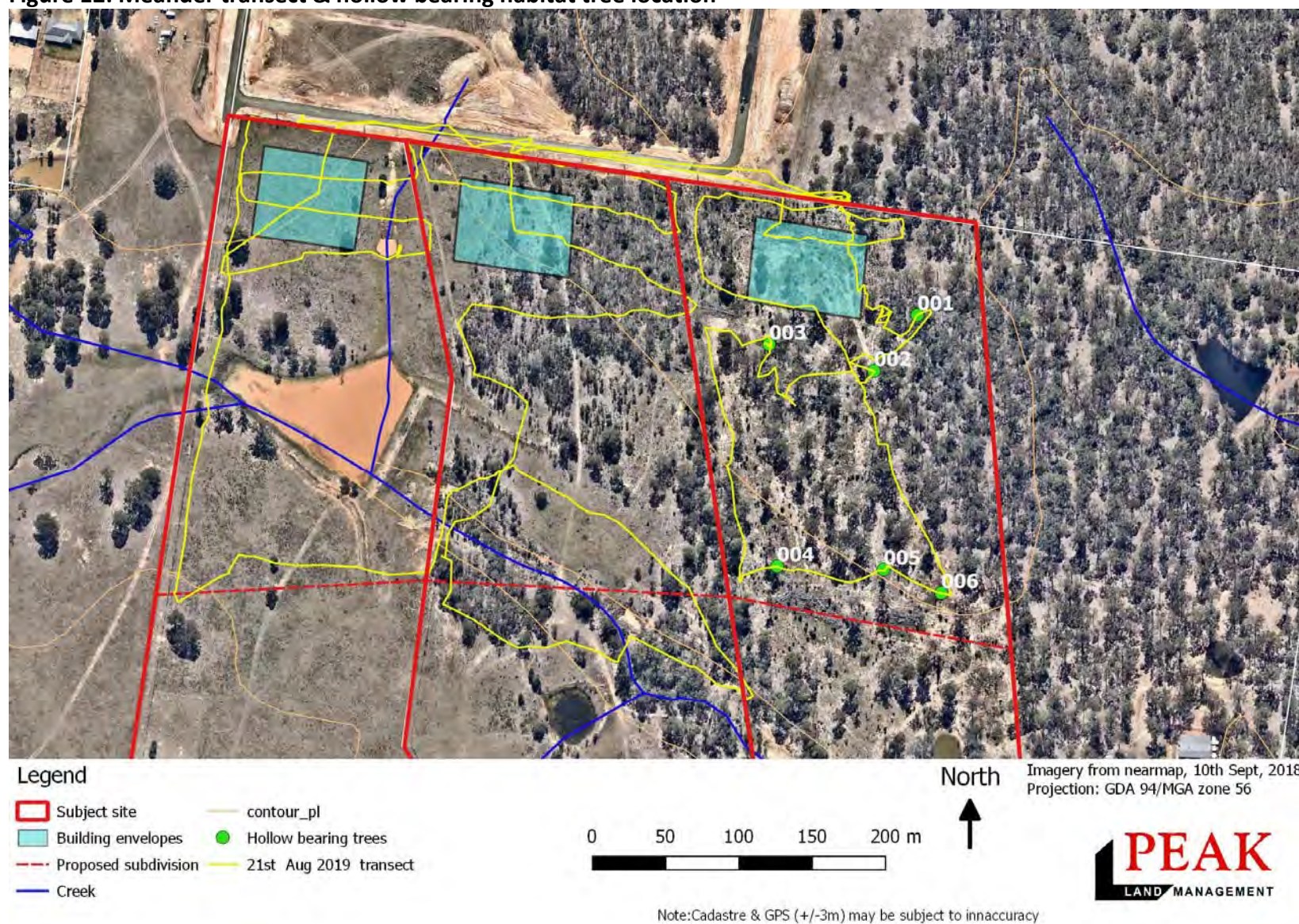
- *The woodland or forest canopy is dominated<sup>1</sup> by one or more of the following four eucalypt species:*
  - *Narrow-leaved ironbark (Eucalyptus crebra), spotted gum (Corymbia maculata (syn. Eucalyptus maculata)), slaty gum (Eucalyptus dawsonii) and grey box (Eucalyptus moluccana). Under certain circumstances a fifth species, Allocasuarina luehmannii (bullock or buloke), may be part of the mix of dominants—i.e. in sites previously dominated by one or more of the four eucalypt species<sup>2</sup>.*
- *A number of other tree species may be sub-dominant or locally dominant within a limited area of a patch. These include rough-barked apple (Angophora floribunda), Blakely’s red gum (Eucalyptus blakelyi), slaty red gum (Eucalyptus glaucina) and forest red gum (Eucalyptus tereticornis).*
- *Other characteristic canopy species include kurrajong (Brachychiton populneus subsp. populneus), black cypress-pine (Callitris endlicheri) and cooba (Acacia salicina). White box (Eucalyptus albens) and grey gum (Eucalyptus punctata) are also often present.*
- *Older regrowth/remnants, with mature hollow bearing trees, are particularly important for the range of habitats and resources they provide to animal species in the ecological community.*
- *A sparse sub-canopy layer may be present; typically with young eucalypts of upper canopy species, along with other species such as wattles (Acacia species).*

- *Three tree species: forest oak (Allocasuarina torulosa)—also known as forest sheoak, rose oak or rose she-oak; white mahogany (Eucalyptus acmenoides); and red ironbark (Eucalyptus fibrosa)—also referred to as broad-leaved ironbark, are all largely absent from the canopy of a patch (i.e. no more than two trees per hectare, on average across a patch—of each of the three species).*
- *An open-to-sparse mid-layer of shrubs such as wattles (Acacia species) and native blackthorn (Bursaria spinosa subsp. spinosa) may be present.*
- *A ground layer is present, although it may vary in development and composition, as a sparse-to-thick layer of native grasses and/or other predominantly native groundcover (small shrubs and ferns, daisies, lilies, orchids and other flowers).*

It is therefore considered this Endangered Ecological Community is present, and an Assessment of Significance will be undertaken for impact over it.

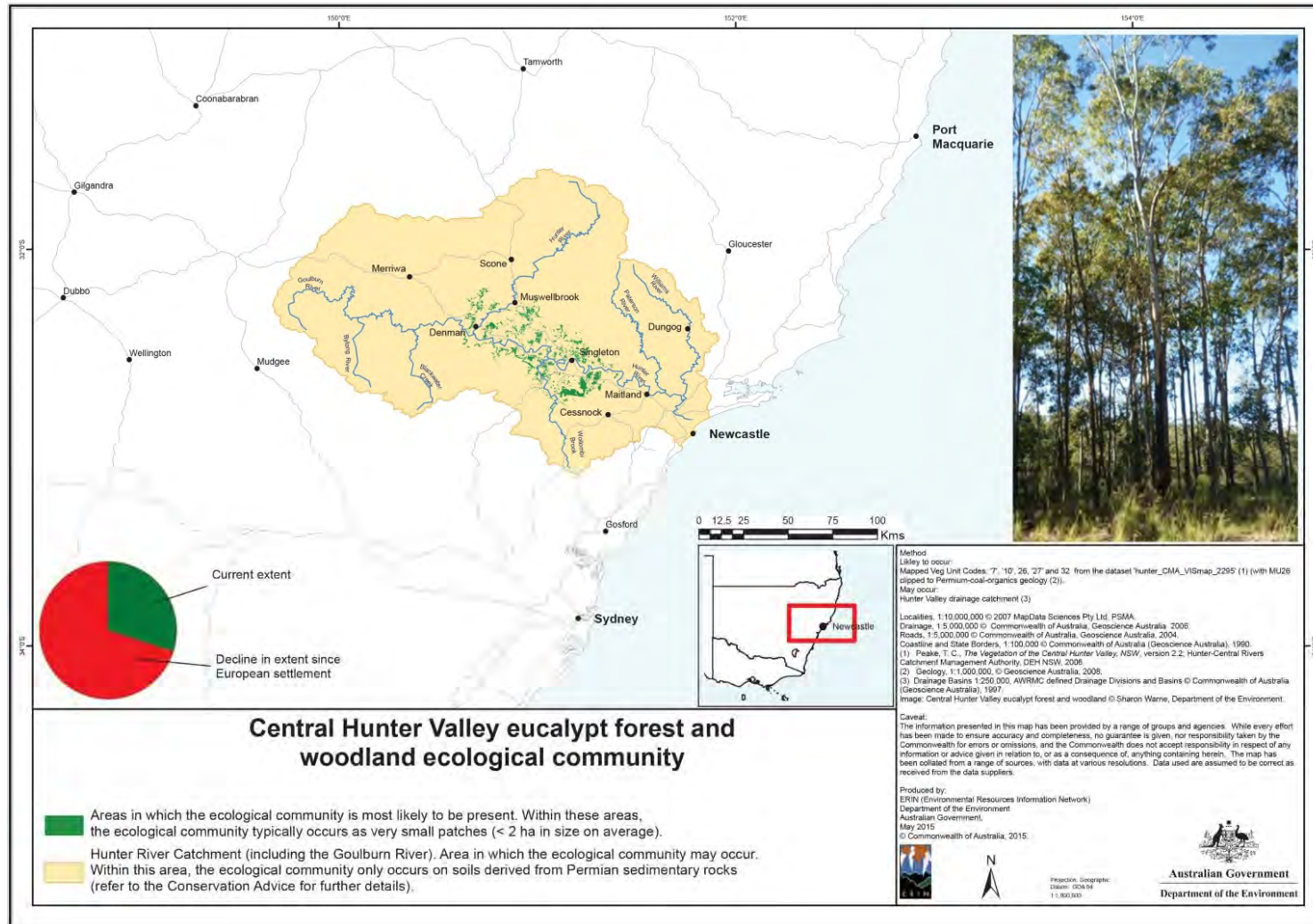


**Figure 12: Meander transect & hollow bearing habitat tree location**





**Figure 13: EPBC listed Central Hunter Valley eucalypt forest and woodland map: a nationally-protected ecological community, Commonwealth of Australia 2016**



**Figure 14: Enlarged view of subject site in relation to Central Hunter Valley eucalypt forest and woodland map: a nationally-protected ecological community, Commonwealth of Australia 2016**



## **6.0 ASSESSMENT OF SIGNIFICANCE**

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A consideration of threatened species potentially occurring on this site which have been gazetted within the *BC Act 2016* was conducted by a search of the NSW Office of Environment and Heritage Atlas (100km<sup>2</sup> or greater area surrounding subject site) which is shown in Appendix 1. Each species/ population/ ecological community is considered for its potential to occur upon the site and the likely level of impact as a result of the proposal. Table 6 shows likely impact for each fauna and flora species. All species regarded as having potential to be impacted upon in any more than a very low way have been subject to a 5 Part Test of Significance. Species which would obviously not occur on the site due to incorrect habitat requirements, or be impacted negligibly by any works, have not been listed below, or tested (as outlined in Section 4 & 5 of this report).

Additionally a literature review of potentially occurring threatened species was conducted. Once each species particular habitat requirements were identified a field inspection occurred of the site to verify the likely impact. This was done by direct species observation during traverses around the site, assessment of likely habitat, and the suitability of the site for threatened species identified. It should be noted however that no trapping, hair sampling, owl /bat call playback/recording, spotlighting/night surveys occurred and therefore if suitable habitat is present, and Wildlife Atlas- Bionet records occur in the local area, an assumption has been made that they may occur, and a 5 Part Test completed if relevant.

Note: all recorded locations of threatened species are sourced from Office of Environment and Heritage Bionet database. Please note that often flora & fauna records and research are not complete, and therefore these are subjective ratings only and may change over time. They are put here as guide only for regulatory authorities, and the proponent to consider.

In this case due to proposed vegetation removal, and impact over any Endangered Ecological Community, only those species & the Endangered Ecological Community as described in Section 4.2 with presence of suitable habitat are tested within Table 6 & the Five Part Test.

Indirect impacts such as increased human disturbance from noise, light spill, dogs, pollution, etc is possible and taken into account within the 5 Part Test.

**Table 6: Threatened flora/fauna and Endangered Ecological Community assessment of potential impact (for each lot)**

Species	Comments	Likely level of impact *	Legal status **
<b>Fauna</b>			
Raptors	Birds of prey such as Little Eagle, White breasted Sea Eagle, Black Breasted Buzzard, Square tailed Kite, Black Falcon, and Spotted Harrier have large foraging ranges (thousands of kilometres for some species) and can migrate in search of food resources, and would be affected in only a very minor way by this proposal due to loss of foraging resources. No raptor nests were observed in any tree. There are Raptor records within the Bionet search area. Therefore there is suitable foraging habitat present. The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared, is not anticipated to have any more than a very low impact on this species due to loss of some foraging resources.	Very Low	V
Owls	<p>Large Forest Owls such as Powerful, Masked &amp; Barking Owl are found in a range of habitats, locally within sclerophyll forests and woodland where appropriate prey species occur. Requires large hollows for nesting and roosting, which are not present over the development site. This site almost certainly forms part of a larger hunting home range and provides some foraging resources (ie gliders/ring tailed possums, etc).</p> <p>The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is not anticipated to have any more than a very low impact on this species due to loss of some foraging resources. No potential roosts/large or any hollows affected over the development sites.</p>	Very Low	V
Little Lorikeet ( <i>Glossopsitta pusilla</i> )	<p>OEH (2017) state:</p> <ul style="list-style-type: none"> <li>“Forages primarily in the canopy of open <i>Eucalyptus</i> forest and woodland, yet also finds food in <i>Angophora</i>, <i>Melaleuca</i> and other tree species. Riparian habitats are particularly used, due to higher soil fertility and hence greater productivity.</li> <li>Isolated flowering trees in open country, e.g. paddocks, roadside remnants and urban trees also help sustain viable populations of the species.</li> <li>Feeds mostly on nectar and pollen, occasionally on native fruits such as mistletoe, and only rarely in orchards.</li> <li>Gregarious, travelling and feeding in small flocks (&lt;10), though often with other lorikeets. Flocks numbering hundreds are still occasionally observed and may have been the norm in past centuries.</li> </ul>	Very Low	V



	<ul style="list-style-type: none"> <li>• Roosts in treetops, often distant from feeding areas.</li> <li>• Nests in proximity to feeding areas if possible, most typically selecting hollows in the limb or trunk of smooth-barked Eucalypts. Entrance is small (3 cm) and usually high above the ground (2–15 m). These nest sites are often used repeatedly for decades, suggesting that preferred sites are limited. Riparian trees often chosen, including species like <i>Allocasuarina</i>.</li> <li>• Nesting season extends from May to September. In years when flowering is prolific, Little Lorikeet pairs can breed twice, producing 3-4 young per attempt. However, the survival rate of fledglings is unknown”.</li> </ul> <p>Therefore suitable foraging habitat is present. It may occur from time to time. The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is not anticipated to have any more than a very low impact on this species due to loss of some foraging resources. No potential roosts/large or any hollows affected over the development sites.</p>		
Varied sittella ( <i>Daphoenositta chrysoptera</i> )	<p>Department of Environment, Climate Change and Water (2010) state that “<i>The Varied Sittella is sedentary and inhabits most of mainland Australia, with a nearly continuous distribution in NSW from the coast to the far west (Higgins and Peter 2002; Barrett et al. 2003). It inhabits eucalypt forests and woodlands, especially rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland. The sedentary nature of the Varied Sittella makes cleared agricultural land a potential barrier to movement. Survival and population viability are sensitive to habitat isolation, reduced patch size and habitat simplification, including reductions in tree species diversity, tree canopy cover, shrub cover, ground cover, logs, fallen branches and litter (Watson et al. 2001; Seddon et al. 2003). The Varied Sittella is also adversely affected by the dominance of Noisy Miners in woodland patches (Olsen et al. 2005) (ed: present over the subject site). Current threats include habitat degradation through small-scale clearing for fencelines and road verges, rural tree decline, loss of paddock trees and connectivity, 'tidying up' on farms, and firewood collection.</i></p> <p>Suitable foraging habitat is present, although has been cleared over much of the development sites.</p> <p>The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is not anticipated to have any more than a very low impact on this species due to loss of some foraging resources.</p>	Very Low	V
Grey crowned	OEH 2017 state:-	Very Low	V

<p>babbler (<i>Pomatostomus temporalis</i>)</p>	<ul style="list-style-type: none"> <li>• <i>"The Grey-crowned Babbler eastern subspecies (temporalis) occurs from Cape York south through Queensland, NSW and Victoria and formerly to the south east of South Australia. In NSW, the eastern sub-species occurs on the western slopes of the Great Dividing Range, and on the western plains reaching as far as Louth and Balranald. It also occurs in woodlands in the Hunter Valley and in several locations on the north coast of NSW. It may be extinct in the southern, central and New England tablelands.</i></li> <li>• <i>Inhabits open Box-Gum Woodlands on the slopes, and Box-Cypress-pine and open Box Woodlands on alluvial plains. Woodlands on fertile soils in coastal regions.</i></li> <li>• <i>Flight is laborious so birds prefer to hop to the top of a tree and glide down to the next one. Birds are generally unable to cross large open areas.</i></li> <li>• <i>Live in family groups that consist of a breeding pair and young from previous breeding seasons. A group may consist of up to fifteen birds. All members of the family group remain close to each other when foraging.</i></li> <li>• <i>Feed on invertebrates, either by foraging on the trunks and branches of eucalypts and other woodland trees or on the ground, digging and probing amongst litter and tussock grasses.</i></li> <li>• <i>Build and maintain several conspicuous, dome-shaped stick nests about the size of a football. A nest is used as a dormitory for roosting each night. Nests are usually located in shrubs or sapling eucalypts, although they may be built in the outermost leaves of low branches of large eucalypts. Nests are maintained year round, and old nests are often dismantled to build new ones.</i></li> <li>• <i>Breed between July and February.</i></li> <li>• <i>Territories range from one to fifty hectares (usually around ten hectares) and are defended all year. Territorial disputes with neighbouring groups are frequent and may last up to several hours, with much calling, chasing and occasional fighting.</i></li> </ul> <p>A relatively common species frequently seen in the Hunter in the right vegetation community types such as this community and not averse to co-existing with humans in gardens and rural areas.</p> <p>The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is not anticipated to have any more than a negligible- very low impact on this species due to loss of some foraging resources. No potential roosts/large or any hollows</p>		
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	affected over the development sites.		
Speckled warbler ( <i>Pyrrholaemus sagittatus</i> )	<p>OEH 2017 state:</p> <ul style="list-style-type: none"> <li><i>The Speckled Warbler lives in a wide range of Eucalyptus dominated communities that have a grassy understorey, often on rocky ridges or in gullies.</i></li> <li><i>Typical habitat would include scattered native tussock grasses, a sparse shrub layer, some eucalypt regrowth and an open canopy.</i></li> <li><i>Large, relatively undisturbed remnants are required for the species to persist in an area.</i></li> <li><i>The diet consists of seeds and insects, with most foraging taking place on the ground around tussocks and under bushes and trees.</i></li> <li><i>Pairs are sedentary and occupy a breeding territory of about ten hectares, with a slightly larger home-range when not breeding.</i></li> <li><i>Speckled Warblers often join mixed species feeding flocks in winter, with other species such as Yellow-rumped, Buff-rumped, Brown and Striated Thornbills.</i></li> </ul> <p>Suitable foraging habitat is present, although has been cleared over much of the development sites.</p> <p>The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is not anticipated to have any more than a negligible- very low impact on this species due to loss of some foraging resources.</p>	Very Low	V
Brown tree creeper ( <i>Climacteris picumnus</i> )	<p>Office of Environment and Heritage, 2018 state:-</p> <p><i>“The Brown Treecreeper is endemic to eastern Australia and occurs in eucalypt forests and woodlands of inland plains and slopes of the Great Dividing Range. It is less commonly found on coastal plains and ranges.</i></p> <p><i>The eastern subspecies lives in eastern NSW in eucalypt woodlands through central NSW and in coastal areas with drier open woodlands such as the Snowy River Valley, Cumberland Plains, Hunter Valley and parts of the Richmond and Clarence Valleys.</i></p> <p><i>The population density of this subspecies has been greatly reduced over much of its range, with major declines recorded in central NSW and the northern and southern tablelands. Declines have occurred in remnant vegetation fragments smaller than 300 hectares that have been isolated or fragmented for more than 50 years.</i></p> <ul style="list-style-type: none"> <li><i>Found in eucalypt woodlands (including Box-Gum Woodland) and dry open forest of the inland slopes and</i></li> </ul>	Very Low	V

	<p><i>plains inland of the Great Dividing Range; mainly inhabits woodlands dominated by stringybarks or other rough-barked eucalypts, usually with an open grassy understorey, sometimes with one or more shrub species; also found in mallee and River Red Gum (Eucalyptus camaldulensis) Forest bordering wetlands with an open understorey of acacias, saltbush, lignum, cumbungi and grasses; usually not found in woodlands with a dense shrub layer; fallen timber is an important habitat component for foraging; also recorded, though less commonly, in similar woodland habitats on the coastal ranges and plains.</i></p> <ul style="list-style-type: none"> <li><i>Sedentary, considered to be resident in many locations throughout its range; present in all seasons or year-round at many sites; territorial year-round, though some birds may disperse locally after breeding.</i></li> <li><i>Gregarious and usually observed in pairs or small groups of 8 to 12 birds; terrestrial and arboreal in about equal proportions; active, noisy and conspicuous while foraging on trunks and branches of trees and amongst fallen timber; spend much more time foraging on the ground and fallen logs than other treecreepers.</i></li> <li><i>When foraging in trees and on the ground, they peck and probe for insects, mostly ants, amongst the litter, tussocks and fallen timber, and along trunks and lateral branches; up to 80% of the diet is comprised of ants; other invertebrates (including spiders, insects larvae, moths, beetles, flies, hemipteran bugs, cockroaches, termites and lacewings) make up the remaining percentage; nectar from Mugga Ironbark (Eucalyptus sideroxylon) and paperbarks, and sap from an unidentified eucalypt are also eaten, along with lizards and food scraps; young birds are fed ants, insect larvae, moths, crane flies, spiders and butterfly and moth larvae.</i></li> <li><i>Hollows in standing dead or live trees and tree stumps are essential for nesting.</i></li> <li><i>The species breeds in pairs or co-operatively in territories which range in size from 1.1 to 10.7 ha (mean = 4.4 ha). Each group is composed of a breeding pair with retained male offspring and, rarely, retained female offspring. Often in pairs or cooperatively breeding groups of two to five birds.</i></li> </ul> <p>Suitable foraging habitat is present, although has been cleared over much of the development sites.</p> <p>The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of</p>		
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	this land already cleared is not anticipated to have any more than a negligible- very low impact on this species due to loss of some foraging resources.		
Spotted tailed quoll ( <i>Dasyurus maculatus</i> )	<p>OEH state :- <i>"Found in a variety of habitat types including dry and moist eucalypt forests and rainforests. They tend to move along drainage lines and make dens in fallen logs or among large rocky outcrops. They like dense understorey"</i>.</p> <p>This site has no or very limited dense understorey present, no rock outcrops, and predominantly cleared development sites. They may be present locally, however habitat over the development sites is marginal. The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is not anticipated to have any more than a very low impact on this species due to loss of some foraging resources, and related indirect impacts from potential human disturbance, light spill, noise, pets, etc.</p>	Very Low	V
Koala ( <i>Phascolarctos cinerus</i> )	Koalas are found in Eucalypt forests throughout eastern Australia. They occur where appropriate feed trees occur. A primary feed tree species occurred on site (Forest Red Gum & Grey Gum) but is very limited, and not present over any development sites. No scats were seen or any koalas sighted in survey traverses. The development site is not potential koala habitat, with limited feed trees present. Unlikely to occur here, and no local records.	Negligible- Very Low	V, EPBC listed- V
Brush tailed Phascogale ( <i>Phascogale tapoatafa</i> )	<p>OEH state <i>"Prefer dry sclerophyll open forest with sparse groundcover of herbs, grasses, shrubs or leaf litter. Also inhabit heath, swamps, rainforest and wet sclerophyll forest. Agile climber foraging preferentially in rough barked trees of 25 cm DBH or greater. Feeds mostly on arthropods but will also eat other invertebrates, nectar and sometimes small vertebrates. Females have exclusive territories of approximately 20 - 60 ha, while males have overlapping territories of up to 100 ha. Nest and shelter in tree hollows with entrances 2.5 - 4 cm wide and use many different hollows over a short time span"</i>.</p> <p>Potential habitat is present and has been recorded locally. The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is anticipated to have a low impact on this species due to loss of some foraging resources, and related indirect impacts from potential human disturbance, light spill, noise, pets, etc.</p>	Low	V
Squirrel glider ( <i>Petaurus norfolcensis</i> )	Department of Environment, Climate Change and Water 2010 state: <i>"The species is widely though sparsely distributed in eastern Australia, from northern Queensland to western Victoria. Inhabits Blackbutt-Bloodwood forest with heath understorey in coastal areas. Prefers mixed species stands with a shrub or Acacia midstorey. Live in family groups of a single adult male one or more adult females and offspring. Require abundant tree hollows for</i>	Very low	V

	<p><i>refuge and nest sites. Diet varies seasonally and consists of Acacia gum, eucalypt sap, nectar, honeydew and manna, with invertebrates and pollen providing protein".</i></p> <p>Research from Lake Macquarie City Council Squirrel Glider Guidelines 2015 stated that:</p> <p><i>The minimum habitat patch size that will be occupied by squirrel gliders is strongly influenced by habitat quality. Squirrel gliders occupy very small patches if habitat quality is high, and much larger habitat patch sizes in lower quality habitat.</i></p> <p><i>However, the probability of a patch being occupied by squirrel gliders decreases with remnant size. Modelling predicts that density and occurrence begins to decline when patch size falls below 100 ha depending on time since isolation, remnant shape, and distance to nearby habitat. In Wyong, the largest known remnant of suitable habitat without squirrel gliders is 30 ha. Habitat patches of less than 4 ha are considered unsuitable for permanent occupancy. Small habitat patches of 4 ha to 30ha, are considered at high risk of local extinction. Minor habitat patches of 30 ha to 100 ha, are considered at moderate to low risk in the short-term, and high risk in the long-term; and major habitat patches, 100 ha to 1,000 ha are considered at no risk in the short-term, (50 yrs to 100 yrs), and low to moderate risk in the long term (Smith 2002).</i></p> <p>Not recorded in this local area, and habitat and connectivity over/through the site is present, however no understorey over the majority of the development sites. Habitat is present adjoining Lot 2, and to the north. No hollows present for denning over the development sites, but hollows present elsewhere over lot 2.</p> <p>The site offers potential habitat. The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is not anticipated to have any more than a very low impact on this species due to loss of foraging resources, and related indirect impacts from potential human disturbance, light spill, noise, pets, etc.</p>		
Listed micro bats & Grey Headed Flying Fox	<p>Most bats have broad foraging ranges and habitat requirements which require open areas, flowering &amp; fruiting flora, insects, forest, lakes/water, trees, for foraging and hollow trees/caves/bridges or other suitable structures to roost.</p> <p>Not recorded in this local area, however habitat is present, and adjoining Lot 2, and to the north. No hollows present for roosting over the development sites, but hollows present elsewhere over lot 2.</p>	Low	All V

	The site offers potential habitat. The loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared is not anticipated to have any more than a very low impact on these species due to loss of foraging resources, and related indirect impacts from potential human disturbance, light spill, noise, pets, etc.		
<b>Flora</b>			
Threatened flora species	Despite an intensive search for threatened flora species no species were recorded. As the site is partially disturbed, and all trees & shrubs and understorey were inspected, and no records of any threatened orchids in this area, it is considered there is a very low likelihood /no threatened species present.	Negligible-not recorded	
\Endangered ecological communities/populations	<ul style="list-style-type: none"> <li>NSW listed Endangered Ecological Community - <i>Central Hunter Grey Box-Ironbark Woodland in the NSW North Coast and Sydney Basin Bioregions.</i></li> <li>EPBC/National listed Critically Endangered Ecological Community - <i>Central Hunter Valley eucalypt forest and woodland.</i></li> <li><i>Hunter Lowland Redgum Forest</i> Endangered Ecological Community</li> </ul>	Loss of 0.47Ha anticipated /lot, approx 1.5Ha in total No impact	Very Low
<b>Threatening Processes</b> (under both EPBC Act and TSC Act)	Yes - see Tables below and 5 Part Test		

**Table 7: Listed relevant Key Threatening Processes (as listed under EPBC Act)**

Listed Key Threatening Process	Effective
Aggressive exclusion of birds from potential woodland and forest habitat by over-abundant noisy miners ( <i>Manorina melanoccephala</i> )	09-May-2014
Competition and land degradation by rabbits	16-Jul-2000
Competition and land degradation by unmanaged goats	16-Jul-2000
Dieback caused by the root-rot fungus ( <i>Phytophthora cinnamomi</i> )	16-Jul-2000
Incidental catch (bycatch) of Sea Turtle during coastal otter-trawling operations within Australian waters north of 28 degrees South	04-Apr-2001
Incidental catch (or bycatch) of seabirds during oceanic longline fishing operations	16-Jul-2000
Infection of amphibians with chytrid fungus resulting in chytridiomycosis	23-Jul-2002
Injury and fatality to vertebrate marine life caused by ingestion of, or entanglement in, harmful marine debris	13-Aug-2003
Invasion of northern Australia by Gamba Grass and other introduced grasses	16-Sep-2009
Land clearance	04-Apr-2001



Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants	08-Jan-2010
Loss of biodiversity and ecosystem integrity following invasion by the Yellow Crazy Ant ( <i>Anoplolepis gracilipes</i> ) on Christmas Island, Indian Ocean	12-Apr-2005
Loss of climatic habitat caused by anthropogenic emissions of greenhouse gases	04-Apr-2001
Novel biota and their impact on biodiversity	26-Feb-2013
Predation by European red fox	16-Jul-2000
Predation by exotic rats on Australian offshore islands of less than 1000 km <sup>2</sup> (100,000 ha)	29-Mar-2006
Predation by feral cats	16-Jul-2000
Predation, Habitat Degradation, Competition and Disease Transmission by Feral Pigs	06-Aug-2001
Psittacine Circoviral (beak and feather ) Disease affecting endangered psittacine species	04-Apr-2001
The biological effects, including lethal toxic ingestion, caused by Cane Toads ( <i>Bufo marinus</i> )	12-Apr-2005
The reduction in the biodiversity of Australian native fauna and flora due to the red imported fire ant, <i>Solenopsis invicta</i> (fire ant)	02-Apr-2003

Page last updated 11<sup>th</sup> Aug, 2019**Table 8: Key relevant threatening processes in NSW under the BC Act 2016.**

Key threatening process	Type of threat
Alteration to the natural flow regimes of rivers, streams, floodplains & wetlands.	Habitat Loss/Change
Bushrock Removal	Habitat Loss/Change
Clearing of native vegetation	Habitat Loss/Change
Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners <i>Manorina melanocephala</i> .	Pest Animal
Alteration of habitat following subsidence due to longwall mining	Habitat Loss/Change
Competition and grazing by the feral European rabbit	Pest Animal
Competition and habitat degradation by Feral Goats, <i>Capra hircus</i> Linnaeus 1758	Pest Animal
Competition from feral honeybees	Pest Animal
Death or injury to marine species following capture in shark control programs on ocean beaches	Other Threat
Ecological consequences of high frequency fires	Habitat Loss/Change
Entanglement in, or ingestion of anthropogenic debris in marine and estuarine environments	Other Threat
Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners	Other Threat

Habitat degradation and loss by Feral Horses (brumbies, wild horses), <i>Equus caballus</i>	Pest Animal
Herbivory and environmental degradation caused by feral deer	Pest Animal
Human-caused Climate Change	Habitat Loss/Change
Importation of red imported fire ants into NSW	Pest Animal
Infection by Psittacine circoviral (beak and feather) disease affecting endangered psittacine species	Disease
Infection of frogs by amphibian chytrid causing the disease chytridiomycosis	Disease
Infection of native plants by <i>Phytophthora cinnamomi</i>	Disease
Introduction and establishment of Exotic Rust Fungi of the order <i>Pucciniales</i> pathogenic on plants of the family <i>Myrtaceae</i>	Disease
Introduction of the large earth bumblebee ( <i>Bombus terrestris</i> )	Pest Animal
Invasion and establishment of exotic vines and scramblers	Weed
Invasion and establishment of Scotch Broom ( <i>Cytisus scoparius</i> )	Weed
Invasion and establishment of the Cane Toad	Pest Animal
Invasion of native plant communities by exotic perennial grasses	Weed
Invasion of native plant communities by Bitou Bush & Boneseed	Weed
Invasion of native plant communities by African Olive <i>Olea europaea</i> subsp. <i>cuspidata</i> (Wall. ex G. Don) Cif.	Weed
Invasion of the Yellow Crazy Ant ( <i>Anoplolepis gracilipes</i> ) into NSW	Pest Animal
Invasion, establishment and spread of Lantana ( <i>Lantana camara</i> L. sens. lat)	Weed
Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants	Weed
Loss and/or degradation of sites used for hill-topping by butterflies	Habitat Loss/Change
Loss of Hollow-bearing Trees	Habitat Loss/Change
Predation and hybridisation by Feral Dogs, <i>Canis lupus familiaris</i>	Pest Animal
Predation by feral cats	Pest Animal
Predation by the European Red Fox	Pest Animal
Predation by the Plague Minnow ( <i>Gambusia holbrooki</i> )	Pest Animal
Predation by the Ship Rat ( <i>Rattus rattus</i> ) on Lord Howe Island	Pest Animal
Predation, habitat degradation, competition and disease transmission by Feral Pigs ( <i>Sus scrofa</i> )	Pest Animal
Removal of dead wood and dead trees	Habitat Loss/Change

Page last updated 11<sup>th</sup> Aug, 2019

**Table 9: Legal status key**

<b>Key - ** Legal status (from NSW Department of Environment and Conservation, 2008):</b>	
<b>V</b>	Vulnerable (Threatened Species Conservation Act, 1995)
<b>E1</b>	Endangered (Threatened Species Conservation Act, 1995)
<b>E2</b>	Endangered (Threatened Species Conservation Act, 1995)
<b>E4</b>	Presumed Extinct (Threatened Species Conservation Act, 1995)
<b>P</b>	Protected (National Parks and Wildlife Act, 1974)
<b>P13</b>	Protected Plants (National Parks and Wildlife Act, 1974)
<b>U</b>	Unprotected

**Table 10: Likely level of impact key used by PEAK LAND MANAGEMENT**

<b>Key - Likely level of impact</b>
This is a subjective qualitative measure used by the consultant. It is determined by the relative impact on a species (ie whether a species will be put in danger of extinction, numbers of individuals likely to be affected directly or indirectly, current status of species) and takes into account factors such as amount of clearing proposed, and surrounding amount of suitable habitat for that species.
<b>Ratings:</b>
<b>Nil</b> (plant only): Not present as site conditions (ie soil/geology, climate, elevation, etc) and on site survey verify it was not present, and could never be naturally present.
<b>Negligible:</b> No impact can be discerned, but is included as there is a minor chance of that species possibly using the site (using the precautionary principle). In some cases there may also be positive impacts such as more foraging feed available from clearing some understorey and promoting native grass growth, or establishment of more vegetation.
<b>Very Low:</b> Individuals unlikely to be affected directly, but could be affected indirectly, and if they are in a very minor way with no major effect likely on any individual.
<b>Low:</b> Recognises that individuals may be present on site (either permanently or infrequently) and affected in a small way such as loss of habitat, including foraging or nesting/denning resources. Suitable surrounding habitat is available to offset direct impact, but it is acknowledged that this may place an individual under more stress, and lead to possible death of individual(s).
<b>Moderate:</b> Individuals will be affected, with impact likely to cause stress and possible death to a local individual or group of individuals. Loss of habitat may lead to the significant impact on a small local population, with its possible demise. Possible significant impact.
<b>High:</b> Will cause the death directly of local individuals, and lead to the loss of habitat for that species to re-establish permanently. Will also lead to the death of a local population/family group, and increase the chance of extinction of the species. Significant impact.

## 6.1 FIVE PART TEST UNDER SECT 7.3 OF THE BC ACT 2016

Under the *Biodiversity Conservation Act 2016 (Sect 7.3)*, a 5 Part Test is undertaken to determine whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats.

A five part test is presented below for all species possibly affected as listed in Table 6:

**a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.**

As examined within Table 6 all species examined are anticipated to have a negligible –low impact from the proposal, with no threatened species considered to be impacted such that a viable local population is affected.

The site proposed clearing / habitat loss is limited to around 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared of most remnant natural vegetation, and limited to slashed/disturbed native understorey and scattered trees (except Lot 3 which has some regrowth Forest present with understorey). No hollow bearing trees affected, no water or creeks impacted, no rock outcrops affected or fallen hollow logs on the ground. Wildlife corridor connectivity is present around & through the site which will be maintained.

Habitat is considered present for some species including Squirrel Glider, Koala, Phascogale, microbats & some other birds, but no bat roosts or hollows affected. The removal of this habitat will have a low impact, due to the small area involved, and retention of nearly all trees and other vegetation outside of the development are over the site (which is recommended as part of the DA consent). The presence of habitat elsewhere in this landscape will offset impact somewhat, and is not considered to have a significant impact on a local population.

Most threatened fauna species in this area occur over larger home ranges (birds/bats/owls/mammals) and although they would forage from time to time over this site it represents a small percentage of their home range. Possible indirect effects such as human disturbance, waste water runoff, pets, light spill, human disturbance, noise, etc may occur.

To reduce these indirect impacts all native vegetation/trees should be retained outside of the nominated development footprint, understorey allowed to regenerate, and other recommendations followed which are made later.

**(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:**  
**(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or**

The following Endangered Ecological Communities are present over the subject site:

- NSW listed Endangered Ecological Community - *Central Hunter Grey Box-Ironbark Woodland in the NSW North Coast and Sydney Basin Bioregions*.
- EPBC/National listed Critically Endangered Ecological Community - *Central Hunter Valley eucalypt forest and woodland*.

Only the NSW listed Endangered Ecological Community is tested here, with the EPBC listed community examined under the National Assessment of Significance Test (Section 7.2).

As described in Section 5.2 this community will be impacted upon by proposed clearing of 0.47Ha/lot, including removal of some trees possible over Lot 3.

OEI state: "NSW listed Endangered Ecological Community - *Central Hunter Grey Box-Ironbark Woodland in the NSW North Coast and Sydney Basin Bioregions* as described in Section 5.2 occurs over 2000km<sup>2</sup> in the region".

The loss of 0.47Ha/lot (or 1.5Ha max in total) is not anticipated to adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction. This is considered minor when compared to total distribution across the region.

It occurs in patches in this area, with its former occurrence fragmented by recent approved rural subdivisions to the north and west of this proposal (Big Ridge Lane & Green Grove). Large remnants are still present locally, however they are under increasing pressure due to residential/rural subdivisions, and clearing for grazing, mining, and now urban development.

The proposal is not expected to adversely affect either community's extent such that its local occurrence is at risk of local extinction.

**(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,**

The proposal is not expected to adversely affect the community's composition, or place it at risk of extinction locally, as there are many thousands of hectares locally, with little protected however within National Parks.

**c) in relation to the habitat of a threatened species or ecological community:**

**(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and**

(i) The site proposed clearing / habitat loss is limited to around 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared of remnant vegetation.

**(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and**

No fragmentation anticipated, with corridor connectivity to be retained.

**(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,**



Whilst all habitat and ecological Communities are important, the loss of 0.47Ha/lot, and 1.5Ha (approx) in total, with much of this land already cleared, with no threatened flora recorded, and negligible- low impact upon any threatened fauna species is assessed as a very low impact. The retention of nearly all native vegetation over the site, & retention of corridors will assist in providing for the long term survival of species in this area.

**(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),**

Not applicable.

**(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.**

Key threatening processes are listed on the BC Act 2016 (Table 8), and the federal EPBC schedule shown in Table 7. Of direct relevance to this proposal are:

- Clearing of native vegetation/ land clearance;

The proposal is also likely to increase the impact of the following KTP's:-

- Loss and degradation of native plant and animal habitat by invasion of escaped garden plants (including lantana), including aquatic plants;
- Invasion of native plant communities by exotic perennial grasses;
- Predation, habitat degradation and competition by fox, feral cats, honey bees, pigs, rabbits, plague minnow.

## **6.2 EPBC SIGNIFICANT IMPACT ASSESSMENT - EPBC/NATIONAL LISTED CRITICALLY ENDANGERED ECOLOGICAL COMMUNITY - CENTRAL HUNTER VALLEY EUCALYPT FOREST AND WOODLAND.**

### **6.2.1 Significant impact criteria (from Matters of National Significance Guidelines 2013)**

The following National Endangered Ecological Community is present over the subject site:

- EPBC/National listed Critically Endangered Ecological Community - *Central Hunter Valley eucalypt forest and woodland.*

As described in Section 5.2 this community will be impacted upon by the proposed clearing of each development area (dwelling footprint, Asset Protection Zone, access road and fenceline) of 0.47Ha/lot, with the majority of this area already cleared of native shrub, mid and part overstorey.

The Significant impact criteria (from Matters of National Significance Guidelines, 2013) state:

#### ***Critically endangered and endangered ecological communities***

##### *Significant impact criteria*

*An action is likely to have a significant impact on a critically endangered or endangered ecological community if there is a real chance or possibility that it will:*

- *reduce the extent of an ecological community*
- *fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines*
- *adversely affect habitat critical to the survival of an ecological community*
- *modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns*
- *cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting*
- *cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to:*
  - assisting invasive species, that are harmful to the listed ecological community, to become established, or*
  - causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community, or*
- *interfere with the recovery of an ecological community.*

### **6.2.2 Significant Impact Assessment - EPBC/National listed Critically Endangered Ecological Community - *Central Hunter Valley eucalypt forest and woodland*.**

- **Reduce the extent of an ecological community**

This CEEC as shown in Figures 13 & 14 occurs in scattered remnant patches over the central Hunter valley floor, with large remnants occurring over Singleton Army Base and surrounds, and scattered remnants around the Sedgefield/Singleton to Muswellbrook area. The Department of Environment and Energy, 2016 state:

*The national Threatened Species Scientific Committee found that the ecological community is highly threatened. Its extent has declined severely—by more than 70 per cent—resulting in a highly fragmented and restricted distribution, the loss of many animals and the subsequent loss of ecosystem function.*

The removal or disturbance over the site of approximately 0.47Ha/1.5Ha in total over all three lots, is therefore considered to not decrease the size of the population/Endangered Ecological Community extent in this case.

- **Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines**

The proposal will cause minor further fragmentation of this community, which already has roads, electricity easements and driveways/property access roads and dwellings over the subject and adjoining properties already present.

Most connectivity however will be retained through the site, by retention of all vegetation outside of the development footprint. A limit of clearing for dwellings covenant is recommended for these lots to prevent future clearing outside of the development sites. It is understood that the existing lots may have had this restriction upon title in place already, with nominated building envelopes present.

- **Adversely affect habitat critical to the survival of an ecological community**

Although 0.47Ha/lot (1.5Ha in total) of this Endangered Ecological Community will be removed this is assessed as a low impact and will not adversely affect habitat critical to the survival of this ecological community within the local area.

- **Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns**

The proposal will not alter groundwater dependant systems, or modify surface drainage patterns, with the building envelopes to be located on a higher slopes, and out of any drainage lines. All natural soil, water and vegetation outside of the development area will be retained.

- **Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting**

The retention of all vegetation over the site outside of the development proposal area will allow the Endangered Ecological Community species composition to not be affected.

- **Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to:**
  - **assisting invasive species, that are harmful to the listed ecological community, to become established, or**
  - **causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community, or**

No impact proposed, as this is an rural residential setting / dwelling proposal with no agriculture proposed, or spreading of weeds or fertilizers proposed. It is recommended however that a covenant is in place to prevent agricultural activities over lots outside of the building envelopes to help prevent degradation of remnant native vegetation, and allow its natural regeneration.

- **Interfere with the recovery of an ecological community.**

Although 0.47Ha/lot (1.5Ha in total) of this Endangered Ecological Community will be removed this is assessed as a low impact and will not adversely affect the recovery of this community on a regional scale. The formation of more National Parks, and protected areas which still retain this vegetation community is seen as vital to prevent its ongoing loss to urban/rural development, agriculture and mining.

It is therefore concluded that the proposed works will not have a significant impact on the EPBC/National listed Critically Endangered Ecological Community - *Central Hunter Valley eucalypt forest and woodland*.



## 7.0 ASSESSMENT OF SERIOUS AND IRREVERSIBLE IMPACTS

Under the BC Act 2016, a determination of whether an impact is serious and irreversible (SAIL) must be made in accordance with the principles prescribed in section 6.7 of the BC Regulation.

The “Guidance to assist a decision maker to determine a serious and irreversible impact, 2017, sets out those potential SAIL species and ecological communities (known as “potential SAIL entities”).

The principles for determining serious and irreversible impacts in the Biodiversity Conservation Regulation, 2017 are:

- *will cause a further decline of a species or ecological community that is currently observed, estimated, inferred or reasonably suspected to be in a rapid rate of decline, or*
- *will further reduce the population of a species or ecological community that is currently observed, estimated, inferred, or reasonably suspected to have a very small population size, or*
- *are impacts on the habitat of a species or area of ecological community that is currently observed, estimated, inferred or reasonably suspected to have a very limited geographic distribution, or*
- *are impacts on a species or ecological community is unlikely to respond to measures to improve habitat and vegetation integrity and is therefore irreplaceable.*

### 7.1: Potential SAIL entities

In this case all potential SAIL entities are derived from Appendix 2 of the Guide, and are within the Bionet search area as shown in Appendix 3 of this report. An Impact evaluation is shown in Table 8. Entities include:

- Regent Honeyeater
- Swift Parrot

**Table 9: SAIL impact evaluation**

Potential SAIL entities	Impact evaluation	Impact thresholds	Serious and irreversible impact?
Regent Honeyeater	Habitat present, associated with this vegetation type (from OEH threatened species profile database), a very low impact anticipated from proposed loss of foraging habitat (but no winter flowering Redgums or Spotted Gum).	Not within an OEH mapped threshold area.	No
Swift Parrot	Habitat present, associated with this vegetation type (from OEH threatened species profile database), a very low impact anticipated from proposed loss of foraging habitat (but no winter flowering Redgums or Spotted Gum).	Not within an OEH mapped threshold area.	No

## 8.0 CONCLUSION AND RECOMMENDATIONS

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The ecological investigations and assessment of impact have found that there is no significant on any threatened species, Endangered Ecological Community, critical habitat, or endangered populations by the proposed works on any NSW or nationally listed species under the *EP&BC Act 1999*, or *BC Act 2016* if the proposal adopts the recommendations of this report.

The following recommendations (in no order of importance) if adopted will improve the biodiversity outcomes for this proposal (being the three proposed newly created lots):

- Where not affected by the proposal all native vegetation (including understorey) outside of the nominated development site be retained in natural condition, and not slashed, grazed, or destroyed in anyway.
- These natural areas should be protected by a S88B covenant or similar legal mechanism, which allows for their protection, and natural regeneration, and does not permit agriculture, grazing, or other disturbance over these areas.
- No go zones should be delineated around each development site, and ensure tool box education to all builders constructing the development so that no impact occurs off the development site.
- Consider more nest boxes over each lot, specifically designed for microbats, gliders and birds (ie varying aperture sizes, made from hardwood or long lasting products).

It is the consultant's opinion that this application does not need referring to the Federal Department of Environment and Energy.

Report prepared by:



Ted Smith BSc (Hons), Dip Ed, BAM Accredited Assessor, Certified Practicing Ecologist  
PEAK LAND MANAGEMENT

**DISCLAIMER:** Whilst every effort is made to present clear and factual information based on current scientific data, on site field survey, and council guidelines, no guarantee is made that all species have been identified on the site, or that all information is presented to councils satisfaction, or that the development will be approved as this is in the hands of the approving statutory authority. 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

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Winning, G., and Paul King, J. 2004. *A study of Squirrel Glider in a fragmented urban landscape, Newcastle, NSW*. HWR Limited.

### **Websites**

The following legal acts and legislation were accessed through Australasian Legal Information Institute (<http://www.austlii.edu.au/>):

*Environment Protection and Biodiversity Conservation Act 1999*

*Biodiversity Conservation Act 2016*

*Biodiversity Conservation Act Regulations 2017*

*National Parks and Wildlife Act 1974*

*Environmental Planning and Assessment Act (1979)*

*Water Management Act, 2000*

*State Environmental Planning Policy 19, 44, 71, 14, Vegetation in Non-Rural Areas SEPP*

### **Other Websites**

The following websites have been viewed throughout the development of this report:

<http://plantnet.rbgsyd.nsw.gov.au/search/simple.htm>

<http://imagery.maps.nsw.gov.au/>

Nearmap

<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/profile.aspx?id=10604>

<http://www.bionet.nsw.gov.au/>

[www.deh.gov.au](http://www.deh.gov.au)



<http://www.environment.gov.au/epbc/pmst/index.html>- & Protected Matters Search  
<http://www.frogsaustralia.net.au/frogs/>  
<http://www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/noxweed/noxious>  
[http://www.ehp.qld.gov.au/wildlife/koalas/koala-ecology.html#claws\\_for\\_climbing](http://www.ehp.qld.gov.au/wildlife/koalas/koala-ecology.html#claws_for_climbing)  
<http://www.environment.nsw.gov.au/determinations>  
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### **Applications – iphone**

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## APPENDIX 1: FLORA SURVEY RESULTS

These species found over the development site and immediate surrounds.

Scientific Name	Common Name	Lot 2	Lot 3	Lot 4
<b>Trees:</b>				
<i>Allocasuarina luehmannii</i>	Bulloak	x	x	x
<i>Corymbia maculata</i>	Spotted Gum	x	x	
<i>Eucalyptus crebra</i>	Narrow leafed Ironbark			
<i>Eucalyptus fibrosa</i>	Broad Leaved ironbark	x		x
<i>Eucalyptus moluccana</i>	Grey Box	x		
<i>Eucalyptus punctata</i>	Grey Gum	x		
<i>Eucalyptus tereticornis</i>	Forest Red Gum	x	x	x
<b>Shrubs and understorey:</b>				
<i>Acacia elongata</i>	Swamp wattle			
<i>Acacia falcata</i>	Sickle leaf wattle	x	x	
<i>Acacia longifolia</i>	Sydney wattle	x		x
<i>Acacia parvipinnula</i>	Silver Stemmed Wattle	x	x	
<i>Brunoniella australis</i>	Blue Trumpet	x		
<i>Bursaria spinosa</i>	Blackthorn	x	x	x
<i>Breynia oblongifolia</i>	Coffee Bush	x		
<i>Calotis cuneifolia</i>	Purple Burr Daisy	x	x	x
<i>Calotis lappulacea</i>	Yellow Burr Daisy	x		
<i>Cassinia aculeata</i>	Dolly Bush	x		x
<i>Chamaesyce drummondii</i>	Caustic Weed	x		
<i>Chrysocephalum apiculatum</i>	Common Everlasting	x		
<i>Chrysocephalum semipapposum</i>	Clustered Everlasting	x		
<i>Cyanthillium cinereum</i> var. <i>cinereum</i>		x		
<i>Daviesia ulicifolia</i>	Gorse Bitter Pea	x	x	x
<i>Dianella revoluta</i> var. <i>revoluta</i>		x	x	x
<i>Dichondra repens</i>	Kidney weed	x	x	x
<i>Dillwynia retorta</i>		x		
<i>Eremophila debilis</i>	Winter Apple	x	x	
<i>Goodenia rotundifolia</i>	A Goodenia	x	x	
<i>Hibbertia linearis</i>	Guinea Flower	x		
<i>Laxmannia gracilis</i>	Slender Wire Lily	x	x	x
<i>Leucopogon ericoides</i>	Peach Heath	x	x	x
<i>Lomandra filiformis</i> subsp. <i>filiformis</i>	Mat Rush	x	x	x
<i>Lomandra multiflora</i> subsp. <i>multiflora</i>	Mat Rush	x	x	x
<i>Ozothamnus diosmifolius</i>	Pill flower	x		
<i>Phyllanthus hirtellus</i>	Thyme Spurge	x		
<i>Pratia purpurascens</i>	Pratia, White Root	x		x
<i>Solanum brownii</i>	Violet Nightshade	x		

<b>Grasses</b>				
<i>Aristida calycina</i> var. <i>calycina</i>	3 Awn Grass	x	x	x
<i>Aristida ramosa</i>	3 Awn Grass	x	x	x
<i>Aristida vagans</i>	3 Awn Grass	x	x	x
<i>Austrostipa</i> spp	Speargrass	x		
<i>Bothriochloa macra</i>	Red Leg grass			x
<i>Cymbopogon refractus</i>	Barb wire grass	x	x	x
<i>Cynodon dactylon</i>	Couch	x	x	
<i>Digitaria</i> spp				x
<i>Entolasia stricta</i>	Wire grass	x	x	
<i>Eragrostis brownii</i>	Love grass	x	x	
<i>Eragrostis leptostachya</i>	Paddock Lovegrass	x	x	x
<i>Imperata cylindrica</i>	Blady Grass	x	x	
<i>Lachnagrostis filiformis</i>	Blown Grass	x		
<i>Panicum simile</i>	Two-colour Panic			x
<i>Rytidosperma tenuius</i>	Wallaby Grass	x		x
<i>Sporobolus creber</i>	Slender Rat's Tail Grass	x		
<i>Themeda triandra</i>	Kangaroo grass	x	x	x
<b>Ferns:</b>				
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>	Poison rock fern	x	x	x
<b>Sedges and water plants</b>				
<i>Cyperus</i> spp	A Sedge		x	
<i>Juncus acutus</i>	Sharp Rush		x	x
<i>Juncus usitatus</i>	Common rush		x	x
<i>Lepidosperma laterale</i>	Variable Sword Sedge	x	x	x
<b>Vines and scramblers:</b>				
<i>Desmodium rhytidophyllum</i>		x		
<i>Glycine clandestina</i>	Purple twining Pea	x		x
<b>Orchids/epiphytes:</b>				
<i>Amyema</i> spp	A Mistletoe	x		
<b>Weeds</b>				
<i>Anagallis arvensis</i>	Scarlet pimpernel	x	x	x
<i>Axonopus affinis</i>	Narrow leaf carpet grass	x	x	x
<i>Cirsium vulgare</i>	Spear thistle	x		
<i>Conyza bonariensis</i>	Fleabane	x		x
<i>Crassocephalum crepidioides</i>	Thickhead	x		
<i>Eragrostis curvula</i>	African Lovegrass	x	x	x
<i>Eragrostis pilosa</i>	Soft Lovegrass			x
<i>Galenia pubescens</i> var. <i>pubescens</i>	Galenia			x
<i>Gomphocarpus fruticosus</i>	Narrow leaf cotton bush			x
<i>Gnaphalium sphaericum</i>	Common cudweed		x	x

<i>Hypochaeris radicata</i>	Flatweed			
(3) <i>Lycium ferocissimum</i>	African Boxthorn	x		x
<i>Olea europaea</i> subsp. <i>cuspidata</i>	African Olive	x	x	x
(4) <i>Opuntia stricta</i>	Prickly Pear		x	
<i>Paspalum dilatatum</i>	Paspalum			x
<i>Romulea rosea</i> var. <i>australis</i>	Onion Grass			x
(5) <i>Senecio madagascariensis</i>	Fireweed	x	x	x
<i>Sida rhombifolia</i>	Paddy's Lucerne	x		
<i>Solanum nigrum</i>	Deadly/Blackberry nightshade	x		
<i>Sonchus asper</i>	Sowthistle	x		
<i>Sporobolus africanus</i>	Parramatta Grass			x
<i>Taraxacum officinale</i>	Dandelion	x	x	x
<i>Trifolium dubium</i>	Yellow suckling clover			x
<b>Native species total:</b>	<b>59</b>			
<b>Weed species total:</b>	<b>22</b>			
<b>TOTAL PLANTS:</b>	<b>81</b>			
# Threatened species				
# ROTAP - Rare plant				
(P) Priority weed	3			



## APPENDIX 2: FAUNA SURVEY RESULTS

### COMMON NAME

The following birds were observed, or heard either on or near the subject site, including flying overhead (common bird names from Pizzey & Knight, 1997):

Magpie	Noisy Miner
Wood Duck	Grey Teal
Yellow Faced Honeyeater	Crested Pigeon
Kookaburra	Australian Raven
Butcherbird	Blue Wren
Pee Wee	Golden Whistler
Galah	Little Grebe
Black Duck	Black Swan

### Other fauna observed, or heard from calls/scats/footprints/scratch marks were:

Eastern Grey Kangaroo- scat	*Rabbit
Red Necked Wallaby- scat	

# Threatened spps listed under EPBC Act

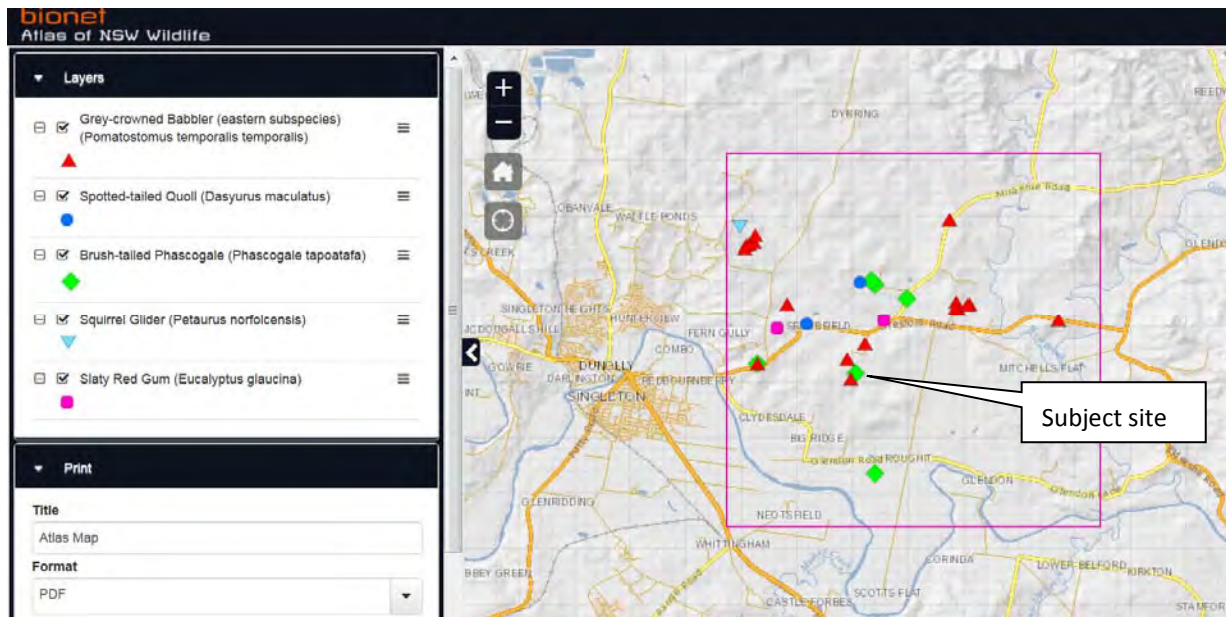
+ Threatened spps listed under BC Act

\* Exotic species

### APPENDIX 3: THREATENED FLORA & FAUNA SPECIES SEARCH RESULT (Over a 100 square kilometre area – NSW & National EPBC Species – from Bionet).






Note: this does not mean these species are found on the site.






Search area and some key local species records:



Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°; ^^ rounded to 0.01°). Copyright the State of NSW through the Office of Environment and Heritage. Search criteria : Licensed Report of all Valid Records of Threatened (listed on TSC Act 1995) ,Commonwealth listed ,CAMBA listed ,JAMBA listed or ROKAMBA listed Entities in selected area [North: -32.50 West: 151.20 East: 151.30 South: -32.60] recorded since 04 Sep 1990 until 04 Sep 2019 returned a total of 44 records of 11 species.

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Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm. status	Records	Info
Animalia	Aves	Ciconiidae	0183	<i>Ephippiorhynchus asiaticus</i>		Black-necked Stork	E1,P		8	
Animalia	Aves	Psittacidae	0260	<i>Glossopsitta pusilla</i>		Little Lorikeet	V,P		1	
Animalia	Aves	Meropidae	0329	<i>Merops ornatus</i>		Rainbow Bee-eater	P	J	1	
Animalia	Aves	Acanthizidae	0504	<i>Chthonicola sagittata</i>		Speckled Warbler	V,P		3	
Animalia	Aves	Pomatostomidae	8388	<i>Pomatostomus temporalis temporalis</i>		Grey-crowned Babbler (eastern subspecies)	V,P		17	
Animalia	Aves	Neosittidae	0549	<i>Daphoenositta chrysoptera</i>		Varied Sittella	V,P		2	

Animalia	Mammalia	Dasyuridae	1008	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E	2	
Animalia	Mammalia	Dasyuridae	1017	<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale	V,P		6	
Animalia	Mammalia	Petauridae	1137	<i>Petaurus norfolcensis</i>	Squirrel Glider	V,P		1	
Animalia	Mammalia	Pteropodidae	1280	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	1	
Plantae	Flora	Myrtaceae	4096	<i>Eucalyptus glaucina</i>	Slaty Red Gum	V	V	2	



#### **APPENDIX 4: SELECTED PHOTOS OF SITE**

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Subject site showing proposed Building Envelope (BE) development site over Lot 2



Looking south over proposed Lot 2 BE development site





Vegetation proposed for retention over Lot 2 (eastern side)



Proposed fence location over Lot 2- already cleared and 1m wide groundstorey clearing required only





Looking south over proposed Lot 3 BE development site



Vegetation proposed for retention over Lot 3





Proposed fence location over Lot 3-some clearing required (1m wide clearing allowed for within this report)



Looking south over proposed Lot 4 BE development site





Vegetation proposed for retention over Lot 4



Proposed fence location- already cleared and 1m wide groundstorey clearing required only





Eucalypt Forest EEC in background - scattered trees only



Green Grove public road, looking east. Subject sites to right of frame.



29<sup>th</sup> September, 2020

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MEREWETHER NSW 2291

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Dear Sally,

**Re: Addendum to the Ecological reports (208B, 208C, 208D & 208E Roughit Lane, Roughit) to address the differences between SEPP 44 and the current SEPP Koala Protection 2019**

PEAK LAND MANAGEMENT has been engaged by you to prepare the above addendum in response to Singleton Shire Council (Angela Tinlin) request, stating:

*I am in the process of preparing the formal planning proposals for Roughit Lane C,D, & E and B.*

*Are you able to get the Ecologist to provide an Addendum to the Ecological reports (C,D & E) and (B) to address the differences between SEPP 44 and the current SEPP Koala Protection 2019 please? This will allow me to update the proposals to reflect the current SEPP.*

I prepared the original Ecological/Biodiversity Assessment reports, and am familiar with the sites. Author details in Attachment 1.

**State Environmental Planning Policy (Koala Habitat Protection) 2019.**

Clause 3 states:

*This Policy aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline.*

In this Policy:

*"core koala habitat" means:*

- (a) an area of land where koalas are present, or*
- (b) an area of land -*
  - (i) which has been assessed by a suitably qualified and experienced person in accordance with the Guideline as being highly suitable koala habitat, and*
  - (ii) where koalas have been recorded as being present in the previous 18 years.*

Clause 9 states:

**9 Development assessment process—no approved koala plan of management for land**

**(1) This clause applies to land to which this Policy applies if the land—**



- (a) is identified on the Koala Development Application Map, and*
- (b) has an area of at least 1 hectare (including adjoining land within the same ownership), and*
- (c) does not have an approved koala plan of management applying to the land.*

*(2) Before a council may grant consent to a development application for consent to carry out development on the land, the council must take into account—*

- (a) the requirements of the Guideline, or*
- (b) information, prepared by a suitably qualified and experienced person in accordance with the Guideline, provided by the applicant to the council demonstrating that—*
  - (i) the land does not include any trees belonging to the feed tree species listed in Schedule 2 for the relevant koala management area, or*
  - (ii) the land is not core koala habitat.*

The Draft Koala Habitat Protection Guideline, 2020 states:

*The Koala Development Application Map identifies areas that have highly suitable koala habitat and that are likely to be occupied by koalas. Landholdings captured by the map (whether the whole lot or only a portion is covered) need to consider the impact of their development on koalas or need to undertake a survey if they believe the map has been incorrectly applied to their land (in accordance with Appendix C). The Koala Development Application Map applies where there is no approved Koala Plan of Management for the land and identifies which areas trigger the development assessment requirements for core koala habitat.*

*The Site Investigation Area Map for Koala Plans of Management identifies areas that are likely to have koala use trees and excludes areas with a low probability of koala habitat. This map identifies areas councils should investigate when identifying core koala habitat in Koala Plans of Management and the extent to which core koala habitat can be identified.*

*The development control provisions of the SEPP apply to development applications relating to land within a council area listed below and:*

- Where there is an approved Koala Plan of Management for the land the development application must be consistent with the approved koala plan of management that applies to the land.*
- Where there is no approved Koala Plan of Management for the land, if the land*
  - is identified on the Koala Development Application Map, and*
  - has an area of more than 1 hectare, or*
  - has, together with any adjoining land in the same ownership, an area of more than 1 hectare, whether or not the development application applies to the whole, or only part, of the land.*

*Koala habitat means koala habitat however described in a plan of management under this Policy or State Environmental Planning Policy No 44—Koala Habitat Protection, and includes core koala habitat.*

*Highly suitable koala habitat - Where 15% or greater of the total number of trees within any PCT are the regionally relevant species of those listed in Schedule 2 (see Appendix A), the site meets the definition of highly suitable koala habitat.*

*If highly suitable koala habitat has been established (via the above survey), the presence or past records of koalas must also be established.*

*In addition to site surveys, there must also be a consideration of existing records spanning the previous 18 years (3 koala generations). The site area is considered to contain habitat that meets the definition of core koala habitat, provided the site contains highly suitable koala habitat (identified via the above survey) and where a record or records exist within the last 18 years, within the following maximum distances from the site:*

- *2.5 kilometres of the site (for North Coast, Central Coast, Central Southern Tablelands, South Coast KMAs)*

## RESULTS

This SEPP applies across NSW to Council LGA areas listed in Schedule 1 (excludes some Sydney Councils) land, and is not a National Park or Forestry Reserve. Therefore this SEPP applies, and will be addressed here.

The site is mapped as *Site Investigation Area Map for Koala Plans of Management* (blue area) on the *Koala Land Development Map* (Attachment 2). There is no Koala Plan of Management (KPoM) known to exist over this site.

Feed trees as listed under this SEPP do occur over the development site being:

<i>Corymbia maculata</i>	Spotted Gum
<i>Eucalyptus crebra</i>	Narrow leafed Ironbark
<i>Eucalyptus fibrosa</i>	Broad Leaved ironbark
<i>Eucalyptus moluccana</i>	Grey Box
<i>Eucalyptus punctata</i>	Grey Gum
<i>Eucalyptus tereticornis</i>	Forest Red Gum

Each site is >1Ha. There are Koala feed trees present, and each site (except 208E which is primarily cleared) is identified as potential *highly suitable koala habitat*, and is mapped as such in Attachment 2 Koala map.

In this case the SEPP states “*If highly suitable koala habitat has been established (via the above survey), the presence or past records of koalas must also be established*”.

An analysis of Bionet records of Koala in this locality has occurred (Attachment 2). A full Bionet search over a 10km x 10km search area around the site (ie 100km<sup>2</sup>) occurred. It shows there are no Koala records within 2.5kms of this site.

Additionally no scats, tree use marks or visual sightings of koalas were seen on or around any part of the site.

The development control provisions of the SEPP therefore would not apply to any future development application, as the subject lots are not assessed as *Core Koala habitat*.

The proposed works therefore conform to this SEPP, and no further koala studies are considered required under this SEPP.



Thanks, any queries please contact me.



Ted Smith BSc (Hons), Grad. Dip. Bush Fire Planning & Design, BAM Accredited Assessor, Certified Practicing Ecologist  
PEAK LAND MANAGEMENT

**DISCLAIMER:** Whilst every effort is made to present clear and factual information based on current scientific data, on site field survey, and council guidelines, no guarantee is made that all information is presented to council's satisfaction, or that the development will be approved as this is in the hands of the approving statutory authority. 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.

## ATTACHMENT 1: AUTHOR DETAILS

PEAK LAND MANAGEMENT is an independent company specialising in providing quality consulting services in natural resource/land management including bush fire assessment. The company is a consultant member of the NSW Ecological Association, and accredited BAM Assessor and abides by both the NSW Ecological Association & NSW DPIE professional code of conduct and ethics. PEAK LAND MANAGEMENT is licenced with NSW DPIE for survey and collection of threatened flora (SL 100640).

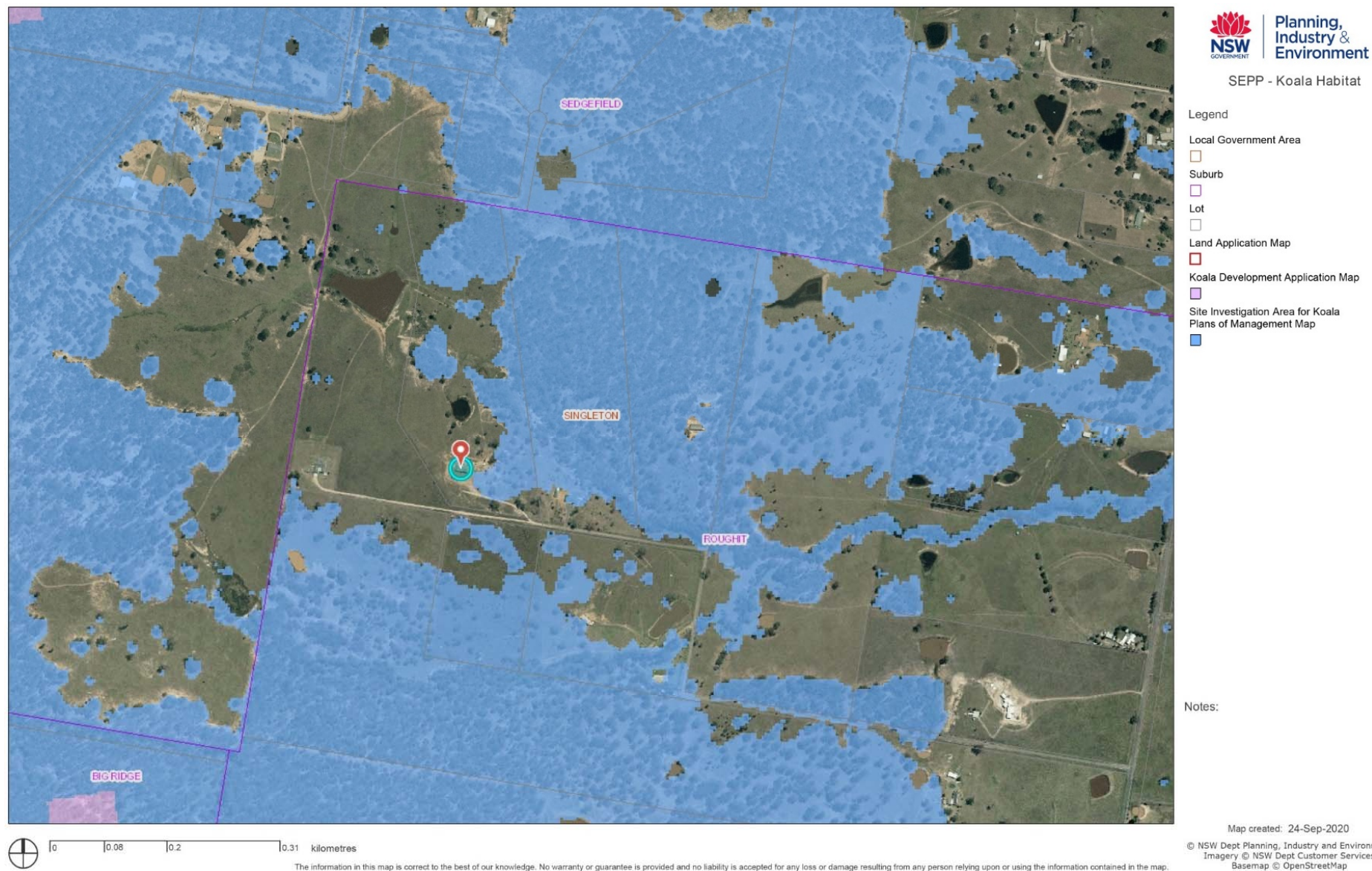
Some examples of the type of work PEAK LAND MANAGEMENT PTY LTD undertakes includes Review of Environmental Factors, Flora & Fauna Surveys/ Ecological/Biodiversity Assessments, Bushland/Vegetation Management Plans, and Bush Fire Assessment Reports.

Mr Ted Smith is the Director of PEAK LAND MANAGEMENT PTY LTD. Ted has a Bachelor of Science Degree with Honours majoring in Physical Geography from the University of New South Wales, and a Graduate Diploma in Design for Bushfire Prone Areas from the University of Western Sydney. He is a qualified & experienced Ecologist being a Certified Practising Ecological Consultant Ecologist (under the NSW Ecological Association -006); Certified BPAD Bushfire Practitioner (FPA Aust-17671), and accredited Biodiversity Assessment Method (BAM) Assessor with NSW DPIE (BAAS 17076).

Ted Smith was the author of this work, and conducted all fieldwork.



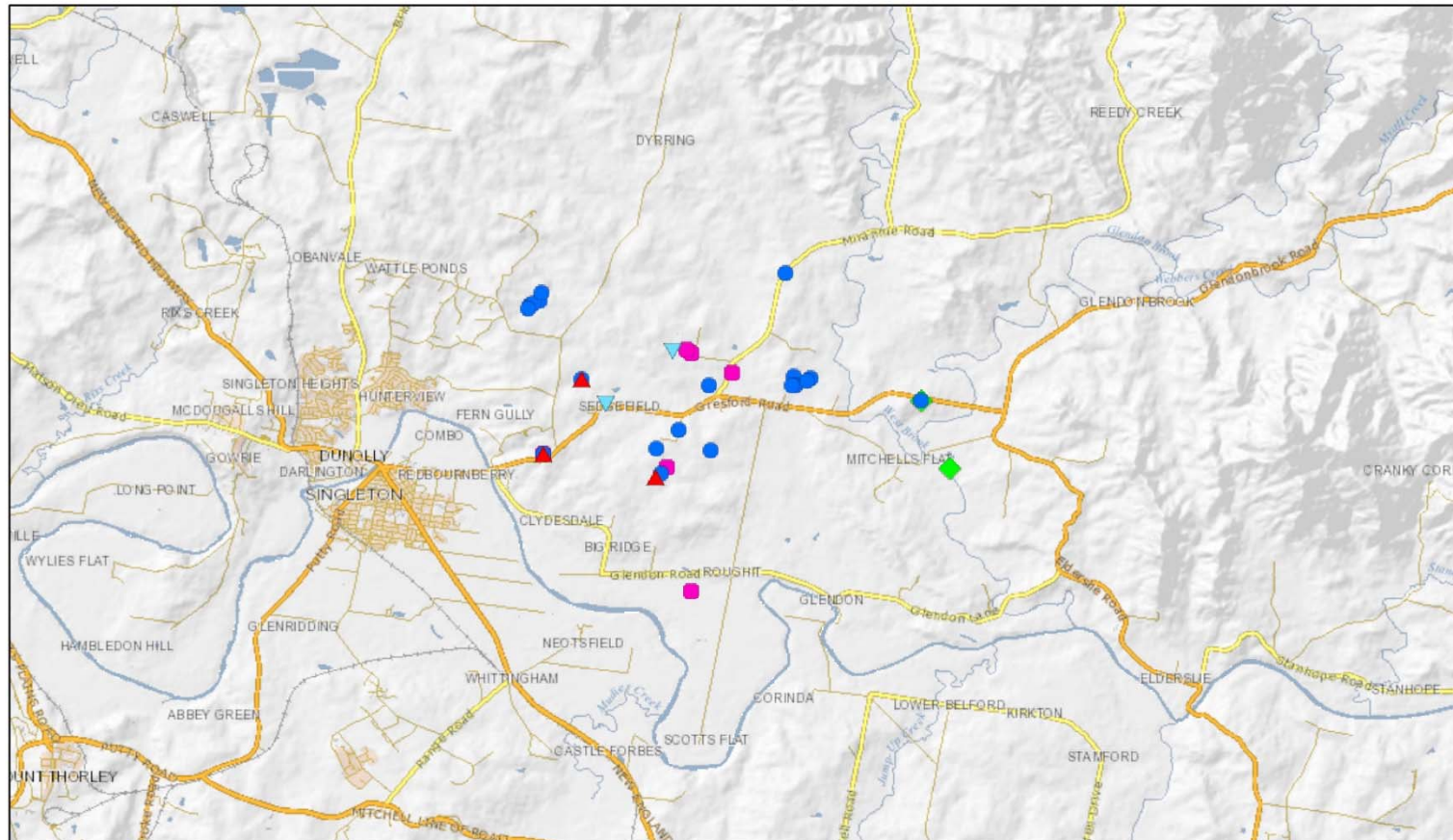
## ATTACHMENT 1: KOALA HABITAT SEPP MAP.





**ATTACHMENT 2: Koala and other threatened species Bionet search results. Koala not present and not therefore shown in legend.**

Atlas Map



September 24, 2020

drawGraphics\_poly

Override 1

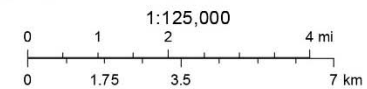
▲ Speckled Warbler (*Chthonicola sagittata*)

● Grey-crowned Babbler (eastern subspecies) (*Pomatostomus temporalis temporalis*)

◆ Varied Sittella (*Daphoenositta chrysoptera*)

▲ Spotted-tailed Quoll (*Dasyurus maculatus*)

■ Brush-tailed Phascogale (*Phascogale tapoatafa*)













Copyright 2017



Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria : Licensed Report of all Valid Records of Threatened (listed on BC Act 2016) or Commonwealth listed Entities in selected area [North: -32.50 West: 151.20 East: 151.30 South: -32.60] recorded since 24 Sep 1990 until 24 Sep 2020 returned a total of 45 records of 10 species.

Report generated on 24/09/2020 4:45 PM

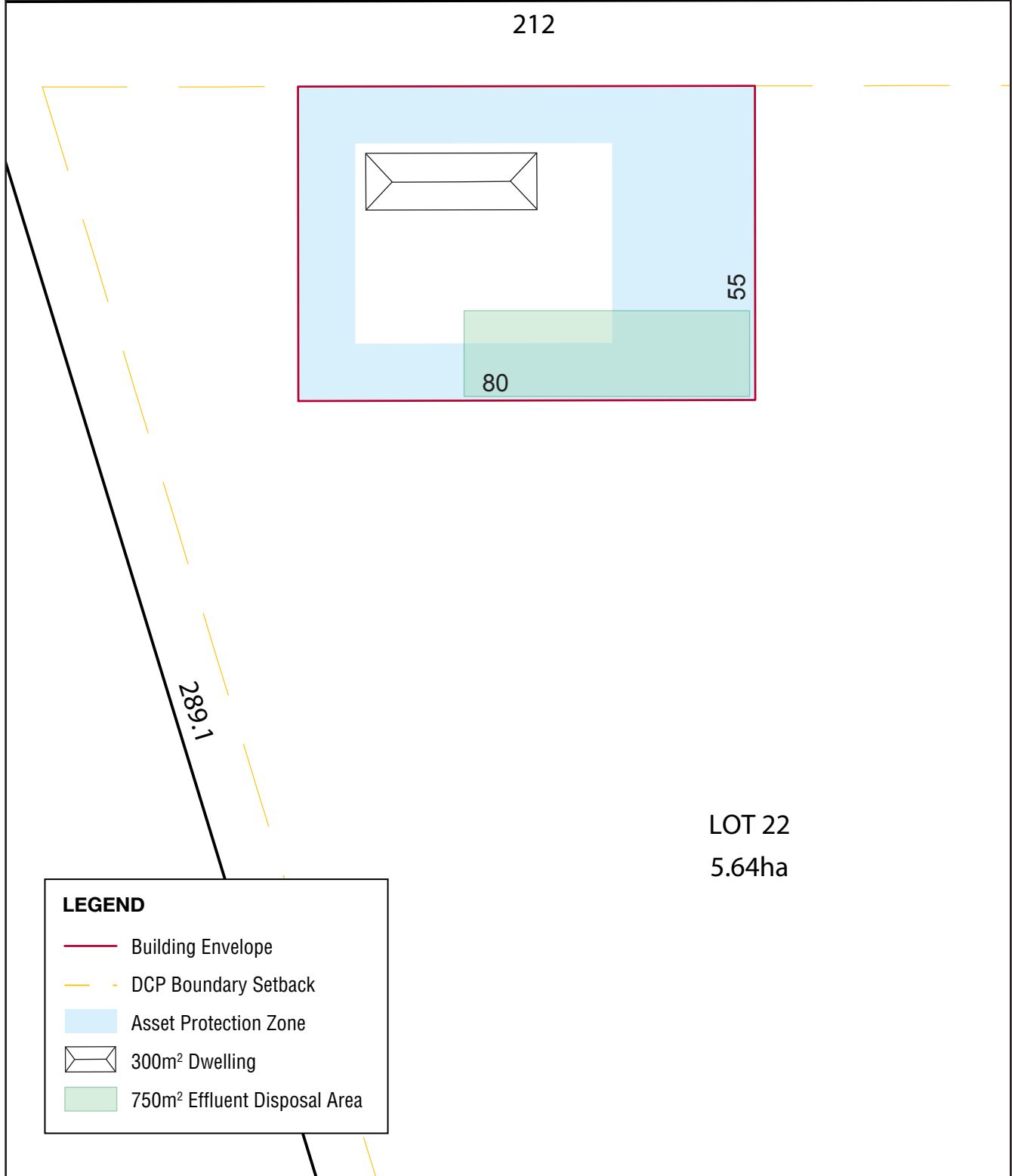
Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm. status	Records	Info
Animalia	Aves	Ciconiidae	0183	<i>Ephippiorhynchus asiaticus</i>		Black-necked Stork	E1,P		8	
Animalia	Aves	Psittacidae	0260	<i>Glossopsitta pusilla</i>		Little Lorikeet	V,P		1	
Animalia	Aves	Acanthizidae	0504	<i>Chthonicola sagittata</i>		Speckled Warbler	V,P		3	
Animalia	Aves	Pomatostomidae	8388	<i>Pomatostomus temporalis temporalis</i>		Grey-crowned Babbler (eastern subspecies)	V,P		19	
Animalia	Aves	Neosittidae	0549	<i>Daphoenositta chrysoptera</i>		Varied Sittella	V,P		2	
Animalia	Mammalia	Dasyuridae	1008	<i>Dasyurus maculatus</i>		Spotted-tailed Quoll	V,P	E	2	

Animalia	Mammalia	Dasyuridae	1017	<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale	V,P		6	
Animalia	Mammalia	Petauridae	1137	<i>Petaurus norfolcensis</i>	Squirrel Glider	V,P		1	
Animalia	Mammalia	Pteropodidae	1280	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	1	
Plantae	Flora	Myrtaceae	4096	<i>Eucalyptus glaucina</i>	Slaty Red Gum	V	V	2	

## **ANNEX C - INDICATIVE ENVELOPES**

GREEN GROVE

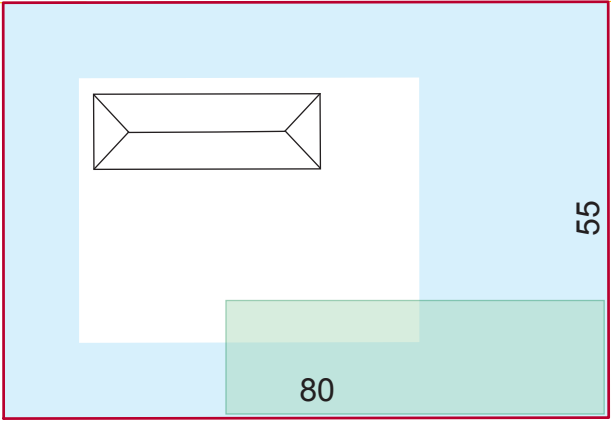
LOT 11  
DP1254323





GREEN GROVE

180



LOT 32  
5.16ha

**LEGEND**

- Building Envelope
- DCP Boundary Setback
- Asset Protection Zone
- 300m² Dwelling
- 750m² Effluent Disposal Area

Concept Building Envelope  
208D Roughit Lane

SCALE: 1:100



GREEN GROVE

118



60

70

170

LOT 42  
5.06ha

**LEGEND**

- Building Envelope
- - DCP Boundary Setback
- Asset Protection Zone
-  300m<sup>2</sup> Dwelling
-  750m<sup>2</sup> Effluent Disposal Area

**Concept Building Envelope**  
208E Roughit Lane

SCALE: 1:100

## ANNEX D - Planning proposal assessment against State Environmental Planning Policies (SEPP's)

SEPP	Overview	Applicable	Consistency
SEPP (Aboriginal Land) 2019	For land owned by Local Aboriginal Land Council's, which is identified on the Land Application Map of the SEPP; requires Development Applications to consider associated development delivery plans.	N/A	<p>The SEPP does not apply to the Singleton LGA.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Activation Precincts) 2020	Promotes the economic development of land identified as being an Activation Precinct on the Land Application Map of the SEPP.	N/A	<p>The SEPP does not apply to the Singleton LGA.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Affordable Rental Housing) 2009	Provides incentives for new affordable rental housing, facilitates the retention of existing affordable rentals, and expands the role of not-for-profit providers	N/A	<p>The LEP amendment proposal does not relate to affordable rental housing.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Building Sustainability Index: BASIX) 2004	Ensures consistency in the implementation of BASIX throughout the State by overriding competing provisions in other environmental planning instruments and development control plans; and specifying that SEPP 1 does not apply in relation to any development standard arising under BASIX.	N/A	<p>The LEP amendment proposal does not relate to implementation of the BASIX scheme.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Coastal Management) 2018	The Coastal Management SEPP gives effect to the objectives of the Coastal Management Act 2016 from a land use planning perspective, by specifying how	N/A	<p>The SEPP does not apply to the Singleton LGA.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>

SEPP		Overview	Applicable	Consistency
		development proposals are to be assessed if they fall within the coastal zone.		
SEPP (Concurrences and Consents) 2018		Provides for the Planning Secretary to act as the concurrence authority for decisions, where the concurrence authority has not responded within allotted timeframes. Also applies transitional arrangements for certain repealed SEPPs.	N/A	<p>The LEP amendment proposal does not relate to concurrence responsibilities or relevant SEPP transitional provisions.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Educational Establishments and Child Care Facilities)		Provides a range of tools to assist childcare and education providers in constructing new facilities and upgrading existing facilities. The SEPP balances the need to deliver additional educational infrastructure with a focus on good design	N/A	<p>The LEP amendment proposal does not relate to Educational Establishments or Child Care Facilities</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Exempt and Complying Development Codes) 2008		Provides exempt and complying development codes that have State-wide application.	N/A	<p>The LEP amendment proposal does not relate to implementation of the exempt and complying development codes.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Gosford City Centre) 2018		Provides design-led, streamlined, flexible and efficient development controls to drive the continued renewal of Gosford City Centre to economic and social revitalisation of Gosford City Centre	N/A	<p>The SEPP does not apply to the Singleton LGA.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Housing for Seniors or People with a Disability) 2004		Encourage the development of high-quality accommodation for our ageing population and for people who have disabilities - housing that	N/A	The LEP amendment proposal does not relate to housing for seniors or people with a disability.



SEPP		Overview	Applicable	Consistency
		is in keeping with the local neighbourhood.		Consistency with the SEPP is not relevant to the proposal.
SEPP 2007	(Infrastructure)	Provides greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.	N/A	<p>The LEP amendment proposal does not affect implementation of the Infrastructure SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Koala Habitat Protection) 2019		Encourages the conservation and management of natural vegetation areas that provide habitat for koalas to ensure permanent free-living populations will be maintained over their present range.	Yes	<p>According to the study information for the LEP amendment proposal, the site contains koala habitat/potential koala habitat.</p> <p>The information lodged for the proposal demonstrates consistency with the SEPP.</p>
SEPP (Kosciuszko National Park—Alpine Resorts) 2007		Provides for the protection and enhancement of alpine resorts in that part of the Kosciuszko National Park identified on the technical map series for the SEPP.	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Kurnell Peninsula) 1989		Through application of appropriate development controls, provides for the protection of the natural environment of the Kurnell Peninsula (within the Shire of Sutherland) as identified on the technical map series for the SEPP.	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Mining, Petroleum Production and Extractive Industries) 2007		Provides for the proper management and development of mineral, petroleum and	N/A	The LEP amendment proposal does not relate

SEPP	Overview	Applicable	Consistency
	extractive material resources for the social and economic welfare of the State.		to an extractive industry proposal.  Consistency with the SEPP is not relevant to the proposal.
SEPP (Kosciuszko National Park—Alpine Resorts) 2007	Provides for the protection and enhancement of alpine resorts in that part of the Kosciuszko National Park identified on the technical map series for the SEPP.	N/A	The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.  Consistency with the SEPP is not relevant to the proposal.
SEPP 19 - Bushland in Urban Areas	Provides for the protection and preservation of bushland in urban areas within certain local government areas.	N/A	The SEPP does not apply to the Singleton LGA.  Consistency with the SEPP is not relevant to the proposal.
SEPP No. 21 - Caravan Parks	Ensures that where caravan parks or camping grounds are permitted under an environmental planning instrument, movable dwellings, as defined in the Local Government Act 1993, are also permitted. The policy ensures that development consent is required for new caravan parks and camping grounds and for additional long-term sites in existing caravan parks. It also enables, with the council's consent, long-term sites in caravan parks to be subdivided by leases of up to 20 years	N/A	The LEP amendment proposal does not relate to a movable dwelling proposal, caravan park or camping ground.  Consistency with the SEPP is not relevant to the proposal.
SEPP No. 33 - Hazardous and Offensive Development	Requires specified matters to be considered for proposals that are 'potentially hazardous' or 'potentially offensive' as defined in the policy.	N/A	The LEP amendment proposal does not relate to 'potentially hazardous' or 'potentially offensive' development.

SEPP	Overview	Applicable	Consistency
			Consistency with the SEPP is not relevant to the proposal.
SEPP No. 36 - Manufactured Estates	Helps establish well-designed and properly serviced manufactured home estates in suitable locations.	N/A	<p>The LEP amendment proposal does not relate to a manufactured home estate.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP No. 47 – Moore Park Showground	Provides for the redevelopment of Moore Park Showground (Sydney) in a manner that is consistent with its status as an area of importance for State and regional planning in New South Wales	N/A	<p>The LEP amendment proposal does not relate to Moore Park Showground as identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP No. 50 - Canal Estates	Bans new canal estates from the date of gazettal, to ensure coastal and aquatic environments are not affected by these developments	N/A	<p>The LEP amendment proposal does not relate to a canal estate.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP No. 55 - Remediation of Land	Contains state-wide planning controls for the remediation of contaminated land. The policy requires councils to be notified of all remediation proposals and requires lodgement of information for rezoning proposals where the history of use of land is unknown or knowledge incomplete.	N/A	<p>According to the study information for the LEP amendment proposal, the site does not contain contaminated land/potentially contaminated land.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP No. 64 - Advertising and Signage	Aims to ensure that outdoor advertising is compatible with the desired amenity and visual character of an area, provides effective communication in	N/A	The LEP amendment proposal does not relate to advertising or signage.

SEPP	Overview	Applicable	Consistency
	suitable locations and is of high-quality design and finish.		Consistency with the SEPP is not relevant to the proposal.
SEPP No. 65 - Design Quality of Residential Flat Development	Raises the design quality of residential flat development across the state through the application of a series of design principles. Provides for the establishment of Design Review Panels to provide independent expert advice to councils on the merit of residential flat development.	N/A	<p>The LEP amendment proposal does not relate to residential flat development.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP No. 70 - Affordable Housing (Revised Schemes)	Provides for revised affordable housing provisions to be inserted into environmental planning instruments for certain land within the Greater Metropolitan Region.	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Penrith Lakes Scheme) 1989	Through application of appropriate development controls, provides for the protection of the natural environment and environmental heritage on land identified on the technical map series for the SEPP (Penrith Lakes).	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
State Environmental Planning Policy (Primary Production and Rural Development) 2019	Contains requirements for State significant agricultural land, small-scale low risk artificial waterbodies, livestock industries and aquaculture.	Yes	<p>The LEP amendment proposal does not relate to a State significant agricultural land, small-scale low risk artificial waterbodies, livestock industries or aquaculture.</p> <p>The information lodged for the proposal demonstrates consistency with the SEPP.</p>



SEPP	Overview	Applicable	Consistency
SEPP (State and Regional Development) 2011	Confers functions on joint regional planning panels to determine development applications for relevant State Significant Development, State Significant Infrastructure and Critical State Significant Infrastructure.	N/A	<p>The LEP amendment proposal does not relate to functions conferred on joint regional planning panels.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (State Significant Precincts) 2005	Facilitates the development, redevelopment and protection of important urban, coastal and regional sites of economic, environmental or social significance to the State, so as to facilitate the orderly use, development or conservation of those State significant precincts for the benefit of the State.	N/A	<p>The LEP amendment proposal does not relate to land within an existing or proposed State significant precinct.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Sydney Drinking Water Catchment) 2011	Through application of appropriate assessment and approval provisions, provides for the protection of the Sydney drinking water catchment as identified on the technical map series for the SEPP.	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Sydney Region Growth Centres) 2006	Provides for the coordinated release of land for residential, employment and other urban development in the North West and South West growth centres of the Sydney Region as identified on	N/A	The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.

SEPP	Overview	Applicable	Consistency
	the technical map series for the SEPP.		Consistency with the SEPP is not relevant to the proposal.
SEPP (Three Ports) 2013	Provides a coordinated and consistent approach to the development and re-development of certain land at Port Botany, Port Kembla and the Port of Newcastle (as identified on the technical map series for the SEPP) for port purposes.	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Urban Renewal) 2010	Establishes a process for assessing and identifying sites as urban renewal precincts, to facilitate the orderly and economic development and redevelopment of sites in and around urban renewal precincts, and to facilitate delivery of the objectives of any applicable government State, regional or metropolitan strategies connected with the renewal of urban areas that are accessible by public transport.	N/A	<p>The LEP amendment proposal does not relate to land within an existing or proposed urban renewal precinct.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017	Aims to protect the biodiversity values of trees and other vegetation in non-rural areas of NSW and preserve the amenity of such areas through the preservation of trees and other vegetation.	Yes	<p>The LEP amendment proposal relates to land within a zone to which the SEPP applies.</p> <p>The information lodged for the proposal demonstrates consistency with the SEPP.</p>
State Environmental Planning Policy (Western Sydney Aerotropolis) 2020	Provides for development of the land identified on the technical map series for the SEPP, where it is consistent with the Western Sydney Aerotropolis Plan.	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>

SEPP	Overview	Applicable	Consistency
State Environmental Planning Policy (Western Sydney Employment Area) 2009	Provides for development of the land identified on the technical map series for the SEPP into the Western Sydney Employment Area.	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>
SEPP (Western Sydney Parklands) 2009	Provides for development of the land identified on the technical map series for the SEPP into multi-use urban parkland for the region of western Sydney.	N/A	<p>The LEP amendment proposal does not relate to land identified on the technical map series for the SEPP.</p> <p>Consistency with the SEPP is not relevant to the proposal.</p>

## ANNEX E - Planning proposal assessment against section 9.1(2) Ministerial Directions

Ministerial Direction	Overview	Applicable	Consistency
<b>1. Employment and Resources</b>			
1.1 Business and Industrial Zones	<p>Applies to planning proposals affecting existing or proposed business or industrial zone land.</p> <p>By requiring consistency with the objectives of the direction, retention of areas of business and industrial zoned land, protection of floor space potential, and/or justification under a relevant strategy/study; the direction seeks to protect employment land in business and industrial zones, encourage employment growth in suitable locations and support the viability of identified centres.</p>	N/A	<p>The LEP amendment proposal does not relate to land within an existing or proposed business or industrial zone.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
1.2 Rural Zones	<p>Provides for protection of the agricultural production value of rural land by requiring planning proposals to be justified by a relevant strategy or study if they seek to rezone rural zoned land to a residential, business, industrial, village or tourist zone or increase the permissible density of rural (except RU5) zoned land.</p>	Yes	<p>The LEP amendment proposal relates to land within an existing rural zone.</p> <p>The information lodged for the proposal demonstrates consistency with the direction.</p>
1.3 Mining, Petroleum Production and Extractive Industries	<p>Seeks to ensure that the future extraction of State or regionally significant reserves of coal, other minerals, petroleum and extractive materials is not compromised by inappropriate development.</p>	Yes	<p>The LEP amendment proposal does not seek to implement provisions that would prohibit or restrict the potential development/mining of coal, mineral or petroleum resources or other extractive materials of State/regional significance.</p> <p>The information lodged for the proposal demonstrates</p>



Ministerial Direction		Overview	Applicable	Consistency
				consistency with the direction.
1.4	Oyster Aquaculture	Provides for the protection of priority oyster aquaculture areas and surrounds from land uses that may adversely impact upon water quality and consequently, on the health of oysters and oyster consumers.	N/A	<p>The LEP amendment proposal does not relate to a priority aquaculture area.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
1.5	Rural Lands	<p>Applies to planning proposals relating to existing or proposed rural or environmental protection zoned land and proposals that seek to change the minimum lot size for subdivision of such land.</p> <p>By requiring consistency with the rural planning principles and rural subdivision principles of SEPP (Rural Lands) 2008 or justification under a relevant strategy, the direction seeks to protect the agricultural production value of rural land and facilitate the orderly and economic development of rural lands for rural and related purposes.</p>	Yes	<p>The LEP amendment proposal relates to land within a proposed environmental protection zone.</p> <p>The information lodged for the proposal demonstrates consistency with the direction.</p>
<b>2. Environment and Heritage</b>				
2.1	Environment Protection Zones	<p>Applies to planning proposals affecting land within an environment protection zone or land otherwise identified for environment protection purposes.</p> <p>Provides for the protection and conservation of environmentally sensitive areas, by ensuring that planning proposals do not reduce the environmental protection standards applying to such land unless it is suitably justified by a relevant strategy or study or is of minor significance in the opinion of the Secretary</p>	Yes	<p>The LEP amendment proposal relates to land within a proposed environmental protection zone.</p> <p>The information lodged for the proposal demonstrates consistency with the direction.</p>

Ministerial Direction		Overview	Applicable	Consistency
		of the NSW Department of Planning, Industry and Environment (or nominated delegate)..		
2.2	Coastal Protection	<p>Applies to land within a coastal zone, as defined in the Coastal Protection Act 1979.</p> <p>The direction seeks to implement the principles of the NSW Coastal Policy by requiring relevant planning proposals to be consistent with the NSW Coastal Policy, the Coastal Design Guidelines and the NSW Coastline Management Manual or that they be suitably justified under a relevant strategy or study or be of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).</p>	N/A	<p>The LEP amendment proposal does not relate to land within a coastal zone.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
2.3	Heritage Conservation	Requires relevant planning proposals to contain provisions to facilitate the conservation of items, areas, objects and places of environmental heritage significance and indigenous heritage significance.	Yes	<p>According to the study information for the LEP amendment proposal, the site contains heritage items/places.</p> <p>The information lodged for the proposal demonstrates consistency with the direction.</p>
2.4	Recreation Vehicle Areas	Seeks to protect land with significant conservation values and other sensitive land from being developed for the purposes of recreation vehicle areas, unless they are suitably justified under a relevant strategy or study or considered to be of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).	N/A	<p>The LEP amendment proposal does not seek to enable land to be developed for the purposes of a recreational vehicle area.</p> <p>Consistency with the direction is not relevant to the proposal.</p>

Ministerial Direction		Overview	Applicable	Consistency
2.5	Application of E2 and E3 Zones and Environmental Overlays in Far North Coast LEPs	<p>Applies to the local government areas of Ballina, Byron, Kyogle, Lismore and Tweed.</p> <p>Requires planning proposals that seek to introduce or alter an E2 or E3 zone into a relevant LEP to be consistent with the Northern Councils E Zone Review Final Recommendations, except where considered to be of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).</p>	N/A	<p>The LEP amendment proposal does not relate to land within the local government areas of Ballina, Byron, Kyogle, Lismore or Tweed.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
2.6	Remediation of Contaminated Land	<p>Applies to planning proposals affecting land that is contaminated or potentially contaminated; and requires certain matters to be addressed before consideration can be given to including the land in a zone that would permit a change of use of the land.</p>	N/A	<p>According to the study information for the LEP amendment proposal, the site does not contain land contamination.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
<b>3. Housing, Infrastructure and Urban Development</b>				
3.1	Residential Zones	<p>Applies to planning proposals affecting existing or proposed residential zoned land or other zoned land upon, which significant residential development is or will be permitted.</p> <p>Requires relevant planning proposals to include provisions that encourage housing development, ensures satisfactory arrangements for servicing infrastructure and will not reduce the permissible residential density of land; unless it is suitably justified under a relevant strategy or study or is of minor significance in the opinion of the Secretary of the NSW Department of Planning,</p>	Yes	<p>The LEP amendment proposal relates to land within a proposed residential zone.</p> <p>The information lodged for the proposal demonstrates consistency with the direction.</p>

Ministerial Direction		Overview	Applicable	Consistency
		Industry and Environment (or nominated delegate).		
3.2	Caravan Parks and Manufactured Home Estates	<p>Applies to planning proposals that seek to identify suitable zones and/or locations and/or provisions for caravan parks or manufactured home estates (excludes certain land reserved or dedicated under the Crown Lands Act 1989 National Parks and Wildlife Act 1974).</p> <p>Provides for a variety of housing types and opportunities for caravan parks and manufactured home estates, through application of requirements for relevant planning proposals.</p>	N/A	<p>The LEP amendment proposal does not seek to identify suitable zones and/or locations and/or provisions for caravan parks or manufactured home estates.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
3.3	Home Occupations	Requires home occupations to be permissible without development consent in dwelling houses under the relevant provisions of a planning proposal, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate), it is considered to be of minor significance.	N/A	<p>The LEP amendment proposal does not affect the permissibility of home occupations in dwelling houses.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
3.4	Integrating Land Use and Transport	Requires planning proposals, which seek to create, alter or remove a zone or provision relating to urban land (including land zoned for residential, business, industrial, village or tourist purposes), to be consistent with the aims, objectives and principles of 'Improving Transport Choice – Guidelines for planning and development' and 'The Right Place for Business and Services – Planning Policy' or that they be suitably justified under a relevant strategy or study or be of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and	Yes	<p>The LEP amendment proposal seeks to introduce provisions into the instrument relating to urban land.</p> <p>The information lodged for the proposal demonstrates consistency with the direction.</p>



Ministerial Direction		Overview	Applicable	Consistency
		Environment (or nominated delegate)..		
3.5	Development Near Regulated Airports and Defence Airfields	Applies development criteria and consultation requirements to planning proposals that seek to create, alter or remove a zone or a provision relating to land in the vicinity of a regulated airport or defence airfield. Inconsistency with the development criteria and/or consultation requirements can be considered if the inconsistency is suitably justified under a relevant strategy or study or is of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).	N/A	<p>The LEP amendment proposal does not relate to land in the vicinity of a licensed aerodrome.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
3.6	Shooting Ranges	Requires planning that proposals not rezone land adjacent to and/ or adjoining to an existing shooting range where it would permit more intensive land uses than those that are permitted under the existing zone or land uses that are incompatible with the noise emitted by the existing shooting, except where the proposal is suitably justified under a relevant strategy or study or where non-compliance is of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).	N/A	<p>The LEP amendment proposal does not relate to land adjoining or adjacent to a shooting range.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
3.7	Reduction in non-hosted short-term residential accommodation period	Applies requirements to planning proposals that seek to identify or reduce the number of days that non-hosted short-term rental accommodation may	N/A	The LEP amendment proposal does not relate to land within Byron Shire Council.

Ministerial Direction	Overview	Applicable	Consistency
	be carried out in parts of its local government area.		Consistency with the direction is not relevant to the proposal.
<b>4. Hazard and Risk</b>			
4.1	Acid Sulfate Soils	Requires the provisions of planning proposals must be consistent with the Acid Sulfate Soils Planning Guidelines and other such relevant provisions provided by the Director-General of the Department of Planning, except where the proposal is suitably justified under a relevant strategy or study or where non-compliance is of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).	N/A  According to the study information for the LEP amendment proposal, the site does not contain acid sulfate soils/potential acid sulfate soils.  Consistency with the direction is not relevant to the proposal.
4.2	Mine Subsidence and Unstable Land	Applies requirements to planning proposals that would have the effect of permitting development on land within a proclaimed Mine Subsidence District, except where the proposal is suitably justified under a relevant strategy or study or where non-compliance is of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).	N/A  The LEP amendment proposal does not relate to land identified as being unstable by a known study, strategy or other assessment. The site is not within a designated mine subsidence district.  Consistency with the direction is not relevant to the proposal.
4.3	Flood Land	Prone Applies requirements for planning proposals that seek to create, remove or alter a zone or a provision that affects flood prone land except where non-compliance is of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).	N/A  The LEP amendment proposal does not relate to flood prone land within the meaning of the NSW Government's 'Floodplain Development Manual 2005'.  Consistency with the direction is not relevant to the proposal.

Ministerial Direction			Overview	Applicable	Consistency
4.4	Planning for Bushfire Protection		Applies requirements for planning proposals affecting land mapped as being bushfire prone land (or land in proximity to such land); except where the Commissioner of the NSW Rural Fire Service has issued written advice to Council that, notwithstanding the noncompliance with the requirements; the NSW Rural Fire Service does not object to progression of the planning proposal.	Yes	<p>The LEP amendment proposal relates to bushfire prone land.</p> <p>The information lodged for the proposal demonstrates consistency with the direction.</p>

## 5. Regional Planning

Note: Direction 5.1 has been repealed.

5.2	Sydney Drinking Water Catchments		Applies requirements to planning proposals affecting land within the Sydney Drinking Water Catchment for the purposes of protecting water quality, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); non-compliance with the requirements of the direction is considered to be of minor significance.	N/A	<p>The LEP amendment proposal does not relate to land within the Sydney Drinking Water Catchment.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
5.3	Farmland of State and Regional Significance on the NSW Far North Coast		Requires that planning proposals not rezone certain land, within the NSW Far North Coast, identified as State Significant Farmland, Regionally Significant Farmland or significant non-contiguous farmland for urban or rural-residential purposes, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); consistency with the North Coast Regional Plan 2036 and Section 4 of the report titled Northern Rivers Farmland Protection Project - Final Recommendations,	N/A	<p>The LEP amendment proposal does not relate to land within the NSW Far North Coast.</p> <p>Consistency with the direction is not relevant to the proposal.</p>

Ministerial Direction		Overview	Applicable	Consistency
		(February 2005), would be achieved.		
5.4	Commercial and Retail Development along the Pacific Highway, North Coast	Applies requirements to planning proposals that affect land that is traversed by the Pacific Highway, within the Port Stephens and Tweed Shire Council LGA's, to (inter-alia) protect the function of the highway and manage commercial and retail development along the highway except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); non-compliance with the requirements of the direction is considered to be of minor significance.	N/A	<p>The LEP amendment proposal does not relate to land traversed by the Pacific Highway.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
<u>Note:</u> Directions 5.5 – 5.8 have been repealed.				
5.9	North West Rail Link Corridor Strategy	Provides that planning affecting land located within the North West Rail Link (NWRL) Corridor must be consistent with the NWRL Corridor Strategy and the objectives of the direction, except where the proposal is suitably justified under a relevant strategy or study or where non-compliance is of minor significance in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate).	N/A	<p>The LEP amendment proposal does not relate to land located within the North West Rail Link Corridor.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
5.10	Implementation of Regional Plans	Requires that planning proposals be consistent with relevant regional strategies released by the Minister for Planning, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.	Yes	<p>The Hunter Regional Plan 2036 (HRP) applies to the LEP amendment proposal.</p> <p>The information lodged for the proposal demonstrates consistency with the direction.</p>



Ministerial Direction	Overview	Applicable	Consistency
5.11 Development of Aboriginal Land Council land	Requires that planning proposals consider development delivery plans prepared under State Environmental Planning Policy (Aboriginal Land) 2019.	N/A	The LEP amendment proposal does not relate to land identified on the Land Application Map of State Environmental Planning Policy (Aboriginal Land) 2019.

Consistency with the direction is not relevant to the proposal.

## 6. Local Plan Making

6.1 Approval and Referral Requirements	Applies requirements for planning proposals, which seek to incorporate provisions into a Local Environmental Plan (LEP) that require concurrence, consultation or development application referral to a minister or public authority.	N/A	The LEP amendment proposal does not seek to incorporate provisions into the instrument that require concurrence, consultation or development application referral to a minister or public authority.
6.2 Reserving Land for Public Purposes	Applies requirements to planning proposals which seek to create, alter or reduce existing zonings or reservations of land for public purposes.	N/A	The LEP amendment proposal does not seek to create, alter or reduce existing zonings or reservations of land for public purposes.
6.3 Site Specific Provisions	Applies requirements for planning proposals seeking to incorporate provisions into an environmental planning instrument so as to amend another environmental planning instrument.	N/A	The LEP amendment proposal does not seek to incorporate provisions into the instrument that would amend another environmental planning instrument.

Consistency with the direction is not relevant to the proposal.

Consistency with the direction is not relevant to the proposal.

Ministerial Direction	Overview	Applicable	Consistency
			Consistency with the direction is not relevant to the proposal.
<b>7. Metropolitan Planning</b>			
7.1	Implementation of the Metropolitan Plan for Sydney 2036	Requires that relevant planning proposals be consistent with the NSW Government's 'A Plan for Growing Sydney' (Dec 2014), except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.	N/A  The LEP amendment proposal does not relate to land to which the NSW Government's 'A Plan for Growing Sydney' (Dec 2014) applies.  Consistency with the direction is not relevant to the proposal.
<u>Note:</u> Direction 7.2 has been repealed.			
7.3	Parramatta Road Corridor Urban Transformation Strategy	Provides for the incremental transformation and development of land identified on the Parramatta Road Corridor Map (on pages 14 and 15) contained in the Parramatta Road Corridor Urban Transformation Strategy (November, 2016), where consistent with the strategy and associated corridor implementation toolkit.	N/A  The LEP amendment proposal does not relate to land identified on the Parramatta Road Corridor Map of the Parramatta Road Corridor Urban Transformation Strategy.  Consistency with the direction is not relevant to the proposal.
7.4	Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	Requires that relevant planning proposals be consistent with the North West Land Use and Infrastructure Strategy, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.	N/A  The LEP amendment proposal does not relate to land to which the North West Land Use and Infrastructure Strategy applies.  Consistency with the direction is not relevant to the proposal.
7.5	Implementation of Greater Parramatta	Requires that relevant planning proposals be consistent with the Greater	N/A  The LEP amendment proposal does not relate to land to which

Ministerial Direction	Overview	Applicable	Consistency
Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.		the Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan applies.  Consistency with the direction is not relevant to the proposal.
7.6 Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	Requires that relevant planning proposals be consistent with the Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.	N/A	The LEP amendment proposal does not relate to land to which the Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan applies.  Consistency with the direction is not relevant to the proposal.
7.7 Implementation of Glenfield to Macarthur Urban Renewal Corridor	Requires that planning proposals be consistent with the precinct plans approved by the Minister for Planning and published on the Department's website on 22 December 2017, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.	N/A	The LEP amendment proposal does not relate to land located within the precincts between Glenfield and Macarthur.  Consistency with the direction is not relevant to the proposal.
7.8 Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure	Requires that planning proposals be consistent with the Stage 1 Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan, except where, in the opinion of the Secretary of the NSW	N/A	The LEP amendment proposal does not relate to land located within the Western Sydney Aerotropolis

Ministerial Direction		Overview	Applicable	Consistency
	Implementation Plan	Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.		Consistency with the direction is not relevant to the proposal.
7.9	Implementation of Bayside West Precincts 2036 Plan	Requires that planning proposals be consistent with the Bayside West Precincts 2036 Plan, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.	N/A	<p>The LEP amendment proposal does not relate to land located within the Bayside local government area.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
7.10	Implementation of Planning Principles for the Cooks Cove Precinct	Applies requirements to planning proposals prepared for land within the Cooks Cove Precinct, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.	N/A	<p>The LEP amendment proposal does not relate to land located within the Cooks Cove Precinct in the Bayside local government area, as shown on Map Sheet LAP_001 Cooks Cove Precinct Section 9.1 Direction.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
7.11	Implementation of St Leonards and Crows Nest 2036 Plan	Requires that planning proposals be consistent with the St Leonards and Crows Nest 2036 Plan, except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.	N/A	<p>The LEP amendment proposal does not relate to land located within St Leonards or Crows Nest.</p> <p>Consistency with the direction is not relevant to the proposal.</p>
7.12	Implementation of Greater Macarthur 2040	Requires that planning proposals be consistent with the Implementation of Greater Macarthur 2040,	N/A	The LEP amendment proposal does not relate to land located subject of the Greater

Ministerial Direction	Overview	Applicable	Consistency
	except where, in the opinion of the Secretary of the NSW Department of Planning, Industry and Environment (or nominated delegate); the inconsistency is considered to be of minor significance and the intent of the strategy is not undermined.		Macarthur Growth Area. Consistency with the direction is not relevant to the proposal.



## **ANNEX F – ABORIGINAL CULTURAL HERITAGE ASSESSMENT**



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## **Aboriginal Cultural Heritage Archaeological Assessment**

### **Planning Proposal – Singleton Local Environment Plan 2013 Amendment**

**Lot 2 DP 1058431**

**Lot 3 DP 1058431**

**Lot 4 DP 10584311**

### **Roughit Lane Sedgefield**

Report to  
Orbit Planning

May 2020

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## Introduction & Proposed Works

Orbit Planning have prepared a planning proposal to facilitate rezoning of three allotments in separate ownership, from RU1 Primary Production to E4 Environmental Living to facilitate future subdivision of each lot for large lot environmental living. Future development will be assessed under separate Development Applications to Singleton Council. Future development will utilise building envelopes to contain the footprint of development within the resulting environmental lots. Singleton City Council advised that they require an Aboriginal Cultural Heritage Due Diligence assessment to address the planning proposal.

The Lots are located on Roughit Lane Sedgfield approximately 4.5 kms in a direct line, east of Singleton. The following Figures 1 & 2 show the subject sites location.

The following Aboriginal Archaeological Due Diligence Assessment is based on the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (NSW Office of Environment & Heritage 2010).

Aboriginal heritage is protected in NSW under the *National Parks & Wildlife Act 1974*. Section 90 of the Act states that it is an offence to destroy, deface, damage or desecrate, or cause or permit the destruction, damage or desecration of an Aboriginal object or Aboriginal Place without prior consent of the Director General of the Office of Environment & Heritage. The penalties for impacting on Aboriginal archaeological sites are provided in Appendix B.

The purpose of the Due Diligence assessment is to identify if any Aboriginal Objects or Places may be harmed by the proposed activity and to identify the requirement for further investigation and/or the need for an Aboriginal Heritage Impact Permit to be sought from the Office of Environment and Heritage prior to the commencement of works.

The Act provides that a person who exercises due diligence in determining that their actions will not harm Aboriginal objects, has a defence against prosecution for the strict liability offence if they later unknowingly harm an object without an Aboriginal Heritage Impact Permit.

## Study area context

The study area is located on the Jerrys Plains Soil landscape (Kovac and Lawrie 1991) comprising Permian lithic sandstone, mudstone, siltstone and conglomerate. Topography is undulating low hills with local relief to 60m and slopes of 2-10%. Soloths occur on crests to midslopes and Solidic Soils occur on lower slopes and drainage lines.

Native vegetation is a woodland community of narrow-leaved ironbark with forest red gum and grey gum occur with buff oak along drainage lines. Minor sheet erosion occurs in disturbed areas on hillslopes and severe gully erosion occurs in some drainage lines (ibid).

The study area is dissected by a 2<sup>nd</sup> order drainage line from north west to the south east of the 3 lots.

The study area is located within the boundaries of Wannaruah Local Aboriginal Land Council.

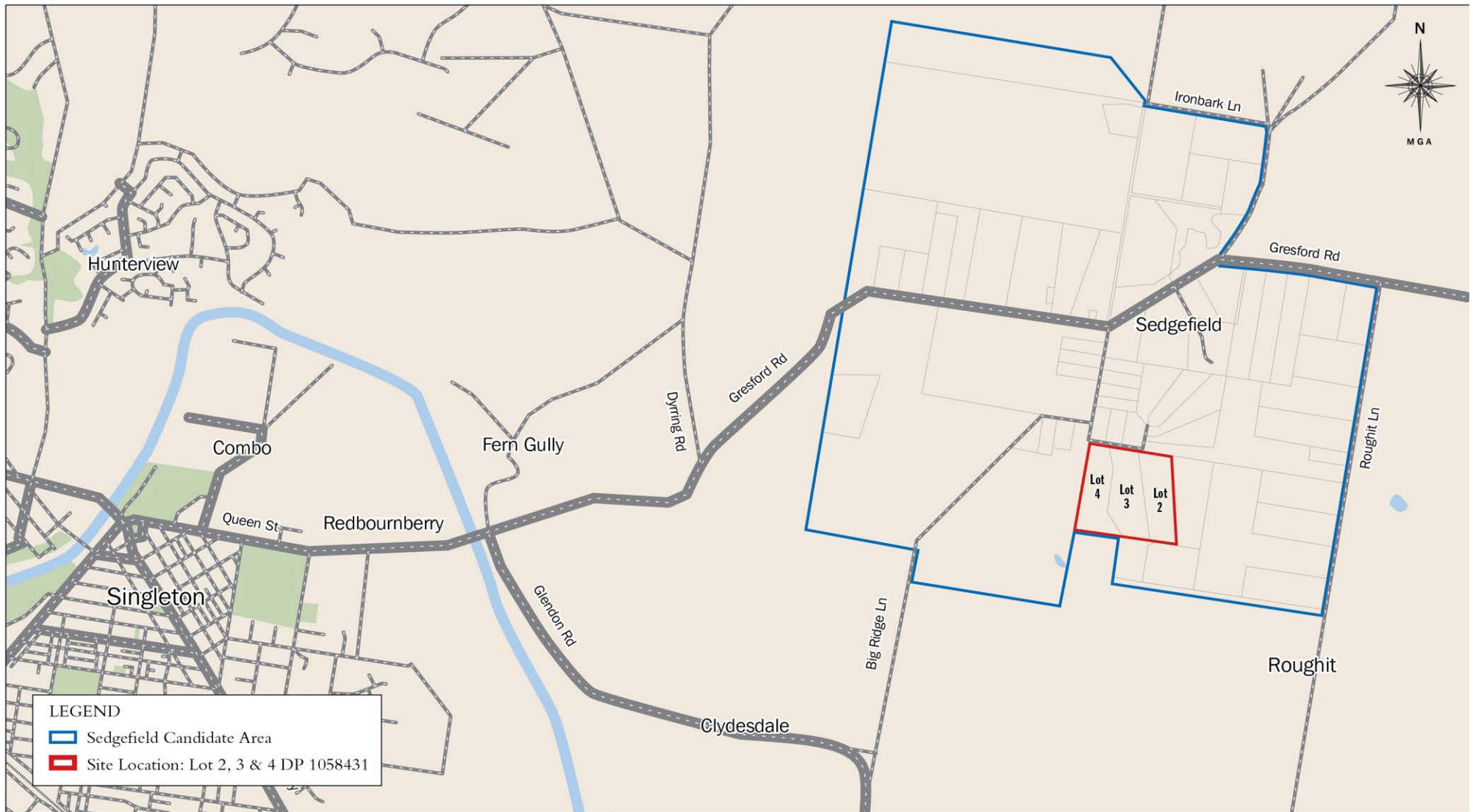


Figure 1 Site Location - courtesy of Orbit Planning. Not to scale





Figure 2 Site location aerial courtesy of Orbit Planning

## **Generic Due Diligence Assessment –Office of Environment & Heritage Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (OEH 2010).**

### **Step 1. Will the activity disturb the ground surface or any culturally modified trees?**

The rezoning of the sites will not require any activity that will create ground disturbance. Subsequent development that will require ground disturbance will be assessed for each individual lot at the development application stage. There are no recorded culturally modified trees located on the subject site.

### **Step 2 a) Are there any relevant confirmed site records or other associated landscape features on AHIMS?**

A search of the Aboriginal Heritage Information Management System (AHIMS) database was undertaken in order to ascertain if there are any previously recorded Aboriginal archaeological sites in, or in proximity to the proposed development.

An extensive AHIMS search was undertaken for the subject site with a one kilometre buffer. The search did identify several sites in proximity to the study area. Figure 3 shows those sites on AHIMS. A copy of the search is provided in Appendix A.

AHIMS have 13 sites recorded within a one kilometre radius of the study area. Four of the sites are located on lots to the west of the study area. Three of these sites (the closest were recorded by Myall Coast Archaeology during the assessment of Lot 209 DP 877391, Lot 204 & 208 DP839648 in 2009, however the report was unavailable on AHIMS.

Additional sites have been recorded by Jill Ruig during an optical fibre assessment and RPS during an area assessment 2 kms to the north.

**Table 1 Site type and frequency within a 1 km radius**

<b>Site Type</b>	<b>Frequency</b>
Open artefact scatter	4
Isolated find	7
Potential archaeological deposit (PAD)	1
Modified tree and artefact	1
Total	13

One feature being a waterhole was associated with the PAD.

Site 37-6-2785 on the adjacent Lot to the west is an isolated artefact. 37-6-2786 located further to the west is an area of PAD focussed on a low wetland where several drainage channels lead to Sedgfield Gully.





Figure 3 AHIMS within the search area



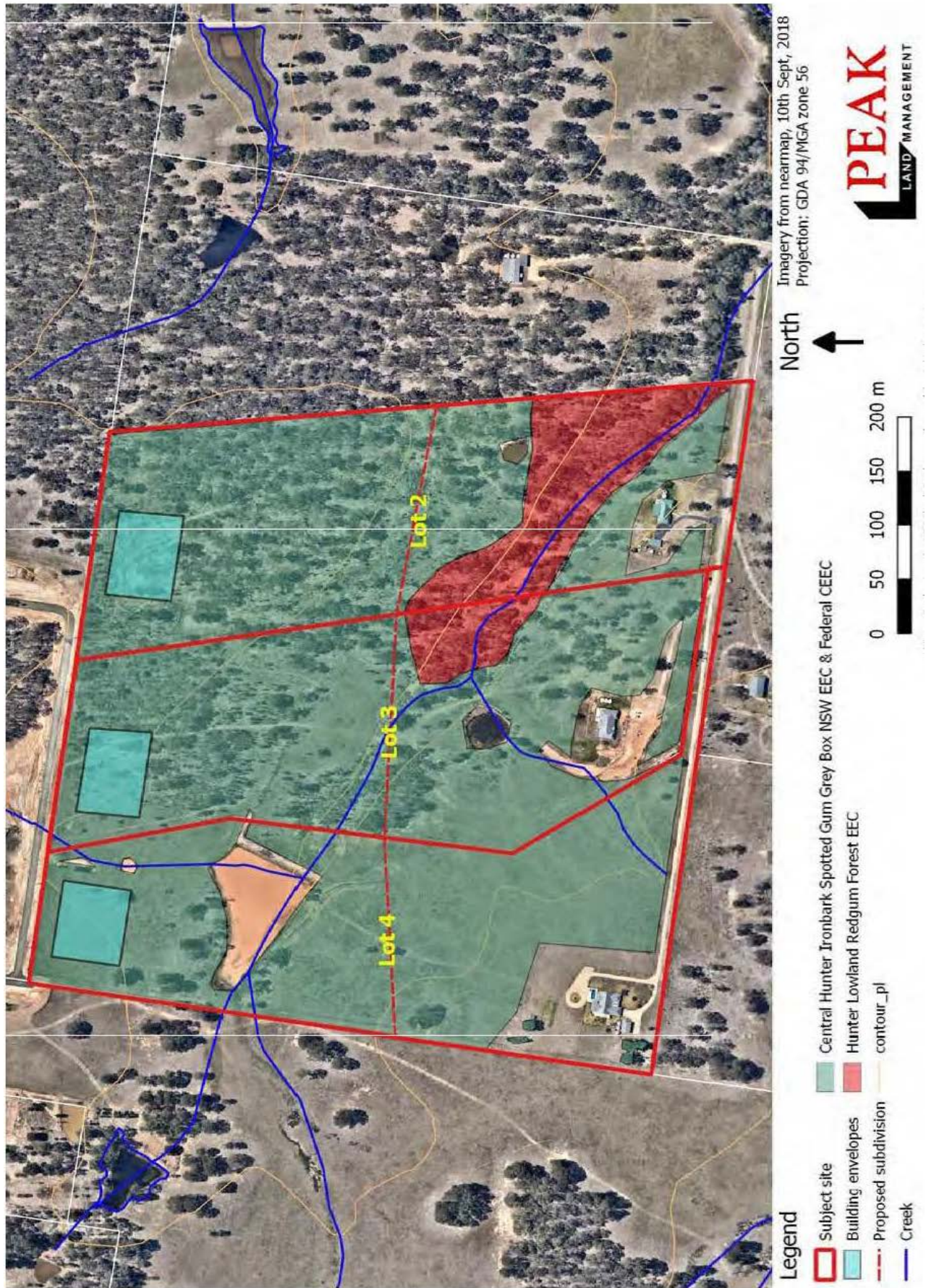


Figure 4 Proposed subdivision and building envelopes - courtesy of Orbit Planning

**Step 2 b) Are there any landscape features that are likely to indicate presence of Aboriginal objects?**

Consequently, if your proposed activity is:

- ***within 200m of waters, or***
- ***located within a sand dune system, or***
- ***located on a ridge top, ridge line or headland, or***
- ***located within 200m below or above a cliff face, or***
- ***within 20m of or in a cave, rock shelter, or a cave mouth;***
- ***and is on land that is not disturbed land (see definitions) then you must go to step 3.***

*Land is disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable.*

*Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks.*

The study area is dissected from the north west to the south east by a 1<sup>st</sup> order creek. The first order creek joins another to form a 2nd order creek 400m to the south east of the corner of Lot 2 DP 1058431. The lots have been used for primary production mainly grazing, however there are disperse remnant/regrowth woodland over Lot 2, sparse trees on Lot 3 while Lot 4 is cleared.

Lots 2, 3 & 4 DP 1058431 would classify as disturbed land under the guidelines with the construction of dams, dwellings, tracks and infrastructure.

In general Aboriginal sites are more likely to occur within 100m of creek lines and sites near a first order creek are likely to be small open sites / isolated finds.

**Step 3. Can harm to an Aboriginal object listed on AHIMS or identified by other sources of information and /or can the carrying out of the activity at the relevant landscape features be avoided?**

***This step only applies if your activity is on land that is not disturbed land or contains known Aboriginal objects.***

The proposed planning amendment will not impact on any Aboriginal object listed on AHIMS.

**Step 4. Does a desktop assessment and visual inspection confirm that there are Aboriginal objects?**

***This step only applies if your activity is on land that is not disturbed land or contains known Aboriginal objects.***

A site inspection was undertaken in conjunction with Wonnarua LALC. The site inspection concentrated on the new lots that may be created by the planning proposal in future development applications.



The ground exposure was variable over the lots. The thin soils did offer adequate exposure for the characterisation of Aboriginal sites over the study area.

The character of the soils, thin and sandy over in-situ parent geology, resulted in no identification of areas of potential archaeological deposit.

*Lot 2 DP1058431 208C Roughit Lane*

**Proposed Lot 22**

Adjacent to the end of newly formalised Green Grove. Northern boundary top of rise. Sloping south to drainage line. Proposed lot encompasses top-mid slope, does not include drainage line. Entire building envelope and the majority of the proposed allotment has been subjected to under scrubbing including extensive ripping of the topsoil (perhaps for fire protection works??). Small regrowth eucalypts 30-50cm high, wattle and weeds in disturbance. Topsoil stripping/mounding of dirt noted. Mature trees remain, particularly along eastern boundary in open woodland, small number in centre of site felled. Rubbish pile (burnt) near north boundary. Thin soil with angular gravels over clay. Due to distance from water low potential for large open campsites/areas of PAD.



Building envelope proposed lot 22 facing east



Rubbish burn off northern area proposed lot 22 facing north





Central area of proposed lot 22 facing west



Central area proposed lot 22, facing south



**Proposed Lot 32**

Building envelope NW corner. Cleared grassed, Contour bank with ants nest NW corner of block and erosion scour 90% SV though disturbed. Remainder of building envelope, largely cleared, some small tree removal. SV30% native grasses and introduced grasses. Thin sandy with angular gravels at base overlying orange brown clays (as per previous lot). Slope wash evident.

Motorbike track n-s orientation approx. 2m wide from north boundary south through property 90%SV. East of track SV20% mid-upper slope (gentle undulating southward slope). Some cobble quartz also noted. NE corner more timbered regrowth and understory vegetation (numerous African olive shrubs?), native grasses and regrowth ironbark SV10%. Some milky cobble quartz also noted. Under scrubbing of regrowth ironbark and casuarinas in central portion of proposed allotment, SV 70% disturbed topsoil. Former bike jump and associated earthworks between eastern boundary and bike track. Surface wash and erosion of topsoil noted. Drainage line along and adjacent to southern boundary continuing on from the lot to the west. Low visibility under casuarinas in SW corner east side of fence to Site 1. Regrowth casuarinas, exposure along contour bank from adjacent lot to the west.



Erosion scald NW corner, facing NW



Small tree regrowth removal building envelope facing east





Motorbike track facing south



Ironbark regrowth NE corner



Casuarina regrowth SE corner





Exposure along contour bank from adjacent lot to the west, facing SW.



Visibility central portion of proposed allotment

## **Proposed Lot 42**

Gently undulating rise, southward facing slope. Building envelope NW corner of block, mid-top of slope. Cleared former grazing, grassed paddock SV10-20% pugged by cattle. Large 10cm cobbles noted in thin sandy topsoil. Broad drainage depression east side of proposed envelope running south to dam.

South of building envelope heading downslope to northern dam edge increase in native grasses instead of pasture. Up to 30% SV around dam edge, exposures at base of tress, around ants nest and disturbed dam edge. Thin (less than 10cm thick sols) with background gravels (angular mudstone (coarse), ironstone and quartzite) over b horizon orange brown clay. Cobbles of milky quartz also noted. 100%SV on dam wall, highly disturbed, numerous gravels.

On southern side of dam wall cobbles of rhyolites and quartzite. Up to 50% SV south side of dam, eroded background gravels in fine sandy topsoil, slope wash/surface erosion noted across site due to thin soils. Upslope from dam to proposed southern boundary SV30-40% native grasses and tea tree shrubs.

Contour bank east property boundary 80% vis but highly disturbed, exposed gravels, surface wash, broken salt glazed (sewer pipe?) frags observed.



Location of building envelope proposed Lot 42, facing west.

Site 1- RL1 IF - Zone 56 GDA 334563 E, 6396468 N. Located on eroded ants nest exposure approximately 6m from edge of drainage line adjacent to E lot boundary. Site in erosion/surface wash, little to no topsoil.

Cream mudstone scraper/modified flake 65x40x20mm, retouch 3 margins in 10mx10m exposure.

The isolated find is located in the south east corner of proposed Lot 42 approximately 230 metres SE of the proposed building envelope (Figure 5).





Dorsal side



Ventral side



Location east of dam wall adjacent to property boundary





Building envelope facing south



Northern side of dam facing SE



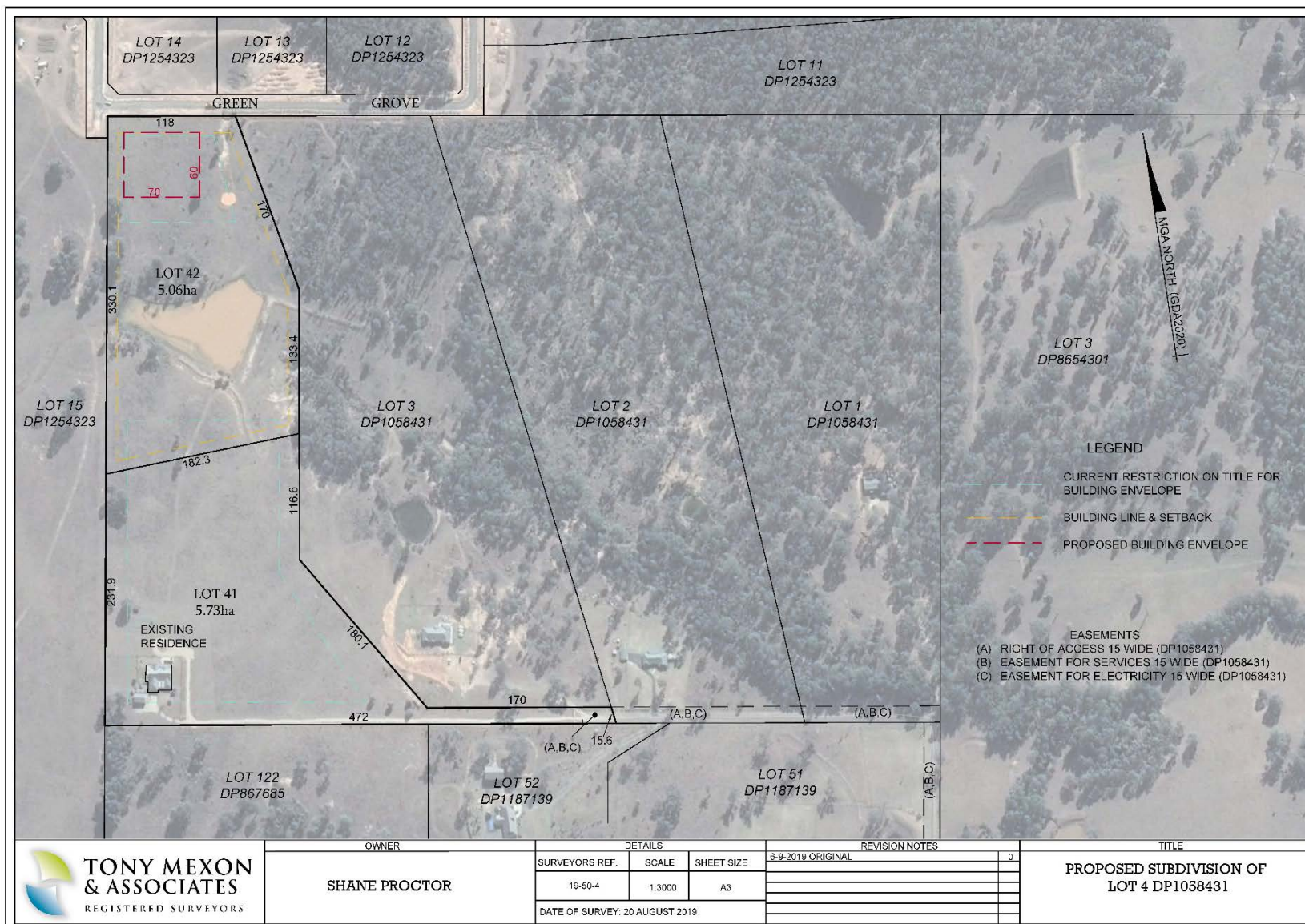


Figure 5 Proposed subdivision of Lot 4 DP1058431 with building envelope

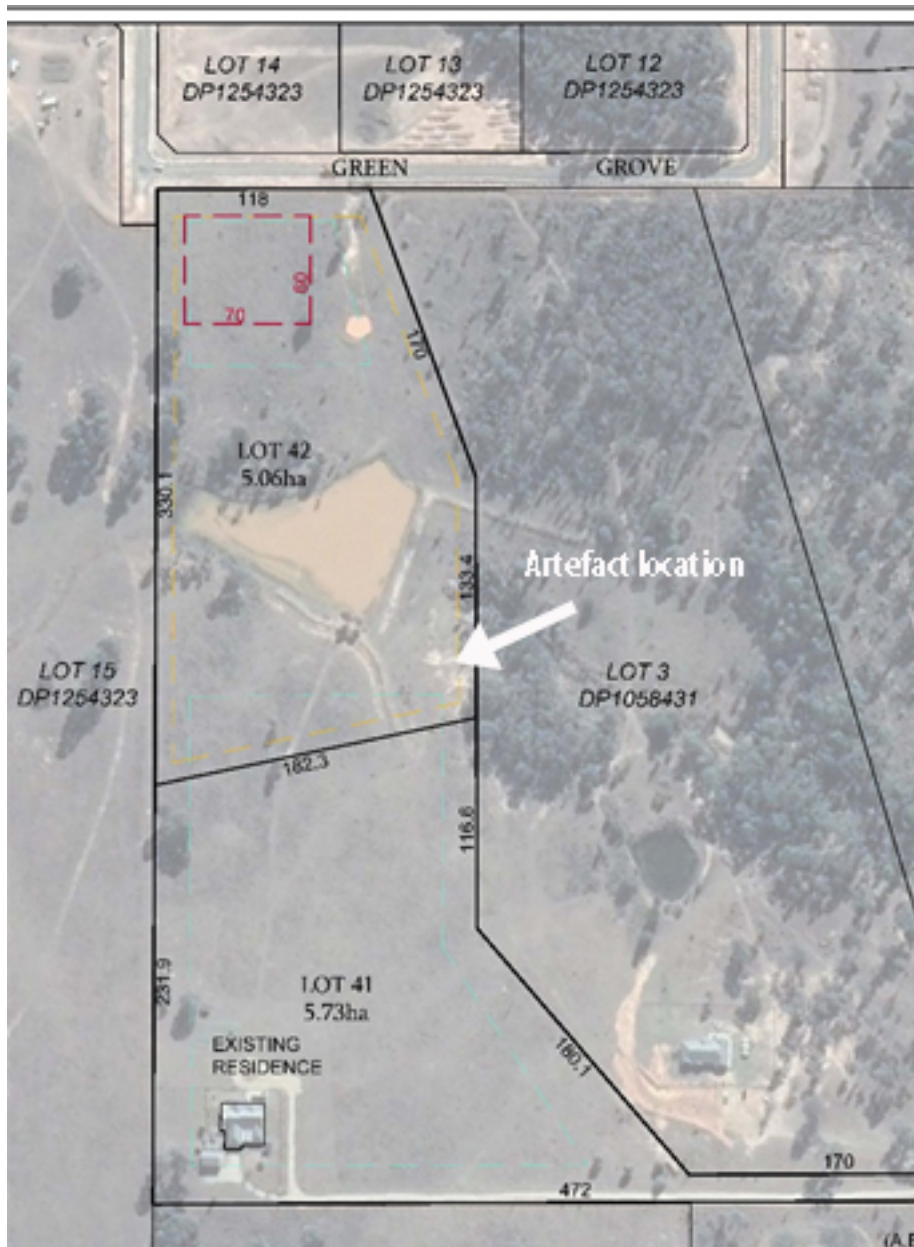


Figure 6 Artefact location relative to the proposed building envelope 308E Roughit Lane

## Management Recommendations

In general there are no constraints to the planning proposal to change the lots from Primary Production to Environmental Living.

There were no areas of potential archaeological deposit located on any of the three lots inspected and the shallow sandy soils have very low archaeological potential. The one artefact located on Lot 4 DP 1058431, is located well away from the proposed building envelope proposed for the newly created Lot 42.

The identified artefact on Lot 4 has been recorded on AHIMS and given the site number 37-6-3964 and the site card can be seen in Appendix C.

## **Recommendations by Lot**

### *Lot 2 DP1058431 – 208C Roughit Lane Sedgfield*

The desk top assessment and physical assessment did not identify any Aboriginal objects or culturally significant landscape features. As the assessment process did not identify any Aboriginal objects or the need for further investigation works within the footprint of the proposed rezoning it is therefore recommended that the proposal may proceed without archaeological constraints.

### *Lot 3 DP1058431 - 208D Roughit Lane Sedgfield*

The desk top assessment and physical assessment did not identify any Aboriginal objects or culturally significant landscape features. As the assessment process did not identify any Aboriginal objects or the need for further investigation works within the footprint of the proposed rezoning it is therefore recommended that the proposal may proceed without archaeological constraints.

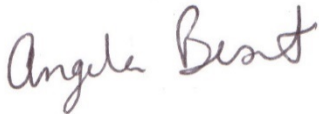
### *Lot 4 DP 1058431 - 208E Roughit Lane Sedgfield*

One Aboriginal object was identified on this Lot, in the south east corner some 230m SE of the proposed building envelope. The planning proposal will not impact on this artefact, nor will future use of the proposed building envelope.

Wannaruah LALC have indicated that they would prefer to collect the artefact if the planning proposal is approved (Appendix B).

**Regards,**

**Insite Heritage Pty Ltd**



Angela Besant  
**Snr Archaeologist**  
**Insite Heritage.**

## **References**

- *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales.* NSW Office of Environment and Heritage (formerly Dept. of Environment, Climate Change & Water) 2010.
- *Myall Coast Archaeological Services 2009 Aboriginal Heritage Assessment Lot 209 DP 877391, Lots 204 & 208 DP 839648, Big Ridge Lane, Sedgfield, Singleton NSW.* Report to Hunter Development Brokerage Pty Ltd Maitland



**Appendix A - AHIMS search**



## AHIMS Web Services (AWS)

### Extensive search - Site list report

Your Ref/PO Number : Rought Lane

Client Service ID : 498968

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-2784	BRAS-2	AGD	56	334287	6396547	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Mr.Lennard Roberts							
37-6-2785	BRIF- 1	GDA	56	334244	6396596	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Mr.Lennard Roberts							
37-6-2786	BR1 PAD 01	AGD	56	333900	6397300	Open site	Valid	Potential Archaeological Deposit (PAD) : 1, Water Hole : 1		
	<u>Contact</u>	<u>Recorders</u>	Mr.Lennard Roberts							
37-6-2738	RPS HSO SFD IF3	GDA	56	333786	6399087	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Miss.Philippa Sokol							
37-6-2739	RPS HSO SFD IF4	GDA	56	333560	6399087	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Miss.Philippa Sokol							
37-6-2740	RPS HSO SFD IF2	GDA	56	334093	6398789	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Miss.Philippa Sokol							
37-6-2741	RPS HSO SFD IF1	GDA	56	334365	6399020	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Miss.Philippa Sokol							
37-6-2742	RPS HSO SFD AS2	GDA	56	333221	6398379	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Miss.Philippa Sokol							
37-6-2743	RPS HSO SFD AS1	GDA	56	334163	6398992	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>	Miss.Philippa Sokol							
37-6-0800	Glendon Road;	AGD	56	331600	6394900	Open site	Valid	Artefact : -	Open Camp Site	98183
	<u>Contact</u>	<u>Recorders</u>	Ms.Jillian Comber							
37-6-0637	Sedgefield 5	AGD	56	334050	6397290	Open site	Valid	Artefact : -	Isolated Find	2683
	<u>Contact</u>	<u>Recorders</u>	Ms.Jill Ruig							
37-6-0939	First Creek	AGD	56	332630	6398670	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Glen Morris							
37-6-1608	STINKING GULLY	AGD	56	333800	6395900	Open site	Valid	Modified Tree (Carved or Scarred) : 2. Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Glen Morris							

Report generated by AHIMS Web Service on 23/04/2020 for Angela Besant for the following area at Datum : GDA, Zone : 56, Eastings : 332590 - 338175, Northings : 6394281 - 6398585 with a Buffer of 1000 meters. Additional Info : inform an A CHAR. Number of Aboriginal sites and Aboriginal objects found is 13

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

## **Appendix B Wannaruah LALC Report**



15 May 2020

Ms L Wyatt  
Stratum Archaeology Pty Ltd  
For Insite Heritage  
Email: liz.wyatt@stratumarchaeology.com.au

Dear Liz

**RE: ABORIGINAL CULTURAL HERITAGE DUE DILIGENCE  
WALKOVER: GREEN CRESCENT OFF BIG RIDGE LANE,  
SEDFIELD NSW**

*This letter from the Wanarua LALC does not express the views of any other Aboriginal stakeholder groups (whether their representatives are members of the LALC or not) or individuals who have chosen to speak in their own right. The comments provided are considered appropriate under Clause No. 42(4) (a) and (b) of the Aboriginal Land Rights Act (1983) (and its amendments) in relation to the role of the LALC in the protection and the promotion of awareness in the community, of culture and heritage for Aboriginal people within its boundary.*

On Tuesday 5 May 2020, Liz Wyatt (Archaeologist, Stratum Archaeology for Insite Heritage) and myself met at Green Crescent, just off Big Ridge Lane south of Gresford Road, Sedgfield to walk over approximately 20ha of rural land, being four (4) separate lots (Lots 1-4) each to be divided in half to form eight (8) lots (Lots 11-12, 21-22, 31-32 and 41-42). Only the land to be separated from the existing housing lots was inspected for this project (proposed Lots 12, 22, 32 and 42 – the assessment area) (See attached plans).

The land was consistent with Hunter/Ingar soil landscapes covering undulating low hills with drainage lines in shallow narrow valleys. Cleared and mostly open woodland was observed, with recent land underscrubbing and some tree clearing having been undertaken on at least two of the lots. Two dams were inspected on Lots 12 and 42). Tree species included ironbarks, sheoaks and grey gums with the occasional mature tree being present. The land (except for recent clearing) appeared to be only moderately disturbed and the vegetation itself, appeared to be natural native type with very few exotic species. It was considered that there was a very thin soil layer on the higher elevation land where it is proposed that the building envelopes will be established.

Lots 12, 22 and 32 did not appear to contain any cultural heritage material, not even around the wall of the constructed dam on Lot 12 or within the cleared areas and natural bushland. However, on the southeastern side of Lot 42, an isolated artefact was found in the edge of a natural waterline depression which slopes towards a small dam



(wetland) at the bottom of hill near an ant hill (334563E:6396468N) not far from the boundary fence with Lot 32. The isolated find was a yellow mudstone scraper and is considered to be isolated discard (see photos attached), as no other objects or very little similar stone material was found in the area (sandstone cobbles, ironstone and conglomerate material was more common).

It is believed that the walkover covered the majority of the assessment area and concentration was undertaken in the areas where building envelopes are proposed as well as areas considered to have potential cultural values. Except for the isolated find, no other areas were identified with further archaeological potential.

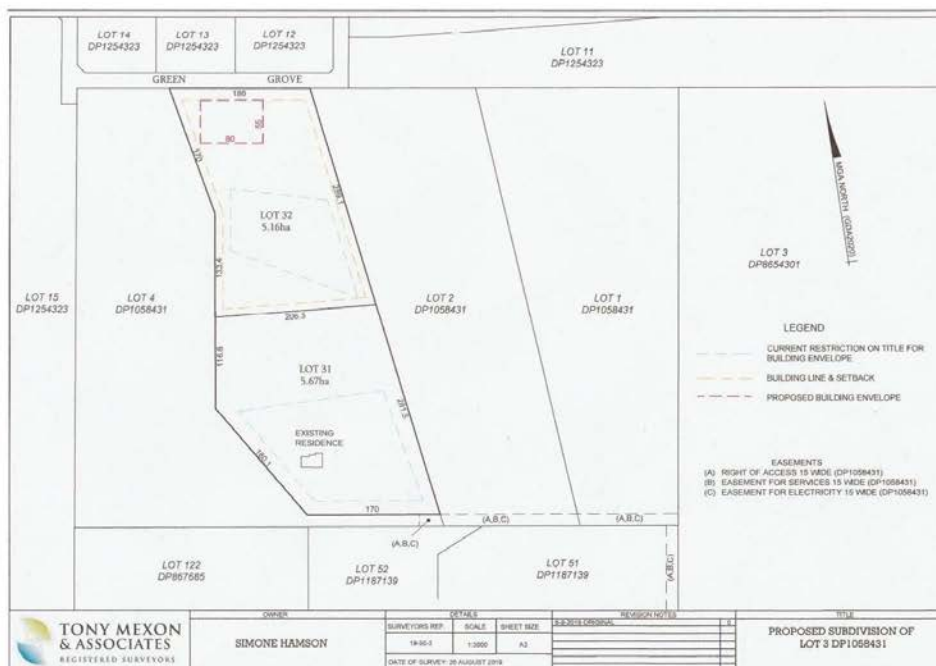
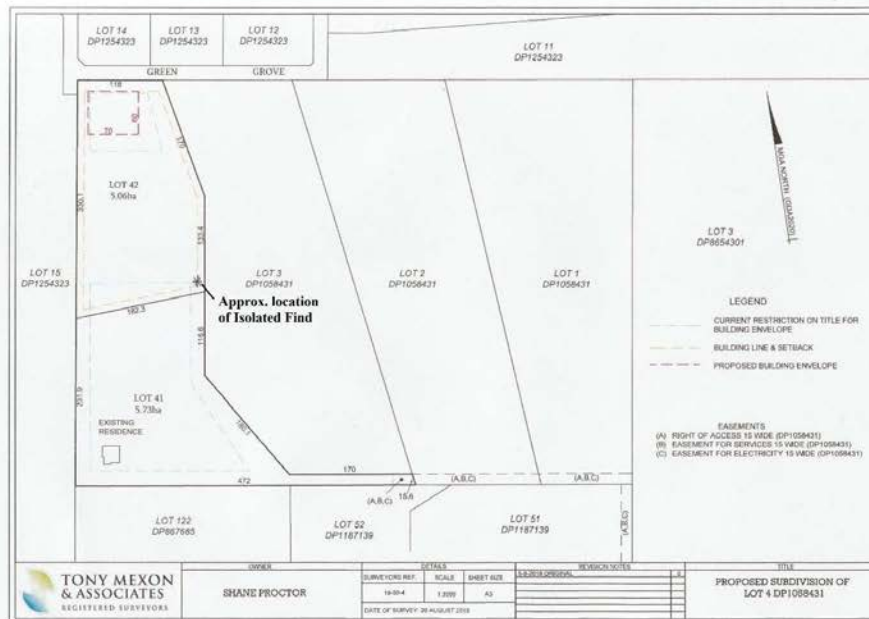
It is therefore recommended that an AHIP be applied for, for the salvage of the mudstone artefact and that a care agreement be approved for the object to be retained by the Wanaruah LALC, along with a copy of the Site Recording Form, for educational purposes. No further cultural heritage assessment is required on Lots 12, 22, 32 or 42.

Thank you once again for this opportunity to walk the land and to be involved in the assessment process of the proposed subdivision and look forward to working with you again in the future.

Kind regards,

A handwritten signature in black ink, appearing to read 'Suzie Worth', with a stylized flourish at the end.

Suzie Worth  
Indigenous Archaeologist for the  
Wanaruah LALC



## **Appendix C – Site Card**

# Aboriginal Site Recording Form

AHIMS Registrar  
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 37-6-3964

Date recorded: 25-05-2020

## Site Location Information

Site name: RL1 IF

Easting: 334563 Northing: 6396468 Coordinates must be in GDA (MGA)

Horizontal Accuracy (m): 10

Zone: 56 Location method: Non-Differential GPS

## Recorder Information

(The person responsible for the completion and submission of this form)

Title Surname First name  
Ms. Besant Angela

Organisation: Insite Heritage

Address: PO Box 98 Wangi Wangi 2267

Phone: 0412836031 E-mail: angela@insiteheritage.com.au

## Site Context Information

Land Form Pattern: Undulating Plain Land Use: Pastoral/Grazing

Land Form Unit: Plain Vegetation: Cleared

Distance to Water (m): 20 Primary Report: ACHA Planning Proposal Singleton LEP 2013 Amendment

How to get to the site: Located on proposed lot 42 DP1058431 - 208E Roughit Lane Sedgefield near Singleton NSW

Other site information: located in the south east corner of a proposed subdivision 230 m SE from the proposed building envelope



## Site location map



## Site contents information

open/closed site:

Site condition:

### Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
1. <input type="text" value="Artefact"/>	<input type="text" value="1"/>	<input type="text" value="10"/>	<input type="text" value="10"/>

### Description:

cream mudstone scraper / modified flake located on ants nest exposure . 65x40x20, retouched on 3 margins

### Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

### Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

### Description:

### Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Features:**

3.

Number of  
featuresLength of  
feature(s)  
extent (m)Width of  
feature (s)  
extent (m)

## Scarred Trees

Scar Depth  
(cm)Regrowth  
(cm)

Scar shape

Tree Species

Description:

**Features:**

4.

Number of  
featuresLength of  
feature(s)  
extent (m)Width of  
feature (s)  
extent (m)

## Scarred Trees

Scar Depth  
(cm)Regrowth  
(cm)

Scar shape

Tree Species

Description:

**Features:**

5.

Number of  
featuresLength of  
feature(s)  
extent (m)Width of  
feature (s)  
extent (m)

## Scarred Trees

Scar Depth  
(cm)Regrowth  
(cm)

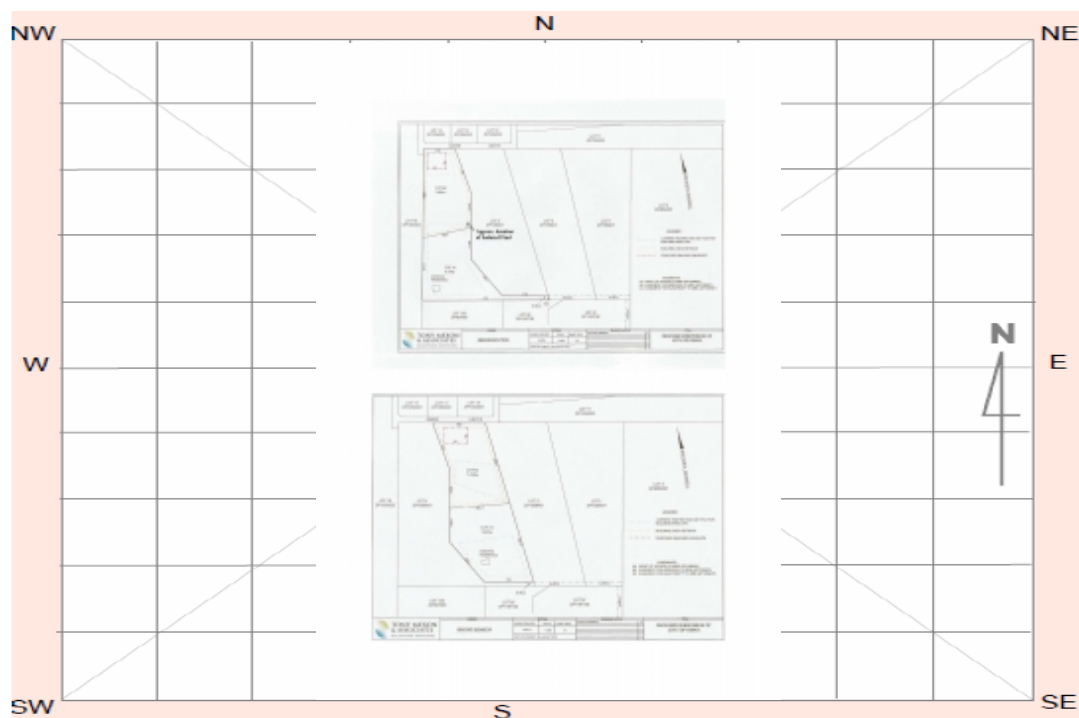
Scar shape

Tree Species

Description:

Other Site  
Info:

located in the south east corner of a proposed subdivision 230 m SE from the proposed building envelope

**Site plan**

Site photographs



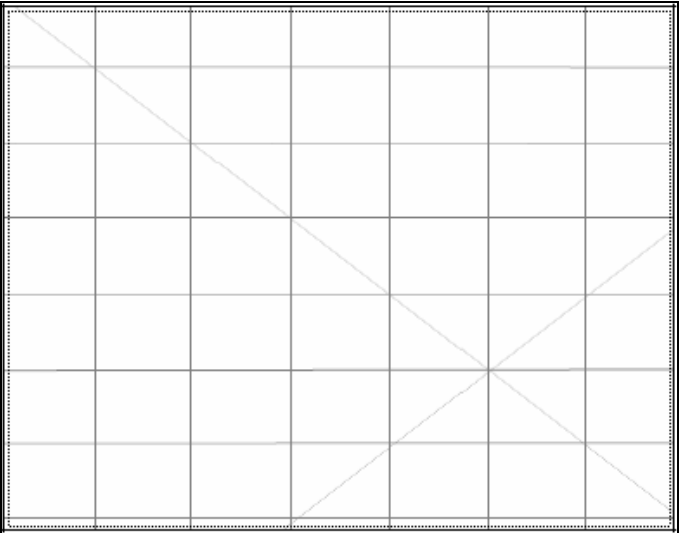
Description:



Description:



Description:



Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type:

Why is this site restricted?:

Further information contact

Title

Surname

First name

Organisation:

Address:

Phone:  E-mail:

## **ANNEX G – BUSHFIRE ASSESMENT**



# BUSHFIRE REZONING REPORT

**-Orbit Planning-  
208C,D & E Roughit Lane  
Roughit**



**PREPARED BY:**



**OCTOBER 2019**



## PEAK LAND MANAGEMENT

Land management consulting services:

**-Bushfire-**

**-Ecological-**

**-Environmental-**

PO Box 3083  
MEREWETHER NSW 2291  
Ph: 02 49 63 3323  
Mobile: 0410 633 837  
Email: [ted@peaklandmanagement.com](mailto:ted@peaklandmanagement.com)  
Web site: [peaklandmanagement.com](http://peaklandmanagement.com)



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<b>3.0</b>	<b>VEGETATION AND ECOLOGY .....</b>	<b>15</b>
<b>4.0</b>	<b>BUSHFIRE RECOMMENDATIONS .....</b>	<b>18</b>
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### Document History

Document Id.	Prep. Date	Version	Submitted to:
Draft Bush Fire Rezoning Assessment Report	5.9.19	1	Orbit Planning
Bush Fire Rezoning Assessment Report	24.9.19	2	Orbit Planning
Bush Fire Rezoning Assessment Report	17.10.19	3	Orbit Planning
Bush Fire Rezoning Assessment Report	24.10.19	4	Orbit 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 Bushfire 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 Bushfire Practitioner Level 3.

## CERTIFICATION

Ted Smith of PEAK LAND MANAGEMENT has carried out a bushfire threat assessment including a site inspection on the subject property. A detailed Bushfire Assessment Report is attached which includes the submission requirements set out in *Appendix 2 & 4 of Planning for Bushfire Protection 2006* together with recommendations as to how the relevant specifications and requirements are to be achieved.

I hereby certify, in accordance with Section 79BA 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 Bushfire Risk Assessment; and
2. That subject to the recommendations contained in the attached Bushfire Risk 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 79 BA(1)(a) of the *Environmental Planning and Assessment Act 1979 No 203*.



---

Signature

24<sup>th</sup> October, 2019

---

Date





## 1.0 INTRODUCTION AND BACKGROUND

PEAK LAND MANAGEMENT has been engaged by Orbit Planning on behalf of landholders over Lots 208 C, D & E to prepare a Bushfire Rezoning Report for a proposed 1 into 2 lot subdivision/rezoning proposal over each respective lot located at Lots 2,3,4 DP 1058431/208C, D & E Roughit Lane, Roughit (Figures 1-3, & 4a,4b,4c). The land has been identified under the Singleton LEP 2011 as RU1 land.

Each proposed rezoning over each lot has been addressed separately within this report, and they are to be treated as separate rezoning applications. They are all assessed within this report for ease of reporting.

Each separate lot (Lots 2, 3, 4) is referred to as “subject site”, the overall 3 lots together is termed “study area”, and proposed development site over each subject site where clearing proposed is termed “development site.” The subject site is currently zoned RU1 rural landscape under the Singleton LEP 2011. The rezoning proposal is for a proposed E4 Environmental Management zoning, permitting smaller lot minimum sizes of 5Ha.

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 Bushfire Prone Areas. This land has been assessed as being part of a Bushfire Prone Area (Figure 7) and is therefore subject to this legislation. LEP amendments in bushfire prone areas need to address the planning principles of Planning for Bushfire Protection (PBP), 2006. These are:

- a) Provision of a perimeter road with two way access which delineates the extent of the proposed development;*
- b) Provision, at the urban bushland interface, for the establishment of adequate Asset Protection Zones for future housing;*
- c) Specifying minimum residential lot depths to accommodate Asset Protection Zones for lots on perimeter roads;*
- d) Minimizing the perimeter of the area of land interfacing the hazard, which may be developed;*
- e) Introduction of controls which avoid placing inappropriate developments in hazardous areas; and*
- f) Introduction of controls on the placement of combustible materials in Asset Protection Zones.*

It should be noted that Section 117 Direction Number 19 of the EP&A Act requires councils in regard to LEP amendments/rezoning to:

- *Consult with the Commissioner of the Rural Fire Service under Section 62 of the EP&A Act, and to take into account any comments by the commissioner; and*
- *Have regard to the planning principles of Planning for Bush Fire Protection Guidelines, 2006 (PBP).*

*If a council does not comply with these provisions it must obtain written advice from the Rural Fire Service Commissioner that the Rural Fire Service does not object to that non compliance.*

This report aims to address PBP, 2006 requirements so consideration may be shown by Council/Rural Fire Service/DPIE to allow rezoning approval.

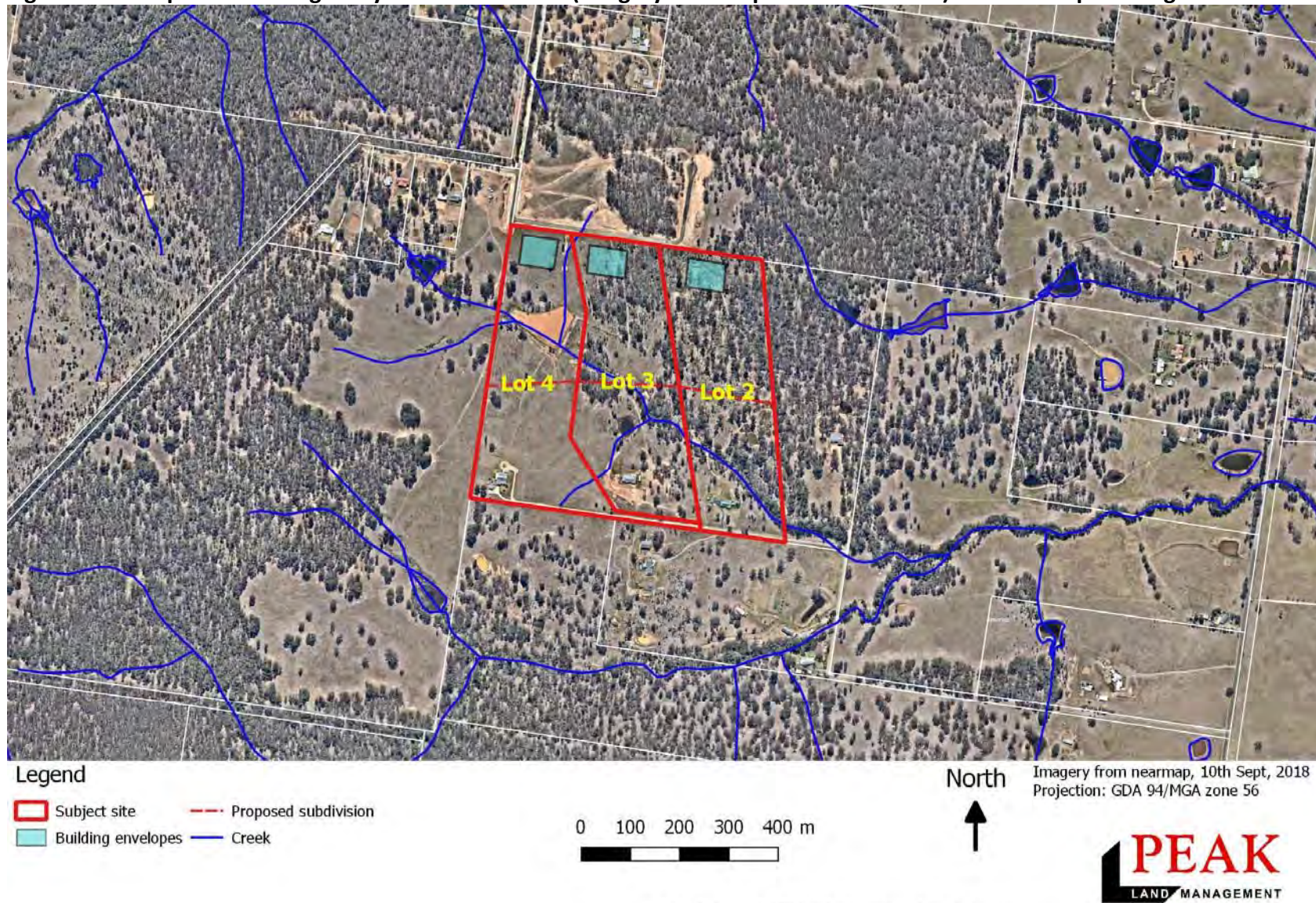
## **1.1 SCOPE OF WORKS**

The proposal is for:

- Rezoning Lots 2, 3, 4 to permit a 1 into 2 lot rural residential subdivision of each separate lot (Fig's 4a-c). This report addresses each lot separately. The rezoning consent authority should treat each lot separately for the purposes of this bush fire rezoning assessment.
- Each existing lot has an existing dwelling over it. Land is cleared around each dwelling, and no further clearing or assessment has been made of these dwellings.
- Allowance has been made over each new proposed lot for a building envelope which contains a dwelling footprint, Asset Protection Zone, effluent disposal area, property access road, and new boundary fencing between the proposed lots, 1m wide, which over most lots is already cleared land. The maximum area of clearing to provide for all these proposed activities is 0.49Ha.



Figure 1: Aerial photo showing study area & surrounds (imagery from Department of Lands). North to top of all figures unless otherwise shown.



Note: Cadastre & GPS (+/-3m) may be subject to innaccuracy



Figure 2: Aerial photo showing study area, each subject site, proposed subdivision & building envelopes/development site

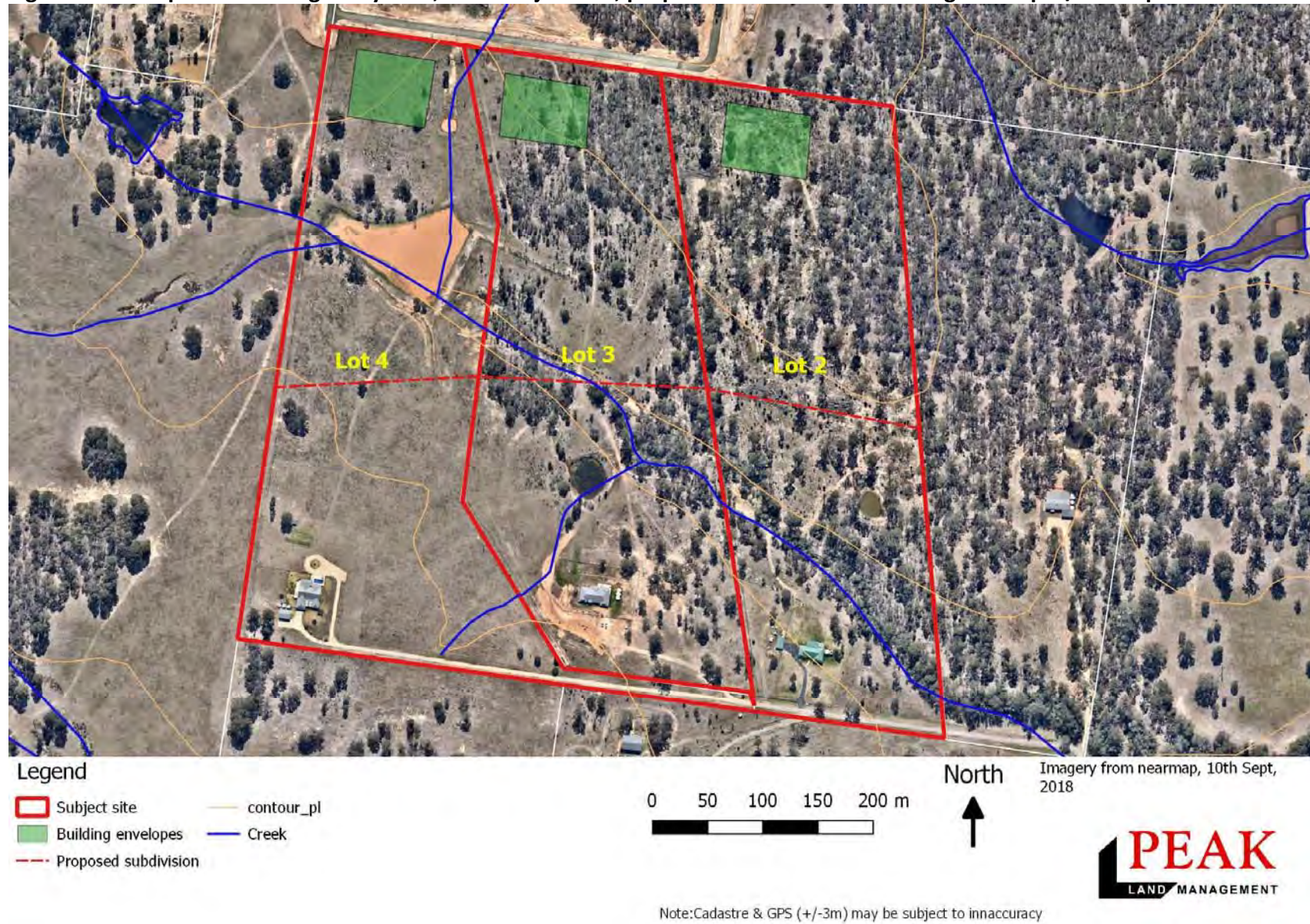
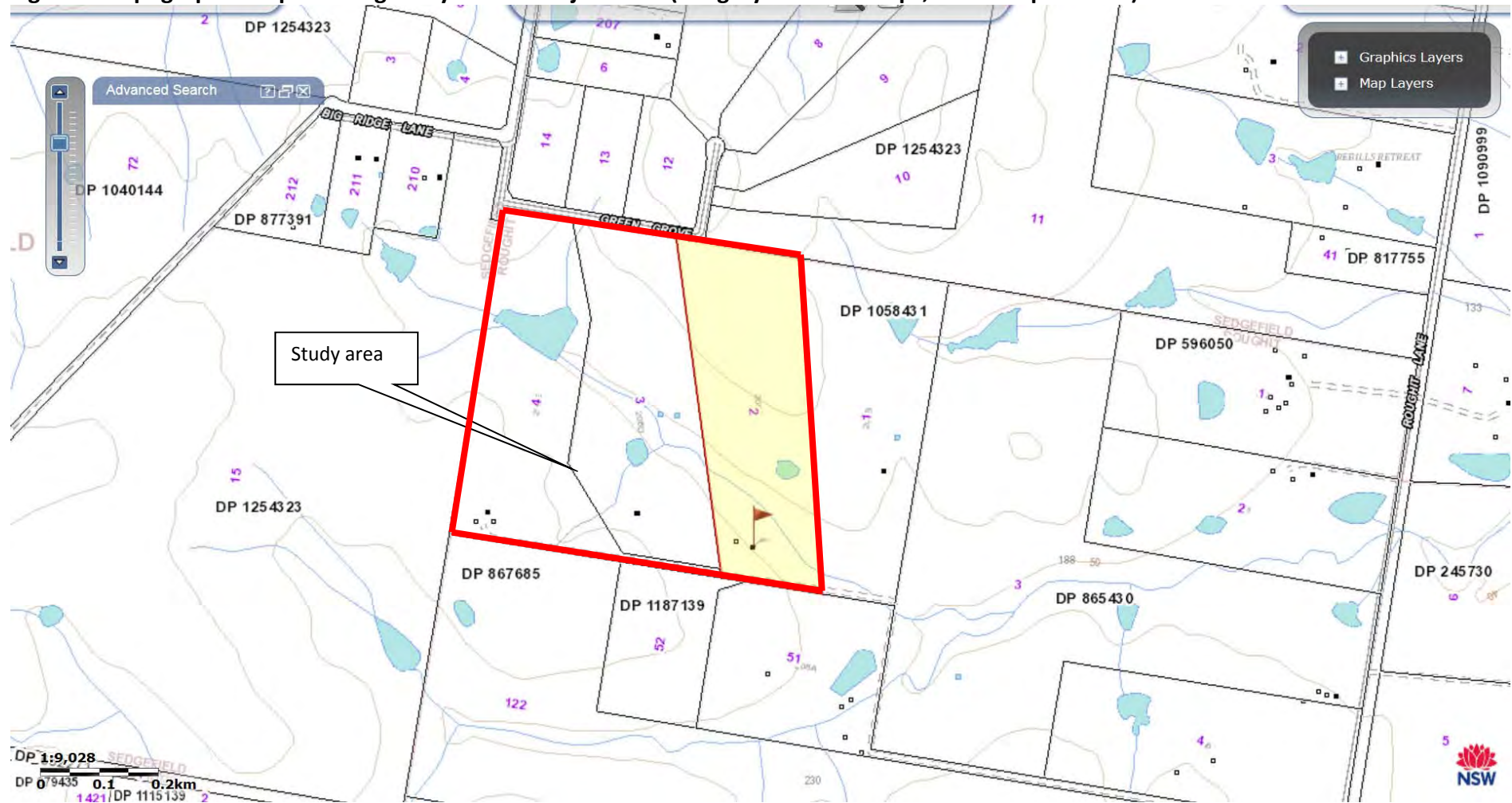
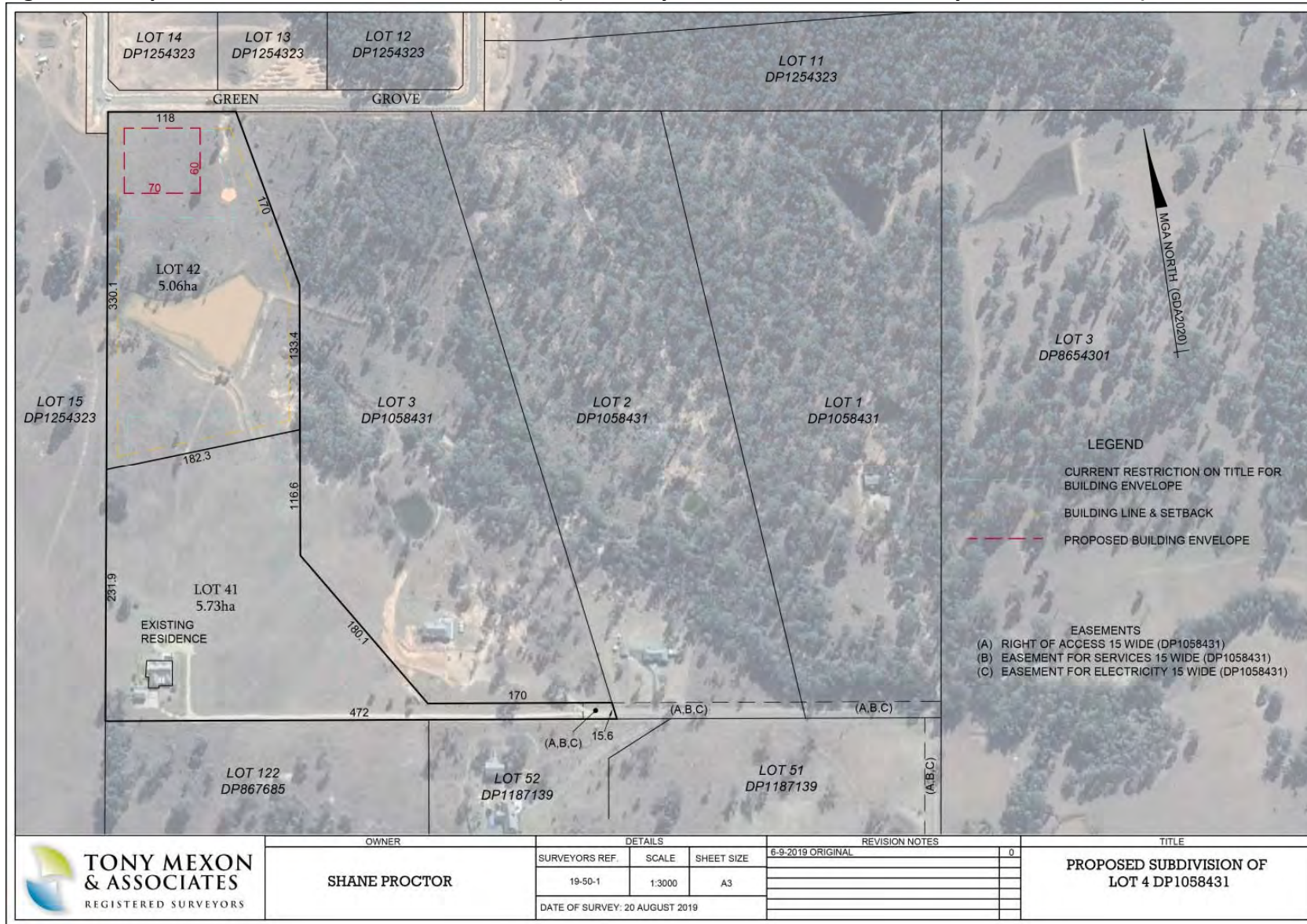




Figure 3: Topographic map showing study area & subject sites (imagery from SIX maps, Lands Department)

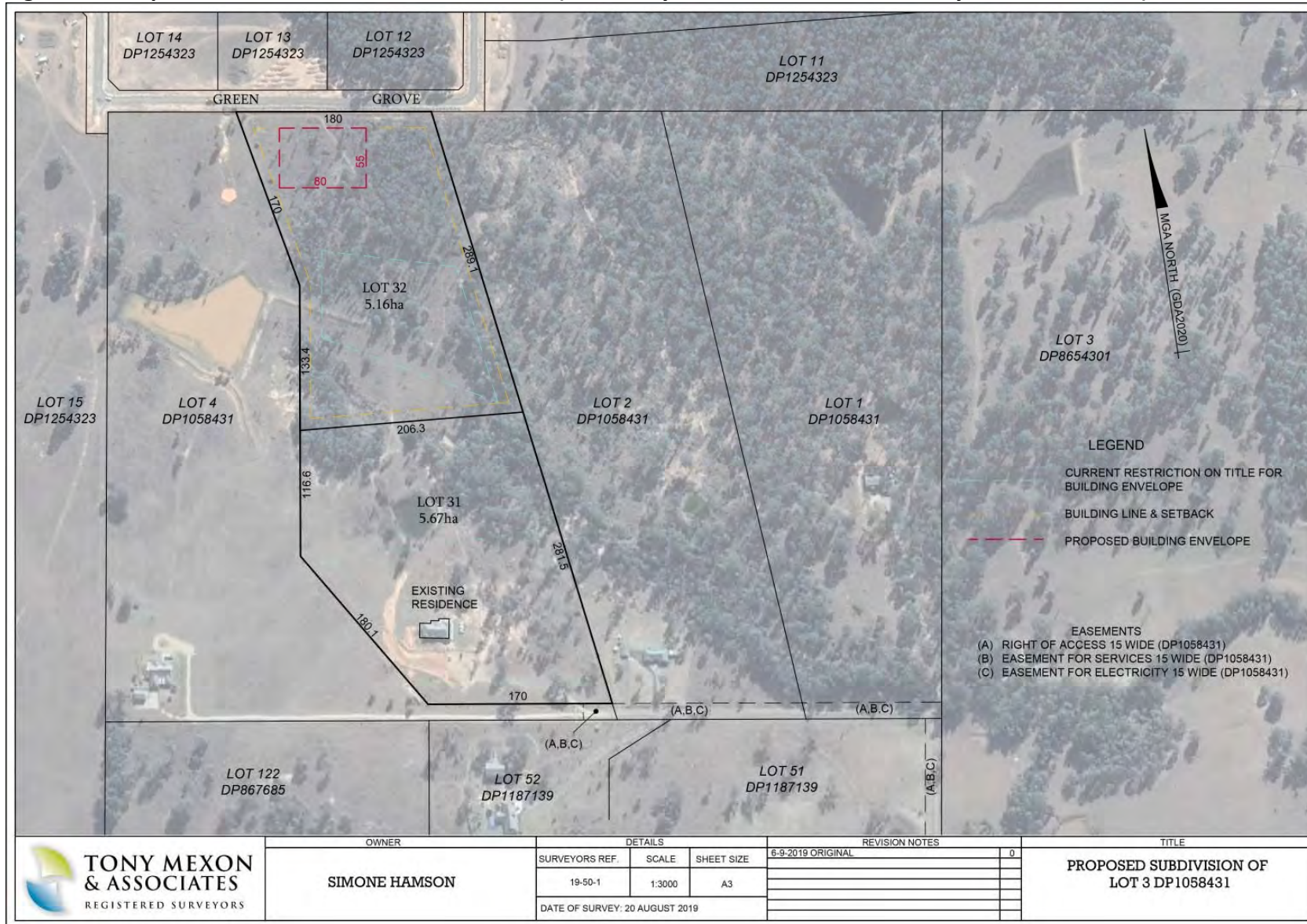


**Figure 4a: Proposed subdivision of Lot 4 DP 1058431 (from Tony Mexon & Associates Surveyors, dated 6.9.19)**



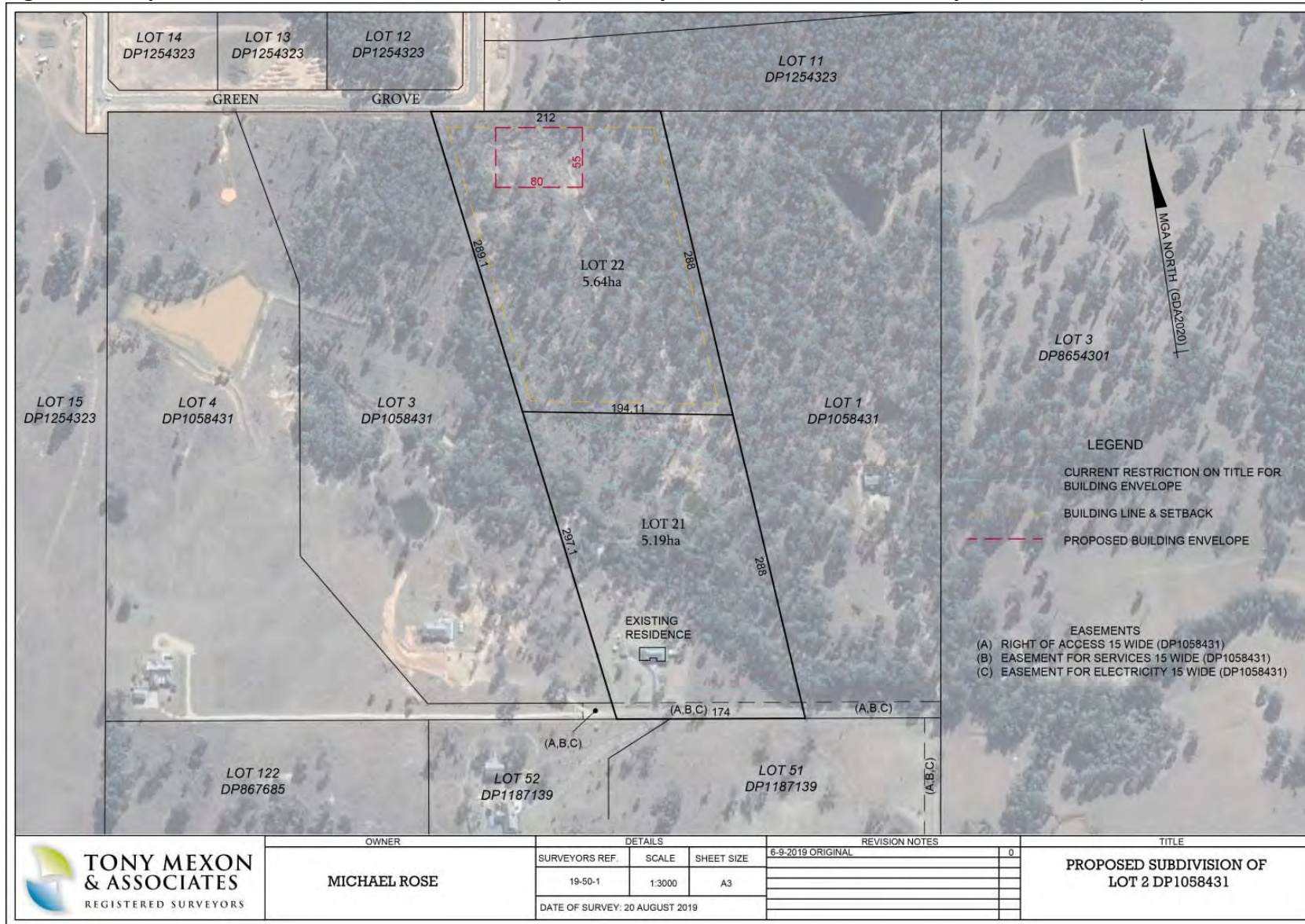


**Figure 4b: Proposed subdivision of Lot 3 DP 1058431 (from Tony Mexon & Associates Surveyors, dated 6.9.19)**





**Figure 4c: Proposed subdivision of Lot 2 DP 1058431 (from Tony Mexon & Associates Surveyors, dated 6.9.19)**





**Figure 5: Vegetation Communities over the subject site (from Hunter CMA Vegetation Mapping, 2006)**

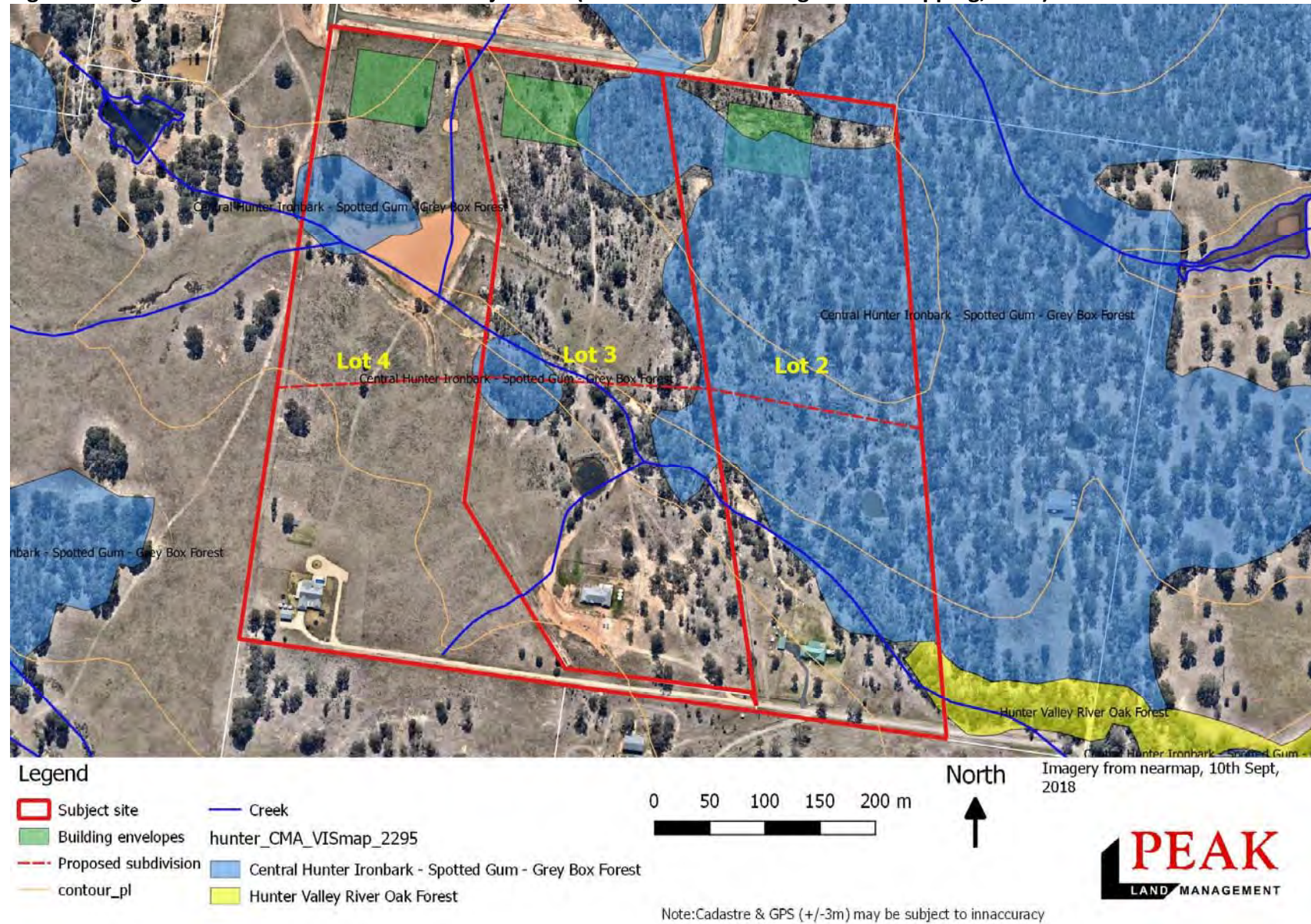
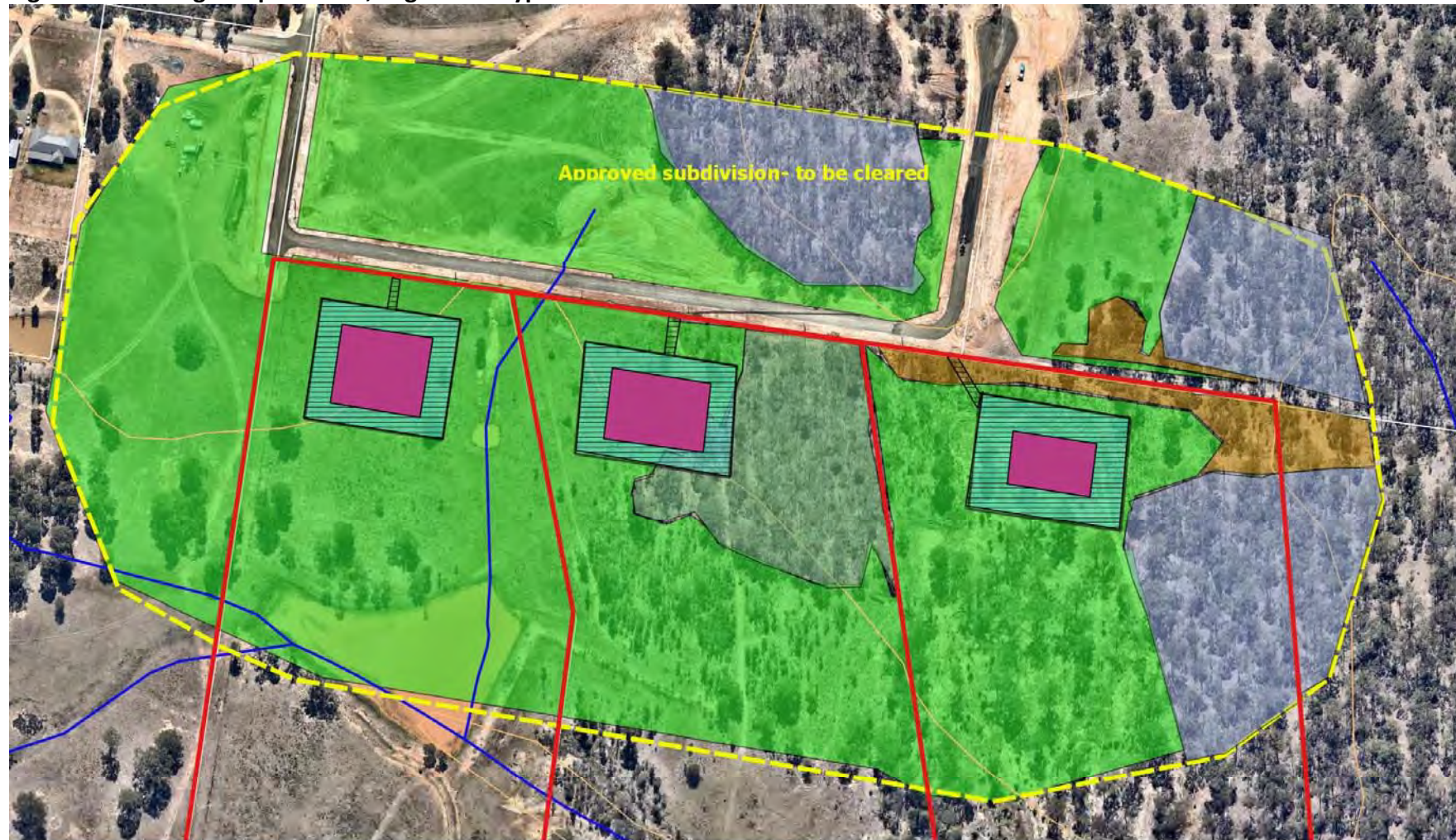




Figure 6: Dwelling footprint area, vegetation types & Asset Protection Zone



Legend

- |   |   |
|---|---|
| <span style="border: 2px solid red; padding: 2px;"> </span> Subject site  | <span style="border-bottom: 2px dashed yellow; width: 50px; display: inline-block;"></span> Bush Fire 140m veg assessment area                            |
| <span style="border: 2px solid red; padding: 2px;"> </span> Asset Protection Zone   | <span style="border-bottom: 2px solid blue; width: 50px; display: inline-block;"></span> Creek  |
| <span style="border: 2px solid red; padding: 2px;"> </span> Building envelopes  | <span style="border-bottom: 2px solid brown; width: 50px; display: inline-block;"></span> contour_pl  |
| <span style="background-color: #90EE90; border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></span> Remnant Forest (for BF Assess.) | <span style="background-color: #D2B48C; border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></span> Woodland (for BF Assess.)     |
| <span style="background-color: #ADD8E6; border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></span> Forest (for BF assessment)      | <span style="background-color: #90EE90; border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></span> Grassland (for BF assessment) |

0 25 50 75 100 m



Note: Cadastre & GPS (+/-3m) may be subject to innaccuracy

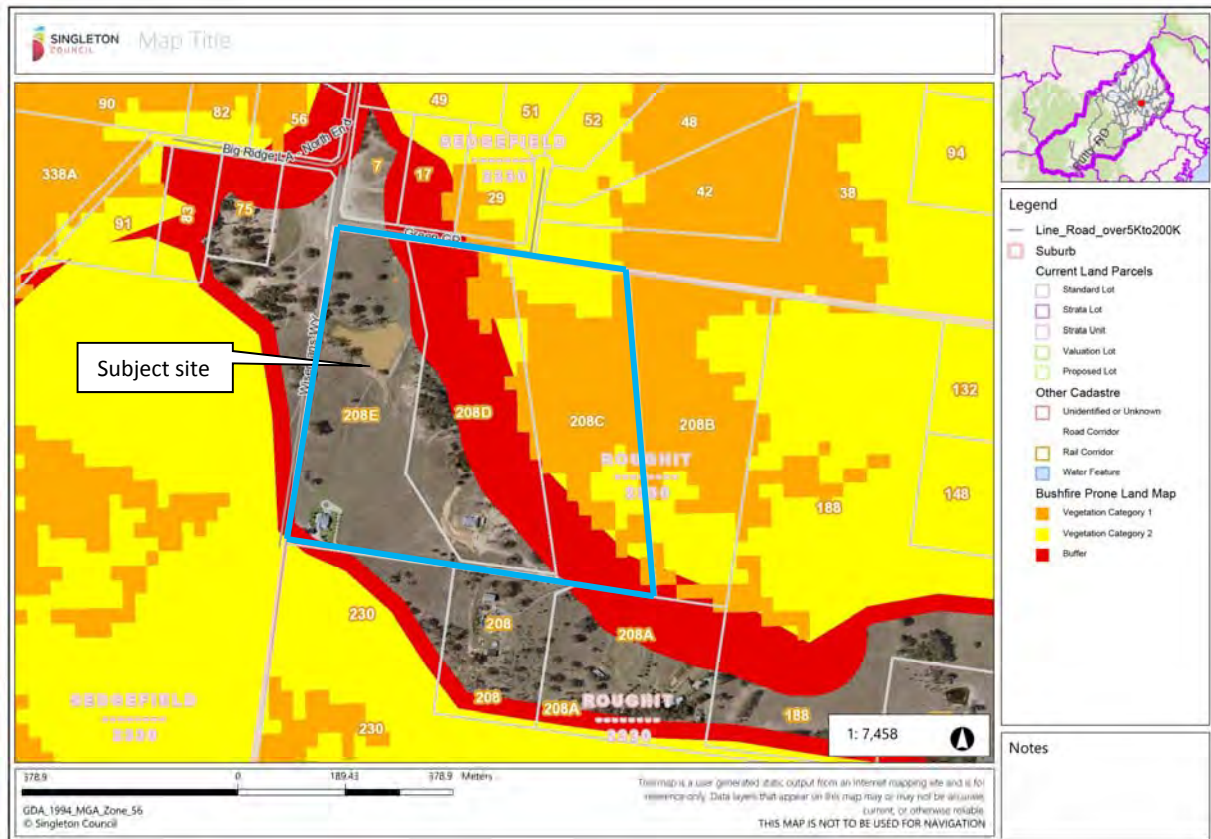
North



Imagery from nearmap, 10th Sept, 2018  
Projection: GDA 94/MGA zone 56





**Figure 7: Bushfire Prone Land Map (from Singleton Shire Council)**

## 2.0 REZONING SPECIFICATIONS AND SITE DETAILS

The subject site is currently zoned RU 1 rural landscape under the Singleton LEP 2011 (Fig 8). This bushfire assessment addresses a rezoning proposal for a proposed rural zone of RU4 over each subject site & to permit a proposed 1 into 2 lot subdivision over each lot (Fig. 2).

This modern subdivision can conform to current council & state (PBP 2006) standards, with access for each new proposed lot from Green Grove Road (a modern just constructed sealed two way public road), unreticulated water, overhead power, and Asset Protection Zones present.

All Asset Protection Zones will be located over each subject site with the nominated building envelopes. Building envelopes have been placed to reduce environmental impact, and be close to Green Grove Road, allowing ease of access for fire services/residents from short property access roads.

## 3.0 VEGETATION AND ECOLOGY

The hazardous vegetation type within 140m is Forest & Grassland. These vegetation types are classified according to PBP 2006.

Dry sclerophyll forest occurs on land as shown in Figure 6 and photos in Appendix 1. Forest is up to 20m in height, with a shrub understorey. In some areas it is part cleared, and no shrub

layer present, and intermittently grazed. In these areas where canopies of trees are clearly separated it has been assessed as Woodland.

Grassland occurs over cleared areas, or areas with scattered individual paddock trees, with slashed, or grazed understorey and no shrub or mid layer present. Grassland occurring to the north of the site is unmanaged in some areas at present, but occurs over land recently developed as part of an approved subdivision, with lots for sale and future dwellings, Asset Protection Zones, property access roads, etc to be cleared.

All vegetation mapped including the grassland, forest & woodland is considered to be an Endangered Ecological Community. *Central Hunter Ironbark Spotted Gum Grey Box Forest* is equivalent to a NSW listed Endangered Ecological Community, and *Central Hunter Ironbark Spotted Gum Grey Box Forest* is also equivalent to a nationally protected EPBC Act listed Critically Endangered Ecological Community being *Central Hunter Valley eucalypt forest and woodland*.

A Biodiversity Assessment Report has been completed by PEAK LAND MANAGEMENT, which restricts building envelopes to 0.5Ha in size (in order also to stay under the clearing threshold), as shown in Figure 6, and to reduce impact on these Endangered Ecological Communities, and conform to likely rezoning & development conditions set out under the Biodiversity Conservation Act 2016 (ie. Avoid & minimise impact principles), and any conditions that may be imposed by the relevant statutory authorities when assessing this rezoning proposal.

The Biodiversity Assessment Report, completed by PEAK LAND MANAGEMENT, dated Sept 2019 found in summary:

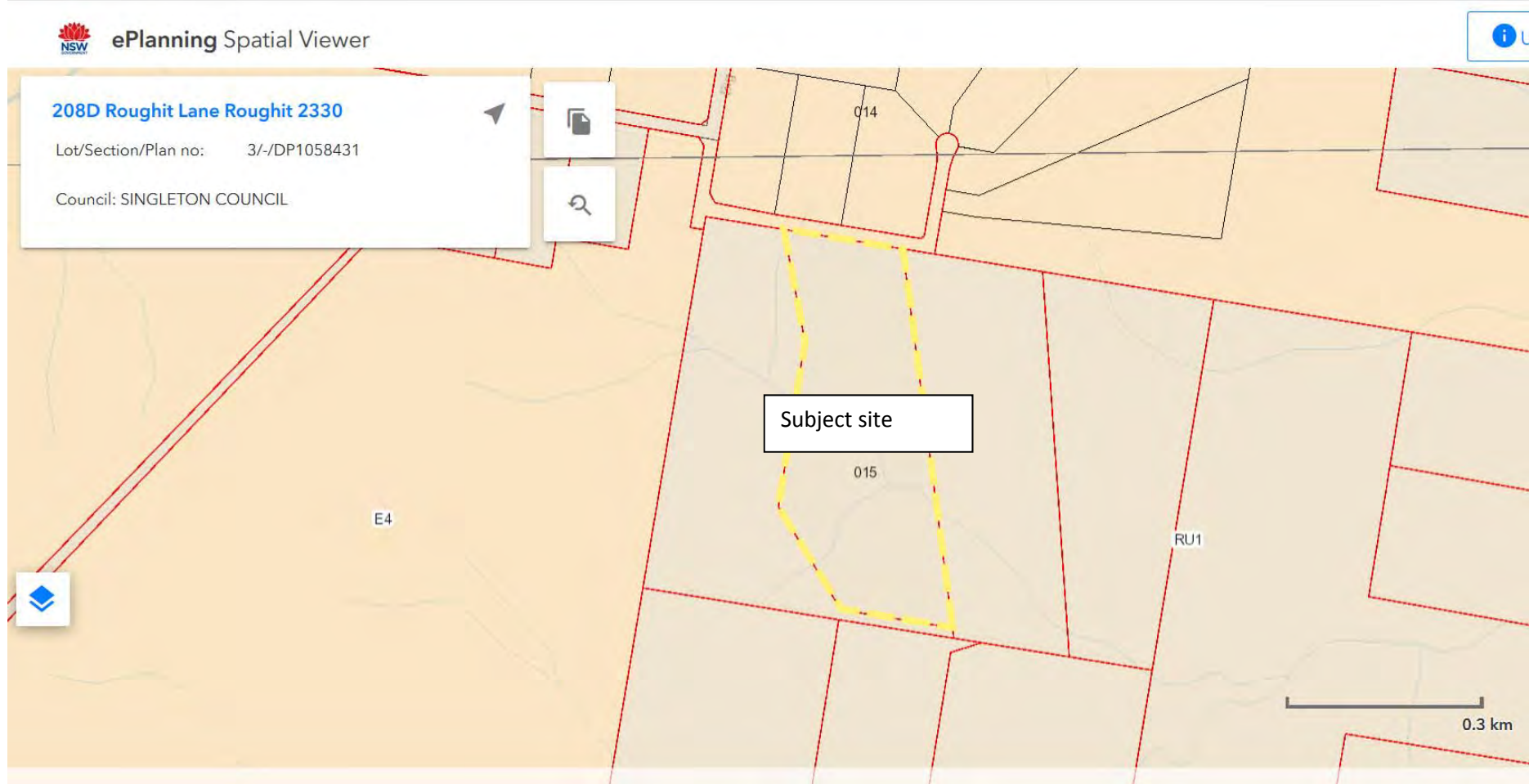
“The ecological investigations and assessment of impact have found that there is no significant impact on any threatened species, Endangered Ecological Community, critical habitat, or endangered populations by the proposed works on any NSW or nationally listed species under the *EP&BC Act 1999*, or *BC Act 2016* if the proposal adopts the recommendations of this report”.

Lot 2 also has numerous hollow bearing habitat trees (located off the development site/building envelopes and unaffected by each subject site rezoning proposal), and is likely to form habitat for a variety of threatened species, such as bats and birds. A Biodiversity Assessment Report has been prepared by PEAK LAND MANAGEMENT for the proposed rezoning.

Land over the majority of Lot 4 is cleared and grazed and not mapped as Bush Fire Prone Land (Fig 7), which the consultant concurs with. It has however been conservatively mapped as Grassland, in accordance with NSW Rural Fire Service policy.



Figure 8: LEP zoning of subject site (from eplanning portal, NSW Government)



## 4.0 BUSHFIRE RECOMMENDATIONS

The proposed residential rezoning plan and future urban subdivision has adequate provision for all bushfire planning principles. These include:

- Asset Protection Zones – adequate land over each proposed site/new lot available for Asset Protection Zones varying in width from 10m (adjoining grassland) to 25m adjoining forest;
- Property access roads are short (<50m), located in cleared areas, from a public road, with Asset Protection Zones/reduced vegetation zones & defendable space in order to allow fire services to turn around etc;
- Proposed lots & building envelopes have been designed to allow adequate Asset Protection Zones to bushfire prone vegetation;
- Modern services will be provided including underground/or above ground power (or solar power may be used) to each building envelope, tank water to be used for each dwelling;
- The subdivision will comply with subdivision requirements as per PBP, 2006 and all future dwellings will also be subject to PBP & AS 3959, and comply with those requirements.

The bushfire risk is considered to be adequately managed through the planning provisions designed for the development as shown above. The proposed rezoning development meets the intent of PBP, 2006.

Thank you for considering this report.



Ted Smith BSc(Hons), Grad Dip, BPAD-A Certified Bushfire Practitioner -BPD-BA-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 will be approved, as this is in the hands of the approving statutory authorities. 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.

## 5.0 REFERENCES

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NSW Rural Fire Service, 2018 (draft). *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  
Lands Department- SIX Maps  
Singleton Shire Council  
Nearmap

### Personal Communication

Sally Flannery- Orbit Planning



## APPENDIX 1: PHOTOS OF SITE AND SURROUNDS

Subject site showing proposed Building Envelope (BE) development site over Lot 2 – looking south from access road from Green Grove Rd



Subject site showing proposed Building Envelope (BE) development site over Lot 2 – looking west





Looking south over proposed Lot 2 BE development site



Vegetation proposed for retention over Lot 2 (eastern side)





Looking north from Lot 2 showing access road entrance from Green Grove Road



Looking south over proposed Lot 3 BE development site





Vegetation proposed for retention over Lot 3



Looking north across Green Grove Rd adjacent to Lot 3





Looking south over proposed Lot 4 BE development site



Vegetation proposed for retention over Lot 4





Lot 4- current horse grazing occurring



Green Grove public road, looking east. Subject sites to right of frame.





Eastern end of Green Grove Road, subject site (lot 2) to right of frame



## **ANNEX H - EXPLANATORY MAPS**



# SINGLETON COUNCIL

208C, 208D & 208E Roughit Lane -  
Current Land Zoning

## Legend



Site

## Land Zoning Map

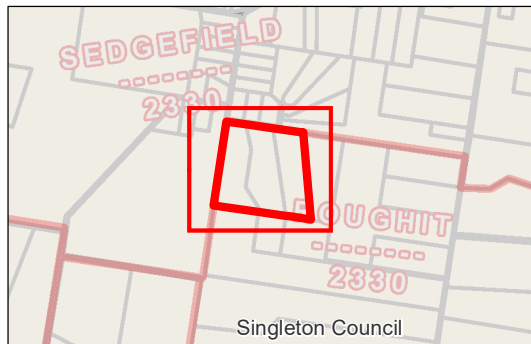
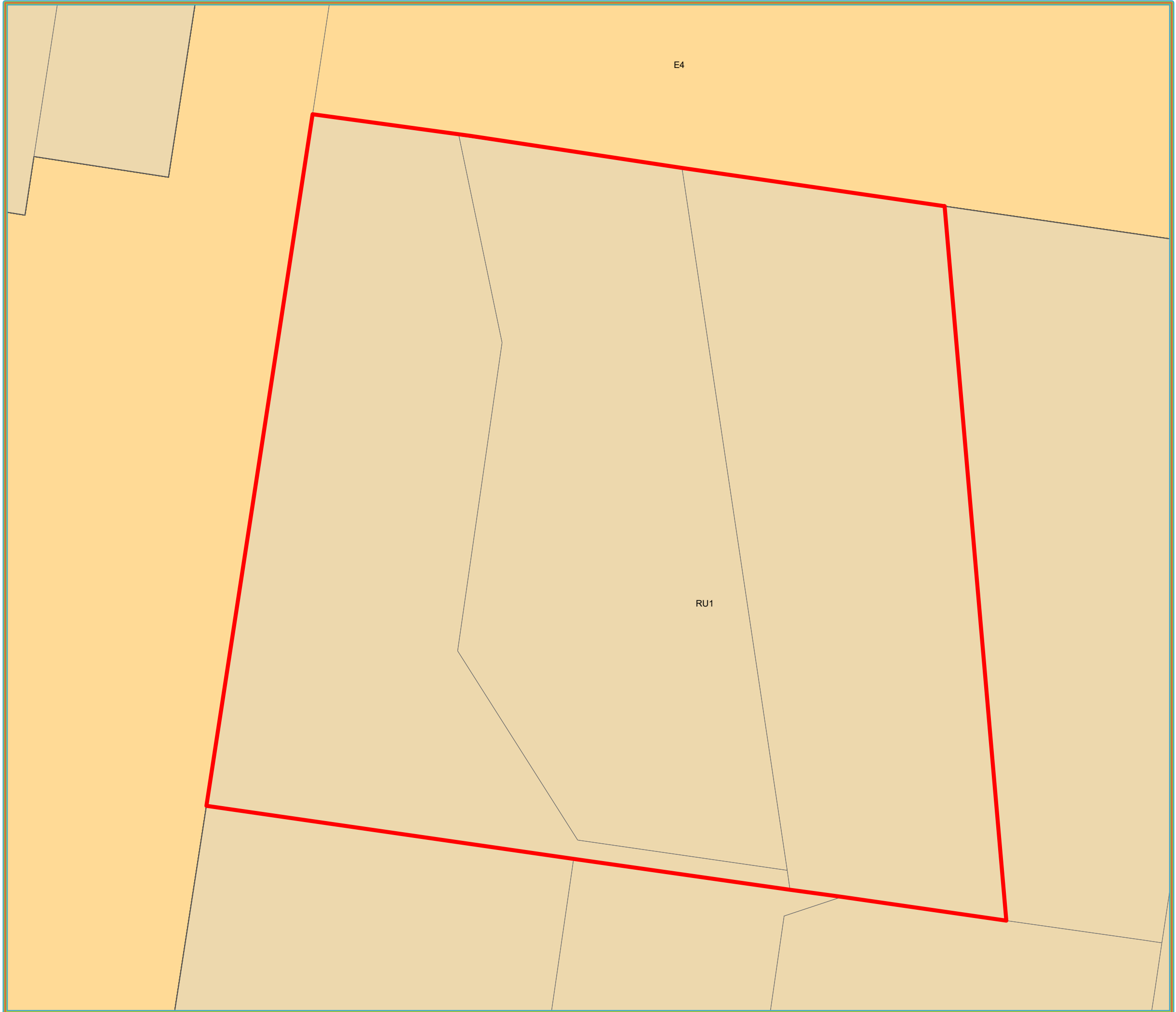
### ZONE



E4 Environmental Living



RU1 Primary Production



Scale: 1:10,000 @ A3

Projection: GDA 1994  
MGA Zone 56

Document Name: DP1058431 Land\_Zoning  
Author:  
Document Created By: mtrappel 22/09/2020 1:42:38 PM





# SINGLETON COUNCIL

208C, 208D & 208E Roughit Lane -  
Proposed Land Zoning

## Legend



Site

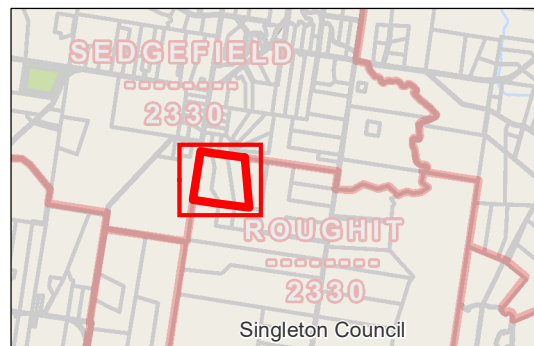
## ZONE



E4 Environmental Living



RU1 Primary Production



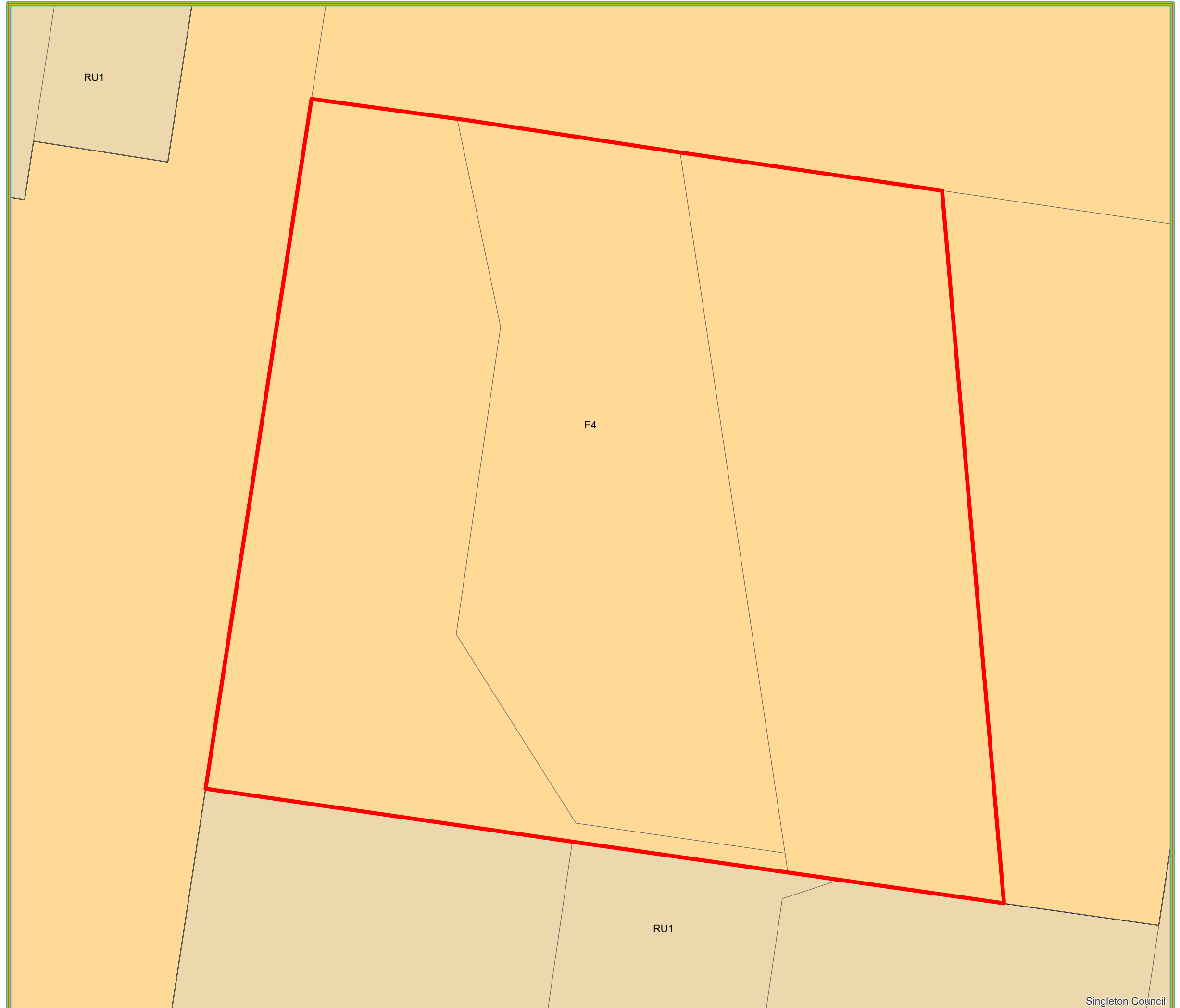
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Projection: GDA 1994  
MGA Zone 56

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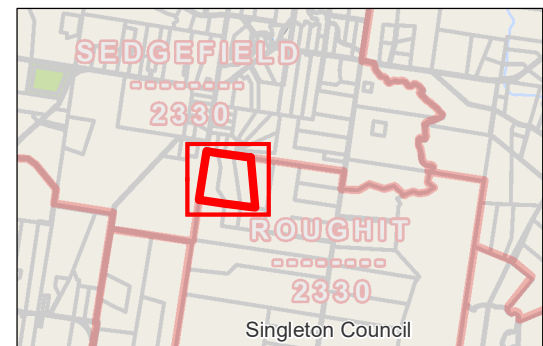


# SINGLETON COUNCIL

208C, 208D & 208E Roughit Lane -  
Current Lot Size

## Legend

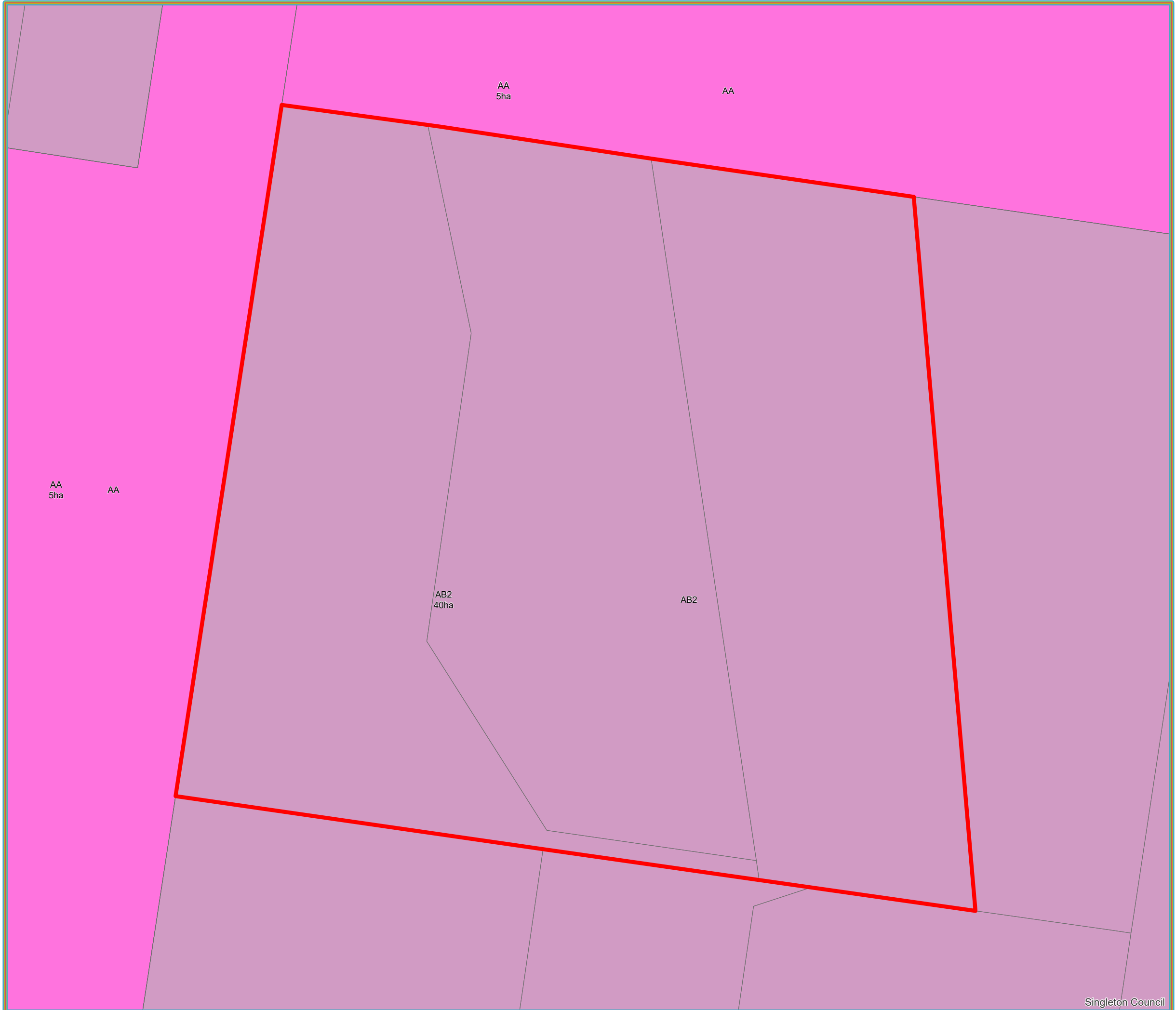
-  Site
-  AA 5 ha
-  AB2 40 ha



Scale: 1:10,000 @ A3

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Author:  
Document Created By: mtrappel 23/09/2020 11:00:43 AM



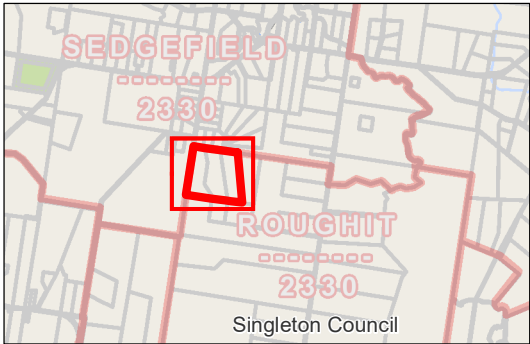


# SINGLETON COUNCIL

208B Roughit Lane -  
Proposed Lot Size

Legend

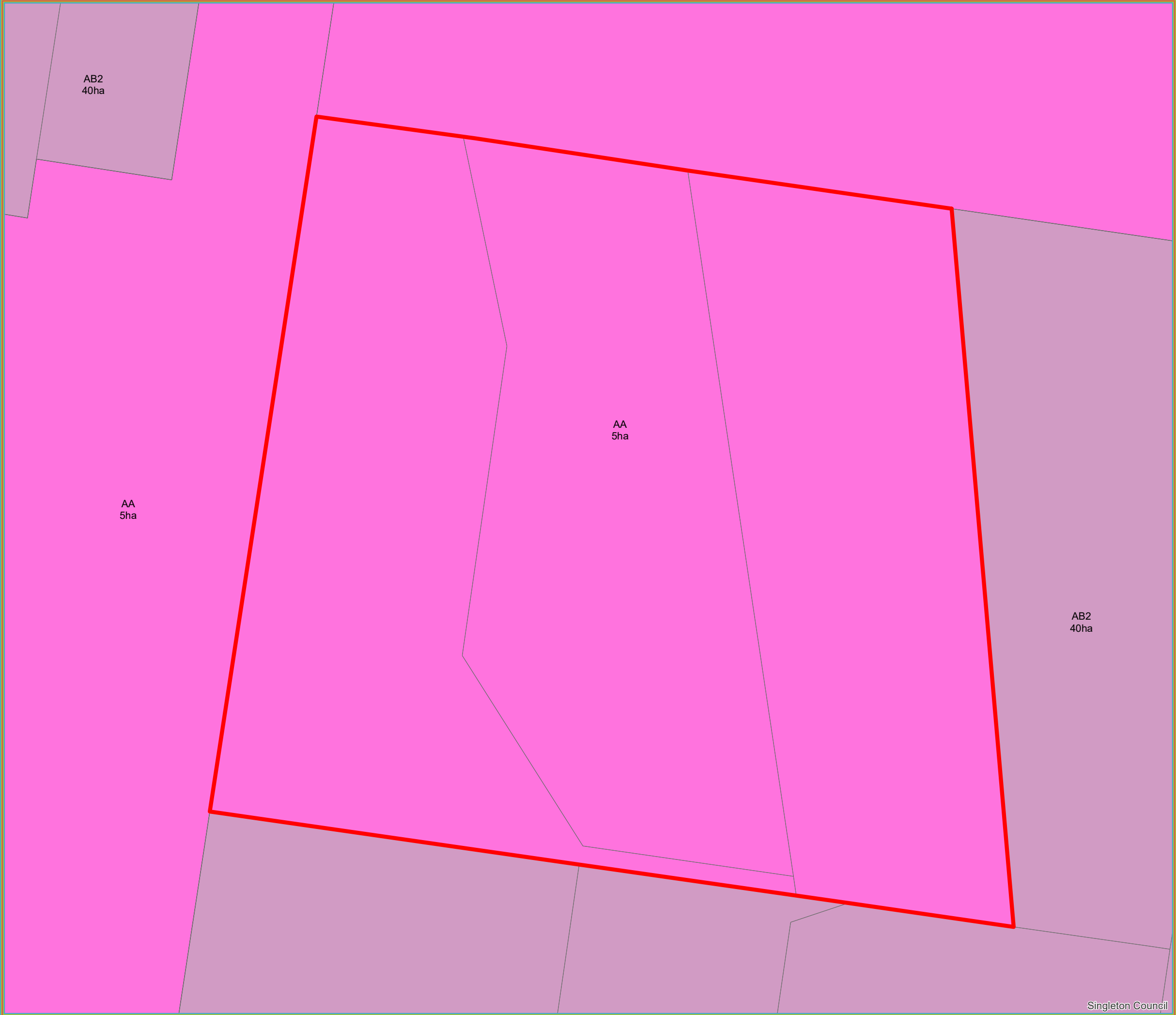
-  Site
-  AA 5 ha
-  AB2 40 ha



Scale: 1:10,000 @ A3

Projection: GDA 1994  
MGA Zone 56

Document Name: DP1058431 Lot\_size\_proposed  
Author:  
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## **ANNEX I - COMMUNICATIONS PLAN**



# 208C, D & E Roughit Lane Planning Proposal Communication Plan

Name of Draft Local Environmental Plan (LEP)	Singleton Local Environmental Plan (SLEP) 2013 – 208B Roughit Lane Rezoning planning Proposal
Subject Land	208 C,D & E Roughit Lane, Roughit.
Land Owner(s)	Michael Rose, Simone Hamson, Shane Proctor
Applicant	Singleton Council
Council File Reference	55.2019.1
NSW Department of Planning & Environment (DP&E) Reference	To be determined
Date	

## Project Overview

The objective of this planning proposal is to amend the *Singleton Local Environmental Plan 2013* to:

- Rezone Lots 2,3 & 4 of DP 1058431 from RU1 Primary Production zone to E4 Environmental Living zone; and
- Amend the minimum lot size requirements for subdivision from 40 hectares to 5 hectares.

## Background

On 15 November 2019, the application for this rezoning was lodged. This amendment will allow for a 1 into 2 lot subdivision of each site, allow for diversity in housing within the Singleton LGA and help maintain important ecological characteristics of the site. The site is within the Sedgefield Candidate Area identified within the Sedgefield Structure Plan.

## Plan Objectives

The purpose of this communication plan is to:

- Undertake evidence based consultation with stakeholders;
- Engage and involve stakeholders in the amendment to the SLEP 2013 (planning proposal) in accordance with the Community Participation Plan; and
- Inform stakeholders of the process followed in the preparation of the planning proposal for the proposed rezoning and minimum lot size amendment”.

## Key Messages

The key message of the planning proposal is to rezone the lot from RU1 Primary Production to E4 Environmental Living in accordance with the SLEP 2013. The proposal also aims to amend the minimum lot size of the site from 40ha to 5 ha to allow for potential future 1 into 2 lot subdivision of each site.

## Milestones and Key Dates

- NSW Department of Planning and Environment review of Planning Proposal - November 2020-January 2021;
- Public authority consultation - March – April 2021;
- Planning proposal updated in consideration of any recommendations made by the NSW Department of Planning and Environment April to May 2021;
- Pre-exhibition Council Report – May 2021;
- Commencement and completion dates for public exhibition period –May 2021- June 2021;
- Timeframe for consideration of submissions – One month;
- Submissions report – July 2021;
- Anticipated date that Council will make the plan - October 2021;
- Anticipated date that Council will forward to the Department of Planning, Infrastructure and Environment for notification - October 2021.

\*please note that these dates are approximate dates

## Key Stakeholders

- Sedgefield Community;
- Singleton Council – (Councillors and Internal Staff);
- Broader Singleton Community;
- NSW Department of Planning and Environment;
- Public Authorities;
- Wanaruah Local Aboriginal Land Council;

## Communication Tool

Communication tool	Tasks
<i>Letter Notification</i>	<ul style="list-style-type: none"><li>• Letters will be sent to the relevant property owners</li></ul>
<i>Social media</i>	<ul style="list-style-type: none"><li>• Facebook and Twitter were used to notify persons of the initial consultation phase for the Bulga planning proposal.</li></ul>
<i>Newspaper advertisements</i>	<ul style="list-style-type: none"><li>• Advertisement in the Singleton Argus on XXXXX.</li><li>• Advertisement in the Hunter Valley News XXXXX.</li></ul>
<i>Councillor briefings</i>	<ul style="list-style-type: none"><li>• To be advised</li></ul>