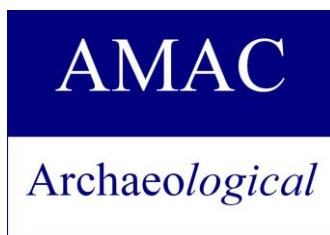
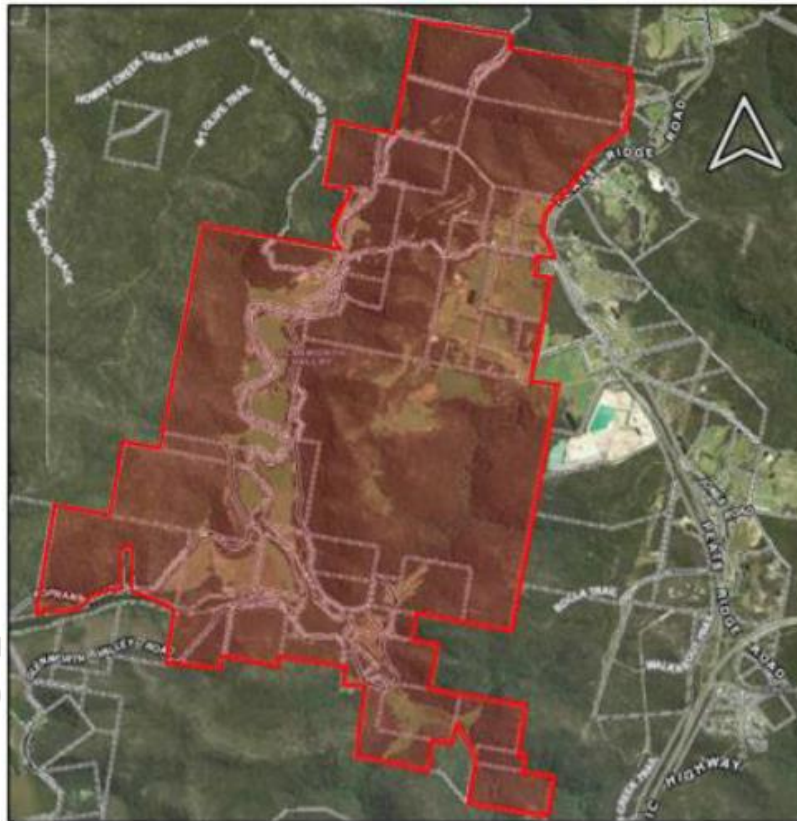


# **ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT**

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***1992 and 2070 Peats Ridge Road,  
48 and 51 Polins Road,  
8, 45, 69, 69A and 81 Cooks Road  
Calga and Glenworth Valley  
New South Wales  
(Central Coast Council LGA)***



**Benjamin Streat, Sarah Hannan  
& Steven J. Vasilakis**

*Archaeological* Management & Consulting Group  
and Streat Archaeological Services

**for  
Glenworth Valley Outdoor Adventures  
November 2021**

*Disclaimer*

*The veracity of this report is not guaranteed unless it is a complete and original copy.*

*This report may be inaccurate, incomplete, not original, or modified, if it appears in monochrome form and the signature below is a copy.*



*Benjamin Streat  
Director of Aboriginal Archaeology  
(mobile 0405 455 869)*



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**Cover Image**

Aerial of Study Area.  
AMAC Group. Six Maps (accessed 27/09/2021).

## ACKNOWLEDGEMENT OF COUNTRY

Glenworth Valley Outdoor Adventures would like to acknowledge the Traditional Custodians of the Central Coast area – the Darkinjung Peoples and the Wannangini/GuriNgai<sup>1</sup> Peoples – and pay respect to their cultural heritage, beliefs and continuing relationship with the land.

Glenworth Valley Outdoor Adventures would also like to acknowledge the post contact experiences of Aboriginal peoples who have attachment to the Central Coast area.

“We pay our respect to the Elders – past, present and future – for they hold the memories, traditions, culture and hopes of Aboriginal Peoples in the area.”

Glenworth Valley Outdoor Adventures recognises the role of the registered Aboriginal parties in the management of the Aboriginal cultural heritage sites, landscape features and values of this project.

Glenworth Valley Outdoor Adventures would like to thank the Registered Aboriginal Parties for their participation in this project and for their valuable contribution to this Aboriginal Archaeological Assessment which has been enriched by their willingness to share valuable aspects of their cultural knowledge especially in respect of Caring for Country

---

<sup>1</sup> AMAC would like to thank Ms Kerrie Brauer (ATOAC).for providing the traditional spelling for the Wanangine/Guringai Peoples.

## INTERNAL REVIEW

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## EXECUTIVE SUMMARY

### Study Area

Archaeological Management and Consulting Group (AMAC) was commissioned by Glenworth Valley Outdoor Adventures in July 2021, to prepare an Aboriginal Cultural Heritage Assessment Report for the 49 lots encompassing approximately 1173.6 hectares within Glenworth Valley and Calga and comprises the following street addresses and lots:

1992 Peats Ridge Road (part of lot) Calga  
2070 Peats Ridge Road Calga  
48 and 51 Polins Road Calga  
8, 45 and 81 Cooks Road Calga  
69 and 69A Cooks Road Glenworth Valley, New South Wales.

And encompasses the following Lots/DP:

Lots 19-25, 30-33, 37, 50, 53, 64, 65, 68, 81, 82, 85-87, 89, 91, 108 and 145/DP 755221  
Lots 22, 23, 32, 73, 75 and 76/DP 755253, Lot 1 and 3/DP 617088, Lot 881/DP 563889,  
Lot 1/DP1222754, Lot 7/DP 1230083, Lot 245/DP48817, Lot 7012/DP 1059767, Lot  
7029/DP 93603, Lot 7035/DP 1051932, Lot 7036/DP 1059768, Lot 7303/DP 1154929,  
Glenworth Valley, and,

Lot A/DP 365595, Lot C/DP 382358, Lot 2/DP 1139242, Lot 882/DP 563889, Part of Lot  
102/DP 1139060, Lot 7039/DP 1059766, Lot 7303/DP 1161109, Calga.

The Planning Proposal seeks approval for additional permitted land use to the existing zones that apply to the land across the 49 lots for Glenworth Valley Outdoor Adventures within Glenworth Valley and Calga. No new development structures, buildings, services, and/or impacts to ground surfaces are proposed as part of this Aboriginal Cultural Heritage Assessment Report. This report has been carried out in response to the following heritage advice provided by Heritage NSW in a letter dating to the 21<sup>st</sup> of December 2020. A full copy of the letter can be found in Appendix One.

### **Aboriginal Cultural Heritage under the National Parks and Wildlife Act 1974**

*Heritage NSW notes that, although the potential for items (Aboriginal objects) to be present within the subject land is observed, no assessment of Aboriginal cultural heritage has been provided in support of the planning proposal. Instead, the planning proposal addresses Local Planning Direction 2.3 (Heritage Conservation) in relation to Aboriginal cultural heritage by proposing to undertake detailed Aboriginal heritage investigations for the specific locations of future individual development applications.*

*Heritage NSW strongly encourages planning authorities to identify and conserve significant Aboriginal cultural heritage values up-front, at the planning proposal stage. This leads to better Aboriginal cultural heritage outcomes and gives greater certainty for stakeholders in any development assessment process. Accordingly, Heritage NSW provides the attached Aboriginal cultural heritage recommendations for this planning proposal.*

## **Aboriginal Heritage and non-Aboriginal Heritage under the Heritage Act 1977**

Heritage NSW's Heritage Programs team will provide separate comments on the planning proposal in relation to Aboriginal and non-Aboriginal heritage considerations under the Heritage Act 1977.

An Aboriginal cultural heritage assessment is needed to inform planning proposals to ensure they are consistent with Ministerial Directions issued under Section 9.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act), specifically Local Planning Direction 2.3 Heritage Conservation (former section 117(2) directions).

Direction 2.3 states that planning authorities must ensure that a planning proposal contains provisions that facilitate the conservation of Aboriginal objects and places protected under the National Parks and Wildlife Act 1974 (NPW Act) (Direction 2.3(4)(b)), and Aboriginal areas, objects, places or landscapes identified as being of heritage significance to Aboriginal culture and people (Direction 2.3(4)(c)).

Considering Aboriginal cultural heritage values at the planning proposal stage provides planning authorities with the opportunity to meet their obligations under the EP&A Act as well as to their local Aboriginal community.

Heritage NSW supports the application of appropriate land-use zoning (such as E2 conservation) as a suitable mechanism to promote the conservation of significant Aboriginal cultural heritage values. Identifying and conserving significant Aboriginal cultural heritage at the planning proposal stage leads to better Aboriginal cultural heritage outcomes and gives greater certainty for stakeholders in any development assessment process. We strongly encourage planning authorities to meet these obligations.

To adequately assess the Aboriginal cultural heritage significance of the lands subject to the planning proposal, the proponent needs to clearly identify all potential areas, objects, places or landscapes of heritage significance to Aboriginal culture and people that may potentially constrain future land-use planning.

Heritage NSW recommends that identification of Aboriginal cultural heritage values and consultation with Aboriginal people be guided by the following documents:

- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011).
- Consultation with the Aboriginal community undertaken in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010).
- Satisfy the requirements of the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010).

Please note that a due diligence process is not sufficient to support a planning proposal. Due diligence is inadequate to assess the potential impacts of planning proposals on potential areas, objects, places or landscapes of heritage significance to Aboriginal culture and people, as required by Local Planning Direction 2.3.

This report conforms to the reporting process, conditions and requirements of *Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998)* and *Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*. This document has been distributed for review and comment to all Registered Aboriginal Stakeholders. All comments have been included as part of the final version of this document.

### Aboriginal Consultation

Consultation for this report has been undertaken in accordance with the *National Parks and Wildlife Act 1974: Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*.

*The mandatory 28-day period for the Aboriginal stakeholders to comment on this document has been undertaken and this is the final Aboriginal stakeholder approved version of this.*

### Significance

The study site is considered to be of *high Aboriginal cultural heritage significance* to the Aboriginal community [REDACTED]

### Recommendations

The management recommendations presented below take into account that *no development impacts* to ground surfaces are proposed. As a result, the following recommendations have been formulated after consultation with the registered Aboriginal Stakeholders, the proponent, and Heritage NSW:

- Consultation with the Registered Aboriginal Parties (RAPs) should continue, as per the requirements detailed in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)*. All RAPs have been given the opportunity to comment on this document and this is the final approved version of this report
- All registered Aboriginal sites which may be at risk of impact from the current activities occurring on the property should be inspected to confirm site locations, conditions, and recorded features
- A Management Plan should be written to establish inspection protocols, - timeframes, and contact procedures between representatives of the registered Aboriginal Stakeholders and Glenworth Valley Outdoor Adventures
- Should any sites be determined to be at risk of damage, a management procedure should be developed in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* and in consultation with relevant Aboriginal Stakeholders. This may include conservation measures such as fencing or signage
- Should any future works be proposed, that may impact these sites - further investigation should be undertaken in accordance with the appropriate legislation that conforms to the reporting process, conditions and requirements of *Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998)* and *Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*.

## CONTACT DETAILS

The contact details for the following archaeologist, NSW Police, Heritage NSW, and the RAPs are as follows:

Organisation	Contact	Contact Details
NSW Environment Line		131 555
NSW Brisbane Water Police Area Command (PAC)		PAC Office: Level 3, 9- 11 Mann Street Gosford NSW 2250 Ph: (02) 4323 5599 Fax: (02) 4323 5509
Archaeological Management & Consulting Group	Mr. Benjamin Streat or Mr. Martin Carney	122c-d Percival Road Stanmore NSW 2048 Ph:(02) 9568 6093 Fax:(02) 9568 6093 Mob: 0405 455 869 Mob: 0411 727 395 benjaminstreat@archaeological.com.au
Heritage NSW Department of Cabinet and Heritage	Archaeologist – Head Office	PO Box 488G Newcastle 2300 Ph: (02) 4927 3119 rog.hcc@environment.nsw.gov.au
Darkinjung Local Aboriginal Land Council (DLALC)	Barry Williams & Amanda Shields	PO Box 401 Wyong NSW 2259 Ph: (02) 4351 2930 darkinjung@dlalc.org.au
Awabakal & Guringai Pty Ltd		
Awabakal Traditional Owners Aboriginal Corp.		
Awabakal Descendants Traditional Owners		
Yinarr Cultural Services		
Corroboree Aboriginal Corp.		
Didge Ngunawal Clan		
Woka Aboriginal Corp. Preservation of Culture & Heritage		



# 1.0 INTRODUCTION

## 1.1 BACKGROUND

Archaeological Management and Consulting Group (AMAC) was commissioned by Glenworth Valley Outdoor Adventures in July 2021, to prepare an Aboriginal Cultural Heritage Assessment Report for the 49 lots encompassing approximately 1173.6 hectares within Glenworth Valley and Calga and comprises the following street addresses and lots:

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8, 45 and 81 Cooks Road Calga  
69 and 69A Cooks Road Glenworth Valley, New South Wales.

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Lots 22, 23, 32, 73, 75 and 76/DP 755253, Lot 1 and 3/DP 617088, Lot 881/DP 563889,  
Lot 1/DP1222754, Lot 7/DP 1230083, Lot 245/DP48817, Lot 7012/DP 1059767, Lot  
7029/DP 93603, Lot 7035/DP 1051932, Lot 7036/DP 1059768, Lot 7303/DP 1154929,  
Glenworth Valley, and,

Lot A/DP 365595, Lot C/DP 382358, Lot 2/DP 1139242, Lot 882/DP 563889, Part of Lot  
102/DP 1139060, Lot 7039/DP 1059766, Lot 7303/DP 1161109, Calga.

The Planning Proposal seeks approval for additional permitted land use to the existing zones that apply to the land across the 49 lots for Glenworth Valley Outdoor Adventures within Glenworth Valley and Calga. No new development structures, buildings, services, and/or impacts to ground surfaces are proposed as part of this Aboriginal Cultural Heritage Assessment Report. This report has been carried out in response to the following heritage advice provided by Heritage NSW in This report has been carried out in response to the following heritage advice provided by Heritage NSW in a letter dating to the 21<sup>st</sup> of December 2020. A full copy of the letter can be found in Appendix One.

### **Aboriginal Cultural Heritage under the National Parks and Wildlife Act 1974**

*Heritage NSW notes that, although the potential for items (Aboriginal objects) to be present within the subject land is observed, no assessment of Aboriginal cultural heritage has been provided in support of the planning proposal. Instead, the planning proposal addresses Local Planning Direction 2.3 (Heritage Conservation) in relation to Aboriginal cultural heritage by proposing to undertake detailed Aboriginal heritage investigations for the specific locations of future individual development applications.*

*Heritage NSW strongly encourages planning authorities to identify and conserve significant Aboriginal cultural heritage values up-front, at the planning proposal stage. This leads to better Aboriginal cultural heritage outcomes and gives greater certainty for stakeholders in any development assessment process. Accordingly, Heritage NSW provides the attached Aboriginal cultural heritage recommendations for this planning proposal.*

### **Aboriginal Heritage and non-Aboriginal Heritage under the Heritage Act 1977**

Heritage NSW's Heritage Programs team will provide separate comments on the planning proposal in relation to Aboriginal and non-Aboriginal heritage considerations under the Heritage Act 1977.

An Aboriginal cultural heritage assessment is needed to inform planning proposals to ensure they are consistent with Ministerial Directions issued under Section 9.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act), specifically Local Planning Direction 2.3 Heritage Conservation (former section 117(2) directions).

Direction 2.3 states that planning authorities must ensure that a planning proposal contains provisions that facilitate the conservation of Aboriginal objects and places protected under the National Parks and Wildlife Act 1974 (NPW Act) (Direction 2.3(4)(b)), and Aboriginal areas, objects, places or landscapes identified as being of heritage significance to Aboriginal culture and people (Direction 2.3(4)(c)).

Considering Aboriginal cultural heritage values at the planning proposal stage provides planning authorities with the opportunity to meet their obligations under the EP&A Act as well as to their local Aboriginal community.

Heritage NSW supports the application of appropriate land-use zoning (such as E2 conservation) as a suitable mechanism to promote the conservation of significant Aboriginal cultural heritage values. Identifying and conserving significant Aboriginal cultural heritage at the planning proposal stage leads to better Aboriginal cultural heritage outcomes and gives greater certainty for stakeholders in any development assessment process. We strongly encourage planning authorities to meet these obligations.

To adequately assess the Aboriginal cultural heritage significance of the lands subject to the planning proposal, the proponent needs to clearly identify all potential areas, objects, places or landscapes of heritage significance to Aboriginal culture and people that may potentially constrain future land-use planning.

Heritage NSW recommends that identification of Aboriginal cultural heritage values and consultation with Aboriginal people be guided by the following documents:

- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011).
- Consultation with the Aboriginal community undertaken in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010).
- Satisfy the requirements of the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010).

Please note that a due diligence process is not sufficient to support a planning proposal. Due diligence is inadequate to assess the potential impacts of planning proposals on potential areas, objects, places or landscapes of heritage significance to Aboriginal culture and people, as required by Local Planning Direction 2.3.

This report conforms to the reporting process, conditions and requirements of *Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998)* and *Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*. This document has been distributed for review and comment to all Registered Aboriginal Stakeholders. All comments have been included as part of the final version of this document.

## 1.2 STUDY AREA

The study site includes 49 lots encompassing 1173.6 hectares of land across Glenworth Valley and Calga, within the Parish of Cowan, County of Northumberland (Figures 2.1-2.2). The street addresses, lot and deposit plans are presented below.

Street Address	Suburb
1992 Peats Ridge Road (part of lot)	Calga
2070 Peats Ridge Road	Calga
48 and 51 Polins Road	Calga
8, 45 and 81 Cooks Road	Calga
69 and 69A Cooks Road,	Glenworth Valley

Lot	Deposited Plan
19-25, 30-33, 37, 50, 53, 64, 65, 68, 81, 82, 85-87, 89, 91 and 108	755221
22, 23, 32, 73, 75 and 76	755253
1, 3	617088
881	563889
1	1222754
245	48817
7	1230083
7012	1059767
7029	93603
7035	1051932
7036	1059768
7303	1154929
882	563889
A	365595
C	382358
2	1139242
102 (Part)	1139060
7039	1059766
7303	1161109

## 1.3 SCOPE

The aims of this cultural heritage assessment are to assess the Aboriginal cultural heritage values of the study area, to provide registered Aboriginal persons or organisations who hold cultural knowledge relevant to determining the cultural significance of Aboriginal object(s) and/or place(s) within, or in the vicinity of the area of the proposed development to present this knowledge for synthesis, analysis and compilation into a Cultural Heritage Assessment about the study area.

This report will assess the impact of the proposed development on any identified items or places of Aboriginal cultural heritage value and to develop mitigative strategies under the appropriate legislation for the management of Aboriginal archaeological and cultural heritage values of the study area. The process has also allowed the proponent and/or the proponent's representative to outline the project details and the participating Aboriginal stakeholders to have input into formulating mitigative strategies at identified points in the impact assessment process.

A methodology and a timeline for the completion of assessment process and report delivery was developed and distributed to all stakeholders. With these clearly identified roles the methodology and project background was submitted to the participating Aboriginal stakeholders for review and input for a period of no less than 28 days.

## **1.4 AUTHOR IDENTIFICATION**

The analysis of the archaeological background and the reporting were undertaken by Mr. Benjamin Streat (BA, Grad Dip Arch Her, Grad Dip App Sc), archaeologist and Director of Streat Archaeological Services Pty Ltd in association with Ms. Sarah Hannan (B. Arts. B. Science) and Mr Steven J. Vasilakis (B. Arts. Hons.), under the guidance of Mr. Martin Carney archaeologist and Managing Director of AMAC Group.

## **1.5 LEGISLATIVE CONTEXT AND STATUTORY CONTROLS**

This section of the report provides a brief outline of the relevant legislation and statutory instruments that protect Aboriginal archaeological and cultural heritage sites within the state of New South Wales. Some of the legislation and statutory instruments operate at a federal or local level and as such are applicable to Aboriginal archaeological and cultural heritage sites in New South Wales. This material is not legal advice and is based purely on the author's understanding of the legislation and statutory instruments. This document seeks to meet the requirements of the legislation and statutory instruments set out within this section of the report.

### **1.5.1 Commonwealth Heritage Legislation and Lists**

One piece of legislation and two statutory lists and one non-statutory list are maintained and were consulted as part of this report: the National Heritage List; the Commonwealth Heritage List and the Register of the National Estate.

#### **1.5.1.1 Environmental Protection and Biodiversity Conservation Act 1999**

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) offers provisions to protect matters of national environmental significance. This act establishes the National Heritage List and the Commonwealth Heritage List which can include natural, Indigenous and historic places of value to the nation. This Act helps ensure that the natural, Aboriginal and historic heritage values of places under Commonwealth ownership or control are identified, protected and managed (Australian Government 1999).

#### **1.5.1.2 National Heritage List**

The National Heritage List is a list which contains places, items and areas of outstanding heritage value to Australia; this can include places, items and areas overseas as well as

items of Aboriginal significance and origin. These places are protected under the Australian Government's EPBC Act.

#### 1.5.1.3 Commonwealth Heritage List

The Commonwealth Heritage List can include natural, Indigenous and historic places of value to the nation. Items on this list are under Commonwealth ownership or control and as such are identified, protected and managed by the Federal Government.

#### 1.5.1.4 Register of the National Estate

The Register of the National Estate is a list of natural, Indigenous and heritage places throughout Australia. It was originally established under the *Australian Heritage Commission Act 1975 (AHC Act)*. This has now been replaced by the Environment Protection and Biodiversity Conservation Act 1999. The register will continue to operate until February 2012 when it will be completely replaced by The Commonwealth Heritage List.

#### 1.5.2 New South Wales State Heritage Legislation and Lists

The state (NSW) based legislation that is of relevance to this assessment comes in the form of the acts which are outlined below.

##### 1.5.2.1 National Parks and Wildlife Act 1974

The NSW National Parks and Wildlife Act 1974 (as amended) defines Aboriginal objects and provides protection to any and all material remains which may be evidence of the Aboriginal occupation of lands continued within the state of New South Wales. The relevant sections of the Act are sections 84, 86, 87 and 90.

An Aboriginal object, formerly known as a relic is defined as:

*any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains"* (NSW Government, 1974).

It is an offence to harm or desecrate an Aboriginal object or places under Part 6, Section 86 of the NPW Act:

Part 6, Division 1, Section 86: Harming or desecrating Aboriginal objects and Aboriginal places:

- (1) *A person must not harm or desecrate an object that the person knows is an Aboriginal object.*

*Maximum penalty:*

- (a) *in the case of an individual—2,500 penalty units or imprisonment for 1 year, or both, or (in circumstances of aggravation) 5,000 penalty units or imprisonment for 2 years, or both, or*
- (b) *in the case of a corporation—10,000 penalty units.*

- (2) *A person must not harm an Aboriginal object.*

*Maximum penalty:*

- (a) *in the case of an individual—500 penalty units or (in circumstances of aggravation) 1,000 penalty units, or*
- (b) *in the case of a corporation—2,000 penalty units.*

- (3) *For the purposes of this section, **circumstances of aggravation** are:*

- (a) *that the offence was committed in the course of carrying out a commercial activity, or*
- (b) *that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.*

*This subsection does not apply unless the circumstances of aggravation were identified in the court attendance notice or summons for the offence.*

- (4) *A person must not harm or desecrate an Aboriginal place.*

*Maximum penalty:*

- (a) *in the case of an individual—5,000 penalty units or imprisonment for 2 years, or both, or*
- (b) *in the case of a corporation—10,000 penalty units.*
- (5) *The offences under subsections (2) and (4) are offences of strict liability and the defence of honest and reasonable mistake of fact applies.*
- (6) *Subsections (1) and (2) do not apply with respect to an Aboriginal object that is dealt with in accordance with section 85A.*
- (7) *A single prosecution for an offence under subsection (1) or (2) may relate to a single Aboriginal object or a group of Aboriginal objects.*
- (8) *If, in proceedings for an offence under subsection (1), the court is satisfied that, at the time the accused harmed the Aboriginal object concerned, the accused did not know that the object was an Aboriginal object, the court may find an offence proved under subsection (2).*

#### **1.5.2.2 Environmental Planning & Assessment Act 1979**

*The Environmental Planning and Assessment Act 1979 (EP&A Act) states that environmental impacts of proposed developments must be considered in land use planning procedures. Four parts of this act relate to Aboriginal cultural heritage.*

- *Part 3, divisions 3, 4 and 4A refer to Regional Environmental Plans (REP) and Local Environmental Plans (LEP) which are environmental planning instruments and call for the assessment of Aboriginal heritage among other requirements.*
- *Part 4 determines what developments require consent and what developments do not require consent. Section 79C calls for the evaluation of*

*The likely impacts of that development, including environmental impacts on both the natural and built environments and the social and economic impacts in the locality (NSW Government 1979).*

- *Part 5 of this Act requires that impacts on a locality which may have an impact on the aesthetic, anthropological, architectural, cultural, historic, scientific, recreational or scenic value are considered as part of the development application process (NSW Government, 1979).*

#### **1.5.2.3 State Environmental Planning Policy 2011**

*The study area is identified under Schedule 2 State Significant Development – Identified sites Clause 15;*

*15 Development in Gosford City Centre*

*Development that has a capital investment value of more than \$75 million on land identified on the Land Application Map (within the meaning of State Environmental Planning Policy (Gosford City Centre) 2018).*

#### **1.5.2.4 State Environmental Planning Policy (Gosford City Centre) 2018**

The State Environmental Planning Policy is specific for the Gosford City Centre of which includes the area subject of this report. This document was endorsed in 2018. Part 5; Section 5.10 outlines the requirements regarding heritage conservation.

#### 5.10 Heritage conservation

Note. Heritage items (if any) are listed and described in Schedule 5. Heritage conservation areas (if any) are shown on the Heritage Map as well as being described in Schedule 5.

##### (1) Objectives

The objectives of this clause are as follows:

- (a) to conserve the environmental heritage of Gosford,
- (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,
- (c) to conserve archaeological sites,
- (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

##### (2) Requirement for consent

Development consent is required for any of the following:

- (a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):
  - (i) a heritage item,
  - (ii) an Aboriginal object,
  - (iii) a building, work, relic or tree within a heritage conservation area,
- (b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,
- (c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,
- (d) disturbing or excavating an Aboriginal place of heritage significance,
- (e) erecting a building on land:
  - (i) on which a heritage item is located or that is within a heritage conservation area, or
  - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,
- (f) subdividing land:
  - (i) on which a heritage item is located or that is within a heritage conservation area, or
  - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

##### (3) When consent not required

However, development consent under this clause is not required if:

- (a) the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development:
  - (i) is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and
  - (ii) would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or
- (b) the development is in a cemetery or burial ground and the proposed development:
  - (i) is the creation of a new grave or monument, or excavation or disturbance of land for the purpose of conserving or repairing monuments or grave markers, and
  - (ii) would not cause disturbance to human remains, relics, Aboriginal objects in the form of grave goods, or to an Aboriginal place of heritage significance, or
- (c) the development is limited to the removal of a tree or other vegetation that the Council is satisfied is a risk to human life or property, or
- (d) the development is exempt development.

(4) Effect of proposed development on heritage significance

The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).

(5) Heritage assessment

The consent authority may, before granting consent to any development:

- (a) on land on which a heritage item is located, or
  - (b) on land that is within a heritage conservation area, or
  - (c) on land that is within the vicinity of land referred to in paragraph (a) or (b),
- require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.

(6) Heritage conservation management plans

The consent authority may require, after considering the heritage significance of a heritage item and the extent of change proposed to it, the submission of a heritage conservation management plan before granting consent under this clause.

(7) Archaeological sites

The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the Heritage Act 1977 applies):



- (a) notify the Heritage Council of its intention to grant consent, and
- (b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

(8) Aboriginal places of heritage significance

The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:

- (a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and
- (b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.

(9) Demolition of nominated State heritage items

The consent authority must, before granting consent under this clause for the demolition of a nominated State heritage item:

- (a) notify the Heritage Council about the application, and
- (b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

(10) Conservation incentives

The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by this Policy, if the consent authority is satisfied that:

- (a) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and
- (b) the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and
- (c) the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and
- (d) the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance, and
- (e) the proposed development would not have any significant adverse effect on the amenity of the surrounding area.

### 1.5.2.5 The Aboriginal Land Rights Act 1983

The NSW *Aboriginal Land Rights Act 1983* (ALR Act), administered by the NSW Department of Aboriginal Affairs, established the NSW Aboriginal Land Council (NSWALC) and Local Aboriginal Land Councils (LALCs). The ALR Act requires these bodies to:

- take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law;

- promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

These requirements recognise and acknowledge the statutory role and responsibilities of New South Wales Aboriginal Land Council and Local Aboriginal Land Councils.

The ALR Act also establishes the Office of the Registrar whose functions include but are not limited to, maintaining the Register of Aboriginal Land Claims and the Register of Aboriginal Owners.

Under the ALR Act the Office of the Registrar is to give priority to the entry in the Register of the names of Aboriginal persons who have a cultural association with:

- lands listed in Schedule 14 to the NPW Act;
- lands to which section 36A of the ALR Act applies (NSW Government, 1974 & DECCW 2010).

#### **1.5.2.6 The Native Title Act 1993**

The *Native Title Act 1993* (NTA) provides the legislative framework to:

- recognise and protect native title;
- establish ways in which future dealings affecting native title may proceed, and to set standards for those dealings, including providing certain procedural rights for registered native title claimants and native title holders in relation to acts which affect native title;
- establish a mechanism for determining claims to native title;
- provide for, or permit, the validation of past acts invalidated because of the existence of native title.

The National Native Title Tribunal has a number of functions under the NTA including maintaining the Register of Native Title Claims, the National Native Title Register and the Register of Indigenous Land Use Agreements and mediating native title claims (NSW Government, 1974 & DECCW 2010).

#### **1.5.2.7 New South Wales Heritage Register and Inventory 1999**

The State Heritage Register is a list of places and objects of particular importance to the people of NSW. The register lists a diverse range of over 1,500 items, in both private and public ownership. Places can be nominated by any person to be considered to be listed on the Heritage register. To be placed an item must be significant for the whole of NSW. The State Heritage Inventory lists items that are listed in local council's local environmental plan (LEP) or in a regional environmental plan (REP) and are of local significance.

#### **1.5.2.8 Register of Declared Aboriginal Places 1999**

The NPW Act protects areas of land that have recognised values of significance to Aboriginal people. These areas may or may not contain Aboriginal objects (i.e. any physical evidence of Aboriginal occupation or use). Places can be nominated by any person to be considered for Aboriginal Place gazettal. Once nominated, a recommendation can be made to EPA/OEH for consideration by the Minister. The Minister declares an area to be an 'Aboriginal place' if the Minister believes that the place is or was of special significance to Aboriginal culture. An area can have spiritual, natural resource usage, historical, social, educational or other type of significance.

Under section 86 of the NPW Act it is an offence to harm or desecrate a declared Aboriginal place. Harm includes destroying, defacing or damaging an Aboriginal place. The potential impacts of the development on an Aboriginal place must be assessed if the development will be in the vicinity of an Aboriginal place (DECCW 2010).

### 1.5.3 Local Planning Instruments

#### 1.5.3.1 Gosford Local Environment Plan 2014

The Gosford Local Environmental Plan was prepared by Gosford City Council in 2014. Section 5.10 deals with Heritage Conservation. The plan states in Clause 1:

The objectives of this clause are as follows:

- (a) to conserve the environmental heritage of Gosford
- (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,
- (c) to conserve archaeological sites,
- (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

The plan states in Clause 2, that consent is required when:

- (a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):
  - (i) a heritage item,
  - (ii) an Aboriginal object,
  - (iii) a building, work, relic or tree within a heritage conservation area.
- (b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item.
- (c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,
- (d) disturbing or excavating an Aboriginal place of heritage significance.
- (e) erecting a building on land:
  - (i) on which a heritage item is located or that is within a heritage conservation area, or
  - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.
- (f) subdividing land:
  - (i) on which a heritage item is located or that is within a heritage conservation area, or
  - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

In addition to this Clause 8 states:

The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:

- (a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at

- the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and
- (b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.

This report is fulfilling section 8 (a) of this clause.

#### **1.5.3.2 Gosford Development Control Plan 2013**

The Gosford Development Control Plan was prepared by Gosford City Council in 2013. Heritage Items are deferred to:

- Heritage Provisions in Part 5.10 of the Gosford LEP 2014

It is based on this provision that the protection and conservation of Aboriginal places of heritage significance are assessed.

#### **1.5.4 Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales**

This assessment conforms to the parameters set out in the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales states that if;

- a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely, then further archaeological investigation and impact assessment is necessary.

#### **1.5.5 Code of Practice for Archaeological Investigation of Aboriginal objects in New South Wales**

This assessment conforms to the parameters set out in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974*, (DECCW 2010).

#### **1.5.6 Guidelines**

This report has been carried out in consultation with the following documents which advocate best practice in New South Wales:

- Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (DECCW 2010);
- Aboriginal Archaeological Survey, Guidelines for Archaeological Survey Reporting (NSW NPWS 1998);
- Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010);
- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010);
- Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998);
- Australia ICOMOS 'Burra' Charter for the conservation of culturally significant places (Australia ICOMOS 1999);

- Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010);
- Protecting Local Heritage Places: A Guide for Communities (Australian Heritage Commission 1999).

## 1.6 ACKNOWLEDGEMENTS

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- [REDACTED], Awabakal Traditional Owners Aboriginal Corp.
- [REDACTED], Awabakal Descendants Traditional Owners
- [REDACTED], Corroboree Aboriginal Corp.
- [REDACTED], Didge Ngunawal Clan
- [REDACTED], Woka Aboriginal Corporation Preservation of Culture & Heritage

## 2.0 DESCRIPTION OF STUDY AREA

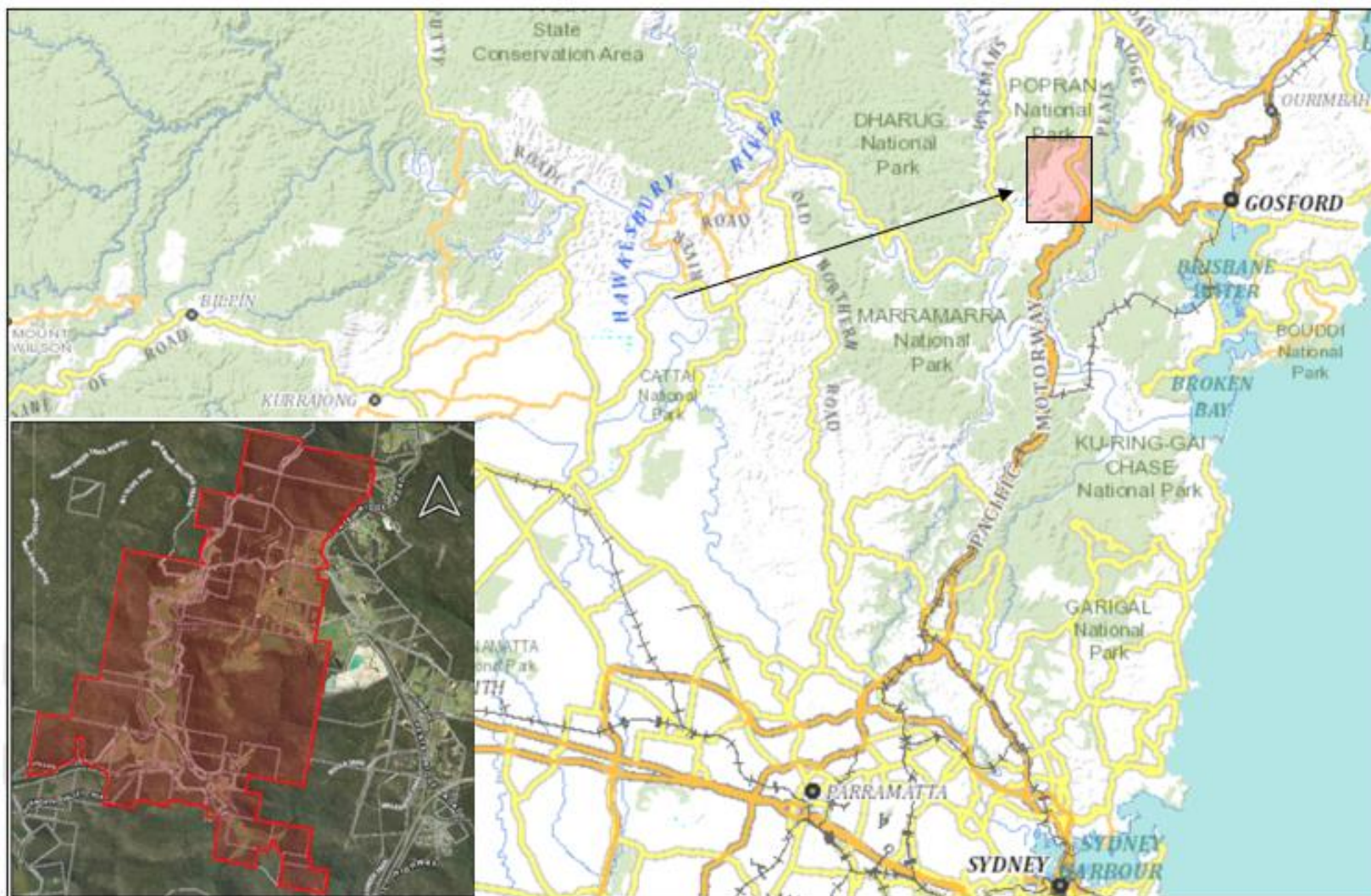
The study site encompasses 49 lots across Glenworth Valley and Calga in the Parish of Cowan, County of Northumberland (Figures 2.1-2.2). The street address, lot and deposit plans are presented below.

Street Address	Suburb
1992 Peats Ridge Road (part of lot)	Calga
2070 Peats Ridge Road	Calga
48 and 51 Polins Road	Calga
8, 45 and 81 Cooks Road	Calga
69 and 69A Cooks Road,	Glenworth Valley

Lot	Deposited Plan
19-25, 30-33, 37, 50, 53, 64, 65, 68, 81, 82, 85-87, 89, 91 and 108	755221
22, 23, 32, 73, 75 and 76	755253
1, 3	617088
881	563889
1	1222754
245	48817
7	1230083
7012	1059767
7029	93603
7035	1051932
7036	1059768
7303	1154929
882	563889
A	365595
C	382358
2	1139242
102 (Part)	1139060
7039	1059766
7303	1161109

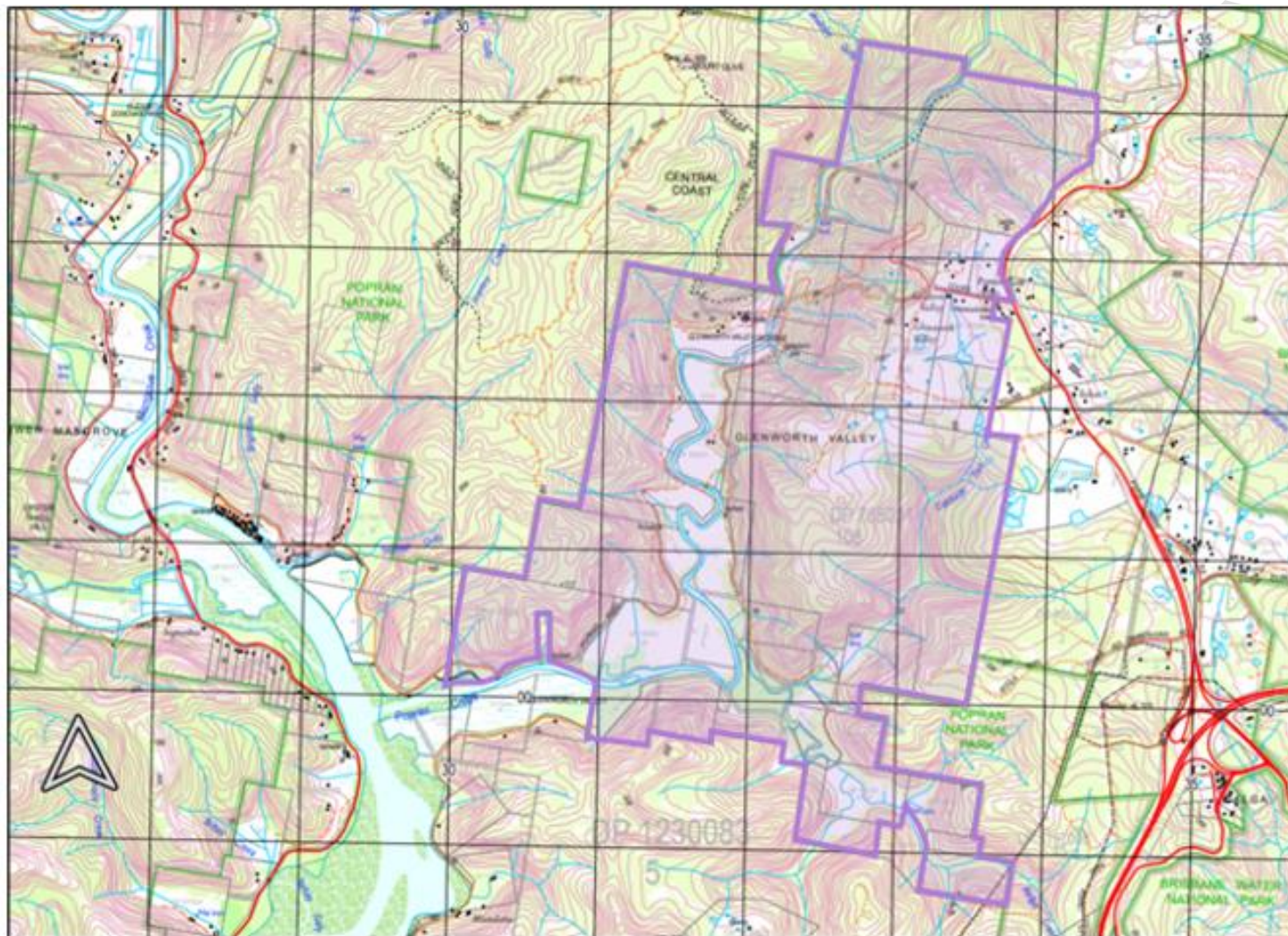
2.1





**Figure 2-1 Aerial with study area location.**  
Study area outlined in red, black arrow. Six Maps. LPI Online (accessed 23/07/2021).





**Figure 2-2 Topographic Map with Site Location.**  
Study area indicated in purple. Six Maps. LPI Online (accessed 23/07/2021).



## 2.2 ENVIRONMENTAL CONTEXT

To adequately understand and assess the potential Aboriginal archaeological resource that may be present within the study area it is vital to understand the environment in which the Aboriginal inhabitants of the study area carried out their activities. The environment that Aboriginal inhabitants lived in is a dominant factor in shaping their activity and therefore the archaeological evidence created by this activity. Not only will the resources available to the Aboriginal population have an influence on the evidence created but the survival of said evidence will also be influenced by the environment.

Due to the expansive nature of the study area, multiple soil landscapes are presented. Each soil landscape will be outlined below with associated topographic features, vegetation, geology, and soils.

### 2.2.1 Watercourses

The site lies within a resource rich area, with both freshwater and estuarine resources available. Popran Creek travels through the western extent of the site with smaller tributaries such as Kellys Creek and Cabbage Tree Creek located in the southern and central areas of the study site. Ausburn Creek and Christy's Gully, tributaries from Mooney Mooney Creek lie 632m and 1.2kms east of the site respectively. The estuarine body, Brisbane Water is approximately 10km to the southeast and the fourth order watercourse, the Hawkesbury River lies approximately 7.6km to the south of the site.

## 2.3 HAWKESBURY SOIL LANDSCAPE

### 2.3.1 Topography

The Hawkesbury soil landscape consists of rolling to very steep hills with narrow crests and ridges. Narrow incised valleys, with rocky benches, broken scarps and boulders are present. Local relief is between 40 – 200m, with slopes >25% and rock outcrops > 50%. An extreme soil erosion hazard is present in conjunction with low soil fertility.

### 2.3.2 Geology and Soils

Hawkesbury sandstone is the dominant geological formation within the area, with medium to coarse grained quartz sandstone present, in addition to minor shale and laminate lenses. Sandstone appears blocky, with massive or cross-bedded sheet facies with vertical or subvertical joint sets. Notably soils are discontinuous, with often >50% of the surface covered by sandstone rock outcrop, however soils within joint lines may be >100cms deep.

Table 2-1 Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
ha1	A1 Horizon	<b>Loose coarse quartz sand.</b> Sand to sandy loam with a porous fabric and loose apedal single grained structure. Charcoal and roots are common, weakly weathered sandstone fragments may also be present. Colours range from brownish black to dull yellow orange and generally becomes lighter with depth.

<b>ha2</b>	B or C Horizon	<b>Earthy yellowish brown sandy clay loam.</b> Clayey sand to clayey sand loam with a porous earthy fabric. Colours include yellow orange, bright yellowish brown and yellowish brown. Peds are generally large, sub angular and blocky when present and gravels, stones and ironstone plated sandstone fragments are common, roots and charcoal is rare. ha2 often occurs in association with sandstone bedrock.
<b>ha3</b>	B or C Horizon	<b>Pale strongly pedal light clay.</b> Fine sandy clay loam to medium clay with rough faced peds and strongly pedal structure. Colours include bright reddish brown to light grey with red, orange and grey mottles common. Colours vary in relation to drainage characteristics and are generally pale. Charcoal fragments and roots are generally absent and stratified ironstone gravels are common.

**Table 2-2 Expected Hawkesbury soil profile depth based on landform**

### **Crests and ridges**

- up to 20cm of loose quartz sand (**ha1**) overlies either
- bedrock or
- <30cms of earthy yellowish brown sandy clay loam (**ha2**)

*N.B The total soil profile is <50cm, boundaries are gradual and texture increases slowly with depth.*

### **Side slopes and benches**

#### **Outside of benches**

- 10 to 30cm of **ha1** overlays
- bedrock

#### **Higher sides of benches**

- 5 to 15cms of **ha1** overlies
- <50cms of **ha2**

*N.B soils are discontinuous with sandstone outcrops and boulders sometimes covering > 50% of ground surfaces. Soil boundaries are gradual or clear and total soil depth is generally <70cms however on joint lines this may exceed 200cms. Friable sandstone may occur as a deep subsoil in poorly drained pockets and along drainage lines.*

#### **Occasionally Higher sides of benches have**

- <30cms of **ha1** which overlies
- <50cms of strongly pedal clay subsoil (**ha3**)

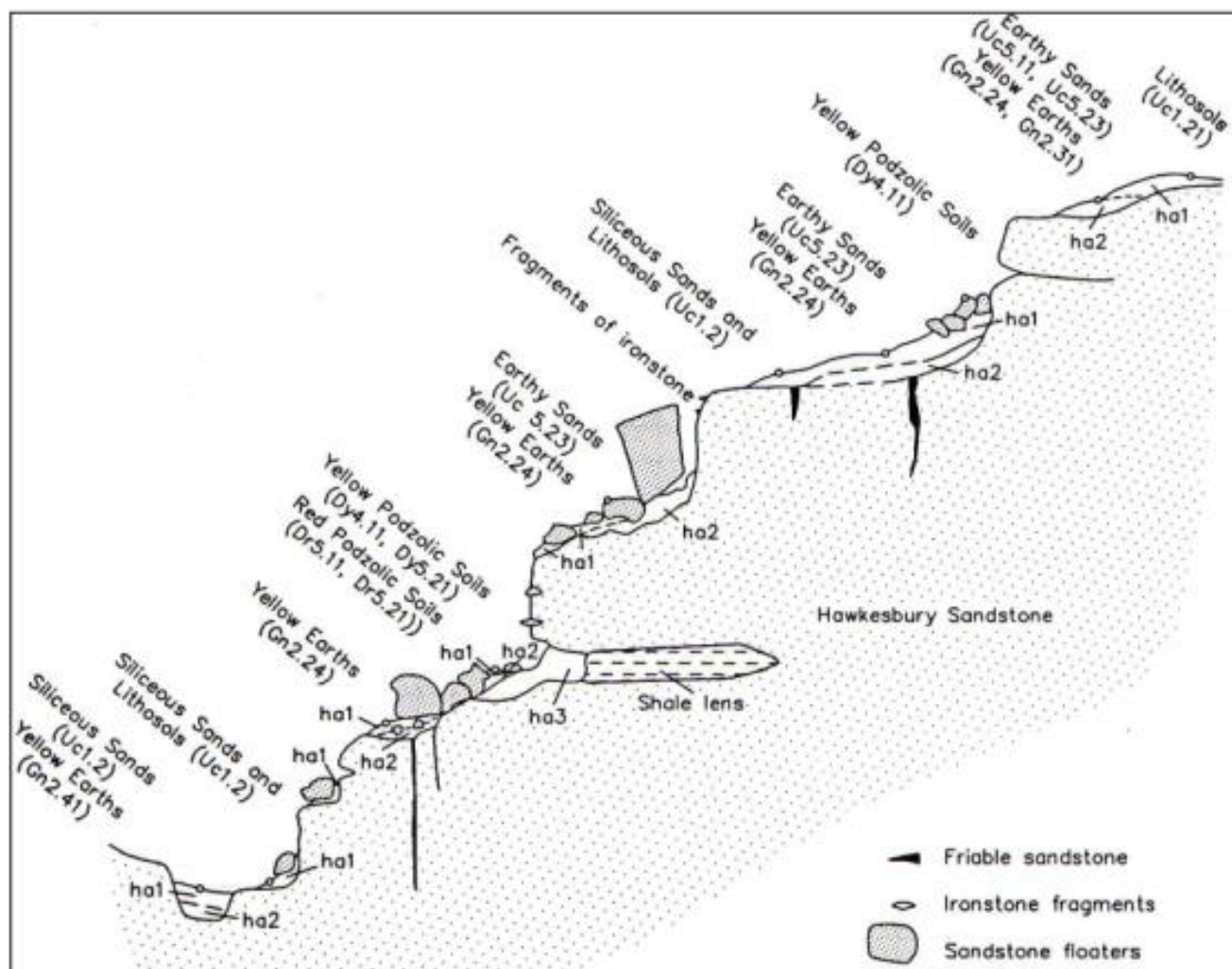
*N.B soil boundaries are clear to sharp with soil depth generally <150cms.*

### **Drainage Lines**

- Exposed beds have deposits of loose quartz sands (**ha1**)
- Occasionally overlying **ha2**.

*N.B The total soil profile is generally <100cm and the boundaries between the soil horizons are generally clear.*

PUBLIC EXHIBITION



**Figure 2-3** Cross Section of the Hawkesbury soil landscape illustrating relationships between landscape features and dominant soil materials.

Soil Landscapes of the Gosford- Lake Macquarie 1:100 000 Sheet Report (Murphy and Tille 1993).

### 2.3.3 Vegetation

Vegetation across Hawkesbury soil landscape is generally uncleared open woodland and open forest with pockets of tall open forest and closed forest in more protected areas. Disturbance and land clearing has not been extreme in this area, due to land use as national parks, state forests and crown land.

Low open woodland is present across exposed crests and ridges and is comprised of yellow bloodwood (*Eucalyptus exima*), red bloodwood (*Eucalyptus gumifera*), grey gum (*Eucalyptus punctata*), Sydney peppermint (*Eucalyptus piperita*), narrow leaved stringybark (*Eucalyptus oblonga*), scribbly gum (*Eucalyptus haemastoma*), dwarf apple (*Angophora hispida*) and old man banksia (*Banksia serrata*).

In western sections, scribbly gum (*Eucalyptus racemosa*) and narrow leafed apple (*Angophora bakeri*) dominate. A shrub understorey is present and common families include Hakea spp., Banksia spp., wattle (*acacia* spp.), tea-tree (*Leptospermum*) spider flower (*Grevillea* spp.) and native heath (*Epacris* spp.). On sheltered sideslopes open forest and open woodland with smooth barked apple (*Angophora costata*) and Sydney peppermint (*Eucalyptus piperita*) are present. Blackbutt (*Eucalyptus pilaris*) and blue leaved stringy barks (*Eucalyptus agglomerata*) have been planted in the Olney and Watagan State Forests.

## 2.4 WATAGAN SOIL LANDSCAPE

### 2.4.1 Topography

Rolling to very steep hills and slopes are characteristic of this soil landscape, with local relief between 50 – 220m and slope gradient of >25%. Convex and narrow (<300m) crests and ridges, steep hillslopes and talus slopes containing sandstone boulders are observable with narrow sandstone and colluvial benches occasionally present. Slopes with gradients above 70% often have cliffs and scarps more than 10m high. Foundational and soil erosion hazards exist for this area.

### 2.4.2 Geology and Soils

The soils are complex and have formed across the Narrabeen Group; Gosford Subgroup – Terrigal Formation. This is comprised of massive and cross-bedded lenticular beds of quartz lithic sandstone, siltstone and claystone. Massive sandstone units form bold cliff exposures.

Table 2-3 Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
wn1	A Horizon	<b>Friable dark brown loam.</b> As a topsoil, high organic content is often present, which consists of dark brown sandy loam to sandy clay loam. The fabric is generally rough ped but occasionally an earthy fabric is present. Sandstone, fragments, ironstone fragments and roots are common, charcoal is rare.
wn2	A1 or A2 Horizon	<b>Hard-setting yellowish brown sandy clay loam.</b> Colours include yellowish brown, dark yellowish brown and light brownish grey. This has an apedal massive structure with a

		slowly porous earthy fabric and occurs as a topsoil or shallow subsoil. Sandstone, ironstone and charcoal fragments and roots are common.
<b>wn3</b>	B Horizon	<b>Mottled earthy sandstone colluvium.</b> Coarse grained light sandy clay loam to medium clay with massive structure and earthy fabric. Colour commonly brownish yellow but can include dark yellowish brown and yellow orange. Sandstone boulders and cobbles generally present, roots few and charcoal rare or absent.
<b>wn4</b>	B2 Horizon	<b>Brown strongly pedal clay.</b> Light to medium clay with a strong pedal structure, occurring as a subsoil overlying bedrock. Variable colouration includes reddish brown, pale yellowish brown, strong brown, reddish yellow and yellowish red. Mottles of red and yellow are sometimes present. Peds are crumbs, polyhedral or angular blocky. Rock fragments and roots are rare and charcoal is absent.
<b>wn5</b>	B3 Horizon	<b>Light grey mottled clay.</b> A medium clay with massive structure when wet, or strongly developed angular blocky structure and smooth faced dense ped fabric when dry. Occurs as a subsoil overlying shale bedrock. Colours range from light grey to greyish yellow brown. Red, yellow and grey mottles common. Roots are rare, charcoal fragments are absent and small sub angular and angular shale fragments are present.
<b>wn6</b>	B or C Horizon	<b>Earthy yellowish brown light sandy clay loam.</b> Clayey sand to sandy clay loam. Apedal massive to occasionally weak pedal structure with distinctly porous earthy fabric. Occurs as a subsoil in association with sandstone bedrock. Colours include yellow orange, bright yellowish brown and yellowish brown. Gravels, stones, and ironstone plated sandstone fragments are few, roots and charcoal are generally rare.

Table 2-4 Expected Watagan soil profile depth based on landform

**Crest and Ridges (Coarse sandstone parent material)**

- up to 40cm of friable dark brown loam (**wn1**) overlies
- bedrock. OR
- 30 - 150cm of earthy yellowish brown light sandy clay loam (**wn6**)

*N.B coarse quartz sandstones common across the broader and flatter crests and ridges. Rock outcrops present and soils often discontinuous. Gradual boundary between soils, with a total soil depth below 100cms.*

**Crest and Ridges (Fine grained parent material)**

- 10 – 30cms of **wn1** or
- 10 – 30cms of hardsetting yellowish brown sandy clay loam (**wn2**) overlying
- <150cms of brown pedal clay subsoil (**wn4**) overlying
- Up to 50cm of light grey clay (**wn5**) overlying
- Bedrock.

*N.B Boundaries between soils is sharp and total soil depth is between 100 and 200cms.*

### Sideslopes

#### Sheltered sideslopes

- 10cms of litter overlies
- 10 – 30cms of **wn1** overlying
- 50-150cms of **wn4**
- Up to 50cms of **wn5** may occur as a deep subsoil, overlying
- bedrock

*N.B Boundaries between soil profiles are sharp and depth is between 50 – 200cms.*

#### Drier exposed sideslopes

- 10 - 30cms of **wn2** overlies
- 50-150cms of **wn4**
- Occasionally 10 – 20cms of **wn1** overlies
- 10 – 30cms of **wn2** and
- 50 – 150cms of **wn4**.
  
- Where coarse sandstones occasionally outcrop, **benches** occur which have 20 – 100cm of **wn1** which can occur as a continuous layer or
  
- **wn1** can overlie
- Up to 150cms of **wn6**

*N.B Boundaries are gradual and total soil depth can range from 20 - >200cms. Sandstone boulders are often present on the surface and buried within the soil.*

### Colluvial Benches and Footslopes

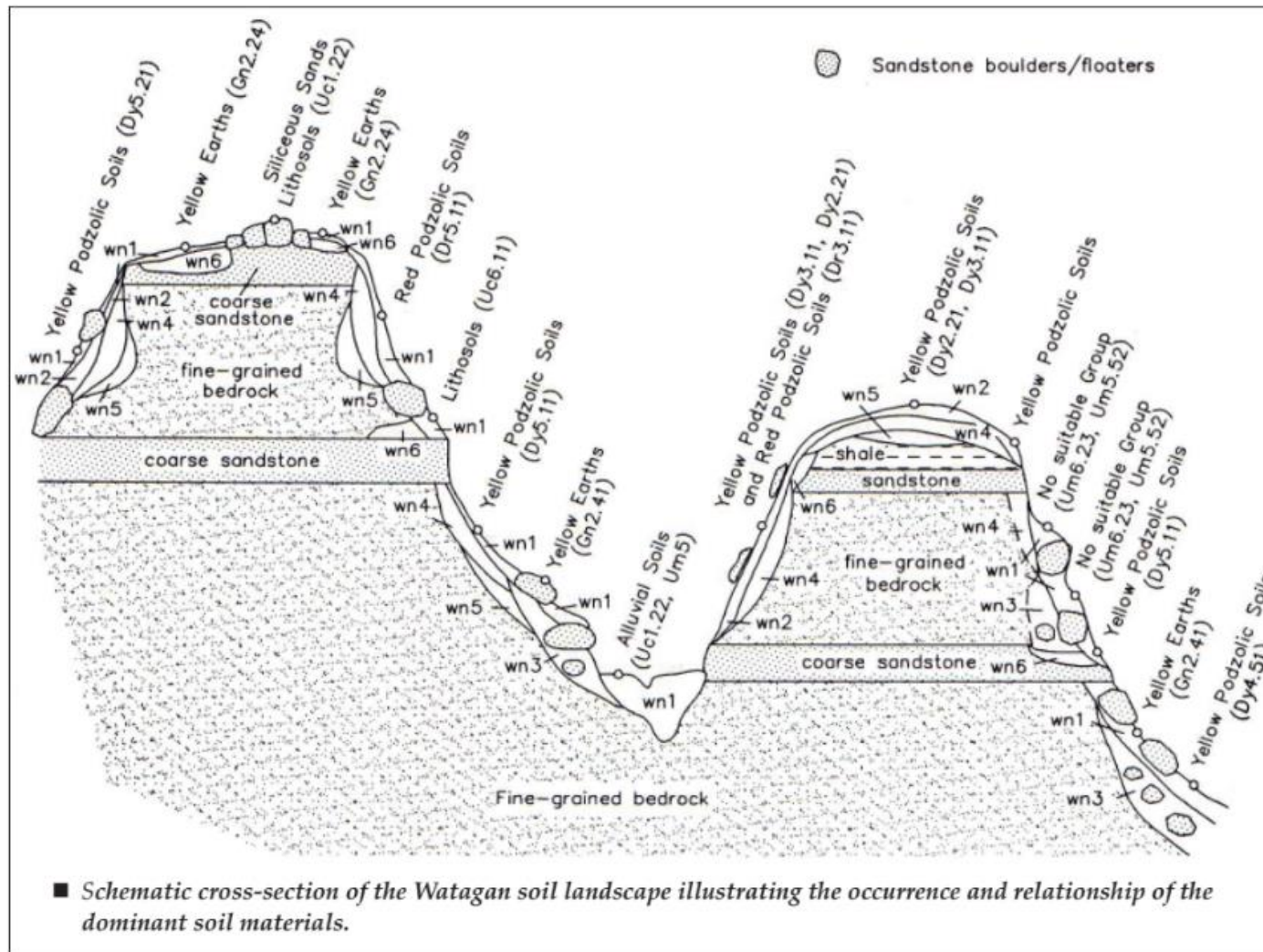
- Up to 150cms of **wn1** overlies
- Sandstone boulders.
- Often sandstone colluvium has weathered in situ to produce up to 200cms of mottled sandstone colluvium (**wn3**) particularly evident on footslopes.
- Which may be overlain by **wn1** or sandstone floaters

*N.B total soil depth is often unknown but can be >200cm. Boundaries between the soil material are usually gradual or occasionally clear.*

### Drainage Flats

- Commonly >100cm of **wn1** occurs in valley flats and alluvial soils.





**Figure 2-4** Cross Section of the Watagan soil landscape illustrating relationships between landscape features and dominant soil materials. Soil Landscapes of the Gosford- Lake Macquarie 1:100 000 Sheet Report (Murphy and Tille 1993).



### 2.4.3 Vegetation

Tall eucalypt open forest and closed forests in sheltered gullies are present across this soil landscape. This is comprised of spotted gum (*Eucalyptus maculata*), bastard mahogany (*Eucalyptus umbra*) and northern grey ironbark (*Eucalyptus siderophloia*). Rough-barked apple (*Angophora floribunda*), grey gum (*Eucalyptus punctata*), forest red gum (*Eucalyptus tereticornis*), narrow-leaved stringybark (*Eucalyptus oblonga*) and forest oak (*Allocasuarina torulosa*) occur with a grass understorey on dry north and western slopes. Common species in closed forests within protected valleys include coachwood (*Ceratopetalum apetalum*) and sassafras (*Doryphora sassafras*). Within the Olney Forest, some crests have been cleared and replaced with eucalyptus plantations.

Open forests are present across protected valleys of the McDonald Ranges, the Hawkesbury Valley and on the western side of Brisbane Water. This is comprised of mountain blue gum (*Eucalyptus deanei*), rough-barked apple (*Angophora floribunda*), white mahogany (*Eucalyptus acmenoides*), turpentine (*Syncarpia glomulifera*), grey gum (*Eucalyptus punctata*), forest red gum (*Eucalyptus tereticornis*), thin-leaved stringybark (*Eucalyptus eugenioides*) and forest oak (*Allocasuarina torulosa*).

## 2.5 LAMBERT SOIL LANDSCAPE

### 2.5.1 Topography

The topography of this landscape consists of undulating to rolling low hills. Slopes are generally less than 20%, with local relief between 20 – 120m, however sandstone bedrocks can outcrop as wide (10-100m) benches and have broken scarps. Small hanging valleys are often associated with gentle- moderately inclined sideslopes. An extreme erosional hazard is present, in conjunction with rock outcrops, low fertility, seasonal waterlogging and perched water tables.

### 2.5.2 Geology and Soils

The Lambert soil landscape is associated with Hawkesbury Sandstone which includes medium to coarse grained quartz sandstone with minor shale and laminate lenses. Soils are typically shallow.

Table 2-5 Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
la1	A1 Horizon	<b>Loose stony brown sandy loam.</b> This occurs as a topsoil and can be olive brown or black when a high level of organic material is present. It ranges from stony brown loamy sand to sandy loam with a porous sandy fabric. Charcoal and roots are common, sandstone and quartz fragments are common and increase with depth.
la2	B Horizon	<b>Earthy yellowish brown clayey sand.</b> This subsoil ranges from massive to weak pedal structure and a porous earthy fabric that decreases in porosity with depth. Colours include yellow, yellow-brown and rust coloured mottles are present in association with root traces. Charcoal and roots are rare; however sandstone and ironstone fragments are common.

<b>la3</b>	B Horizon	<b>Angular blocky ‘puggy’ clay.</b> Texture varies between fine sandy clay loam to medium clay. Soil is massive when saturated and peds are generally smooth faced, however subangular and polyhedral peds sometimes occur. Colour is generally yellowish brown however may be light yellow orange or pale grey. Red, orange and grey mottles are common as are platy iron coated ironstone fragments. Roots and charcoal are absent.
<b>la4</b>	B/C Horizon	<b>Earthy mottled pale clayey sands.</b> This generally has an apedal massive structure with a porous earthy fabric and texture can range from loamy sand to sandy clay loam, to clayey sands and sandy loams. Colours included light yellow, bright yellowish brown and rusted pipe mottles may be present in wet conditions. Sandstone, charcoal and roots are usually absent.

**Table 2-6 Expected Lambert soil profile depth based on landform**

### **Benches (Outsides, insides and larger)**

#### **Outsides of benches:**

- up to 20cm of loose stony brown sandy loam (**la1**) overlies
- bedrock

*N.B The total soil profile will not exceed 60cm.*

#### **Insides of benches:**

- Up to 20cm of **la1** overlies
- up to 50cm of earthy yellowish brown clayey sand (**la1**)

*N.B The total soil profile usually <100cm. soil boundaries are gradual.*

#### **Larger benches:**

- characterised by areas of exposed flat bedrock with shallow discontinuous pockets / islands of up to 30cms of **la1**

*N.B The total soil depth is generally <10cm.*

### **Wet Areas and Drainage Lines**

- Up to 20cm **la1** overlies
- Up to 50cm earthy mottled pale clayey sands **la4** OR
- Up to 50cm of white ‘puggy’ clay (**la3**) where shale lenses occur

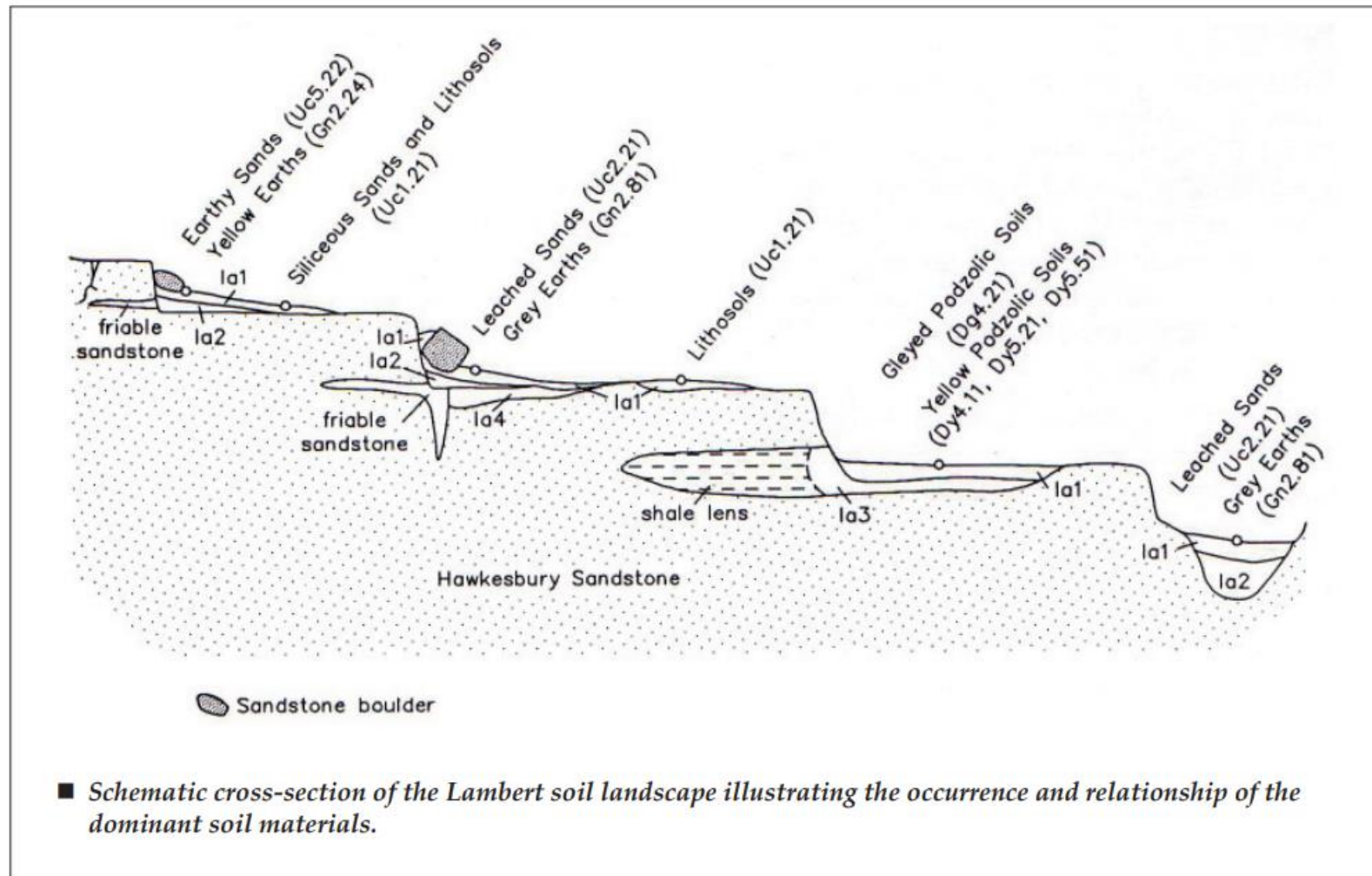
*N.B Boundaries are gradual between **la1** and **la2** however boundaries between **la1** and **la3** are sharp. Total soil depth rarely exceeds 100cm. Secondary depositional yellow earth material is often found adjacent to drainage lines.*

### **Shale Lenses**

Where shale lenses have impacted soil formations:

- Up to 20cm of **la1** overlies
- Up to 50cm of white puggy clay (**la3**)

*N.B boundaries are sharp and clear and total soil depth is <60cm.*



**Figure 2-5** Cross Section of the Lambert soil landscape illustrating relationships between landscape features and dominant soil materials. Soil Landscapes of the Gosford- Lake Macquarie 1:100 000 Sheet Report (Murphy and Tille 1993).

### 2.5.3 Vegetation

European land impacts have generally been less extreme across this soil profile with large areas utilised for national parks and crown land. This is in association with moderate to high limitations present for urban development and high to severe limitations for cultivation and grazing. Vegetation is impacted by strong dry winds, frequent bushfires and overdried or oversaturated shallow soils. Vegetation is characterised by uncleared open-hearthlands, closed-hearthlands and scrublands and smaller areas low eucalyptus woodland.

Across areas with prolonged oversaturation or seepage, heath banksia (*Banksia ericifolia*) and dagger hakea (*Hakea teretifolia*) are dominant. Shrubs associated with this include native heath (*Epacris spp.*), tea-trees (*Leptospermum spp.*), eggs and bacon (*Dillywynia spp.*), billy buttons (*Kunzea spp.*) and various spider flowers (*Grevillea spp.*). Dwarf apple (*Angophora hispida*) can be identified in western areas near Simpsons Pass.

Low eucalyptus open woodland is characterised by scribbly gum (*Eucalyptus haemastoma*), grey gum (*Eucalyptus punctata*) and red bloodwood (*Eucalyptus gummiifera*). In areas with deeper soils and unimpeded drainage, smooth barked apple (*Angophora costata*) and shrub she-oak (*Allocasuarina distyla*) are located.

## 2.6 HAWKESBURY RIVER SOIL LANDSCAPE

### 2.6.1 Topography

This soil landscape occurs over the floodplains of the Hawkesbury River and its tributaries on Quaternary Alluvium. Excluding riverbanks, the topography is generally level, with a local relief of <5m and slope gradients of 5%. Low lying swampy depressions, low terraces, meander scrolls, point bars and depositional fans can occur.

### 2.6.2 Geology and Soils

This soil landscape has formed across the quaternary alluvium which contains gravels, sands, silts and clays. Soils are complex due to dynamic formative environments. These soils can have low fertility, permanent or seasonal waterlogging, flooding and foundational hazards.

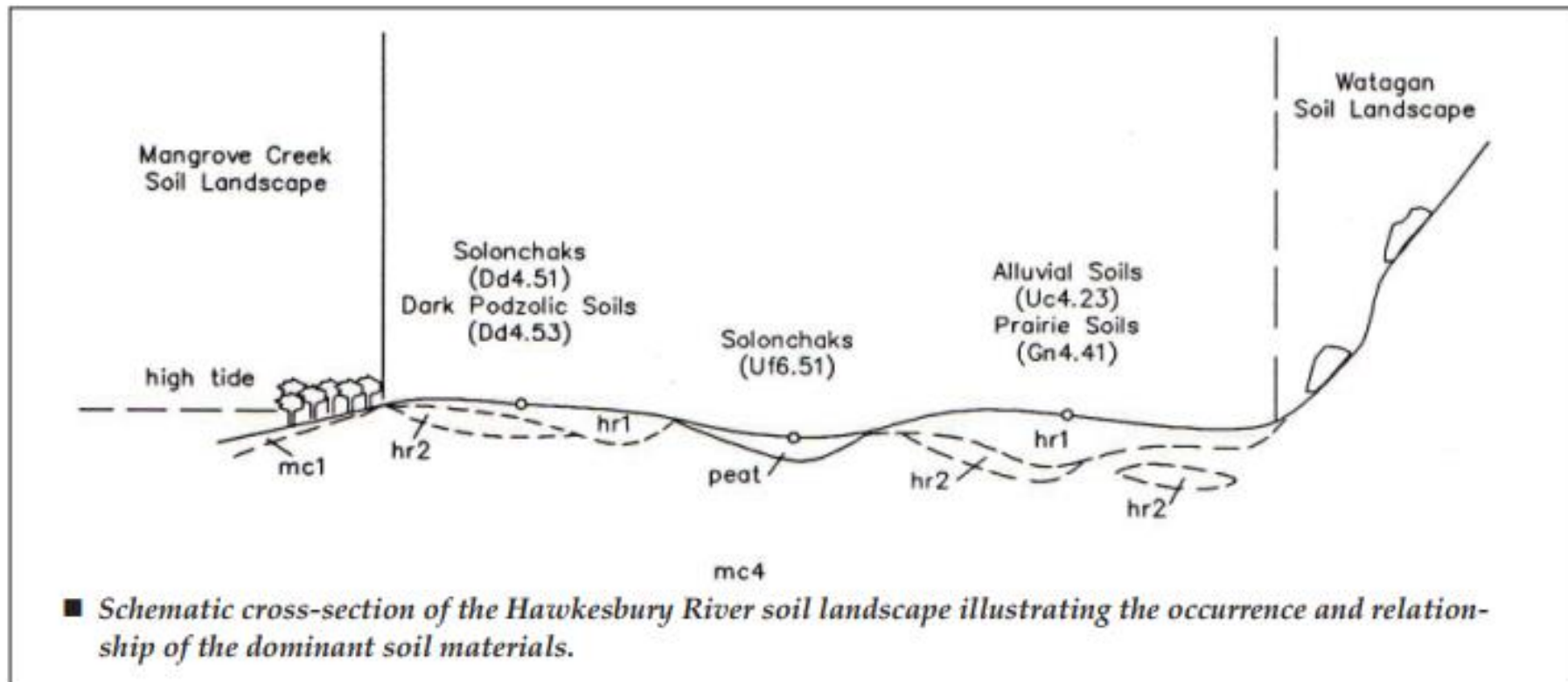
Table 2-7 Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
hr1	A Horizon	<b>Brownish black to black sands and loams.</b> This has a weak to moderate sub angular blocky structure with a rough ped fabric. Colour is predominantly black or brownish black. Alluvial bedding is occasionally evident, roots are numerous and charcoal and stones are rare.
hr2	A2 Horizon	<b>Mottled brown sands.</b> Sand to loamy sand texture with massive structure and porous sandy fabric. Colours vary between dark brown and pale yellowish brown and slight orange mottling may be visible. A seasonally perched water table may be present. Roots are few, charcoal and stone are rare- absent.

<b>mc4</b>	B Horizon	Mottled gleyed clays. Saturated mottled grey sandy clay loam to heavy clay with an apedal massive, dense structure and non-porous fabric. May appear brownish black, greyish yellow brown or brownish grey. Orange brown mottling may be present. Shell fragments may occur in lenses or bands.
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**Table 2-8 Expected Hawkesbury River soil profile depth based on landform**

<b>General</b>
<ul style="list-style-type: none"> <li>➤ &gt;100cms of brownish black sands and loams (<b>hr1</b>) occurs as a topsoil and subsoil. Or</li> <li>➤ Up to 40cm of <b>hr1</b> may overlie</li> <li>➤ &gt;200cm of mottled gleyed clay (<b>mc4</b>)</li> <li>➤ Occasionally 30cm of brown mottled sands occurs between <b>hr1</b> and <b>mc4</b></li> <li>➤ Lenses of <b>hr2</b> can occur within <b>mc4</b></li> </ul> <p><i>N.B The total soils are complex and highly variable.</i></p>
<b>Swampy Areas</b>
<ul style="list-style-type: none"> <li>➤ up to 40cm of waterlogged loamy peat overlies</li> <li>➤ &gt;100cm of <b>mc4</b></li> <li>➤ Occasionally clean yellow quartz sands and gravels are thrown on riverbanks after flooding.</li> </ul>



**Figure 2-6** Cross Section of the Hawkesbury River soil landscape illustrating relationships between landscape features and dominant soil materials.  
Soil Landscapes of the Gosford- Lake Macquarie 1:100 000 Sheet Report (Murphy and Tille 1993).



### 2.6.3 Vegetation

The vegetation across this soil landscape is no longer in a native state and is comprised of a variety of introduced and noxious types of vegetation. This movement away from the natural vegetation is a result of previous land clearing and this area is largely used for agricultural and recreational purposes.

The vegetation now consists of extensively cleared scrub and tall open forest which has associated improved and native pastures. Swamp oak (*Casuarina glauca*), swamp paperbark (*Melaleuca ericifolia*) and swamp mahogany (*Eucalyptus robusta*) exist in poorly drained areas. In areas of infrequent tidal inundation some rushlands can occur. Tall open forest is present across better drained areas and is comprised of mountain blue gum (*Eucalyptus deanei*) and rough barked apple (*Angophora floribunda*).

## 2.7 SYDNEY TOWN LANDSCAPE

### 2.7.1 Topography

The Sydney Town landscape lies over undulating to rolling low hills and moderately inclined slopes. This occurs from the edge of the Somersby Plateau from Maroota in the south-west to the Watagan Forest in the far north in conjunction to the Watagan Mountains and McDonald Ranges. Slopes gradients are 5-25% and local relief is up to 80m. Ridges and crests are broad (100-300m) when present, slopes are uneven, moderately inclined and waxing and drainage lines are narrow and incised. Sandstone benches are occasionally visible across drainage lines. Soils are shallow to deep and moderate to severe sheet erosion occurs across extensively cleared areas.

### 2.7.2 Geology and Soils

The geology consists of both Hawkesbury Sandstone and Narrabeen Group – Gosford Subgroup – Terrigal Formation. The Hawkesbury Sandstone consists of medium to coarse grained quartz sandstone with minor shale and laminate lenses whilst the latter formation consists of lithic/ quartz sandstone, siltstone and claystone. Coarse quartz sandstone has been identified through field surveys are the dominant lithology.

Table 2-9 Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
st1	A1 Horizon	<b>Loose brown sandy loam.</b> This topsoil generally has an apedal single grained structure and porous sandy fabric however a rough ped fabric and weak sub angular blocky structure can occasionally occur. Colours can include dark brown and greyish yellow brown, with colour lightening with depth. Roots, charcoal and sandstone are common.
st2	B Horizon	<b>Earthy bright brown sandy clay loam.</b> This is generally brightly coloured yellowish brown or brown and texture increases from light sandy clay loam to sandy clay loam with depth. A massive apedal structure with porous earthy fabric is observable and this is hardsetting when exposed with charcoal and roots few but sandstone common. In the upper zones faunal casts and channels present and often infilled with <b>st1</b> .

<b>st3</b>	B/C Horizon	<b>Strongly pedal clay.</b> Light to medium clay commonly occurring as a subsoil derived from Hawkesbury Sandstone shale lenses. A pale coloured rough faced ped fabric is typical, however site drainage can impact this. Colours include bright reddish brown and light grey. Red orange and grey mottles often occur. Charcoal and roots are rare or absent, however stratified ironstone gravels are common.
<b>st4</b>	B2 / B3 Horizon	<b>Grey massively mottled sandy clay loam.</b> Clayey sand to sandy clay loam in texture with apedal massive structure and porous earthy fabric. Light grey to greyish yellow colour with rusted pipe mottles in wet areas with root traces. Roots are few, sandstone and charcoal are rare to absent.

**Table 2-10 Expected Sydney Town soil profile depth based on landform**

### Crests and Slopes

- Generally up to 30cm of loose brown loamy sand (**st1**) overlies
- up to 150cm of earthy bright brown sandy clay loam (**st2**)
- occasionally up to 50cm of grey massive mottled sandy clay loam (**st4**) occurs at depth above sandstone bedrock
- occasionally sandstone benches are covered by up to 30cm of **st1** or
- up to 50cm of **st2**
- in poorly drained areas up to 20cm of **st1** overlies
- up to 150cm of **st4**

### Drainage lines

- Bedrock OR
- up to 100cm of **st1** occasionally overlies
- up to 100cm of **st4**

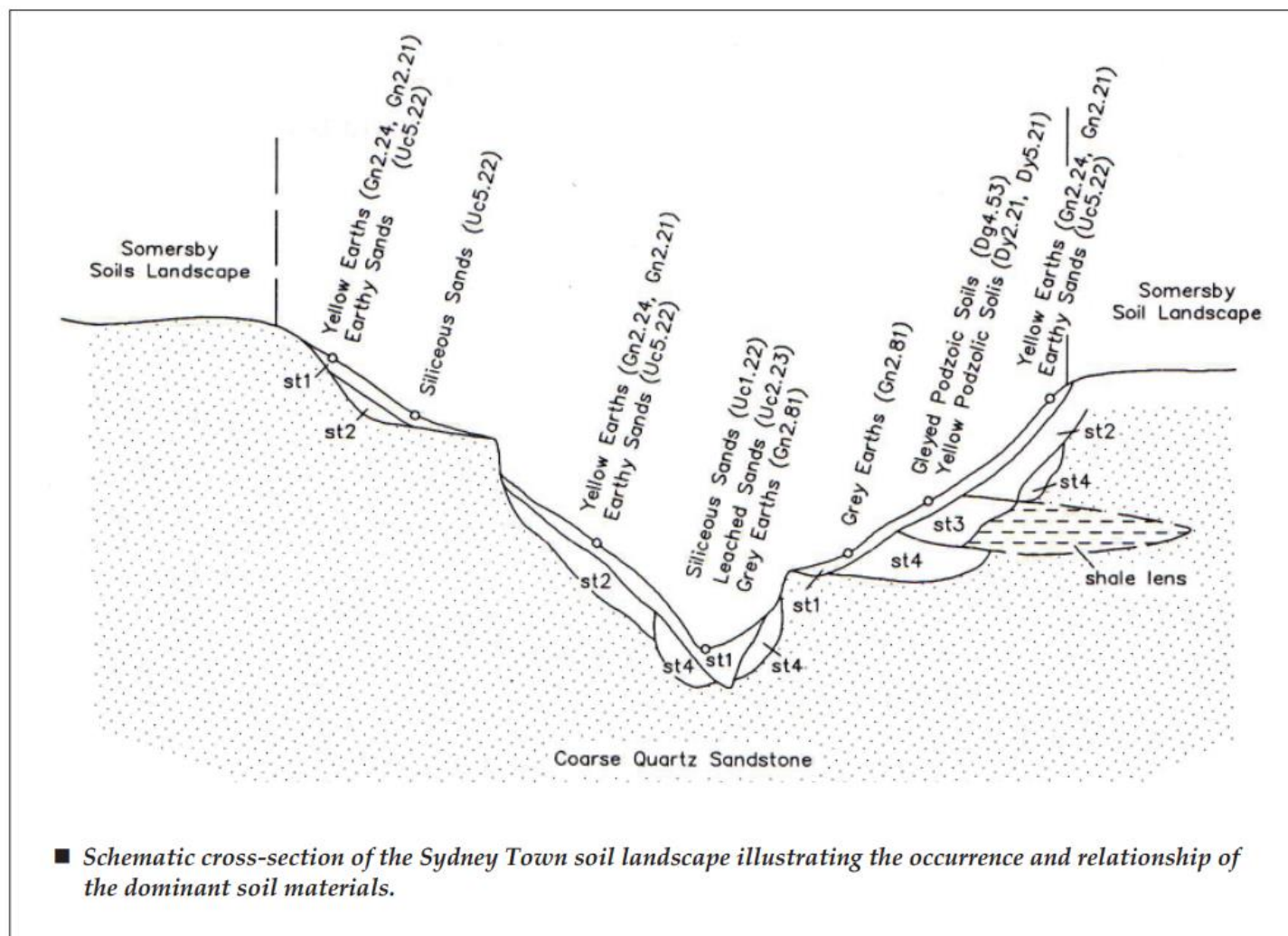
*N.B The total soil depth varies considerably; between 0 – 150cms and boundaries are gradual.*

### Shale Lenses

- 15cm of **st1** overlies
- 50 – 150cm of strongly pedal clay subsoil (**st3**)

*N.B soil boundaries are sharp and total depth is between 50 – 150cm.*





**Figure 2-7 Cross Section of the Sydney Town soil landscape illustrating relationships between landscape features and dominant soil materials.**

Soil Landscapes of the Gosford- Lake Macquarie 1:100 000 Sheet Report (Murphy and Tille 1993).

### 2.7.3 Vegetation

The vegetation across this soil landscape is no longer in a native state and is comprised of a variety of introduced and noxious types of vegetation. This movement away from the natural vegetation is a result of previous land clearing for a range of purposes. This includes grazing, logging, orcharding, recreational tracks and in national park and dam catchment areas, some bushland remains.

Previously this area would have been covered by low eucalypt open woodland and scrub. Remnant species include scribbly gum (*Eucalyptus haemastoma*), brown stringybark (*Eucalyptus capitellata*), red bloodwood (*Eucalyptus gummifera*), smooth-barked apple (*Angophora costata*), sydney peppermint (*Eucalyptus piperita*) and old man banksia (*Banksia serrata*). Understorey shrubs areas with sufficient drainage were comprised of drumsticks (*Isopogon spp.*), grey spider flower (*Grevillea spp.*) and flaky-barked tea-tree (*Leptospermum attenuatum*). Poorly drained shrubland include heath banksia (*Banksia ericifolia*) and dagger hakea (*Hakea teretifolia*). Plantations of blue leaved stringy bark (*Eucalyptus agglomerate*) and blackbutt (*Eucalyptus pilularis*) occur in the Watagan and Olney State Forests.

## 2.8 SOMERSBY SOIL LANDSCAPE

### 2.8.1 Topography

Occurring across undulating low rises to rolling rises on sandstone plateau surfaces, the Somersby soil landscape has local reliefs up to 40m, with slopes <15%. Broad (200-500m) ridges and crests are present with smooth, gently inclined long slopes and narrow drainage lines. Rock outcrops are rare.

### 2.8.2 Geology and Soils

One geological formation underlies the Somersby soil landscape; that being the Hawkesbury Sandstone, consisting of medium to coarse grained quartz sandstone with minor shale and laminate lenses. Ironstone and gravel shale fragments generally increase with depth. Widespread deep weathering has occurred, resulting in friable sandstone. Soils are moderately deep to deep and minor to moderate sheet, rill and gully erosion has occurred in cleared and disturbed areas. Soil fertility is generally very low and highly acidic.

Table 2-11 Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
so1	A1 Horizon	<b>Loose dark brown sandy loam.</b> Loamy sand or sandy loam in texture with an apedal single grained structure and porous sandy fabric. This can occasionally be weakly subangular blocky in structure with a rough faced ped. Colour becomes lighter with depth and is brown or brownish black. Charcoal and roots are present and rounded ironstone nodules are rare.
so2	B Horizon	<b>Earthy yellowish brown sandy clay loam.</b> Porous earthy fabric with massive apedal structure. Texture increased with depth from clayey sand to sandy clay loam. Colours are

		generally bright and include yellowish brown and brown. Rounded gravel sized ironstone nodules are abundant as are faunal casts and channels in the upper sections which are often infilled by <b>so1</b> . Charcoal fragments and roots are rare.
<b>so3</b>	B3 or C Horizon	<b>Pallid grey sandy clay.</b> Sandy clay to loam to light clay. Colours include light grey, dull yellow orange and greyish yellow. Orange and red mottles can occur and becomes larger but less abundant with depth. Roots are rare and unbranching and hard iron indurated nodules are often present.
<b>so4</b>	C Horizon	<b>Friable sandstone.</b> Strongly weathered with a sugary appearance, occurring as a deeply weathered parent material. Colours range from light grey to dull yellow orange and rusty pipe mottles follow root traces. This material can be disrupted with moderate force and strongly weathered sandstone fragments are common with depth and roots few.
<b>so5</b>	B or C Horizon	<b>Saturated pallid greyish yellow brown sandy clay loam.</b> Massive apedal structure with earthy porous fabric, occurring as a subsoil in wet areas. This is characterised by pallid solid colours including greyish yellow brown and dull yellow brown and is loose when exposed. Rusty pipe mottles are present, stone and charcoal are rare and roots are few to common.

Table 2-12 Expected Somersby soil profile depth based on landform

#### General Profile

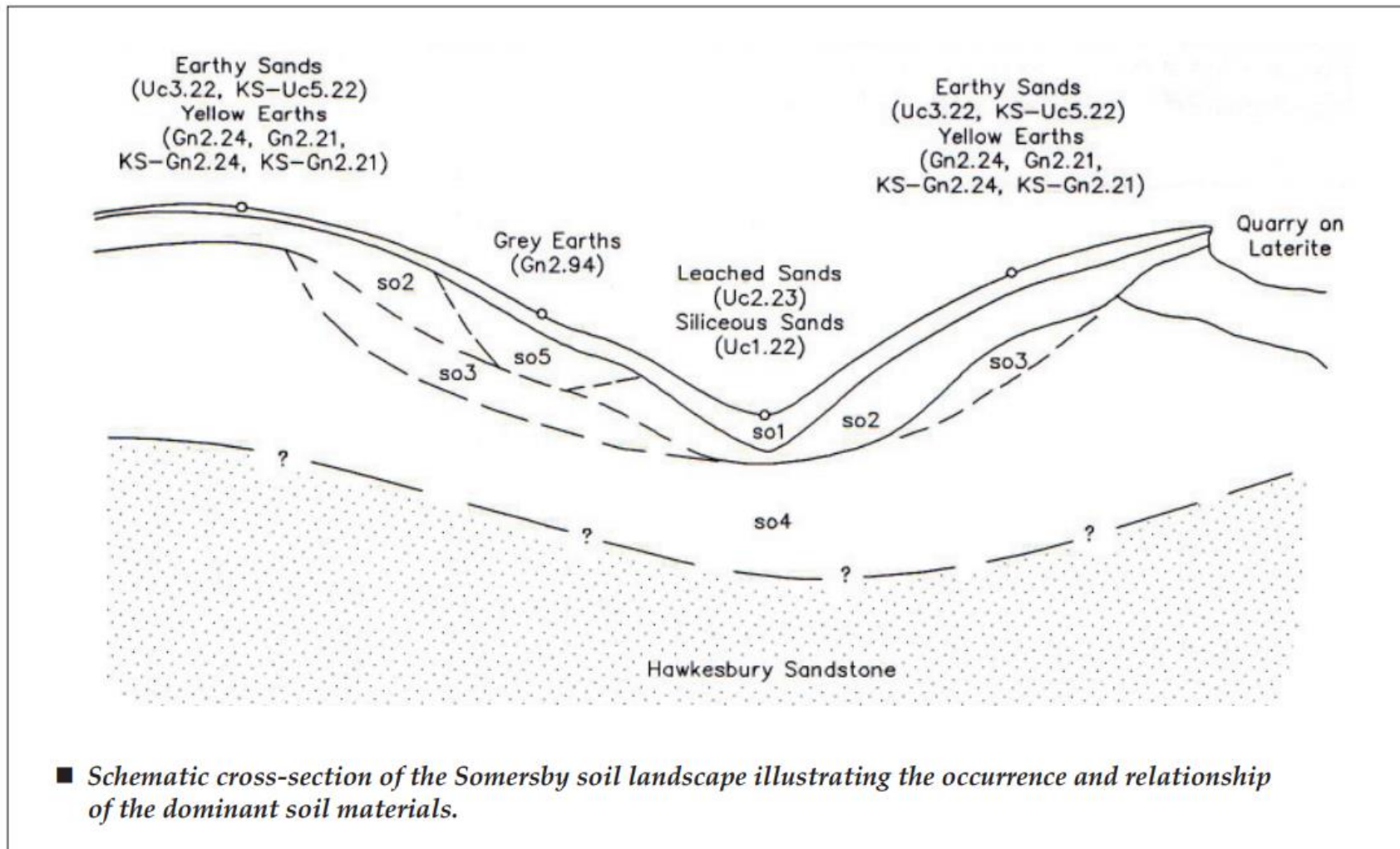
- Up to 30cm of loose brown loamy sand (**so1**) overlies
- Up to 300cm of earthy yellowish brown sandy clay loam (**so2**) often overlying
- Up to 100cm of pallid grey sandy clay loam (**so3**) and
- >100cm of friable sandstone (**so4**)

*N.B little variation in soil type. Total soil depth is correlated with slope gradient. Gently sloped areas can have a depth of 300cm, whilst steeper soils have shallower soils of 50 – 100cm. Sandstone bedrock can be extensive under soils. Ironstone nodules and rock fragments are common on crests and upper slopes but absent in lower sloped areas.*

#### Poorly drained areas with scrublands or heathlands

- dark organic- rich sandy topsoils (**so1**) overlie
- up to 100cm of saturated pallid greyish yellow brown sandy clay loam (**so5**) overlying
- deep gleyed sands occur along drainage lines

*N.B laterite (indurated iron concretory nodules) occurs as a capping on some crests.*



**Figure 2-8** Cross Section of the Somersby soil landscape illustrating relationships between landscape features and dominant soil materials. Soil Landscapes of the Gosford- Lake Macquarie 1:100 000 Sheet Report (Murphy and Tille 1993).

### 2.8.3 Vegetation

Similar to the Sydney Town and Hawkesbury River soil landscapes, this area has had extensive clearing and as a result, the vegetation across this soil landscape is no longer in a native state and is comprised of a variety of introduced and noxious types of vegetation. The land is currently used for market gardens, orchards, nurseries, studs, quarrying and grazing.

The original vegetative cover would have been low eucalypt open woodland and scrubland. This consisted of brown stringybark (*Eucalyptus capitellata*), scribbly gum (*Eucalyptus haemastoma*), smooth-barked apple (*Angophora costata*), red bloodwood (*Eucalyptus gummifera*), blackbutt (*Eucalyptus pilularis*) and old man banksia (*Banksia serrata*). The understorey would have included flaky-barked tea-tree (*Leptospermum attenuatum*), hairpin banksia (*Banksia spinulosa* var. *spinulosa*), geebung (*Persoonia* spp.), gymea lily (*Doryanthus excelsa*), native heath (*Epacris* spp.), beard-heath (*Leucopogon* spp.) and waratah (*Telopea speciosissima*). Scrubland on poorly drained areas were dominated by heath banksia (*Banksia ericifolia*) and dagger hakea (*Hakea teretifolia*).

## 2.9 MANGROVE CREEK SOIL LANDSCAPE

### 2.9.1 Topography

The Mangrove Creek soil landscape has a local relief of <3m, and slopes of <3%. Regular inundation by brackish tidal waters impact the tidal flats and creeks in coastal inlets and estuaries. Reoccurring deposition and erosion occurs through the erosion from upper catchment areas and the process of scour by the ebb tide. Different drainage patterns are present for four shore parallel zones; the mudflat, mangrove, saltmarsh and littoral forest zones. Minor topographical variation creates a mosaic of zones. The mudflat zone is inundated excluding at low tide. This has rapidly migrating, shallow non directional meandering channels with reversable flows which widen rapids in the downstream direction. The mangrove zone is inundated only at high tide and the saltmarshes are inundated during spring high tides. Both have non directional, interrupted drainage. Lastly, the forest zone is rarely flooded and has interrupted or absent drainage.

### 2.9.2 Geology and Soils

The geology consists of Holocene sediments; silty to peaty quartz sand, silt and clay. Within sandy muds and muddy sands shell layers are common. Soils are generally deep and impacted by regular tidal flooding and waterlogging. Subsequently there is a high foundational hazard, high saline content and very low soil fertility.

Table 2-13 Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
mc1	P2 Horizon	<b>Dark brown organic silty loam.</b> As an organic surface this material is plastic and sticky, spongy, salty and sludgy with decomposing and saturated organic material and matted algal growth. Apedal massive structure with colours ranging between black and yellowish grey. At depth, dark yellow



		mottles are common and associated with abundant root and faunal channels. Shell and shell fragments common.
<b>mc2</b>	A1 Horizon	<b>Shelly dark brown organic sandy loam.</b> Saturated, organic rich topsoil with an apedal massive structure and porous fabric. Due to high organic context, colour is dark brown or black, however can be dull yellowish brown. Roots, faunal channels, shells and shells fragments are common.
<b>mc3</b>		<b>Shelly grey brown sand.</b> Permanently saturated saline, shelly, greyish yellow brown coarse sand with apedal single-grained structure and sandy fabric. Colours include greyish yellow brown and dark greyish yellow with grey mottling. Shell and quartz are common however faunal channels and roots are rare.
<b>mc4</b>	B Horizon	<b>Mottled gleyed clay.</b> Apedal massively structured subsoil with a dense and non-porous fabric. Saturated saline mottled grey sandy clay loam to heavy clay. colours include brownish black, greyish yellow brown and brownish grey. Orange and brown mottling frequently occurs. Shell lenses and bands can occur and roots are absent.

**Table 2-14 Expected Mangrove Creek soil profile depth based on landform**

#### **Mangrove Flats**

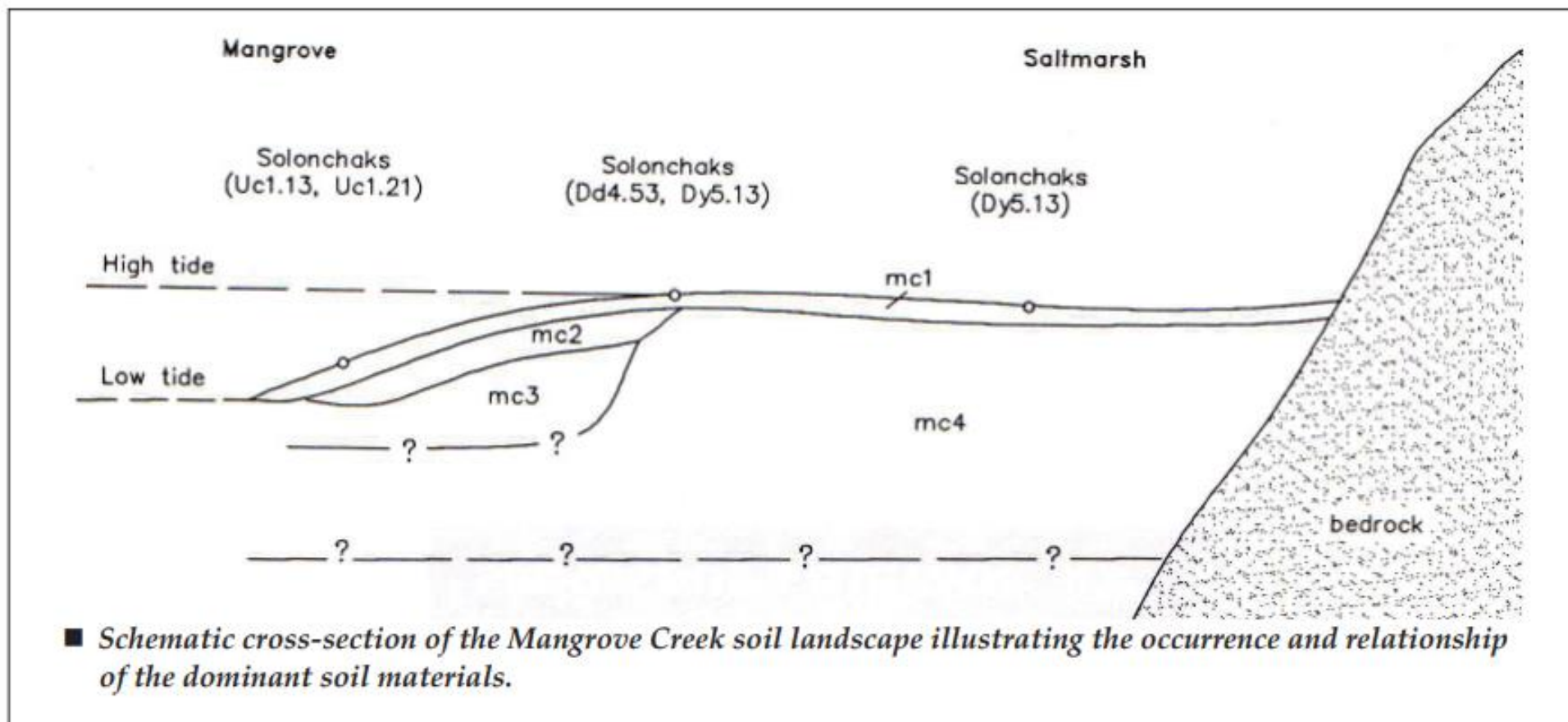
- up to 30cm of dark brown organic silty loam (**mc1**) overlies either
- >100cm of mottled gleyed clay (**mc4**) or
- Up to 50cm of shelly dark brown organic sandy loam (**mc2**) and
- Shelly grey brown sand (**mc3**)

*N.B total soil depth is >200cm and boundaries are gradual to diffuse.*

#### **Salt Marshes**

- up to 30cm of (**mc1**) overlies
- <100cm of **mc4**

*N.B The total soil profile is >200cm and boundaries between soils are gradual.*



**Figure 2-9** Cross Section of the Mangrove Creek soil landscape illustrating relationships between landscape features and dominant soil materials.  
Soil Landscapes of the Gosford- Lake Macquarie 1:100 000 Sheet Report (Murphy and Tille 1993).

### 2.9.3 Vegetation

Due to frequent inundation, this soil landscape has largely remained uncleared and is comprised of several vegetative zones; uncleared mangrove (open scrub), saltmarsh (herbland and sedgeland) and low open forest.

The most common species with open scrub is the grey mangrove (*Avicennia marina*). Other species include river mangroves, which are located towards low lying riverine edges. Marshlands are less frequently inundated and contain seablite (*Suaeda australis*), glasswort (*Sarcocornia quinqueflora*), sand couch (*Sporobolus virginicus*) and sea rush (*Juncus krausii*). In some saltmarshes algal growth is the only vegetation present.

Swamp Oak (*Casurina glauca*) dominate low open forest zones, with swamp mahogany (*Eucalyptus robusta*) occasionally present. The associated understorey contains sand couch (*Sporobolus virginicus*) and sea rush (*Juncus krausii*).

## 2.10 OXFORD FALLS SOIL LANDSCAPE

### 2.10.1 Topography

The topography of this soil landscape consists of hanging valleys 100–1000m wide, with local relief of up to 80m and gently to moderately inclined slopes of <15%. Associated with rock outcrops and low scarps occasional sandstone benches can be located on sideslopes. Seepage areas and hillswamps are common. Swampy conditions can develop across gently inclined slopes, concave valley floors and drainage lines.

### 2.10.2 Geology and Soils

The main geological formation within this area is the Hawkesbury Sandstone, comprised of medium to coarse grained quartz sandstone with minor shale and laminate lenses, however the Terrigal Formation is also present in some locations. This consists of lithic quartz sandstone siltstone and claystone. Soils can be shallow to deep and the landscape has a very high erosion hazard in association with low soil fertility and localised rock outcrops.

Table 2-15 Description of dominant soil material

Dominant Soil Material	Soil Horizon	Description
of1	A1 Horizon	<b>Dull yellowish brown loose loamy sand.</b> This topsoil has a loose apedal single grained structure, a porous sandy fabric and is usually water repellent. Colours can include dull yellowish brown, greyish yellow brown, yellow brown and in wet areas, dark brownish black. Colours generally become paler with depth and dry colours may be bleached. Sandstone and quartz gravels are abundant and roots and charcoal are common.
of2	B Horizon	<b>Earthy yellowish brown clayey sand.</b> Clayey sand to light sandy clay loam, with a porous earthy fabric and an apedal massive structure. Generally appears as a bright yellowish brown but may be yellowish brown. Few and faint orange mottles are common, sandstone quartz and roots are rare and charcoal is absent.



of3	A2 Horizon	<b>Beached loose sand.</b> This subsoil is shallow and has a porous sandy fabric. Weak to non-coherent structure dependant on saturation, with roots few and charcoal and stone absent. Colours include light grey and dull yellow orange.
of4	B Horizon	<b>Convolute soft organic and iron pans.</b> Dark brown soft organic and iron-stained sand to loamy sand with a massive apedal structure. The material consists of quartz sand grains coated and weakly cemented with organic and iron compounds. Hardsetting on exposure. Dark brown and yellow brown colouring with stones, charcoal and roots are absent.
of5	B Horizon	<b>Yellowish brown massive sand.</b> An apedal single grained to apedal massive structure is present in this deep subsoil. Fabric may be sandy or earthy and colour is usually bright yellowish brown or yellowish brown. Charcoal and stone are absent, roots are few.
of6	B/C Horizon	<b>Wet earthy mottled pale clayey sand.</b> Occurring as a subsoil in wet areas, this has an apedal massive structure and porous earthy fabric. Sandy loam is the most common texture, and the surface condition is loose. Colours include light yellow and bright yellowish brown. Around root traces rusty pipe mottles are observable. Roots are few to common, sandstone may be present and charcoal fragments are rare or absent.

Table 2-16 Expected Oxford Falls soil profile depth based on landform

#### Upper Slopes

- up to 30cm of dull yellowish brown loose loamy sand (**of1**) overlies either
- bedrock. Or
- 20 – 50cm of earthy yellowish brown clayey sand (**of2**) often overlies
- 3 – 20cm of friable sandstone

*N.B rock benches are common and soils are discontinuous. Total soil depth is <100cm and boundaries are gradual.*

#### Lower Slopes

- up to 40cm of **of1** overlies
- up to 200cm of **of2**

*N.B rock benches are usually absent and soils are continuous. Total soil depth is >100cm with gradual boundaries between soils.*

#### Elevated Sandy Deposits Above Drainage Lines

- up to 30cm of **of1** overlie
- up to 30cm of bleached loose sand (**of3**) and
- up to 60cm of convoluted soft organic and iron pans (**of4**) overlying
- >50cm of yellowish-brown massive sand (**of5**)

*N.B total soil depth is >150cm, with sharp boundaries between soils. Deep sandy deposits accumulate above drainage lines.*

#### Along Drainage Lines and Wet Areas

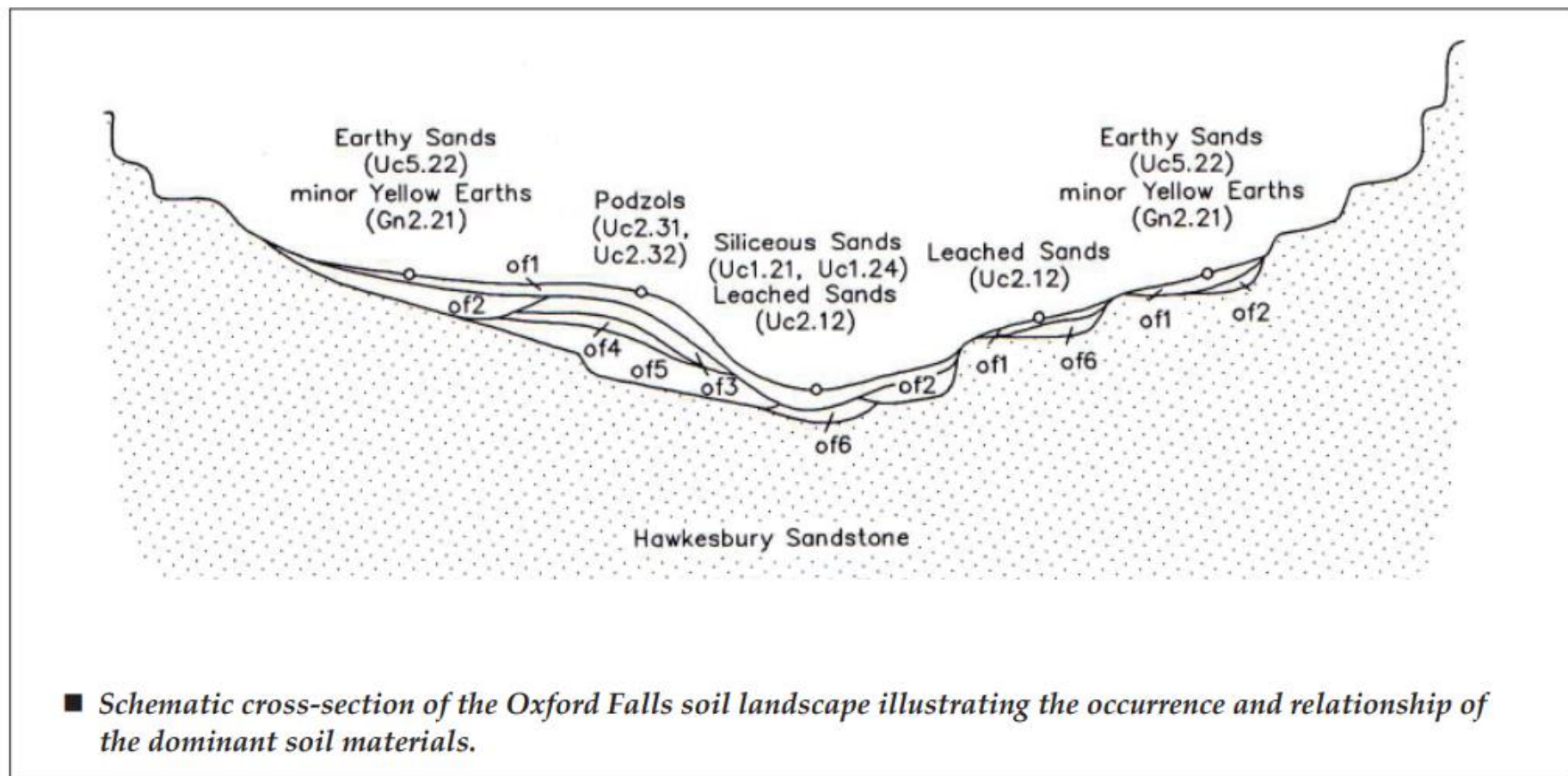
- up to 40cm of **of1** overlies
- bedrock. Or
- up to 100cm of wet earthy mottled pale clayey sands (**of6**)

*N.B The total soil profile is up to 150cm, with clear boundaries between soils. Sandstone bedrock may be exposed along drainage channels.*

#### Swamps

- up to 50cm of a reddish-brown organic material containing iron oxides, algae and bacteria overlie
- up to 200cm of peaty black anaerobic root mat, abruptly overlies
- grey-brown saturated mottled sand with rust stains and roots channels. This can be up to several metres deep.

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**Figure 2-10** Cross Section of the Oxford Falls soil landscape illustrating relationships between landscape features and dominant soil materials.

Soil Landscapes of the Gosford- Lake Macquarie 1:100 000 Sheet Report (Murphy and Tille 1993).

### 2.10.3 Vegetation

Across the Oxford Falls soil landscape multiple vegetive zones exist, largely reliant upon site drainage. This includes uncleared tall open forest, low open woodland, scrub and heathland. On better drained slopes, low open woodland occurs. This included yellow bloodwood (*Eucalyptus eximia*), red bloodwood (*Eucalyptus gummifera*), narrow-leaved apple (*Angophora bakeri*), scribbly gum (*Eucalyptus haemastoma*) and grey gum (*Eucalyptus punctata*). The understory is predominantly comprised of thyme spurge (*Pyllanthus thymoides*) and narrow-leaf hovea (*Hovea linearis*).

Across poorly drained areas including swampy valley floors and closed scrub and heathland, heath banksia (*Banksia ericifolia*) and dagger hakea (*Hakea teretifolia*) are present.

On better drained valley floors, tall eucalypt open forests and woodlands with dry sclerophyll understoreys are visible. This vegetative zone consists of Sydney peppermint (*Eucalyptus piperita*), smooth-barked apple (*Angophora costata*), scribbly gum (*Eucalyptus racemosa* and *Eucalyptus haemastoma*) red bloodwood (*Eucalyptus gummifera*), grey gum (*Eucalyptus punctata*) and occasionally blue-leaved stringybark (*Eucalyptus agglomerata*). The understorey is comprised of flax wattle (*Acacia linifolia*), flakey bark tea-tree (*Leptospermum attenuatum*), narrow leafed geebung (*Persoonia linearis*) and rough bush pea (*Pultenaea scabra*). Bracken (*Pteridium esculentum*) is common in the herb layer. At Ten Mile Hollow, north of the study area, Sydney green wattle (*Acacia parramattensis*) occurs.

## 2.11 LAND USE AND DISTURBANCE FACTORS

This section of the report provides an assessment of land use, the level of disturbance and the likely archaeological potential of the study area. The archaeological potential is based on the level of previous disturbance as well as the previously discussed predictive model for the region.

The *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010); defines disturbed lands as given below.

“Land is disturbed if it has been the subject of a human activity that has changed the land’s surface, these 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)”

This definition is based on the types of disturbance as classified in The Australian Soil and Land Survey Field Handbook (CSIRO 2010). The following is a scale formulated by CSIRO (2010) of the levels of disturbances and their classification.

Minor Disturbance		Moderate Disturbance		Major Disturbance	
0	No effective disturbance; natural	3	Extensive clearing (e.g.: poisoning and ringbarking)	6	Cultivation; grain fed
1	No effective disturbance other than grazing by hoofed animals	4	Complete clearing; pasture native or improved, but never cultivated	7	Cultivation; irrigated, past or present
2	Limited clearing (e.g.: selected logging)	5	Complete clearing; pasture native or improved, cultivated at some stage	8	Highly disturbed (quarrying, road works, mining, landfill, urban)

The above scale is used in determining the level of disturbance of the study area and its impact on the potential archaeology which may be present.

### 2.11.1 Aboriginal Land Use and Resources

The Brisbane Waters provided a rich dietary intake for the local inhabitants of the Darkinjung Peoples and the Wannangini/GuriNgai<sup>2</sup> Peoples who occupied the small strip of the coastal land between Gosford and Wyong. The surrounding landscape formed natural borders between other nearby coastal groups including the Awabakal people and Wonnarua people of the north. With a population of approximately 5,000 (at the time of settlement, historical and archaeological documentation suggests that these coastal tribes were semi-sedentary, where social arrangements allowed for a large number to cohabit within one camp.

<sup>2</sup> See Acknowledgement to Country.

These coastal tribes depended heavily on marine resources such as fish and shellfish but were not limited to such diets, as cabbage palms and bracken fern roots were also included (Dyall 1971). Farming practices were also utilised in the form of land clearing. This was conducted through the burning of grasslands in order to encourage new growth which attracted local game. Based on the predominance of rock shelters found within the Hawkesbury sandstone landscape, it is also evident that natural rock overhangs were utilised as an alternate place of temporary and/or repeated occupation. However, open camps were the preferred site due to spiritual beliefs surrounding the collapse of rock shelters if spirits were not appeased.

The procurement of specific resources for ceremonial or domestic purposes would rely on the accessibility and availability of these resources. There are readily mapped resources within the region that may have been exploited by Aboriginal occupants, with more being present before the land was cleared and settled.

The events of colonisation later saw the decimation of the Darkinjung population between 1790, 1830 and 1850 due to the spread of the smallpox epidemic within the region. Of those who survived, were found to regroup with neighbouring peoples in order to form mixed groups within the region of which the Darkinjung land now encompassing what would have been boundaries of neighbouring groups.

Sites containing fresh water and sedentary food sources, coupled with the presence of other resources which may have been exploited or available on a seasonal basis, would suggest that Aboriginal land use of the study area was regular and repeated, with this reflected in the archaeological record. These areas will possess a high archaeological potential (Goodwin 1999).

### 2.11.2 European Land Use

Due to the expansive nature of the site, differing levels of land use are present, however background research indicates that generally, this has been minimal, with the activities primarily restricted to agriculture, tourism and recreational use. Significant proportions have been retained as conservation zones, crown land and land owned by the Darkinjung Local Aboriginal Land Council (DLALC).

One two storey events facility is present however, the majority of structures are single storey with associated services. There is no indication that any deep excavation or construction of basements floors are present across the property. Additional features such as horse-riding trails and bike riding tracks are additionally present. Intact soil profiles are subsequently present and there is an associated potential for Aboriginal objects and deposits of archaeological and/or cultural heritage to be present. Due to the significant size of the study area areas/features of higher use and disturbance are tabulated and presented in Figure 2.11

Areas	Feature	Level of Disturbance
Northern wooded lots	Some pathways, cleared areas, some temporary structures however few to no permanent structures	Very Low
Mid cleared lots	Sections cleared for agricultural use, multiple permanent structures either residential or supporting. Manmade dams evident	Low - Mid

Mid wooded lots	Some but fewer permanent structures. Some paths may be used for motorbike riding, horse riding and other activities	Low - Mid
Lower lots closer to water	Access paths to water evident however fewer structures. Some areas extremely bare.	Low - Mid
Southern most lots	Pathways visible however few to no structures evident. Large bare eroded area across Lot 85, 25 and 68 DP/755221.	Low - Mid

## 2.12 DISTURBANCE AND ARCHAEOLOGICAL POTENTIAL

*It is important to note that the following assessments describe the archaeological potential of the study area. It is acknowledged that if the study area has little or no archaeological potential, the study area may still have cultural significance to the Aboriginal community.*

Due to the expansive nature of the site, differing levels of land use are present, however background research indicates that generally this has largely been minimal, with the activities primarily restricted to the agriculture, tourism and recreational use. Significant proportions have been retained as conservation zones, crown land and land owned by the Darkinjung Local Aboriginal Land Council (DLALC).

One two storey events facility is present, however, the majority of structures are single storey with associated services. There is no indication that any deep excavation or construction of basements floors are present across the property. Additional features such as horse-riding trails, walking trails, and bike riding tracks are present. Intact soils have the potential to be present within sections of the landscape with the potential for Aboriginal objects/deposits, and features of archaeological and/or cultural heritage to be present. However, there is no evidence to suggest developments and/or structures of significant depth have taken place and as the soil profile of the area is expected to be considerably deep it is therefore believed that the A horizon (artefact bearing deposit) may be intact.

There is permanent freshwater within the vicinity of the study area. Archaeological sites will be larger, more complex and have a relatively higher density the closer they are to permanent fresh water (Kohen 1986) with regularly exploitable food resources. The site lies within a resource rich area, with both freshwater and estuarine resources available. Popran Creek travels through the western extent of the site with smaller tributaries such as Kellys Creek and Cabbage Tree Creek located in the southern and central areas of the study site. Ausburn Creek and Christy's Gully, tributaries from Mooney Mooney Creek lie 632m and 1.2kms east of the site respectively

Sites with ephemeral water sources or those which are located in the vicinity of the headwaters of upper tributaries (first order streams) have a sparse distribution and density (McDonald 1992). The study area may contain artefacts which are representative of concentrated and repeated Aboriginal occupation within undisturbed soil profiles.

In light of this, and in the context of the information provided about the land use of the site, its proximity to major tributaries the following has been predicted:



**Low-moderate disturbance to sections of the landscape::** Sub-surface Aboriginal objects with potential conservation value have a high probability of being present within the study area.

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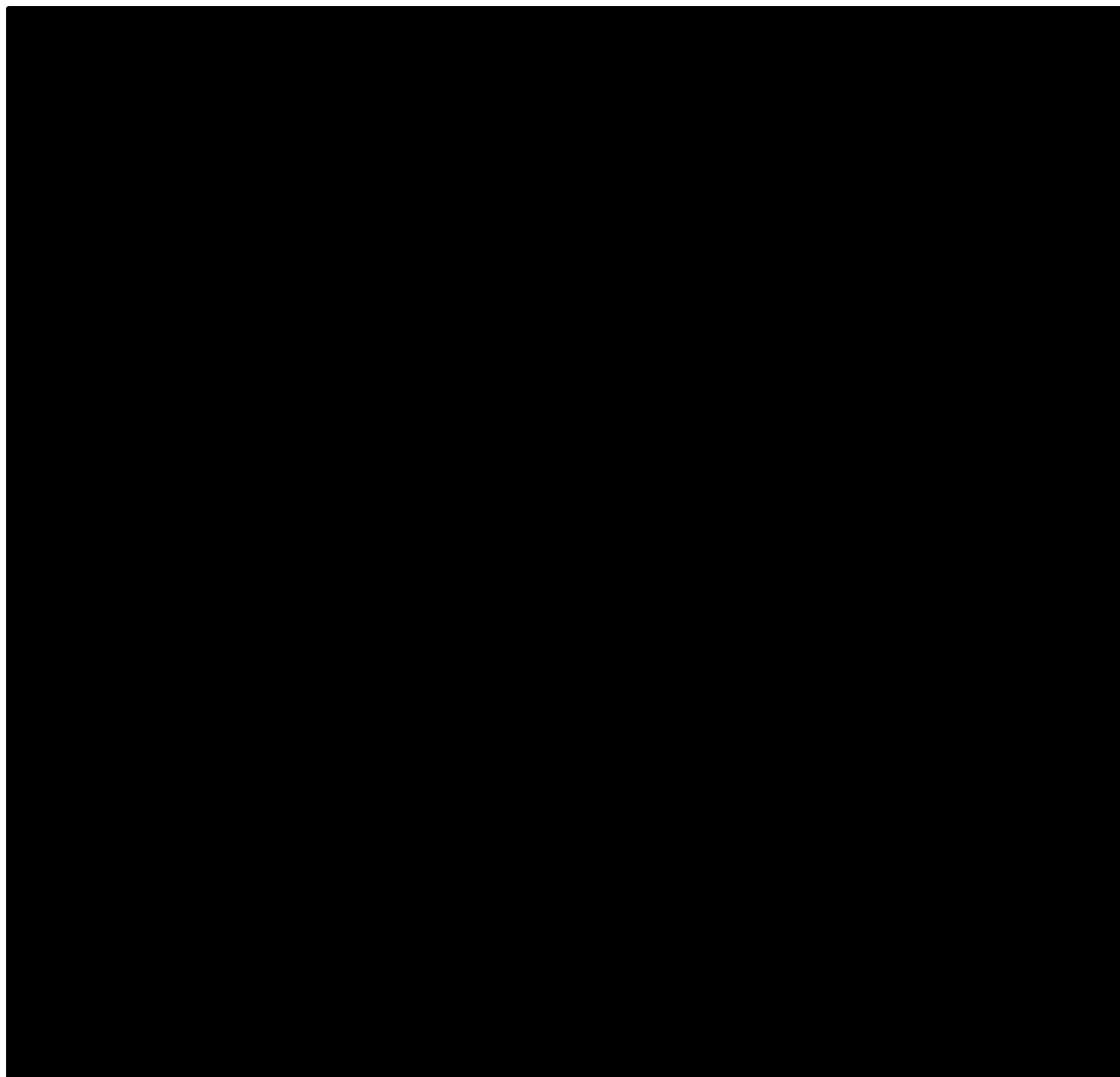
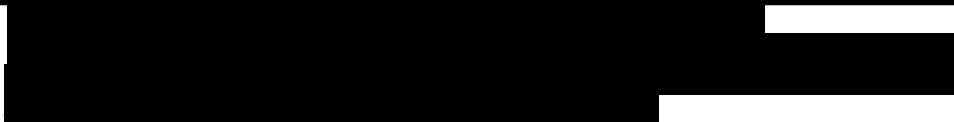


Figure 2-11



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## 3.0 ABORIGINAL CONSULTATION

This section documents the requirements of the Aboriginal consultation process that should be undertaken as part of any Aboriginal archaeological and cultural heritage assessment where an Aboriginal Heritage Impact Permit (AHIP) or test excavation is required. Section 3.1 outlines the guidelines for Aboriginal consultation issued by the DECCW.

### 3.1 CONSULTATION REQUIREMENTS

Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010), referring to Part 6 Approvals under the NPW Act were released in April 2010. The responsibilities of the proponent when test excavation is to take place and/or permit under section 90 of the NPW Act are listed below.

<http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf>

#### Stage 1 – Notification of project proposal and registration of interest

Stage 1 states that:

“4.1.2- Proponents are responsible for ascertaining, from reasonable sources of information, the names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal *objects* and/or *places*. Reasonable sources of information could include (a) to (g) below. Proponents must compile a list of Aboriginal people who may have an interest for the proposed project area and hold knowledge relevant to determining the cultural significance of Aboriginal *objects* and/or *places* by writing to:

- (a) the relevant DECCW (sic) EPRG regional office
- (b) the relevant Local Aboriginal Land Council(s)
- (c) the Registrar, *Aboriginal Land Rights Act 1983* for a list of Aboriginal owners
- (d) the National Native Title Tribunal for a list of registered native title claimants, native title holders and registered Indigenous Land Use Agreements
- (e) Native Title Services Corporation Limited (NTSCORP Limited)
- (f) the relevant local council(s)
- (g) the relevant catchment management authorities for contact details of any established Aboriginal reference group.

4.1.3- Proponents must write to the Aboriginal people whose names were obtained in step 4.1.2 and the relevant Local Aboriginal Land Council(s) to notify them of the proposed project. The proponent must also place a notice in the local newspaper circulating in the general location of the proposed project explaining the project and its exact location. The notification by letter and in the newspaper must include:

- (a) the name and contact details of the proponent

- (b) a brief overview of the proposed project that may be the subject of an application for an AHIP, including the location of the proposed project
- (c) a statement that the purpose of community consultation with Aboriginal people is to assist the proposed applicant in the preparation of an application for an AHIP and to assist the Director General of DECCW in his or her consideration and determination of the application
- (d) an invitation for Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) in the area of the proposed project to register an interest in a process of community consultation with the proposed applicant regarding the proposed activity
- (e) a closing date for the registration of interests.

4.1.4- There must be a minimum of 14 days from the date the letter was sent or notice published in the newspaper to register an interest. The time allowed to register an interest should reflect the project's size and complexity.

4.1.5- The proponent must advise Aboriginal people who are registering an interest that their details will be forwarded to DECCW and the Local Aboriginal Land Council (LALC) unless they specify that they do not want their details released.

4.1.6- The proponent must make a record of the names of each Aboriginal person who registered an interest and provide a copy of that record, along with a copy of the notification from 4.1.3 to the relevant DECCW EPRG regional office and LALC within 28 days from the closing date for registering an interest.

4.1.7- LALCs holding cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area who wish to register an interest to be involved in consultation must register their interest as an Aboriginal organisation rather than as individuals.

4.1.8- Where an Aboriginal organisation representing Aboriginal people who hold cultural knowledge has registered an interest, a contact person for that organisation must be nominated. Aboriginal cultural knowledge holders who have registered an interest may indicate to the proponent they have appointed a representative to act on their behalf. Where this occurs, the registered Aboriginal party must provide written confirmation and contact details of those individuals to act on their behalf.

## **Stage 2 – Presentation of information about the proposed project**

Stage 2 states that:

“4.2.1- The proponent must initiate arrangements for presenting the proposed project information to the registered Aboriginal parties (from Stage 1).

4.2.2- The presentation of proposed project information should provide the opportunity for:

- (a) the proponent to present the proposal, outline project details relevant to the nature, scope, methodology and environmental and other impacts
- (b) the proponent to outline the impact assessment process including the input points into the investigation and assessment activities

- (c) the proponent to specify critical timelines and milestones for the completion of assessment activities and delivery of reports
- (d) the proponent and registered Aboriginal parties to clearly define agreed roles, functions and responsibilities
- (f) the registered Aboriginal parties to identify raise and discuss their cultural concerns, perspectives and assessment requirements (if any).

4.2.3- The proponent should record or document that the proposed project information has been presented. This record or documentation should include any agreed outcomes, and any contentious issues that may require further discussion to establish mutual resolution (where applicable). The proponent should provide a copy of this record or documentation to registered Aboriginal parties.

4.2.4- Depending on the nature, scale and complexity of the proponent's project, it may be reasonable and necessary for the proponent to:

- (a) conduct additional project information sessions to ensure that all necessary information about the project is provided and enable registered Aboriginal parties to provide information about the cultural significance of Aboriginal object(s) and/or place(s) that may be present on the proposed project area
- (b) create the opportunity for registered Aboriginal parties to visit the project site" (DECCW 2010).

### **Stage 3 – Drafting, review and finalisation of the Cultural Heritage Assessment Report**

Stage 3 states that:

"4.3.1- The proponent must present and/or provide the proposed methodology(s) for the cultural heritage assessment to the registered Aboriginal parties.

4.3.2- The registered Aboriginal parties must be given the opportunity to review and provide feedback to the proponent within a minimum of 28 days of the proponent providing the methodology. The review should identify any protocols that the registered Aboriginal parties wish to be adopted into the information gathering process and assessment methodology and any matters such as issues/areas of cultural significance that might affect, inform or refine the assessment methodology. Comments should be provided in writing, or may be sought verbally by the proponent and accurately recorded.

4.3.3- As part of this consultation, the proponent must also seek cultural information from registered Aboriginal parties to identify:

- (a) whether there are any Aboriginal objects of cultural value to Aboriginal people in the area of the proposed project
- (b) whether there are any places of cultural value to Aboriginal people in the area of the proposed project (whether they are Aboriginal places declared under s.84 of the NPW Act or not). This will include places of social, spiritual and cultural value, historic places with cultural significance, and potential places/areas of historic, social, spiritual and/or cultural significance.

4.3.4- Some information obtained from registered Aboriginal parties may be sensitive or have restricted public access. The proponent must, in consultation with

registered Aboriginal parties, develop and implement appropriate protocols for sourcing and holding cultural information. In some cases, the sensitive information may be provided to the proponent by an individual and the proponent should not share that information with all registered Aboriginal parties or others without the express permission of the individual.

4.3.5- Information obtained in 4.3.4 is used to understand the context and values of Aboriginal object(s) and/or place(s) located on the proposed project site. This information must be integrated with the scientific (archaeological) assessment of significance. Together the context, values, and scientific assessment provide the basis for assessing Aboriginal heritage values and recommending management options.

The information collected by the proponent during the consultation process must be used only to inform decision making for any application for an AHIP, unless the registered Aboriginal parties agree otherwise.

4.3.6- The proponent must seek the views of registered Aboriginal parties on potential management options. Management options will include ways to avoid or mitigate harm and/or conserve known Aboriginal object(s) and/or place(s). Management options should consider how Aboriginal people can continue their association with identified Aboriginal heritage values.

4.3.7- The proponent must document all feedback received in Stage 3 from registered Aboriginal parties in the final cultural heritage assessment report. This must include copies of any submissions received and the proponent's response to the issues raised. In some cases, this may require an acknowledgment of sensitive information and a list of Aboriginal people who should be contacted for permission to receive further details" (DECCW 2010).

#### **Stage 4 – Review of draft cultural heritage assessment report.**

Stage 4 states that:

"4.4.1- The proponent must prepare a draft cultural heritage assessment report.

4.4.2- The proponent must provide a copy of the draft cultural heritage assessment report to registered Aboriginal parties for their review and comment.

4.4.3- The proponent must give registered Aboriginal parties a minimum of 28 days from sending the draft report to make submissions. The time allowed for comment on the draft report should reflect the project's size and complexity. Comments should be provided in writing or, where provided verbally, accurately recorded.

4.4.4- After considering the comments received on the draft report the proponent must finalise the report. The final report must include copies of any submissions received, including submissions on the proposed methodology and on the draft report. The final report must also include the proponent's response to each submission. The report must then be submitted to DECCW for consideration with the proponent's application for an AHIP.

4.4.5- The proponent must provide or make available copies of the final cultural heritage assessment report and the AHIP application to registered Aboriginal parties and the relevant LALC(s) (whether or not the LALC is registered in Stage

1). The report and application must be provided or made available within 14 days of the AHIP application being made" (DECCW 2010).

### **3.2 CONSULTATION SUMMARY**

Consultation for the subsequent report is being undertaken in accordance with the *National Parks and Wildlife Act 1974: Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010); for situations where test excavation under the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).

All registered stakeholders were given a copy of the proposed Aboriginal Cultural Heritage Assessment Research Design with 28 days to respond to this methodology.

All registered stakeholders were given a copy of this Aboriginal Cultural Heritage Assessment Report and were given a minimum of 28 days to comment on this report. This is the final Aboriginal stakeholder approved version of this report.

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### Table 3-1 Consultation Log

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Project Overview					
Project Name	Manager	Status	Progress (%)	Budget (k\$)	Timeline (Days)
Project A	John Doe	Completed	100	120	30
Project B	Jane Smith	In Progress	75	150	45
Project C	Mike Johnson	On Hold	20	80	15
Project D	Sarah Lee	Planned	0	200	60
Project E	David Kim	Completed	100	90	25
Project F	Emily White	In Progress	60	110	35
Project G	Chris Brown	On Hold	10	60	10
Project H	Alex Green	Planned	0	180	50
Project I	Nina Black	Completed	100	70	20
Project J	Kevin Gray	In Progress	85	130	40

## 4.0 BACKGROUND INFORMATION

Pre-field work research consisted of an analysis and synthesis of the background data to determine the nature of the potential archaeological and cultural heritage resource in the region.

The research of this cultural heritage assessment consisted of stages which are listed below:

- Background research
- Aboriginal consultation and oral history interviews
- Site inspection and cultural heritage mapping.

Background research entailed a detailed review of sources of information on the history, oral history, ethno-history and archaeological background of the study area and surrounds and will include but not be limited to material from:

- Heritage NSW archaeological assessment and excavation reports and cultural heritage assessments
- Heritage NSW Library
- State Library of NSW including the Mitchell Library
- Local libraries and historical associations
- National Library of Australia.

A search of the Heritage NSW AHIMS was undertaken and the results examined. The site card for each site within 1000m in all directions from the centre of the study area was inspected (where available) and an assessment made of the likelihood of any of the sites being impacted by the proposed development. The Heritage NSW library of archaeological reports (Hurstville) was searched and all relevant reports were examined. Searches were undertaken on the relevant databases outlined in *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010)*:

Further to this the following sources were examined:

- The National Heritage List
- The Commonwealth Heritage List
- The NSW State Heritage Inventory
- The Register of the National Estate
- The National Native Title Register
- The Register of Declared Aboriginal Places
- Prevailing local and regional environmental plans
- Environmental background material for the study area.

### 4.1 AHIMS SEARCH RESULTS

The Archaeological Heritage and Information Management System Database (AHIMS) is located at the Heritage NSW Offices at Hurstville in New South Wales. This database

The following tables are comprised of the results listed from the extensive searches:

### Table 4-1

Site ID	Site name	Site status	Site features
1	Site 1	Active	Feature 1, Feature 2
2	Site 2	Active	Feature 1, Feature 2
3	Site 3	Active	Feature 1, Feature 2
4	Site 4	Active	Feature 1, Feature 2
5	Site 5	Active	Feature 1, Feature 2
6	Site 6	Active	Feature 1, Feature 2
7	Site 7	Active	Feature 1, Feature 2
8	Site 8	Active	Feature 1, Feature 2
9	Site 9	Active	Feature 1, Feature 2
10	Site 10	Active	Feature 1, Feature 2
11	Site 11	Active	Feature 1, Feature 2
12	Site 12	Active	Feature 1, Feature 2
13	Site 13	Active	Feature 1, Feature 2
14	Site 14	Active	Feature 1, Feature 2
15	Site 15	Active	Feature 1, Feature 2
16	Site 16	Active	Feature 1, Feature 2
17	Site 17	Active	Feature 1, Feature 2
18	Site 18	Active	Feature 1, Feature 2
19	Site 19	Active	Feature 1, Feature 2
20	Site 20	Active	Feature 1, Feature 2



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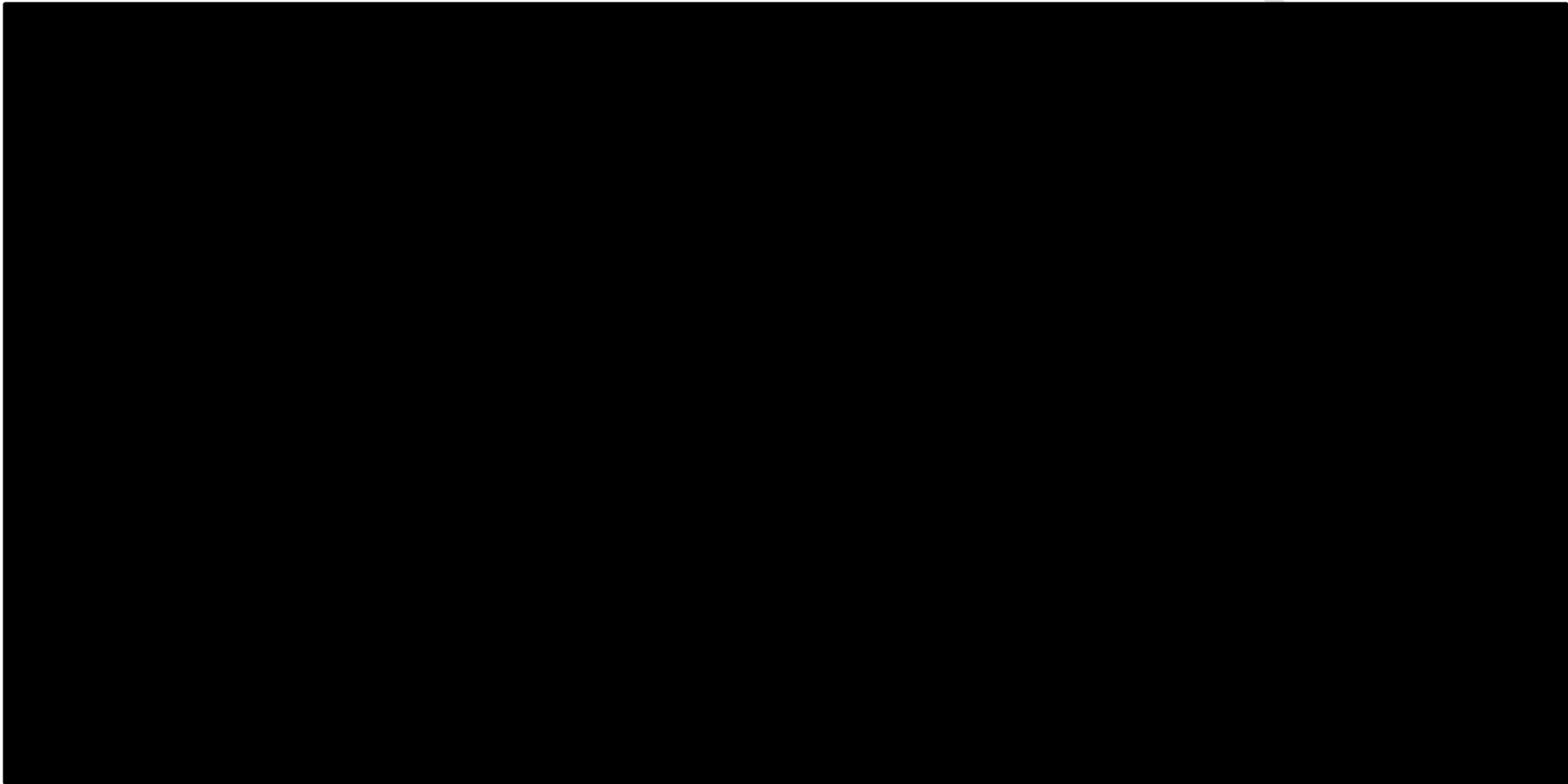


Figure 4-1



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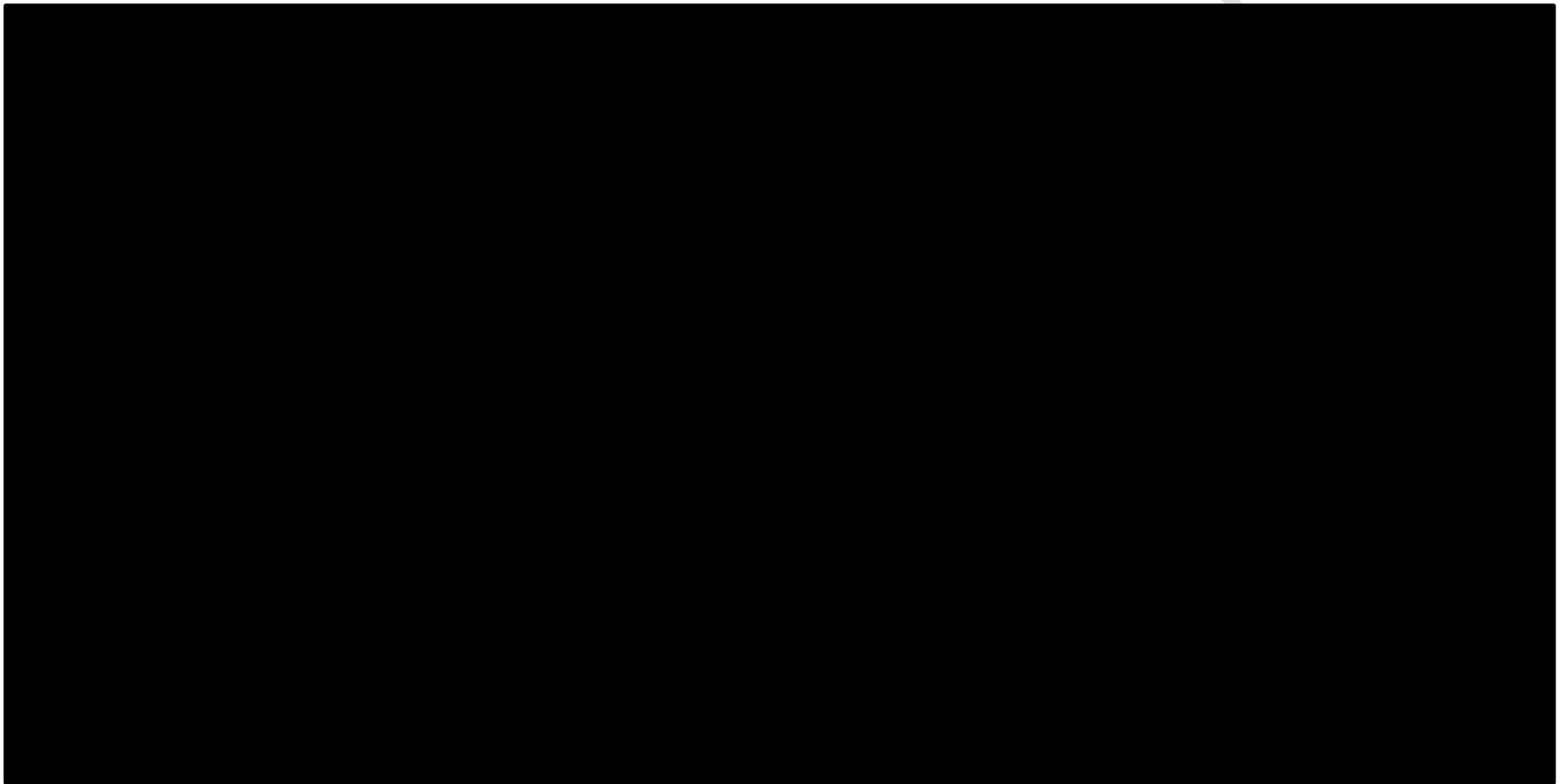


Figure 4-2



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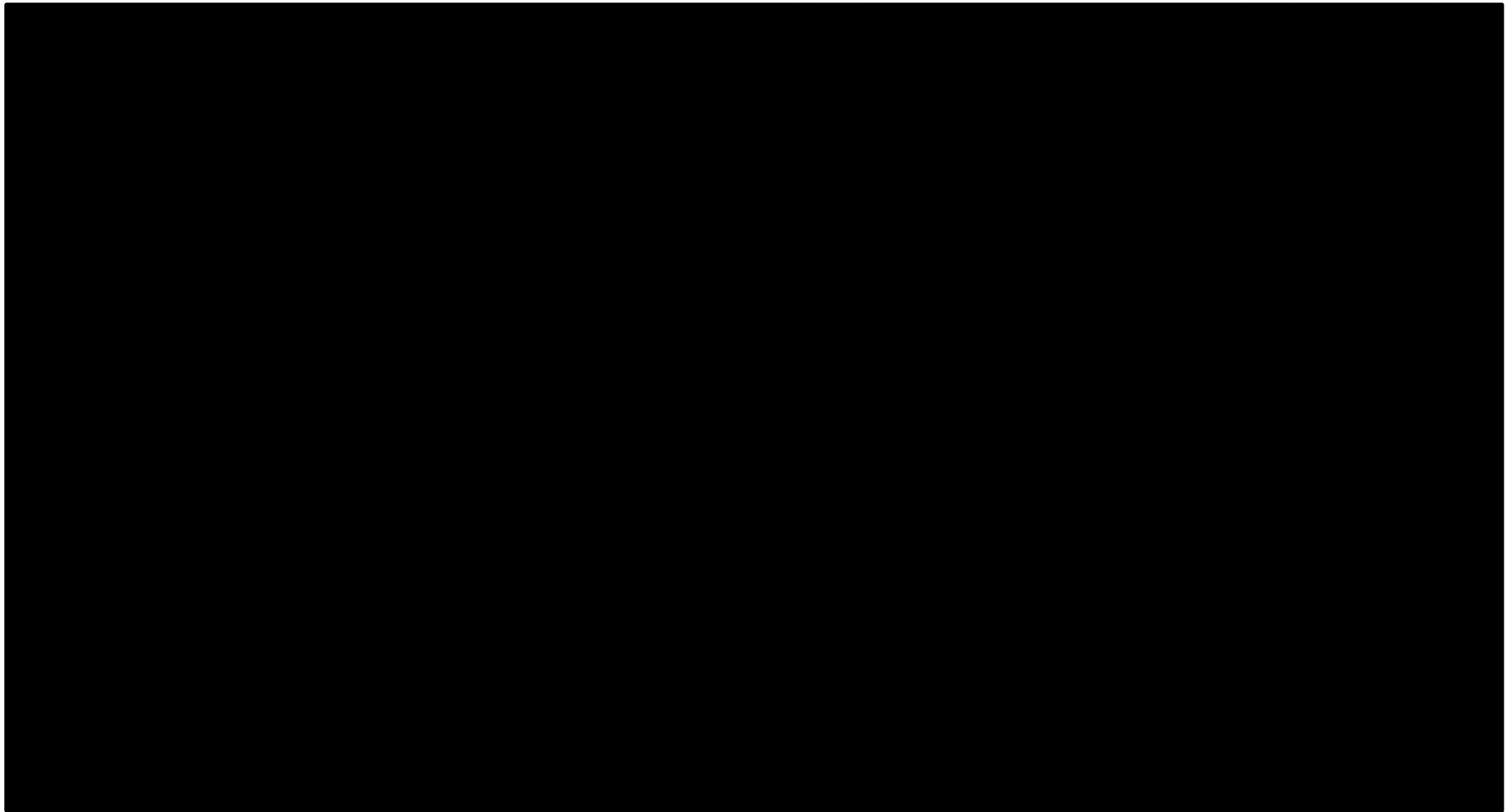
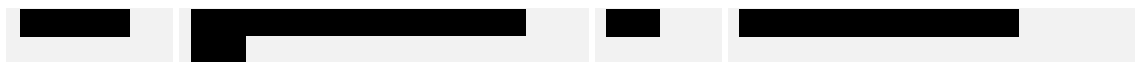


Figure 4-3

### Table 4-4

Site ID	Site name	Site status	Site features
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
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PUBLIC EXHIBITION

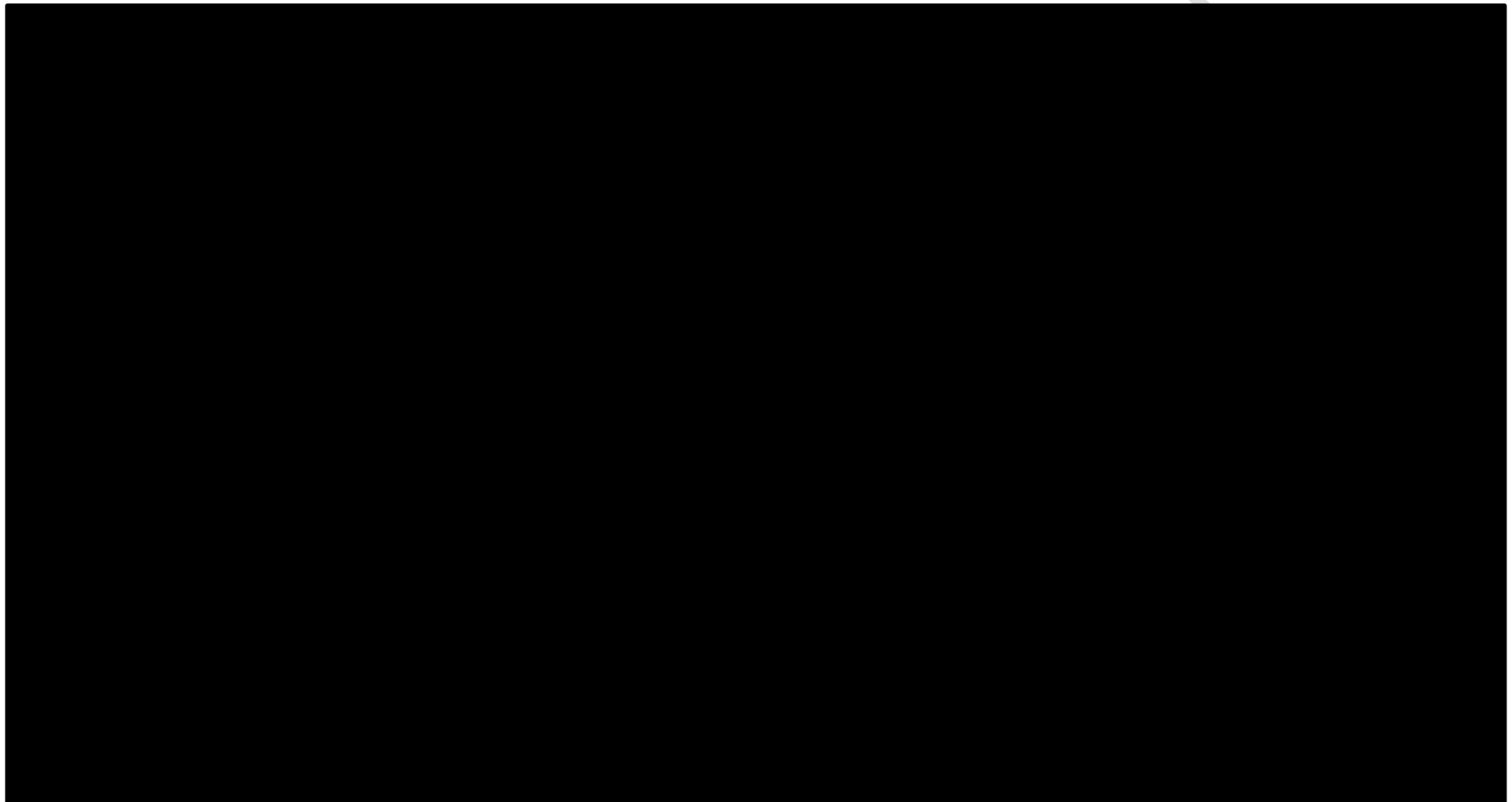
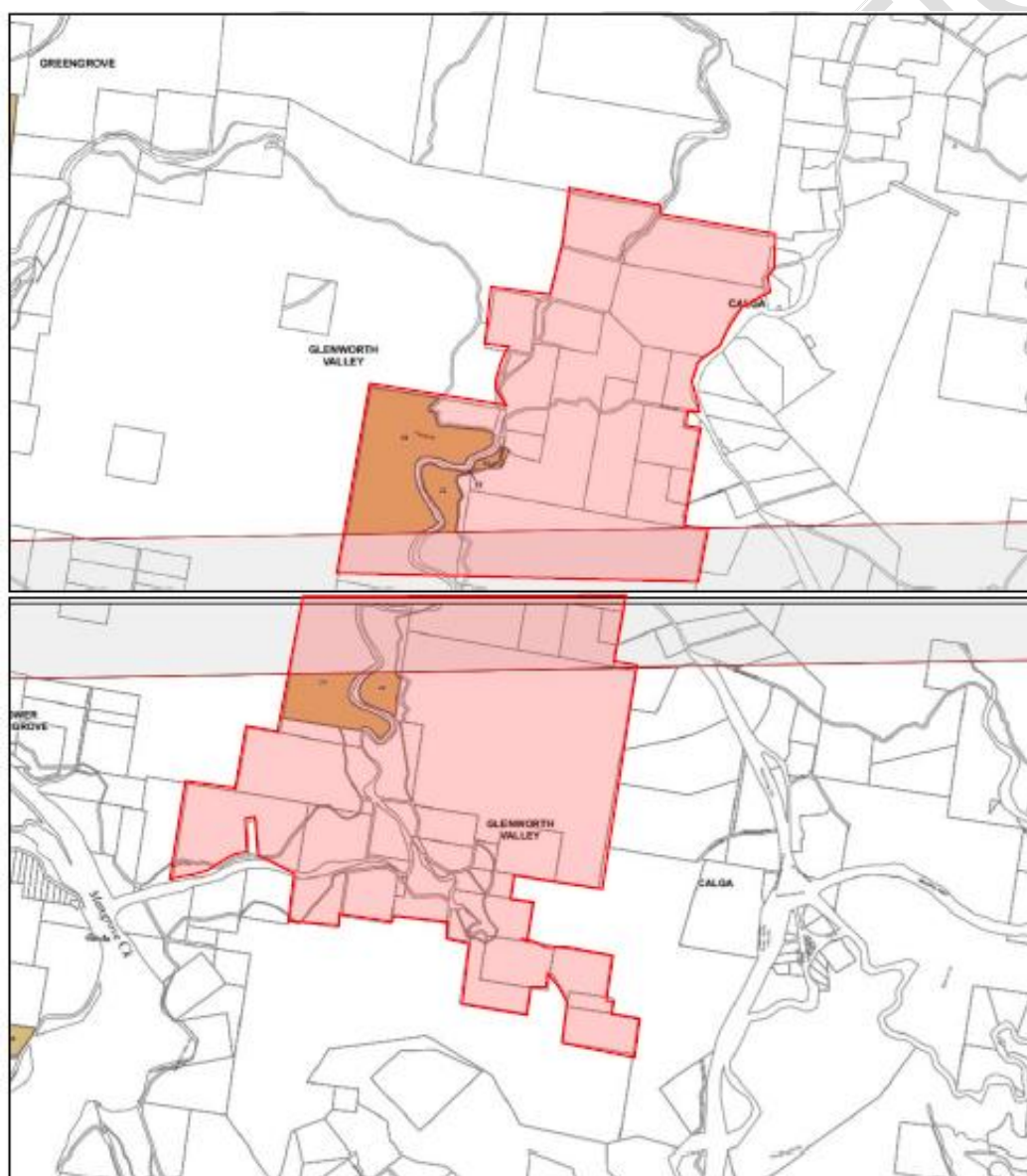


Figure 4-4

## 4.2 OTHER SEARCH RESULTS

Results for other statutory databases searched are given below:

Heritage Listings/ Register/ Other	Result
National Heritage List	N/A
Commonwealth Heritage List	N/A
NSW State Heritage Register	
Register of Declared Aboriginal Places	N/A
National Native Title Register	N/A
Gosford/Central Coast LEP 2014	Yes – To sections of the study area.



**Figure 4-5 Gosford General Heritage Sites.**  
Study area indicated in red. Gosford LEP Sheets HER – 010 and HER – 011 (2014).

#### 4.3

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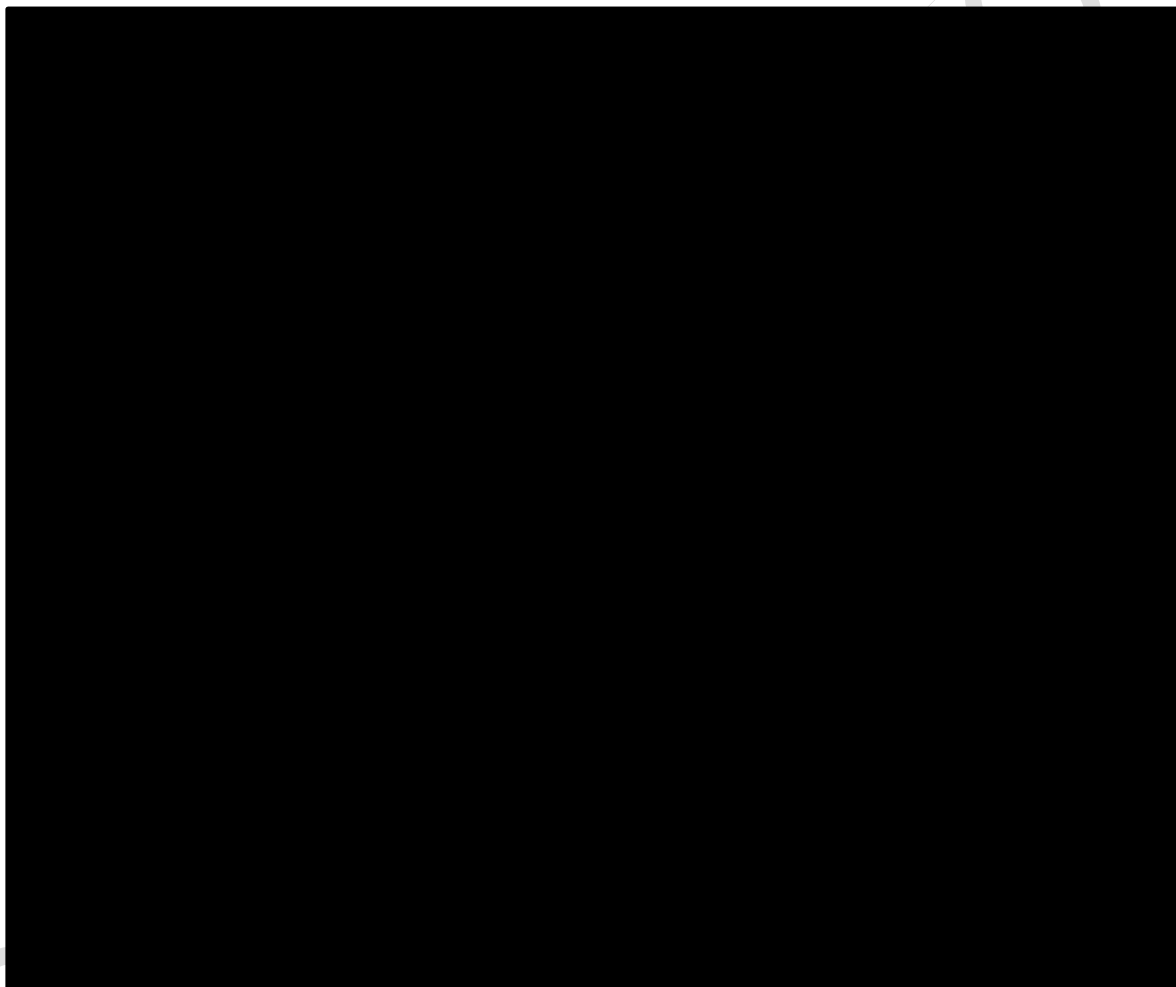


Figure 4-6

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### 4.3 SUMMARY OF ARCHAEOLOGICAL PREDICTIVE MODEL FOR THE REGION

Predictive modelling is an adaptive process which relies on a framework formulated by a number of factors, including but not limited to the use of local land systems, the environmental context, archaeological work and any distinctive sets of constraints that would influence land use patterns. This is based on the concept that different landscape zones may offer different constraints, which is then reflected in the spatial distributions and forms of archaeological evidence within the region (Hall and Lomax 1996).

Early settlement models focused on seasonal mobility, with the exploitation of inland resources being sought once local ones become less abundant. These principles were adopted by Foley (1981) who developed a site distribution model for forager settlement patterns. This model identifies two distinctive types of hunter and gather settlements; 'residential base camps' and 'activities areas'. Residential base camps are predominately found located in close proximity to a reliable source of permanent water and shelter. From this point the surrounding landscape is explored and local resources gathered. This is reflected in the archaeological record, with high density artefact scatters being associated with camp bases, while low density and isolated artefacts are related to the travelling routes and activity areas (Foley 1981).

However, more recently, investigation into understanding the impacts of various episodes of occupation on the archaeological record has been explored, of which single or repeated events are being identified. This is often a complex process to establish, specifically within predictive models as land use and disturbance can often result in post depositional processes and the superimposition of archaeological materials by repeated episodes of occupation.

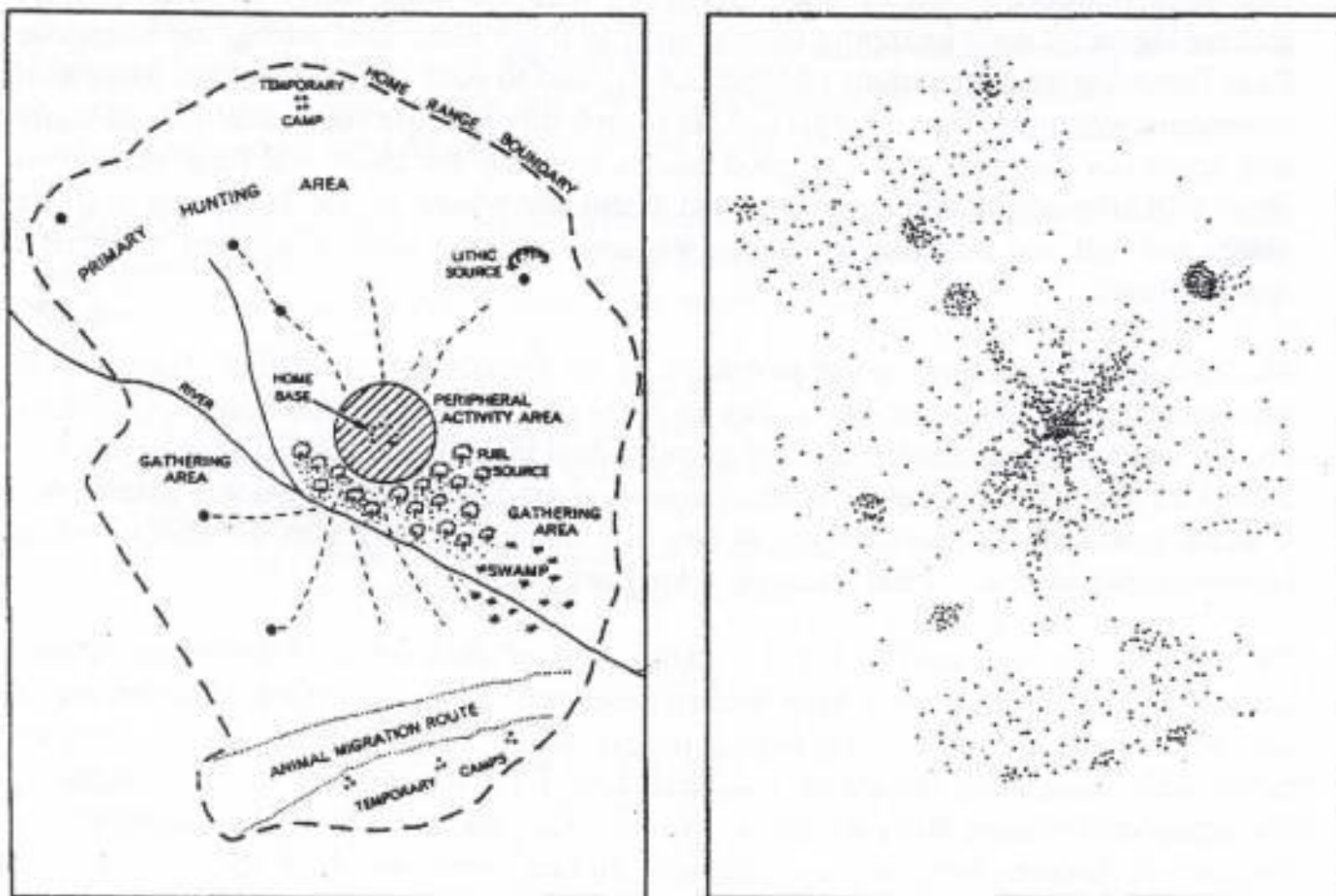
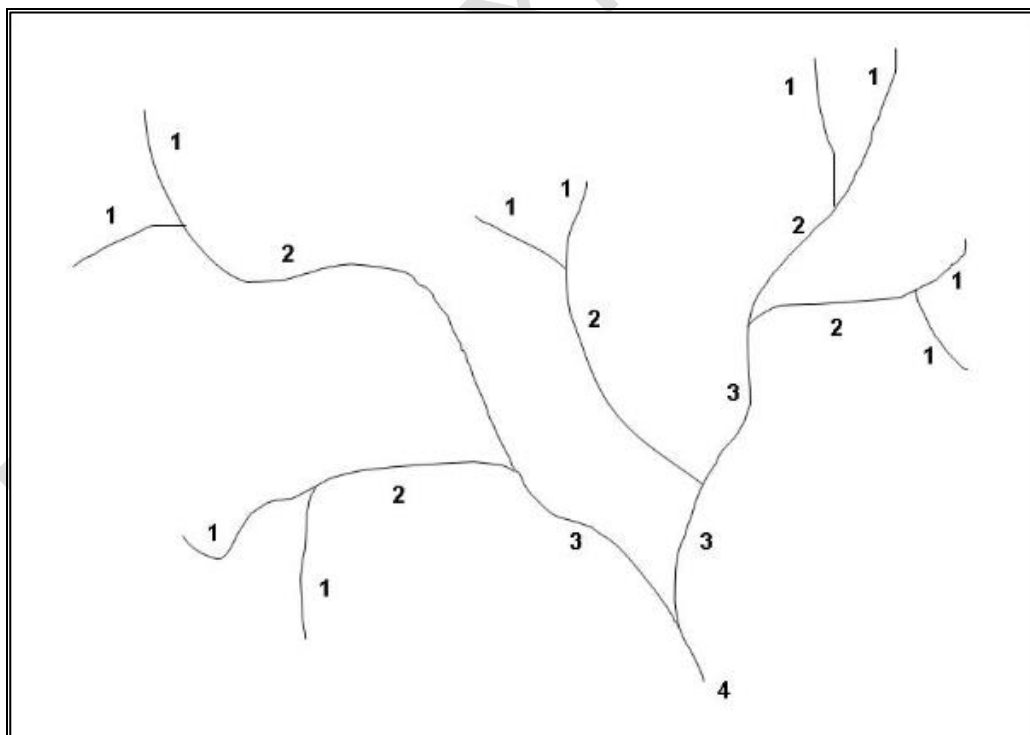


Figure 4-7 Examples of forager settlement patterns.  
Foley (1981).

The principles behind this model have been incorporated into other predictive models such as that of McBryde (1976). McBryde's model is centred on the utilisation of food resources as a contributor to settlement patterns, specifically with reference to the predictability and reliability of food resources for Aboriginal people within the immediate coastal fringe and/or hinterland zone, with migratory behaviour being a possibility. Resources such as certain species of animals, particularly; small marsupials and reptiles, plant resources and nesting seabirds may have been exploited or only available on a seasonal or intermittent basis. As such, archaeological sites which represent these activities whilst not being representative of permanent occupation may be representative of brief, possibly repeated occupation.

Jo McDonald and Peter Mitchell have since contributed to this debate, with reference to Aboriginal archaeological sites and proximity to water using their Stream order model (1993). This model utilises Strahler's hierarchy of tributaries. This model correlates with the concept of proximity to permanent water and site locations and their relationship with topographical units. They identify that artefact densities are greatest on terraces and lower slopes within 100m of water.

Intermittent streams, however, also have an impact on the archaeological record. It was discovered that artefacts were most likely within 50 – 100m of higher (4<sup>th</sup>) order streams, within 50m (2<sup>nd</sup>) order streams and that artefact distributions around (1<sup>st</sup>) order streams were not significantly affected by distance from the watercourse. Landscapes associated with higher order streams (2<sup>nd</sup>) order streams were found to have higher artefact densities and more continuous distribution than lower order streams.



**Figure 4-8** Strahler's hierarchy of tributaries.  
Strahler (1957).

**Table 4-5 Relationship between landscape unit and site distribution for region**

<b>Landscape Unit /Site types</b>	<b>Site Distribution and activity</b>
<b>1<sup>st</sup> order stream</b>	Archaeological evidence will be sparse and reflect little more than a background scatter
<b>Middle reaches of 2<sup>nd</sup> Order Stream</b>	Archaeological evidence will be sparse but focus activity (one off camp locations, single episodes and knapping floor)
<b>Upper reaches of 2<sup>nd</sup> order stream</b>	Archaeological evidence will have a relatively sparse distribution and density. These sites contain evidence of localised one-off behaviour.
<b>Lower reaches of 3<sup>rd</sup> order stream</b>	Archaeological evidence for frequent occupation. This will include repeated occupation by small groups, knapping floors (used and unused material) and evidence of concentrated activities.
<b>Major creek-lines 4<sup>th</sup> order streams</b>	Archaeological evidence for more permanent or repeated occupation. Sites will be complex and may be stratified with a high distribution and density.
<b>Creek junctions</b>	This landscape may provide foci for site activity, the size of the confluence in terms of stream rankings could be expected to influence the size of the site, with the expectation of there being higher artefact distribution and density.
<b>Ridge top locations between drainage lines</b>	Ridge Tops will usually contain limited archaeological evidence, although isolated knapping floors or other forms of one-off occupation may be in evidence in such a location.
<b>Raw Materials near water-sources</b>	The most common raw materials are silcrete and chert in sites closer to coastal headlands, though some indurated mudstone/silicified tuff and quartz artefacts may also be found.
<b>Grinding Grooves</b>	Grinding Grooves may be found in the sandstone or shale/sandstone transition areas.
<b>Scarred trees -</b>	May occur in stands of remnant vegetation.
<b>Ceremonial Sites</b>	Consultation with relevant Aboriginal Stakeholder groups, individuals and review of ethnographic sources often reveal the presence of ceremonial or social sites.

Umwelt (2004), has identified similar environmental – archaeological relationships which contribute to the mapping and modelling of archaeological sites, such as:

- The pattern of watercourses and other landscape features such as ridge lines affected the ease with which people could move through the landscape
- Certain landscape features such as crests or gently sloping, well-drained landforms influenced the location of camping places or vantage points that provided outlooks across the countryside
- The morphology of different watercourses affected the persistence of water in dry periods and the diversity of aquatic resources and so influenced where, and for how long, people could camp or procure food
- The distribution of rock outcrops affected the availability of raw materials for flakes and ground stone tools
- The association of alluvial, colluvial and stable landforms affects the potential that sites will survive

- European land-use practices affect the potential for site survival and/or the capacity for sites to retain enough information for us to interpret the types of activities that took place at a specific location

All models state that the primary requirement of all repeated, concentrated or permanent occupation is reliable access to fresh water. Brief and possibly repeated occupation may be represented in areas that have unreliable access to ephemeral water sources, however these areas will not possess a high archaeological potential (Goodwin 1999).

The Aboriginal Cultural Heritage Data Audit (DOP, 2005) produced the following table as part of the NSW Comprehensive Coastal Assessment Toolkit (DOP, 2005) which made the following statements outlined in table 4.6 about the predictive location of Aboriginal sites in Coastal NSW. These statements support the conclusions drawn in the following predictive model established for the study area. The study makes one very important claim which is that Aboriginal Ceremonial or Dreaming Sites can only be identified by Aboriginal community knowledge.

PUBLIC EXHIBITION

**Table 4-6 Aboriginal Cultural Heritage Data Audit, Predictive Modelling for Coastal Aboriginal Sites, NSW**

Site Type	Archaeological/ Predictive Modelling
Aboriginal Ceremony and Dreaming Sites	Can only be identified on the basis of Aboriginal community knowledge.
Aboriginal Resource and Gathering Sites	Can occur at any location where plant and animal target species are found at present or were available in the past.
Art Sites:	All rock paintings or drawings and some rock engravings will occur within rock shelters/overhangs, most commonly within sandstone cliff lines and in granite boulder fields. Rock engravings may occur wherever there are suitable rock-surface exposures.
Artefacts:	Will occur in all landscapes with varying densities. Artefacts of greatest scientific significance will occur in stratified open contexts (such as alluvial terraces, sand bodies) and rock shelter floors.
Burials:	Most likely (but not always) to be buried in, or eroding from, sandy soils. Can occur within rock shelters/overhangs, most commonly within sandstone cliff lines and in granite boulder fields.
Ceremonial Ring Sites:	Environmental factors may be of particular importance in site location including association with sources of water, ridges, unstructured soils and geological boundaries. Distance to adjacent ceremonial ring sites may influence site location.
Conflict Sites:	Can only be identified on the basis of historical records and community knowledge.
Grinding Grooves:	Most likely to occur on surface exposures of sandstone. Occasionally occur within sandstone rock shelters.
Modified Trees	Will only occur where target tree species survive and if these are of an age generally greater than 100 years old.
Non-Human Bone and Organic Material Sites:	Will occur in any surface or buried context where preservation conditions allow. Most commonly survive in open shell midden sites and in rock shelter floor deposits.
Ochre Quarry Sites:	Can occur at any location where suitable ochre sources are found, either as isolated nodules or as suitable sediments (clays).
Potential Archaeological Deposits:	Can occur in all landscape types. PADs of greatest scientific significance will occur in stratified open contexts (such as alluvial terraces, sand bodies) and rock shelter floors.
Shell Middens:	Will occur as extensive packed shell deposits to small shell scatters in all coastal zones along beaches, headlands and estuaries, both in open situations and in rock shelters. May occur along rivers and creeks where edible shellfish populations exist or existed in the past.
Stone Arrangements	Tend to be on high ground, often on the tops of ridges and peaks commanding views of the surrounding country. Often situated in relatively inaccessible places.
Stone Quarry Sites:	Can occur at any location where suitable raw materials outcrop, including pebble beds/beaches.
Waterholes	May occur within any river or creek. Rare examples may occur in open exposures of rock.



## 4.4 ARCHAEOLOGICAL PREDICTIVE MODEL FOR THE STUDY AREA

The following section gives an indication of the likelihood of certain site types being located within the study area. These indications are based on the research and results of assessments and excavations in the vicinity of the study area and also from the greater Northumberland Region. The predictive model also takes into account the variables of landscape features, landscape resources, landscape disturbance and ethnographic evidence gathered from Aboriginal Stakeholder groups and individuals.

Site Type	Research	Likelihood
Open Artefact Scatters	Higher order streams such as the Hawkesbury River, Popran Creek and Mooney Mooney Creek are located within the vicinity of the study area. The dearth of known reliable raw material source within nearby landscape units, would suggest that the artefacts may be significant in number but smaller in size, on account to greater levels of stone tool reduction. Excavations in the vicinity of the study area indicate the presence of deposits that are suggestive of concentrated and repeated occupation.	Likely within undisturbed parts of the study area.
Isolated Artefacts	Higher order streams such as the Hawkesbury River, Popran Creek and Mooney Mooney Creek are located within the vicinity of the study area. The dearth of known reliable raw material source within nearby landscape units, would suggest that the artefacts may be significant in number but smaller in size, on account to greater levels of stone tool reduction. Excavations in the vicinity of the study area indicate the presence of deposits that are suggestive of concentrated and repeated occupation.	Likely within undisturbed parts of the study area.
Midden Deposits	Given the proximity of the study area to watercourses, it is likely that sections of the study area was used for food procurement, consumption, and refuse discard. It is presently unclear whether intact original soil profiles are present, however, if they are, associated archaeological material may occur within said deposits.	Likely within undisturbed parts of the study area.
Grinding Grooves	Boulders of sandstone or outcrops may occur in the landscape units represented in the study area.	Likely within undisturbed parts of the study area.
Stone Resource Sites	Rock outcrops of suitable flaking material may be present within the study area.	Possible within undisturbed parts of the study area.
Scarred Trees	Trees of sufficient age are located within the study area and therefore, evidence of scarring or carving may be present.	Likely within undisturbed parts of the study area.
Sandstone Shelters	The soil landscapes of the study area may contain sandstone overhangs	Likely within the study area.
Burials	Undisturbed sandy loam deposits may be present and subsequently, burials may be possible within the study area. The acidic soil profiles however may impact the survival of skeletal remains.	Possible within undisturbed parts of the study area.

Ceremonial Sites	Consultation with relevant Aboriginal stakeholder groups and individuals is taking place, however, it is possible that such information may become available in the future, as a result, of further consultation.	Possible that Ceremonial/Social sites may be present within the study area.
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## 4.5 ARCHAEOLOGICAL CONTEXT

It is generally accepted that Aboriginal occupation of Australia dates back at least 40,000 years (Attenbrow 2002 p.20 - 21 & Kohen et al 1983). The result of this extensive and continued occupation which includes the Sydney region has left a vast amount of accumulated depositional evidence and the Cumberland Lowlands is no exception. The oldest date generally considered to be reliable for the earliest occupation around the region comes from excavations at Parramatta which contain objects or features which have been dated to 30,735 ± 407 BP (McDonald et al 2005).

The majority of reliably dated archaeological sites within the region are less than 5,000 years old which places them in the mid to late Holocene period. A combination of reasons has been suggested for this collection of relatively recent dates. There is an argument that an increase in population and 'intensification' of much of the continent took place around this time, leading to a great deal more evidence being deposited than was deposited as a result of the sparser prior occupation period. It is also the case that many archaeological sites along the past coastline may have been submerged as the seas rose approximately to their current level around 6,000 years ago. This would have had the effect of covering evidence of previous coastal occupation. In addition, it is also true that the acidic soils which are predominate around the Sydney region do not allow for longer-term survival of sites (Hiscock 2008 p. 106).

Different landscape units not only influence the preservation of sites but can determine where certain site types will be located. Across the whole of the Sydney Basin, the most common Aboriginal archaeological site type is occupation evidence within Rock Shelters. However, the most common Aboriginal archaeological site type in the Cumberland Lowlands is Open Artefact Scatters or Open Campsites, which are locations where two or more pieces of stone show evidence of human modification. These sites can sometimes be very large, with up to thousands of artefacts and include other habitation remains such as animal bone, shell or fireplaces [known as *hearths*] (Attenbrow 2002 p. 75 – 76). Many hundreds of artefact sites have been recorded within the Cumberland Lowlands. This is despite the fact that at least 50% of the Cumberland Lowlands has already been developed to such an extent that any archaeological evidence which may have once been present has been destroyed.

## 4.6 PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS NEAR THE STUDY AREA

As part of the research process of this report the library of archaeological assessments, test excavation and open area salvage excavation reports which is located at the offices of HNSW at Hurstville was consulted. Presented below are summaries of indigenous archaeological survey assessments, test excavations and salvage excavations in the vicinity of the study area, which have all been carried out. Each site card for registered sites within the study area have additionally been summarised. This list is by no means exhaustive and is merely a representative sample of archaeological activity within the vicinity of the study area.

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The practical ramifications of the results of the aforementioned archaeological assessments and excavations are that there is a high potential for Aboriginal archaeological features, objects, and/or deposits to be present within the study area, particularly if there is minimal disturbance.

PUBLIC EXHIBIT

## 5.0 SIGNIFICANCE ASSESSMENT

The processes of assessing significance for items of cultural heritage value are set out in *The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance: the Burra Charter* (amended 1999) formulated in 1979 and based largely on the Venice Charter of International Heritage established in 1966.

Archaeological sites may be significant according to four criteria, including scientific or archaeological significance, cultural significance to Aboriginal people, representative significance which is the degree to which a site is representative of archaeological and/or cultural type, and value as an educational resource. In New South Wales the nature of significance relates to the scientific, cultural, representative or educational criteria and sites are also assessed on whether they exhibit historic or cultural connections.

### 5.1 ARCHAEOLOGICAL SIGNIFICANCE

#### 5.1.1 Educational Significance

The educational value of any given location will depend on the importance of any archaeological material located, on its rarity, quality and the contribution this material can have on any educational process (Australia ICOMOS, 1999 p. 11).

No programme of archaeological test excavation was conducted as part of this assessment to locate Aboriginal cultural material. Therefore, no educational significance can be assigned to the study area.

#### 5.1.2 Scientific Significance

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located, on its rarity, quality and on the degree to which this may contribute further substantial information to a scientific research process. (Australia ICOMOS, 1999 p.11).

No programme of archaeological test excavation was conducted as part of this assessment to locate Aboriginal cultural material. Therefore, no scientific significance can be assigned to the study area.

#### 5.1.3 Representative Significance

The representative value of any given location will depend on rarity and quality of any archaeological material located and on the degree to which this representativeness may contribute further substantial information to an educational or scientific research process. (Australia ICOMOS, 1999 p.11).

No programme of archaeological test excavation was conducted as part of this assessment to locate Aboriginal cultural material. Therefore, no representative significance can be assigned to the study area.

### 5.2 SOCIAL AND CULTURAL SIGNIFICANCE

As defined in the 'Burra Charter' (ICOMOS, 1999) cultural significance is broken into three parts: aesthetic, historic and scientific value for past, present or future generations. Cultural significance is a concept which assists in estimating the value of any given place. Places that are likely to be of significance are those which can contain information which may assist with the understanding of the past or enrich the

present, and which will be of value to future generations. The meaning of these terms in the context of cultural significance is outlined below. It should be noted that they are not mutually exclusive, (Australia ICOMOS, 1999 p.12).

### **5.2.1 Historic Significance**

A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment. (Australia ICOMOS, 1999 p.11).

No historical significance has been assigned to the study area by any participating Aboriginal Stakeholders. However, the study site is considered to be of high Aboriginal cultural heritage significance to the Aboriginal community [REDACTED]

### **5.2.2 Scientific Significance**

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located, on its rarity, quality and on the degree to which this may contribute further substantial information to a scientific research process. (Australia ICOMOS, 1999 p.11).

No scientific significance had been assigned to the study area by any participating Aboriginal Stakeholders. However, the study site is considered to be of high Aboriginal cultural heritage significance to the Aboriginal community [REDACTED]

### **5.2.3 Aesthetic Significance**

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; the smells and sounds associated with the place and its use. (Australia ICOMOS, 1999 p.11).

[REDACTED]

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[REDACTED]

In addition, the study site is considered to be of high Aboriginal cultural heritage significance to the Aboriginal community [REDACTED]





PUBLIC EXHIBITION

## 6.0 CULTURAL HERITAGE RESPONSES

All registered stakeholders were given a copy of this report and were given a minimum of 28 days to comment on this report. All comments will be incorporated into these reports. This section outlines the research questions and responses concerning the cultural heritage of the study area.

### 6.1 REGISTERED STAKEHOLDER QUESTIONS

All registered stakeholders were given a copy of a proposed Aboriginal Cultural Heritage Assessment Report (ACHAR) research methodology and given 28 days to respond to this methodology.

The following is a questionnaire that was included with the ACHA methodology.

- Does the study area hold any social, spiritual or cultural values to the participating Aboriginal stakeholders? If so, what are these values and are they confined to particular parts of the study area?
- Why are these parts or the whole of the study area culturally significant to the participating Aboriginal stakeholders?
- Are particular parts of the study area more important than others?
- Are any previously unidentified known culturally significant places present within the study area? If so, where are they located?
- Are any previously unidentified Aboriginal objects or Aboriginal places present within the study area? If so, where are they located?
- Are any previously unidentified natural or archaeological resources present within the study area? If so, where are they located?
- Are there any traditional stories or legends associated with the study area?
- Are there any recollections of Aboriginal people living within the study area?
- Is there any information to suggest the presence of burials within the study area?
- Are any traditional flora or fauna resources associated with the study area?
- Does the study area have any sensory scenic or creatively significant cultural values?
- If so, what are these values and are they confined to particular parts of the study area and where are they located?
- In what way if any will the proposed development harm the identified cultural heritage and archaeological values of the study area?
- Do the participants have suggestions on the mitigative strategies for the management of the cultural and archaeological values of the study area?
- Are there any gender specific cultural values associated with the study area which cannot be raised in a male presence?
- Are there any gender specific cultural values associated with the study area which cannot be raised in a female presence? If so how would the Aboriginal stakeholders like these dealt with?
- Do the participants have any concerns not yet raised in this interview?

## **6.2 REGISTERED STAKEHOLDER SUBMISSIONS TO QUESTIONS AND RESEARCH METHODOLOGY**

On the 7<sup>th</sup> October 2021, a Teleconference meeting was scheduled to discuss the report's recommendations and way forward. The following RAPs approved the recommendations set out in the Methodology.

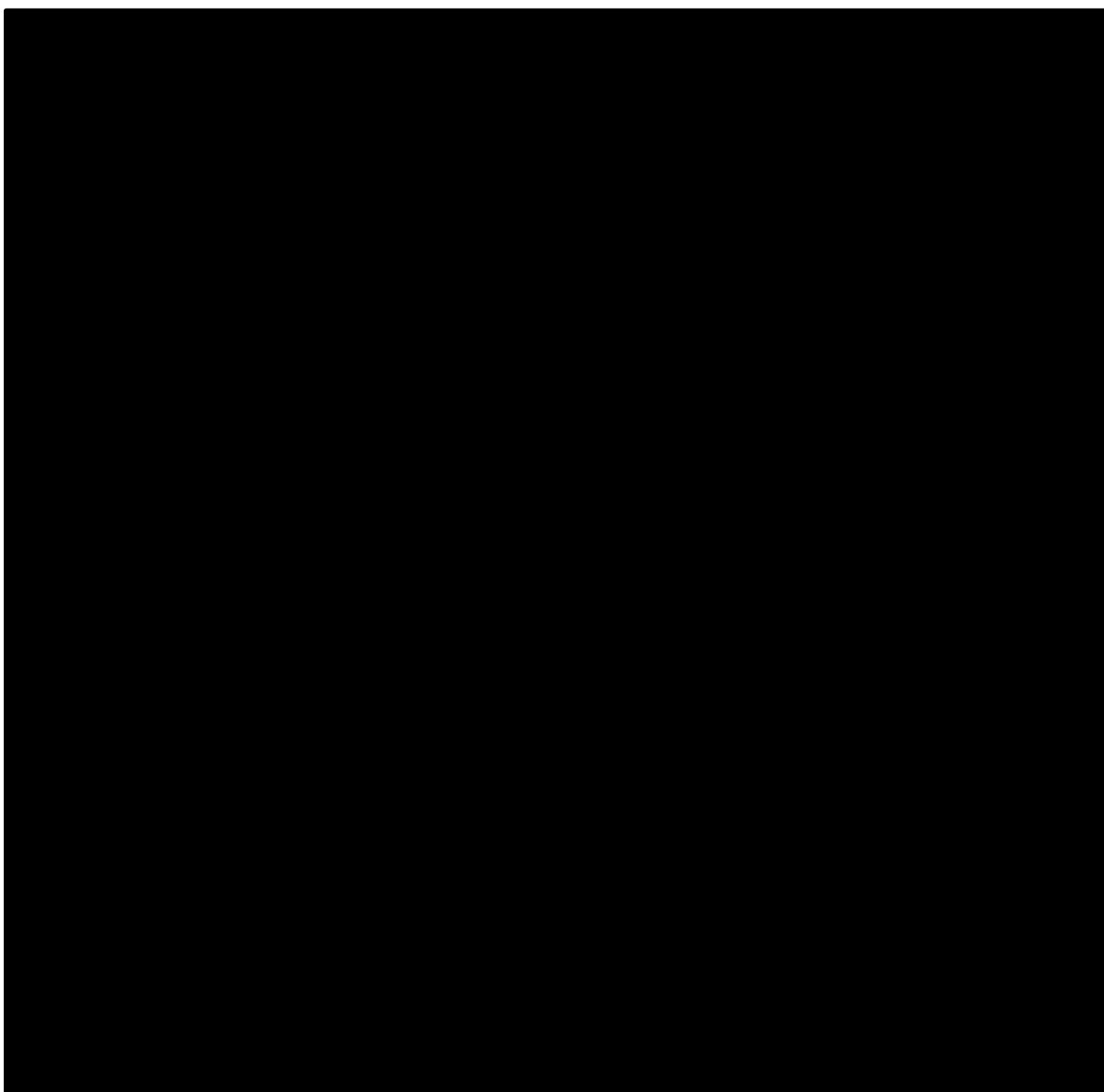
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### **6.2.1 [REDACTED]**

[REDACTED]



### **6.3 REGISTERED STAKEHOLDER SUBMISSIONS TO ACHAR**

On the 27<sup>th</sup> October 2021, a Teleconference meeting was scheduled to discuss the report's recommendations and way forward. The following RAPs approved the recommendations set out in the ACHAR.

[REDACTED]

[REDACTED]

[REDACTED]

#### **6.3.1**

[REDACTED]

**No other submissions were made.**

## 7.0 MANAGEMENT AND MITIGATION

The management recommendations presented in this section of the report take into account that *no development impacts* to ground surfaces are proposed. As a result, the following recommendations have been formulated after consultation with the registered Aboriginal Stakeholders, the proponent, and Heritage NSW:

- Consultation with the Registered Aboriginal Parties (RAPs) should continue, as per the requirements detailed in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)*. All RAPs have been given the opportunity to comment on the recommendations of this report. This is the final Aboriginal Stakeholder approved version of this report
- All registered Aboriginal sites which may be at risk of impact from the current activities occurring on the property should be inspected to confirm site locations, conditions, and recorded features
- A Management Plan should be written to establish inspection protocols, - timeframes, and contact procedures between representatives of the registered Aboriginal Stakeholders and Glenworth Valley Outdoor Adventures
- Should any sites be determined to be at risk of damage, a management procedure should be developed in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* and in consultation with the relevant Aboriginal Stakeholders. This may include conservation measures such as fencing or signage
- Should any future works be proposed, that may impact these sites - further investigation should be undertaken in accordance with the appropriate legislation that conforms to the reporting process, conditions and requirements of *Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998)* and *Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*.

## 8.0 GLOSSARY

Term	Definition
Aboriginal/ Aborigine	These terms apply to indigenous Australians throughout time.
Aboriginal Object	A term now used (formerly 'relic') within the NSW <i>National Parks and Wildlife Act, 1974</i> to refer to "...any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains."
AHIP	Aboriginal Heritage Impact Permit, issued under Part 6 of the National Parks and Wildlife Act 1974, where harm to an Aboriginal object or Aboriginal place cannot be avoided.
Alluvial	Describes material deposited by, or in transit in flowing water.
AMAC	Archaeological Management and Consulting Group.
Artefact	Any object, usually portable, that has been made or shaped by human hand.
Assemblage	A collection of artefacts found in close proximity with one another often excavated together.
Axe grinding Grooves	Areas on a stone surface where other items such as stone tools, wood or bones have been sharpened.
Basalt	A dark coloured, basic volcanic rock.
Bioturbation	Reworking of sediments through the action of ground dwelling life forms. This can also include soil cracking and root activity.
Broken Flake	A flake fragment which displays only part of the diagnostic features of a complete flake.
BP	Before present (AD1950).
Burial	Sites containing the physical remains of deceased Aboriginal people.
Ceremonial Sites	Places or objects of ceremonial, religious or ritual significance to Aboriginal people.
Chert	A hard siliceous rock suitable for flaking into tools.
DCP	Development Control Plan.
DP	Deposited Plan.
DPIE	Department of Planning, Industry and Environment (Formerly Department of Planning and Environment)
EES Group	Environment, Energy and Science Group (formerly Office of Environment and Heritage)
Erosion	Process where particles are detached from rock or soil and transported away principally via water, wind and ice.
Flake	A piece of stone, detached by striking a core with another stone.
Flaking/Knapping	The process of making stone tools by detaching flakes from a piece of stone.
Friable	Easily crumbled or cultivated.
Hard setting	Soil which is compact and hard. It appears to have a pedal structure when dried out.
Heritage Division	Formerly known as the Heritage Branch
Holocene	The period of time since the last retreat of the polar icecaps, commencing approximately 10,000 – 110,000
Intensification	Increased social and economic complexity.

Term	Definition
Landscape Unit	An area of land where topography and soils have distinct characteristics, are recognisable, describable by concise statements and capable of being represented on a map.
Laminite	A thinly bedded, fine grained sedimentary rock.
LEP	Local Environment Plan.
LGA	Local Government Area.
Lithics	A term used to describe stone and stone artefacts.
Loam	A medium textured soil of approximate composition of 10- 25% clay, 25-50% silt and 2% sand.
Loose	A soil which is not cohesive.
Matrix	Finer grained fraction, typically a cementing agent within soil or rock in which larger particles are embedded.
Midden	Aboriginal occupation site consisting chiefly of shells, which can also include bone, stone artefacts and other debris.
NPW Act	National Parks and Wildlife Act 1974
OEH	NSW Office of Environment and Heritage (formerly known as the DECCW)
Open Campsite	A surface accumulation of stone artefacts and/ or other artefacts exposed on the ground surface.
Potential Archaeological Deposit (PAD)	An area where no surface archaeological remains are visible but where it has been assessed that there is some potential for sub-surface archaeological remains to be present.
Ped	An individual, natural soil aggregate.
Pedal	Describes a soil in which some or all of the soil material occurs in the form of peds in a moist state.
Plastic	Describes soil material which is in a condition which allows it to undergo permanent deformation without appreciable volume change or elastic rebound and without rupture.
Pleistocene	The epoch of geological time starting 1.8 million years ago.
Quartz	Common mineral with naturally sharp edges and poor fracturing properties. Colour ranging from clear, to milky white and pink.
Quartzite	Homogenous medium to coarse grained metamorphosed sandstone.
Rock Painting	Encompassing drawing, paintings or stencils that have been placed on a rock surface usually within a rock shelter.
Rock Engraving	Pictures which have been carved, pecked or abraded into a rock surface, usually sandstone and predominantly open, flat surfaces.
Sandstone	A detrital sedimentary rock with predominantly sand sized particles.
Scarred/ Carved Tree	A tree from which bark has been deliberately removed.
Sclerophyll	Denoting the presence of hard stiff leaves, typically used to classify forest and indicative of drier conditions.
Sedimentation	Deposition of sediment typically by water.
Silcrete	A sedimentary rock comprising of quartz grains in a matrix of fine grained – amorphous silica.
Silt	Fine soil particles in size ranges of 0.02 – 0.002mm.
Slope	A landform element inclined from the horizontal at an angle measured in degrees or as a percentage.
SHI	State Heritage Inventory
SHR	State Heritage Register
Subsoil	Subsurface material comprising the B and C horizons of soils with distinct profiles.
Stone Resource Site	A geological feature in the landscape from which raw material for the manufacture of stone tools was obtained.



Term	Definition
Texture	The coarseness or fineness of a soil as measured by the behaviour of a moist ball of soil when pressed between the thumb and forefinger.
Topsoil	A part of the soil profile, typically the A1 Horizon, containing material which is usually darker, more fertile and better structured than the underlying layers.
Weathering	The physical and chemical disintegration, alteration and decomposition of rocks and minerals at or near the earth's surface by atmospheric and biological agents.

PUBLIC EXHIBITION

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PUBLIC EXHIBITION

# APPENDICES

## APPENDIX ONE – HERITAGE NSW RESPONSE: PLANNING PROPOSAL – ALLOW ADDITIONAL PERMITTED USES ON 49 LOTS AT GLENWORTH VALLEY AND CALGA



Our ref: DOC20/1051723

Gary Murphy  
Chief Executive Officer  
Central Coast Council  
[ask@centralcoast.nsw.gov.au](mailto:ask@centralcoast.nsw.gov.au)

Attention: Bruce Ronan, Strategic Planner, Local Planning and Policy  
[bruce.ronan@centralcoast.nsw.gov.au](mailto:bruce.ronan@centralcoast.nsw.gov.au)

### Planning Proposal – Allow additional permitted uses on 49 Lots at Glenworth Valley and Calga

Dear Mr Murphy

Thank you for the opportunity to comment on the planning proposal to allow additional permitted uses on 49 Lots at Glenworth Valley and Calga. Heritage NSW has reviewed the planning proposal and provides advice in relation to Aboriginal cultural heritage considerations under the *National Parks and Wildlife Act 1974*.

#### Aboriginal Cultural Heritage under the *National Parks and Wildlife Act 1974*

Heritage NSW notes that, although the potential for items (Aboriginal objects) to be present within the subject land is observed, no assessment of Aboriginal cultural heritage has been provided in support of the planning proposal. Instead, the planning proposal addresses Local Planning Direction 2.3 (Heritage Conservation) in relation to Aboriginal cultural heritage by proposing to undertake detailed Aboriginal heritage investigations for the specific locations of future individual development applications.

Heritage NSW strongly encourages planning authorities to identify and conserve significant Aboriginal cultural heritage values up-front, at the planning proposal stage. This leads to better Aboriginal cultural heritage outcomes and gives greater certainty for stakeholders in any development assessment process. Accordingly, Heritage NSW provides the attached Aboriginal cultural heritage recommendations for this planning proposal.

#### Aboriginal Heritage and non-Aboriginal Heritage under the *Heritage Act 1977*

Heritage NSW's Heritage Programs team will provide separate comments on the planning proposal in relation to Aboriginal and non-Aboriginal heritage considerations under the *Heritage Act 1977*.

If you have any questions regarding the above advice, please contact Sam Gibbins at Heritage NSW on 9895 6586 or via email at [samantha.gibbins@environment.nsw.gov.au](mailto:samantha.gibbins@environment.nsw.gov.au).

Yours sincerely

A handwritten signature in blue ink, appearing to read "S. Higgs".

Dr Samantha Higgs  
Senior Team Leader  
Aboriginal Cultural Heritage Regulation - North  
Heritage NSW  
21 December 2020

Level 6, 10 Valentine Ave Parramatta NSW 2150 ■ Locked Bag 5020 Parramatta NSW 2124  
P: 02 9873 8500 ■ E: [heritagemailbox@environment.nsw.gov.au](mailto:heritagemailbox@environment.nsw.gov.au)

## HERITAGE NSW – Aboriginal Cultural Heritage Recommendations

### Planning Proposals

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An Aboriginal cultural heritage assessment is needed to inform planning proposals to ensure they are consistent with Ministerial Directions issued under Section 9.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), specifically Local Planning Direction 2.3 Heritage Conservation (former section 117(2) directions).

Direction 2.3 states that planning authorities must ensure that a planning proposal contains provisions that facilitate the conservation of Aboriginal objects and places protected under the *National Parks and Wildlife Act 1974* (NPW Act) (Direction 2.3(4)(b)), and Aboriginal areas, objects, places or landscapes identified as being of heritage significance to Aboriginal culture and people (Direction 2.3(4)(c)).

Considering Aboriginal cultural heritage values at the planning proposal stage provides planning authorities with the opportunity to meet their obligations under the EP&A Act as well as to their local Aboriginal community.

Heritage NSW supports the application of appropriate land-use zoning (such as E2 conservation) as a suitable mechanism to promote the conservation of significant Aboriginal cultural heritage values. Identifying and conserving significant Aboriginal cultural heritage at the planning proposal stage leads to better Aboriginal cultural heritage outcomes and gives greater certainty for stakeholders in any development assessment process. We strongly encourage planning authorities to meet these obligations.

To adequately assess the Aboriginal cultural heritage significance of the lands subject to the planning proposal, the proponent needs to clearly identify all potential areas, objects, places or landscapes of heritage significance to Aboriginal culture and people that may potentially constrain future land-use planning.

Heritage NSW recommends that identification of Aboriginal cultural heritage values and consultation with Aboriginal people be guided by the following documents:

- [\*Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales\*](#) (OEH 2011).
- Consultation with the Aboriginal community undertaken in accordance with the [\*Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010\*](#) (DECCW 2010).
- Satisfy the requirements of the [\*Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW\*](#) (DECCW 2010).

Please note that a due diligence process is not sufficient to support a planning proposal. Due diligence is inadequate to assess the potential impacts of planning proposals on potential areas, objects, places or landscapes of heritage significance to Aboriginal culture and people, as required by Local Planning Direction 2.3.



## APPENDIX TWO - AMENDED PLANNING PROPOSAL REQUEST – GLENWORTH VALLEY



**Item No:** 2.5  
**Title:** Amended Planning Proposal Request - Glenworth Valley  
**Department:** Environment and Planning

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11 November 2019 Ordinary Council Meeting

Trim Reference: F2018/00020-07 - D13343340  
Author: Bruce Ronan, Town Planner  
Scott Duncan, Section Manager, Land Use and Policy  
Manager: Karen Tucker, Acting Unit Manager, Strategic Planning  
Executive: Scott Cox, Director Environment and Planning

### Report Purpose

The purpose of this report is for Council to consider an amendment to a current Planning Proposal which seeks to enable additional permissible uses on land at Glenworth Valley and Calga (Glenworth Valley Outdoor Adventures) through an amendment to *Gosford Local Environmental Plan 2014*.

This report recommends that the Council support the amendment of the Planning Proposal and, as the Gateway Determination has lapsed, seek a new Gateway Determination from the Minister of Planning.

### Recommendation

**1 That the Council support an amended Planning Proposal applying to:**

- Lots 19, 20, 21, 23, 24, 25, 30, 31, 32, 33, 37, 50, 53, 64, 65, 68, 81, 82, 85, 86, 87, 89, 91, 108, 145 DP 755221,
- Lots 22, 23, 32, 73, 75, 76 DP 755253,
- Lots 1, 3 DP 617088,
- Lot 881 DP 563889,
- Lot 1 DP 1222754,
- Lot 7 DP 1230083,
- Lot 245 DP 48817,
- Lot 7012 DP 1059767,
- Lot 7029 DP 93603,
- Lot 7035 DP 1051932,
- Lot 7036 DP 1059768,
- Lot 7303 DP 1154929, Glenworth Valley, and
- Lot A DP 365595,
- Lot C DP 382358,
- Lot 2 DP 1139242,
- Lot 882 DP 563889,
- part of Lot 102 DP 1139060,



- Lot 7039 DP 1059766,
- Lot 7303 DP 1161109, Calga

to amend the Gosford Local Environmental Plan 2014 (or draft Central Coast Local Environmental Plan), whichever is in effect at the time, to permit the following additional permitted uses (if they are not included in the Central Coast Local Environmental Plan):

- a on land zoned E2 Environmental Conservation, development for the purpose of eco-tourist facilities and recreation facilities (outdoor);
  - b on land zoned RU2 Rural Landscape, development for the purposes of eco-tourist facilities, camping grounds and tourist and visitor accommodation;
  - c on the existing cleared areas of the land zoned E2 Environmental Conservation, comprising Lots 19, 20, 21, 23, 25, 30, 32, 33, 37, 50, 53, 64, 68, 85, 86, 87, 89, 91, 108 and 145 DP 755221, Lots 22 and 32 DP 755253, Lot 3 DP 617088, Lot 245 DP 48817, Lot 7039 DP 1059766 and Lot 7303 DP 1154929, development for the purpose of extensive agriculture.
  - d on land comprising that part of Lot 89 DP 755221 which currently accommodates the multi-purpose building and its curtilage,
    - (i) development for the purpose of function centre, entertainment facility and food and drink premises, and
    - (ii) the total floor area for the function centre, entertainment facility and food and drink premises is to be a maximum of 1500m<sup>2</sup> with any additions being attached to, or directly adjacent to, the existing building.
  - e on the existing cleared areas of the land zoned E2 Environmental Conservation comprising part of Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253, development for the purpose of function centre and camping ground.
  - f on the existing cleared areas of the land zoned E2 Environmental Conservation comprising part of Lots 108 and 145 DP 755221, development for the purpose of tourist and visitor accommodation.
- 2 That Council submit a revised Planning Proposal to the Minister for Planning in accordance with Section 3.35(2) of the Environmental Planning and Assessment Act 1979, requesting an amended Gateway Determination pursuant to Section 3.34 of the Environmental Planning and Assessment Act 1979.

## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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- 3 That Council request delegation for Council to finalise and make the draft Local Environmental Plan, pursuant to Section 3.36 of the Environmental Planning and Assessment Act 1979.**
- 4 That Council undertake community and public authority consultation, in accordance with the Gateway Determination requirements.**
- 5 That the Council consider a further report on results of the agency and community consultation.**

### **Background**

The subject site is commonly known as the "Glenworth Valley Outdoor Adventures" site.

As a result of changes to local planning instruments over many years, the existing horse riding school, which has been operating on the site since it was approved in 1969, is no longer permissible within the E2 Environmental Conservation zone under *Gosford Local Environmental Plan 2014* (GLEP 2014) which applies to the subject land.

The continuation of this use is enabled utilising the "existing use rights" provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Until 2006 development consent could be granted for other uses not permitted in the, then, 7(a) Conservation and Scenic Protection (Conservation) zone on the basis of the existing non-conforming use on the site (i.e. the horse riding school). During this period subsequent developments were approved which included music festivals, paintball and quad biking. A list of development consents granted include:

DA 2839/1999 - music festival (15,000 people per day)  
DA 25818/2004 - small scale music festival (2,500 people per day)  
DA 19911/2003 – recreation facility – paintball  
DA 20082/2003 – recreation facility – quad bike tours

In 2006 the "existing use rights" provisions under the EP&A Act and Regulations were changed to prohibit other non-conforming uses from being permitted. Hence no more development applications could be considered for uses that were not permitted in the zone. Since 2006 the only development consents issued for uses not permitted in the zone related to a temporary use of land and an ancillary use to approved developments on the site.

DA 45588/2014 - recreation facility - equestrian and running events (temporary use)  
DA 44773/2013 – multi-purpose building (ancillary to approved uses on site)

In 2013, DA 43465/2013 approved 3 motel units and 5 caravan sites (i.e. relocatable cabins) on land which is now zoned RU2 Rural Landscape.

## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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The development consent was issued when the land was zoned 7(b) Conservation and Scenic Protection (Scenic Protection) under IDO 122 and motels and caravan parks were permitted uses.

The Planning Proposal, as originally lodged on 13 August 2013, sought approval to provide certainty for the continuation of these existing uses on the subject site and to provide opportunities for additional recreation and tourist related developments in the future by adding specific additional permitted uses into GLEP 2014 which can be conducted on the property.

The Planning Proposal, as originally supported by the former Gosford City Council (fGCC) sought to:

- Enable additional permitted uses of eco-tourist facilities, camping grounds, tourist and visitor accommodation on the land zoned RU2 Rural Landscape;
- Enable additional permitted uses of eco-tourist facilities, camping grounds, tourist and visitor accommodation, extensive agriculture, recreation facilities (outdoor) on land zoned E2 Environmental Conservation;
- Rezone the cleared, pasture improved farmland on the ridge proximate to Cooks Road from E2 Environmental Conservation to RU2 Rural Landscape.

The original Planning Proposal was supported by resolutions of the fGCC made on 17 December 2013 and 10 June 2014 (Attachments 2 and 3) and was progressed under the delegated Authority of the Chief Executive Officer of the fGCC (Attachment 4).

This Planning Proposal was subject to a Gateway Determination issued on 17 July 2014 by the then Department of Planning and Environment (now Department of Planning, Industry and Environment) and the current Gateway Extension lapsed on 24 October 2018.

On the basis of agency consultation in relation to the current Planning Proposal, and additional requirements of the land owner, the Proponent has sought the modifications as detailed further in this report. This request for an amended Planning Proposal opens up the existing Planning Proposal for reassessment as well. Should Council resolve to proceed with the amended Planning Proposal, it will require Council to request an amendment to the Gateway Determination from the Department of Planning, Industry and Environment (DPIE).

### **The Site**

The subject site comprises 49 lots ranging in size from 0.1 hectares (Ha) to 267.5 Ha. The area of the subject site is 1173.6 Ha.

Access is gained to all but two lots via Cooks Road which joins Peats Ridge Road. The remaining two lots gain access directly onto Peats Ridge Road.

## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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The land represents a significant holding of environmentally important land being relatively isolated, with limited access, and characterised by a cleared valley floor with vegetated hillsides and ridgelines (Figure 1).

The land comprises a number of discrete pockets of Endangered Ecological Communities (EEC) and regionally significant vegetation throughout the site.

It is located between developed agricultural and resource lands situated along Peats Ridge Road to the east and Popran National Park to the west. Popran Creek, and a number of other small watercourses which run into it, flow through the site, which then drains to the Hawkesbury River.

The land is also an established tourist destination. Its close proximity to Sydney makes it a desirable destination for a wide tourism market, including international visitors. The broad range of nature-based activities offered at the site also make it appealing for a variety of users and maximises opportunities that the site presents. Some uses are temporary (e.g. music festivals and "mud run" events), whilst other uses are of a more permanent nature with some fixed structures (e.g. multi-purpose building). Different parts of the site are used for various activities (e.g. abseiling, horse riding, quad bike riding). The cleared valley floor is used for the grazing of horses and livestock.

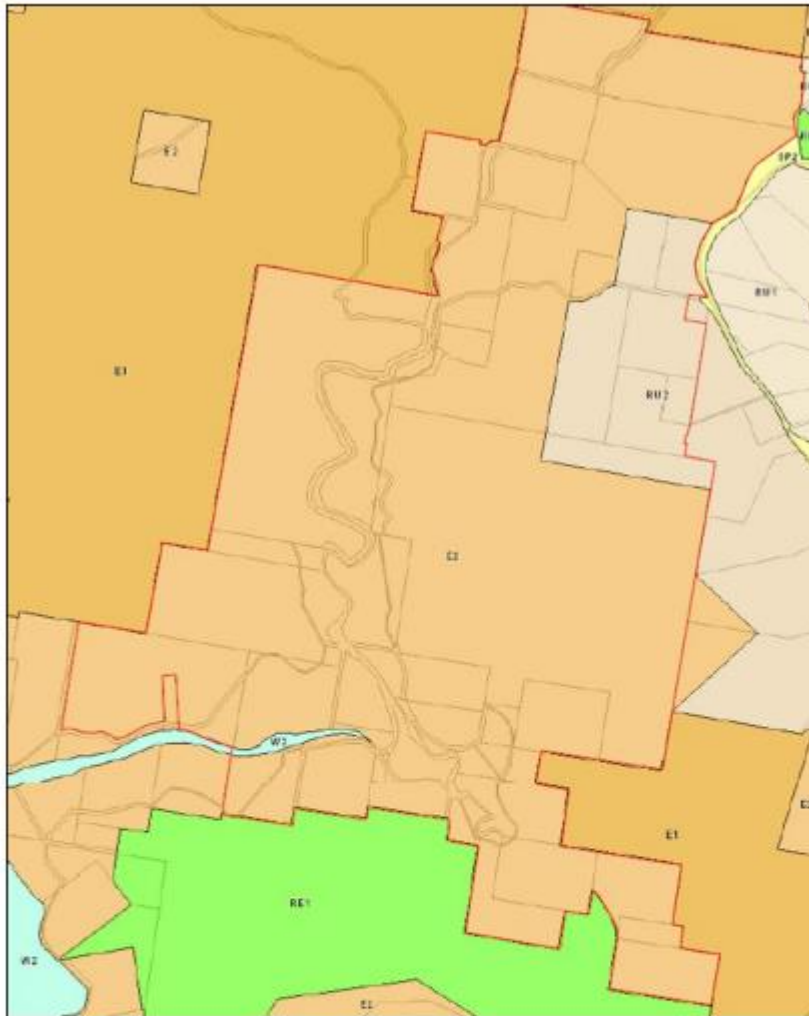






**Figure 1:** Locality Context (subject site outlined in red)

The subject site comprises approximately 1070.2 Ha of land zoned E2 Environmental Conservation and 103.4 Ha of land zoned RU2 Rural Landscape under GLEP 2014 (Figure 2).



**Figure 2:** Current Zoning (subject site outlined in red)

The subject site includes landholdings owned by The Glenworth Valley Pastoral Company Pty Ltd, NSW Department of Trade and Industry (Crown Lands) and the Darkinjung Local Aboriginal Land Council (DLALC) (Figure 3).

The subject land comprises the following lots owned by The Glenworth Valley Pastoral Company Pty Ltd:

## 2.5 Amended Planning Proposal Request - Glenworth Valley (contd)

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- Lots 19, 20, 21, 23, 24, 25, 30, 31, 32, 33, 37, 50, 53, 64, 65, 68, 81, 82, 85, 86, 87, 89, 91, 108, 145 DP 755221,
- Lots 22, 23, 32, 73, 75, 76 DP 755253,
- Lots 1 & 3 DP 617088,
- Lots 881 & 882 DP 563889,
- Lot 1 DP 1222754,
- Lot A DP 365595,
- Lot C DP 382358,
- Lot 2 DP 1139242,
- part of Lot 102 DP 1139060.

The following lots are Crown Land over which The Glenworth Valley Pastoral Company Pty Ltd has a licence under the *Crown Land Management Act 2016* (previously referred to as a permissive occupancy) for the purpose of grazing:

- Lot 7012 DP 1059767
- Lot 7039 DP 1059766
- Lot 7303 DP 1161109
- Lot 7303 DP 1154929

The other Crown Land lots included in the subject area are set out below.

- Lot 7029 DP 93603,
- Lot 7035 DP 1051932,
- Lot 7036 DP 1059768,
- several unformed Crown roads

The land owned by DLALC comprises Lot 245 DP 48817 and Lot 7 DP 1230083.

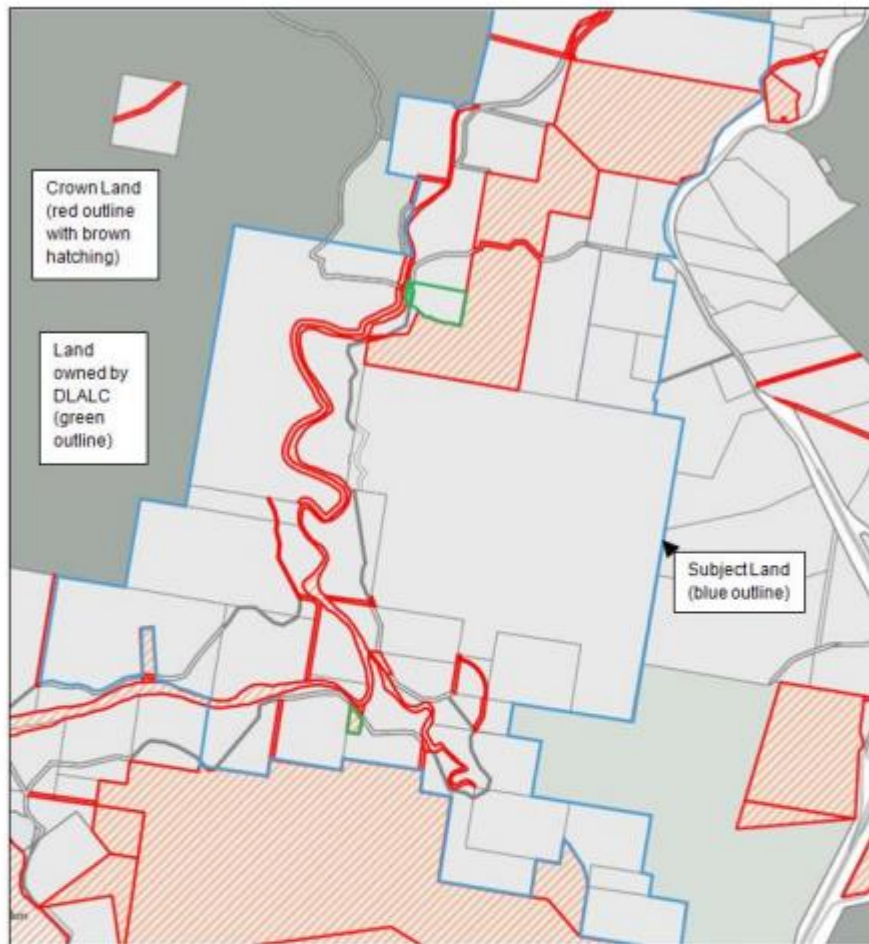


Figure 3: Land owned by the Crown and DLALC

### The Amended Proposal

The proponent's favoured position is to retain the following aspects of the original Planning Proposal:

- Enable additional permitted uses of eco-tourist facilities, camping grounds, tourist and visitor accommodation on all the land zoned RU2 Rural Landscape; and



## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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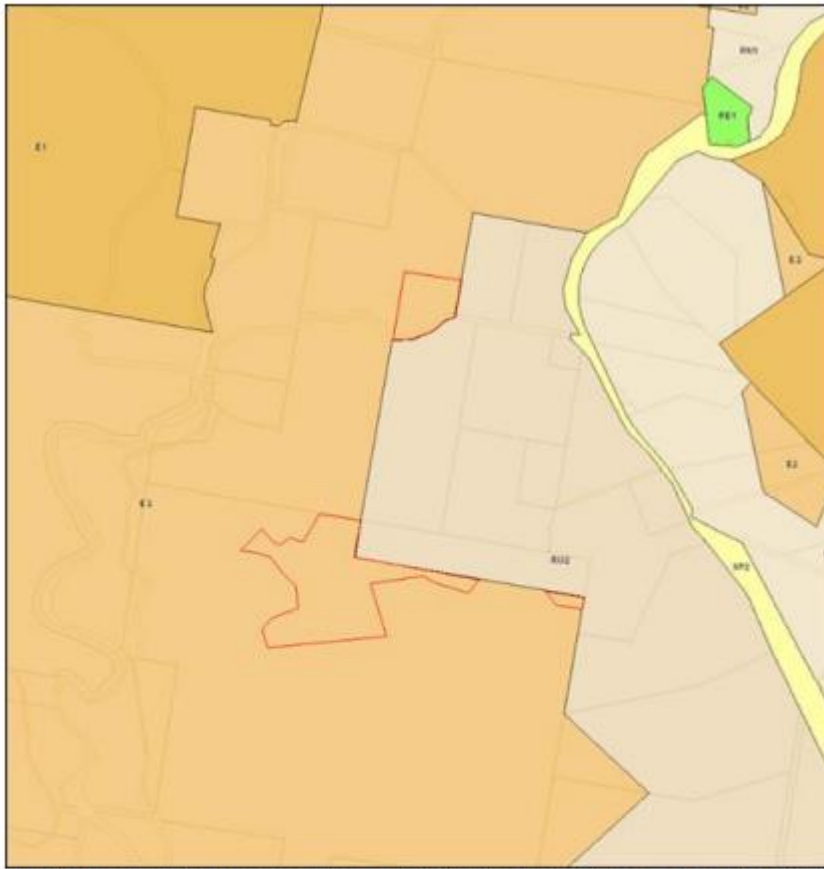
- Enable additional permitted uses of eco-tourist facilities, camping grounds, tourist and visitor accommodation, extensive agriculture, recreation facilities (outdoor) on all the land zoned E2 Environmental Conservation.

However, the proponent has advised that should Council not agree to all these uses over the whole of the E2 Environmental Conservation zoned land, then the following would be satisfactory:

- extensive agriculture on all existing cleared land;
- camping ground on existing cleared areas of Lots 19, 37 and 89 DP 755221 and lots 22 and 32 DP 755253;
- tourist and visitor accommodation on the existing cleared areas of Lots 108 and 145 DP 755221 adjacent to the RU2 Rural Landscape zone. In response to concerns raised by the then NSW Office of Environment and Heritage (OEH), the amended proposal does not seek to rezone the cleared pasture improved farmland on the ridge proximate to Cooks Road from E2 Environmental Conservation to RU2 Rural Landscape as originally proposed (Figure 4). Instead the proponent seeks that these lands be retained as E2 Environmental Conservation with the additional permitted use of "tourist and visitor accommodation".

In addition, the proponent is seeking to include the following amendments to the Planning Proposal:

- 1 Introducing the uses of function centre, entertainment facility and food and drink premises as additional permitted uses for the existing multi-purpose building (on Lot 89 DP 755221) and limiting the total floor area to 1500m<sup>2</sup>.
- 2 Adding function centre, entertainment facility and food and drink premises as additional permitted uses on the existing cleared areas of surrounding lots (Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253) with no permanent structures. These lots are currently zoned E2 Environmental Conservation under GLEP 2014.



**Figure 4:** Land originally proposed to be zoned from E2 Environmental Conservation to RU2 Rural Landscape

The amendment to the Planning Proposal to permit the existing multi-purpose building and surrounding land to be used as a function centre, entertainment facility and food and drink premises was justified by the proponent on the following grounds:

- The existing recreation activities are weekend and school holiday orientated and are reliant on fine weather. To overcome the potential of having successive weekends or holidays washed out, the business is looking to diversify its operations to include midweek and off peak markets and less weather dependent activities. In this way the building can be used for activities that are not tied to the existing recreational activities on the site.

## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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- The allotments surrounding the multi-purpose building are included to allow some operational flexibility, for example, if customers wish to hold a wedding ceremony outdoors.

### **Assessment**

The assessment of the amended planning proposal (which includes that originally considered by the fGCC and the additional permitted uses requested by the proponent) are considered below. The result of this assessment is shown in Figure 5 which indicates the location of each of the proposed additional permitted uses on the site.



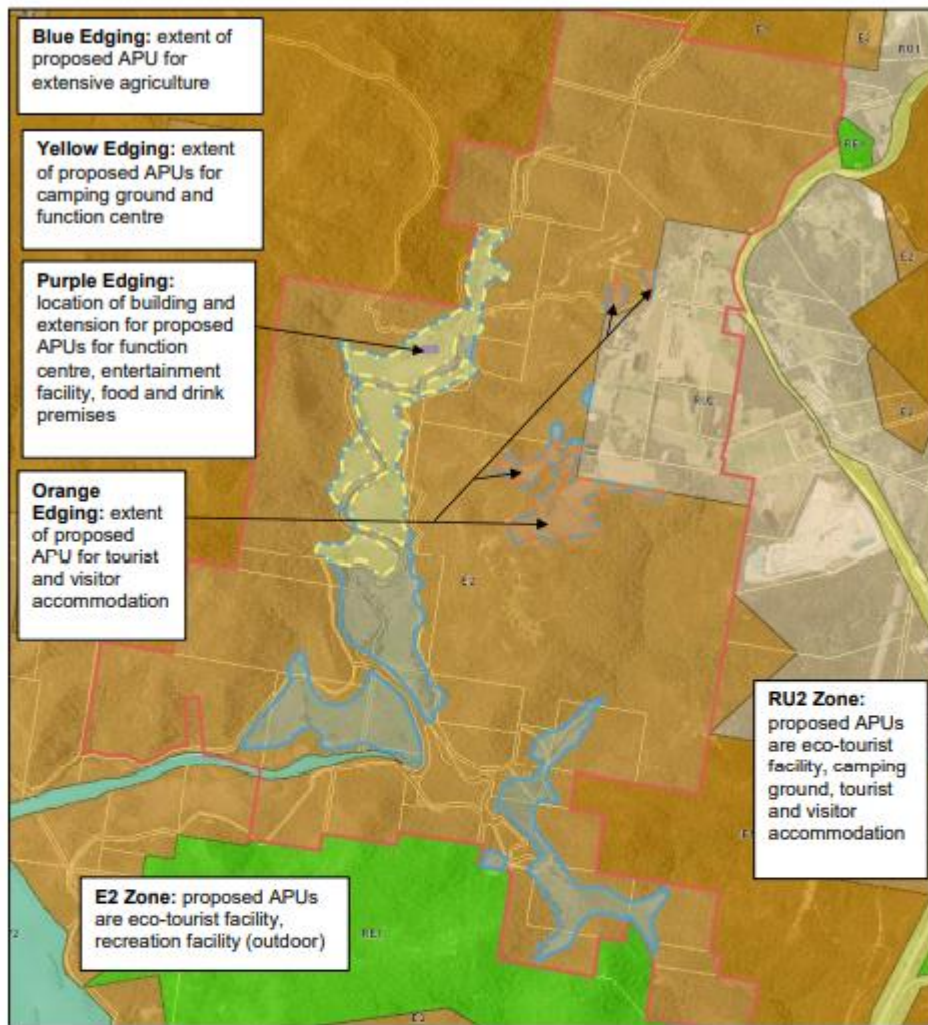


Figure 5: Lots within the subject land affected by each Additional Permitted Use

### Extensive Agriculture

"Extensive agriculture" means any of the following:

- (a) the production of crops or fodder (including irrigated pasture and fodder crops) for commercial purposes;
- (b) the grazing of livestock for commercial purposes;
- (c) bee keeping;

## 2.5 Amended Planning Proposal Request - Glenworth Valley (contd)

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(d) a dairy (pasture based).

"Extensive agriculture" is not permissible in the E2 Environmental Conservation zone given the environmental values of the land and the incompatibility of this use with these values. Also, under the provisions of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, extractive industries are permissible in any zone where "agriculture" is permissible. The Mineral Resources Audit, 2014 did not identify any potential resource within Glenworth Valley.

The applicant has sought the inclusion of "extensive agriculture" as a permissible use on the E2 Environmental Conservation component on the basis of existing grazing activities associated with the horse riding school. Also prior to the GLEP 2014 coming into effect the land was zoned 7(a) Conservation and Scenic Protection (Conservation) which listed "Agriculture" as a use permitted with consent.

The inclusion of "extensive agriculture" as an additional permitted use on cleared E2 Environmental Conservation zoned land on the valley floor and on land adjacent to the RU2 Rural Landscape zone is supported as it is currently used for horse grazing and/or fodder production. The Additional Permitted Use provisions will clearly indicate that development for the purpose of "extensive agriculture" is to occur on existing cleared land. The vegetated escarpment is unsuitable for "extensive agriculture" and is not currently used for this use.

"Extensive agriculture" is permitted in RU2 Rural Landscape zone as a general permitted use in the zone so it is not necessary to specify it as an additional permitted use relating to this land.

### **Recreation Facility (Outdoor)**

*Recreation facility (outdoor)" means a building or place (other than a recreation area) used predominately for outdoor recreation, whether or not operated for the purposes of gain, including a golf course, golf-driving range, mini-golf centre, tennis court, paint-ball centre, lawn bowling green, outdoor swimming pool, equestrian centre, skate board ramp, go-kart track, rifle range, water-ski centre or any other building or place of a like character used for outdoor recreation (including any ancillary buildings) but does not include an entertainment facility or a recreation facility (major).*

"Recreation facility (outdoor)" is not permissible in the E2 Environmental Conservation zone. Although the existing recreational uses and possible future recreational uses are more nature-based than those nominated above, this definition best suits the predominant activities on the land.

Activities include horse riding, (both guided and free ranging on nominated trails), quad bike riding (in nominated areas), kayaking, abseiling (in specific areas), laser skirmish/paintball and may also include other emerging outdoor pursuits.



## 2.5 Amended Planning Proposal Request - Glenworth Valley (contd)

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The inclusion of recreational facility (outdoor) as an Additional Permitted Use on land zoned E2 Environmental Conservation zone will cater for any future recreational uses that may arise whilst protecting the overall values of the site via the objectives of the zone.

Such future recreational uses would require individual development assessment and as it is the inherent natural values of the land that make it attractive for these recreational/tourist related activities it is in the landowner's interests to seek to protect these values.

"Recreation facilities (outdoor)" is permitted in RU2 Rural Landscape zone as a general permitted use in the zone so it is not necessary to specify it as an additional permitted use relating to this land.

### **Eco-tourist Facility**

*"Eco-tourist facility" means a building or place that:*

- (a) provides temporary or short-term accommodation to visitors on a commercial basis, and*
- (b) is located in or adjacent to an area with special ecological or cultural features, and*
- (c) is sensitively designed and located so as to minimise bulk, scale and overall physical footprint and any ecological or visual impact.*

*It may include facilities that are used to provide information or education to visitors and to exhibit or display items.*

The definition of "eco-tourist facility" specifically requires such short-term accommodation to be designed so as to minimise its ecological and visual impact. Such a use would be suitable in the E2 Environmental Conservation zone.

There are also mandated requirements in Clause 5.13 of the GLEP 2014 that sets out matters for consideration of "eco-tourist facilities" that would ensure that development would maintain the environmental values of the land and ensure that it is sensitively designed and managed to have minimal impact on the environment.

Under the draft Central Coast Local Environmental Plan (CCLEP), "eco-tourist facilities" are proposed to be a use permitted in the E2 Environmental Conservation zone so would not be required to be included as an additional permitted use in the E2 zone should this Plan be in effect when this Planning Proposal is finalised.

The planning proposal seeks to permit "eco-tourist facilities" within the RU2 Rural Landscape zone.

### **Camping Ground**

*"Camping ground" means an area of land that has access to communal amenities and on which campervans or tents, annexes or other similar portable and lightweight temporary shelters are, or are to be, installed, erected or placed for short term use, but does not include a caravan park.*

The proponent has advised that the "camping ground" use operates as an ancillary use to the approved horse riding school and it should be permitted over all of the subject land. However as the proposed "camping ground" use is proposed to operate independently of the horse riding use, it lacks strategic merit to be allowed to operate over all the site.

A camping ground use exists on the cleared parts of Lots 22 and 32 DP 755253 and Lots 19, 37 and 89 DP 755221 which is in the valley and zoned E2 Environmental Conservation. As these lots are proximate to the focal point of many group activities on the site the use of "camping ground" on the existing cleared areas of these lots is supported.

The proponent has advised that small groups (e.g. Duke of Edinburgh expeditions) venture into remote areas of the site to camp as part of their wilderness experience. Therefore this use should be permitted over all of the subject land. Under the definition; "camping grounds" means an area of land that has access to communal amenities. Short term camping in the form of "a wilderness experience" as proposed by the proponent is therefore outside of the above "camping grounds" definition. However such low key camping could be considered as a "recreation facility (outdoor)", which is a use proposed to be permitted on all lots zoned E2 Environmental Conservation.

Under the draft CCLEP "camping ground" is proposed to be a permitted use in the RU2 Rural Landscape zone so would not be required to be included as an additional permitted use in the RU2 Rural Landscape zone should this plan be in effect when this planning proposal is finalised.

### **Tourist and Visitor Accommodation**

*Tourist and visitor accommodation means a building or place that provides temporary or short term accommodation on a commercial basis, and includes any of the following:*

- (a) *backpackers' accommodation,*
- (b) *bed and breakfast accommodation,*
- (c) *farm stay accommodation,*
- (d) *hotel or motel accommodation,*
- (e) *serviced apartments,*

*but does not include:*

- (f) *camping grounds, or*
- (g) *caravan parks, or*
- (h) *eco-tourist facilities.*

## 2.5 Amended Planning Proposal Request - Glenworth Valley (contd)

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The proponent has requested that "tourist and visitor accommodation" be permitted over the whole site on the basis that accommodation was part of the riding school and is therefore able to be used in conjunction with the riding school. The proponent argues that under existing use rights the accommodation component can be enlarged, expanded and intensified under s 4.66 – 4.70 of the Environmental Planning and Assessment Act 1979.

Whilst an existing use can be enlarged, expanded and intensified, cl 42 of the *Environmental Planning and Assessment Regulation 2000* requires that such enlargement, expansion or intensification "must be for the existing use and for no other use". Therefore any accommodation onsite, relying on existing use rights, that is to be enlarged, expanded and intensified has to be for the use of horse riders.

The proposed "tourist and visitor accommodation" is not proposed to be linked to the horse riding activities and has the potential to be more intensive. Therefore the claim that "tourist and visitor accommodation" should be permitted on the whole site is not supported.

Furthermore, the definition of "tourist and visitor accommodation" incorporates development of a substantial nature which would potentially be incompatible with the scenic quality of the land zoned E2 Environmental Conservation within the valley and known environmental constraints such as bushfire hazard and flooding.

Within the broader E2 Environmental Conservation zone a suitable form of short term accommodation would be "eco tourist facility". There are mandated requirements in cl 5.13 of the GLEP 2014 and the draft CCLEP that sets out matters for consideration regarding "eco-tourist facilities" that would ensure that development would maintain the environmental values of the land and ensure that it is sensitively designed and managed to have minimal impact on the environment.

Under the draft CCLEP "eco-tourist facility" is proposed to be a permitted use in the E2 Environmental Conservation zone so would not be required to be included as an additional permitted use in the E2 zone should this plan be in effect when this planning proposal is finalised.

However, it should be noted that currently there is generally cleared land zoned E2 Environmental Conservation adjacent to the RU2 Rural Landscape zone atop the escarpment, being parts of Lots 108 and 145 DP 755221. The additional permitted use of "tourist and visitor accommodation" is considered a suitable use on such land as it does not have the significant scenic quality values as the E2 Environmental Conservation zoned land in the valley but contains similar characteristics to the adjoining RU2 Rural Landscape zoned land which is proposed to include the use of "tourist and visitor accommodation".

The cleared areas identified in the E2 Environmental Conservation zoned land for "tourist and visitor accommodation" are outside of the Transition Area adjacent to Calga Sands. This will ensure that such a use will not adversely affect, or be adversely affected by, current or future resource development of Calga Sands.



## 2.5 Amended Planning Proposal Request - Glenworth Valley (contd)

The RU2 Rural Landscape zoned land is generally cleared with scattered stands of woodland so could accommodate "tourist and visitor accommodation" units within the undulating landform without an adverse impact on the rural quality of the area. Such a use would be unlikely to dominate the landscape as the land is primarily required for grazing purposes. Therefore it is considered that imposing a limit on the number of units is not required for this area as the use can be satisfactorily determined on the basis of economic demand and the environmental capacity of the land to support such uses.

It should be noted that DA 43465/2013 approved 3 motel units and 5 caravan sites (i.e. relocatable cabins) on two lots which are now within the RU2 Rural Landscape zone. The development consent was issued when the land was zoned 7(b) Conservation and Scenic Protection (Scenic Protection) and motels and caravan parks were permitted uses. The 5 x 2 bedroom relocatable cabins have been constructed.

### **Use of Existing Multi-Purpose Building**

The existing multi-purpose building is located on Lot 89 DP 755221 and was approved as an ancillary use to the recreational uses operating on the site. The Planning Proposal seeks to permit the building to be used independently as a "function centre", "entertainment facility" and a "food and drink premises".

It has an existing floor area of approximately 800m<sup>2</sup> and it is proposed that the total floor space to be used for a function centre, entertainment facility and a food and drink premises be 1500m<sup>2</sup>. This additional floor space will allow for future expansion, if required, provided the additional floor space comprises an extension to the building or is directly adjacent to it, the environmental impact will be minimal.

The definitions of the proposed additional permitted uses are:

- *"Entertainment facility" means a theatre, cinema, music hall, concert hall, dance hall and the like, but does not include a pub or registered club.*
- *"Food and drink premises" means a premises that are used for the preparation and retail sale of food or drink (or both) for immediate consumption on or off the premises and includes any of the following: a restaurant or café, take away food and drink premises, a pub, a small bar.*
- *"Function centre" means a building or place used for the holding of events, functions, conferences and the like, and includes convention centres, exhibition centres and reception centres, but does not include an entertainment facility.*

As the uses of "entertainment facility" and "food and drink premises" relate to buildings only, they could not be located anywhere but within the existing multi-purpose building (or future extensions) on Lot 89 DP 755221. Therefore it is not intended to include these uses on the additional lots as requested by the proponent.

## 2.5 Amended Planning Proposal Request - Glenworth Valley (contd)

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The use of "function centre", however, can relate to a "place" as well as a "building".

Therefore outdoor functions, such as weddings, birthday parties and corporate activities would be able to occur on land where this use is permitted. Cleared land adjoining and proximate to the existing multi-purpose building is suitable for such a use. These lots are Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253.

It should be noted that an outdoor music festival does not fit within the definition of an "entertainment facility" or a "function centre". Consequently such music festivals are currently considered as a temporary use of land under clause 2.8 in GLEP 2014 and the draft CCLEP. This clause states:

*Despite any other provision of this Plan, development consent may be granted for development on land in any zone for a temporary use for a maximum period of 28 days (whether or not consecutive days) in any period of 12 months.*

### Assessment Summary

The Planning Proposal, if supported, would amend the GLEP 2014 in the following manner.

The additional permitted uses over the entire area zoned E2 Environmental Conservation are proposed to be "recreation facility (outdoor)" and "eco-tourist facility". Such outdoor recreation facilities are envisaged to be low key nature based activities similar to those currently operating on the site by Glenworth Valley Pastoral Company Pty Ltd. However the definition of "recreation facilities (outdoor)" allows more intensive uses that could adversely affect the environmental character of the area. The impact of any such proposals would occur as part of the development assessment process in consideration of the objectives of the E2 Environmental Conservation zone.

Likewise the requirements for "eco-tourist facilities" specified in the GLEP 2014 will ensure that it the future development is sensitively designed and managed to have minimal impact on the environment.

The additional permitted use of "extensive agriculture" could not occur within all of the land within the E2 Environmental Conservation zone as most of the land is steep and heavily vegetated making it unsuitable for such a use. Therefore the planning proposal seeks to permit the use only on the generally cleared parts of the E2 Environmental Conservation zone.

The additional permitted use of a "camping ground" is to apply to the existing cleared parts of Lots 22 and 32 DP 755253 and Lots 19, 37 and 89 DP 755221.

Any other "wilderness" camping experience can be accommodated within the definition of "recreation facility (outdoor)".

## 2.5 Amended Planning Proposal Request - Glenworth Valley (contd)

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The additional permitted use of "tourist and visitor accommodation" is to apply to the existing cleared parts of Lots 108 and 145 DP 755221 which are zoned E2 Environmental Conservation and which are adjacent to the RU2 Rural Landscape boundary.

The total floor area for the permanent "function centre", "entertainment facility" and "food and drink premises" is to be no greater than 1500m<sup>2</sup> and any additions to the existing building are to be connected to, or directly adjacent, to it.

The additional permitted uses of "entertainment facility" and "food and drink premises" are to apply generally to that part of Lot 89 DP 755221 on which the existing multi-purpose building is situated. The use of "function centre" is proposed to apply to the cleared areas on adjoining and nearby Lots 19, 37 and 89 DP 755221 and Lots 22 and 32 DP 755253.

The additional permitted uses within the RU2 Rural Landscape zone are "eco-tourist facilities" "camping grounds" and "tourist and visitor accommodation".

Should the CCLEP come into effect prior to the subject Planning Proposal, then any proposed additional permitted uses that are generally included as permissible development within the applicable E2 Environmental Conservation and RU2 Rural Landscape zoned would not be required to be carried over.

### Strategic Assessment

The Planning Proposal, as outlined in the report, is supported on the following grounds:

- The Planning Proposal will facilitate long term certainty as to the continued and future operations of Glenworth Valley to permit a range of recreational and tourist related activities, whilst protecting the environmental quality of the site.
- By nominating a list of additional permitted uses applicable to the land, detailed assessment of specific future development can be carried out on a case by case basis, and allow flexibility in accommodating activities whilst protecting and managing the overall environmental values of the land
- The significant economic benefits (both direct and indirect) that the Glenworth Valley tourist development contributes to the regional economy and synergies with other businesses and tourist facilities.
- The Planning Proposal will allow this regionally significant recreational and tourist attraction to grow and develop as new nature-based outdoor recreational opportunities emerge.
- The retention of existing zones with the additional permitted uses will allow for the on-going development and enhancement of a significant tourist facility and ensure it remains intrinsically linked to the protection and

## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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management of the environment and allowing development at an appropriate scale.

This assessment identifies that the request has sufficient preliminary justification for Council to submit the amended Planning Proposal to the Department of Planning and Environment to seek an amended Gateway Determination.

### **Statutory Compliance and Strategic Justification**

The proposal has been assessed having regard for all State Environmental Planning Policies, Ministerial s.9.1 Directions and the relevant guidelines set out within the Central Coast Regional Plan 2036 (CCRP 2036) as detailed within Attachment 5.

The proposal is considered to be consistent with these considerations, therefore is suitable for forwarding to the Minister of Planning requesting an amended Gateway Determination.

### **Internal Consultation**

Internal consultation for the current Planning Proposal has been undertaken as summarised below.

Due to the size of the subject land (over 1000 Ha) and the fact that building and development footprints have not been identified within the Planning Proposal it is only possible to assess general impacts. All direct and specific impacts are able to be addressed by future development applications. Relevant comments have been utilized to inform the issues and strategic merits assessment of the proposal.

### **Waste Management**

Existing approved activities have a Plan of Management for storage, management and disposal of solid waste related to the activity and are serviced by a private waste collection contractor.

As has occurred previously, upon application to Council for upcoming events or proposed development, Council's Waste Services staff have been liaising with the applicant to seek the best possible outcome in relation to on-site sewage management.

The use of the multi-purpose building independent of any other uses on the site has the potential to result in the frequency of usage being increased which will result in additional hydraulic loading on the on-site sewage management system. There is also the potential that the multi-purpose building may be utilised for an event or function at the same time as a festival or event is occurring elsewhere on the property, thus impacting further on the system.

To determine the impacts of this, a wastewater management report will be required to be submitted to Council, post Gateway, which addresses the following:



## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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- The estimated frequency of functions and likely numbers of patrons utilising the function centre, entertainment facility and food and drink premises.
- The ability of the existing on-site sewage management system to accommodate any additional hydraulic loading.
- Recommendations for any modifications required to either the treatment or disposal system to accommodate the additional hydraulic loading.

### ***Flooding and Drainage Management***

The impacts of overland flooding from upstream tributaries in the locality may impact on future structures. The assessment of such impacts would be subject to development applications and any flooding issues could be dealt with at that stage.

The multi-purpose building has been constructed and the flooding and drainage comments supported the Development Application (DA) for the building at the time. It was not considered that the building would be affected by flooding from any gullies or watercourses within the property. This situation will not change.

### ***Traffic and Transport***

The road network has the capacity to support the various recreational and festival events being held with access to Cooks Road and its intersection with Peats Ridge Road. These roads in this remote location could be upgraded with improved parking and upgraded pedestrian access to support larger scale events or more frequent activities if desired, when future DA's are lodged.

When one-off traffic generating events occur on site, such as music festivals, Council's Traffic Officer and a Police Officer liaise with the applicants and oversee the implementation and monitoring of temporary Traffic Management Plans (TMPs) to address such issues as queuing along Peats Ridge Road.

No objection is raised to the independent use of the existing multi-purpose building provided any development activities are assessed in accordance with the RMS Guidelines for Traffic Generating Development.

### ***Environmental Assessment***

No objection to the Planning Proposal subject to the protection of all existing areas of native vegetation and ongoing riparian management can be conditioned through future DA's for the individual additional uses.

Environmental management conditions tied to activity specific management plans coupled with ongoing monitoring should ensure the environmental values of the site are not eroded. Conditioning through development consent adequately addresses this issue.

## 2.5 Amended Planning Proposal Request - Glenworth Valley (contd)

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Based upon the available cleared areas on the site it is possible for future development to be located to avoid any impact upon native vegetation.

Detailed assessments of biodiversity and Aboriginal / Cultural Heritage values must accompany future development applications for these additional uses.

The multi-purpose building has been constructed and the environment comments supported the DA for the building at the time. The building and ancillary carpark is located within a cleared paddock area and will not result in any direct or in direct impacts on any native vegetation. All bushfire asset protection zones are achievable without the need for any additional vegetation management.

### **External consultation**

Government agency consultation was undertaken in 2014 in relation to the current Planning Proposal. Comments from those agencies consulted are summarised below.

Further government agency consultation will be required to be undertaken subject to the conditions of the Gateway Determination. It is expected that those agencies previously consulted will be requested to comment on the revised proposal.

### ***Office of Environment and Heritage / National Parks and Wildlife Service (now Department of Planning, Industry and Environment)***

The then Office of Environment and Heritage (OEH) advised that it does not support the rezoning of the E2 Environmental Conservation zoned land to RU2 Rural Landscape within the proposal at the time. It was further advised the proposed additional land uses (e.g. extensive agriculture) are incompatible with the environmental characteristics of the subject land. In addition, part of the site has already been identified as an offset for the Calga Quarry project, which cannot be affected by the proposal.

OEH further advised that any impacts to vegetation associated with the proposal must be offset; the proposal should not impact on corridor function between the three parcels of national park which surround the site, and that the proposal should not burden the NSW National Parks and Wildlife Service with additional responsibility as a result of allowing more major events, further incursions into national park due to poorly defined boundaries to the park, increased requirement for fire protection and potential for impacts to Aboriginal cultural heritage (e.g. from abseiling).

OEH also confirmed that further consultation with DLALC and Guringai Tribal Link Aboriginal Corporation including a comprehensive site inspection and cultural heritage assessment of the areas proposed to be subject to future development is undertaken prior to the finalisation of the rezoning.

### **Comment**

## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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As a result of this advice from OEH, the proponent has amended the Planning Proposal to remove the rezoning of certain E2 Environmental Conservation zoned land to RU2 Rural Landscape.

Future uses will be required to be located on areas of the subject site which are already cleared and/or not subject to existing environmental constraints. It is therefore proposed to require further environment and heritage impact assessment to be carried out at the development application stage for each particular building or development location.

### ***NSW Trade and Investment – Crown Lands (now The Treasury)***

The then NSW Trade and Investment - Crown Lands had no objections to the rezoning of the adjoining lands subject to the change in zoning not resulting in any additional requirements for the management of the Crown Estate such as increased bushfire mitigation measures and must not be relied upon to implement or facilitate any such measures.

### ***NSW Department of Primary Industries – Agriculture (now Department of Planning, Industry and Environment)***

The then NSW Department of Primary Industries – Agriculture (DPI - Agriculture) raised no concerns about the additional uses within the E2 Environmental Conservation Zone as the proposed uses can complement management and education for the environmental areas.

DPI - Agriculture objected to the proposed residential type and large visitation activities within the RU2 Rural Landscape zone as these activities are not complementary to commercial agriculture due to the possibilities of causing land use conflict and opening up the possibility of other landholders requesting similar expansion of types of land uses that could stifle agricultural investment.

### ***Comment***

Should an amended Gateway Determination be received the amended Planning Proposal will be referred to the relevant part of the Department of Planning, Industry and Environment for comment. The above objection may be reviewed at this time.

### ***NSW Trade and Investment – Mineral Resources and Energy (now The Treasury)***

Part of the eastern portion of the subject site is located adjacent to Rocla's Calga Sand Quarry, a state and regionally significant sand resource, supplying material for the building and construction industries in the Greater Sydney area. The transition area of the Calga Sand Quarry overlaps part of eastern side of the subject site (western side of the quarry).

The agency has no concerns in general, to the proposal to allow tourism-related activities being added as additional permitted uses in the E2 Environmental Conservation and RU2 Rural Landscape zones on the subject land.

## **2.5 Amended Planning Proposal Request - Glenworth Valley (contd)**

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The agency considers however that the tourism-related activities proposed may have the potential to create land use conflict in the vicinity of the Calga Sand Quarry.

The agency notes however that Council has acknowledged the close proximity of the quarry and that the proposed additional uses should not impact the quarry by sterilising the resource or restricting its operations and that the proposed tourist-related activities can be located in areas remote from the impacts of the quarry.

### ***NSW Roads and Maritime Service (now Department of Transport)***

The then NSW Roads and Maritime Service (RMS) reviewed the information provided and raised no objections to the Planning Proposal for land at Glenworth Valley and Calga.

Any future development of this land will require a Traffic Impact Study to be undertaken in accordance with the RMS Guide to Traffic Generating Developments. These matters can be addressed during subsequent Development Applications.

### ***NSW Rural Fire Service (now Department of Family and Community and Justice)***

The then NSW Rural Fire Service (RFS) advised that it does not object to the planning proposal subject to future Development Applications complying with the provisions of *Planning for Bushfire Protection 2006*, particularly the provisions of Asset Protection Zones, safe access and emergency evacuation management. These matters can be addressed during subsequent Development Applications.

### **Darkinjung Local Aboriginal Land Council**

Darkinjung Local Aboriginal Land Council (DLALC) was consulted as a landowner and provided qualified support for Lot 245 DP 48817 being included in the Planning Proposal. The qualification is that the operators of Glenworth Valley are to enter into an arrangement with DLALC for the continued use of the land.

It should be noted that DLALC has also been granted Lot 7027 DP 1051931 (now Lot 7 DP 1230083) and for completeness should be included in any agreement.

The applicant was provided with a copy of this correspondence.

### **Financial Impact**

The direct cost to Council is the preparation of the Planning Proposal and Council's fee has been paid for this service.

The proponent has advised that the current recreational uses on the site generate approximately 25 full-time and 80 part-time jobs and attracts up to 200,000 visitors to the area per year. The Planning Proposal will enable the continued operation and ongoing growth of the business, providing additional employment opportunities and tourism growth.



**Social Impacts**

Glenworth Valley is a major tourist attraction and the ability for it to further accommodate activities consistent with nature-based recreation, including accommodation in the form of eco-tourist facilities, is supported from a tourism perspective. It will provide an opportunity to increase outdoor recreational experiences and thus provide the community with options to enjoy the environment of the Central Coast.

**Environmental Considerations**

These have been outlined in the body of the report.

**Link to Community Strategic Plan**

Theme 2: Smart

Goal C: A growing and competitive region

S-C4: Promote and grow tourism that celebrates the natural and cultural assets of the Central Coast in a way that is accessible, sustainable and eco-friendly.

Theme 3: Green

Goal F: Cherished and protected natural beauty

G-F1: Protect our rich environmental heritage by conserving beaches, waterways, bushland, wildlife corridors and inland areas, and the diversity of local native species.

Theme 5: Liveable

Goal L: Healthy lifestyle for a growing community

L-L1: Promote healthy living and ensure sport, leisure, recreation and aquatic facilities and open spaces are well maintained and activated.

**Risk Management**

There have been no risks identified to the natural and built environment if this Planning Proposal is supported by Council as previously discussed in this report.

**Critical Dates or Timeframes**

Should Council resolve to proceed with the preparation of an amended Planning Proposal, the critical date will be the amended Gateway Determination date to complete the project.

**Conclusion**

The request to include additional permitted uses in respect of land at Cooks Road in Calga and Glenworth Valley is considered to have strategic merit.

It is recommended that the Council support the amended Planning Proposal and undertake the necessary next steps to progress the Planning Proposal in accordance with the Planning Proposal process.

**Attachments**

1	Proposal Summary (Glenworth valley)	D13691400
2	Former Gosford City Council Resolution - 17 December 2013	D13343533
3	Former Gosford City Council Resolution - 10 June 2014	D13343536
4	Former Gosford City Council Resolution - 27 June 2014	D13343535
5	Strategic Assessment (Glenworth Valley - Amended Gateway Request)	D13691401



## Attachment 1

# Proposal Summary

<b>Applicant</b>	Coastplan Consulting		
<b>Owner</b>	The Glenworth Valley Pastoral Company Pty Ltd Darkinjung Local Aboriginal Land Council The Treasury – Crown Land		
<b>Application Number</b>	PP 38/2013		
<b>Description of Land subject of planning proposal</b>	<i>Property Description:</i> 1992 Peats Ridge Road, Calga (part of lot) 2070 Peats Ridge Road 48 and 51 Polins Road, Calga 8, 45 and 81 Cooks Road, Calga 69 and 69A Cooks Road, Glenworth Valley <i>Legal Description:</i> Lots 19, 20, 21, 23, 24, 25, 30, 31, 32, 33, 37, 50, 53, 64, 65, 68, 81, 82, 85, 86, 87, 89, 91, 108, 145 DP 755221, Lots 22, 23, 32, 73, 75, 76 DP 755253, Lots 1, 3 DP 617088, Lot 881 DP 563889, Lot 1 DP 1222754, Lot 245 DP 48817, Lot 7 DP 1230083, Lot 7012 DP 1059767, Lot 7029 DP 93603, Lot 7035 DP 1051932, Lot 7036 DP 1059768, Lot 7303 DP 1154929, Glenworth Valley, and  Lot 882 DP 563889, Lot A DP 365595, Lot C DP 382358, Lot 2 DP 1139242, part of Lot 102 DP 1139060, Lot 7039 DP 1059766, Lot 7303 DP 1161109, Calga		
<b>Site Area</b>	1173.6 Ha		
<b>Existing Use</b>	Recreation facilities, pasture and natural bushland		
<b>Proposed Amendments – Gosford Local Environmental Plan 2014</b>			
<b>Provisions</b>	<b>Existing Provision</b>	<b>Proposed Amendment</b>	<b>Outcome (Supported/Not Supported)</b>

<b>Zoning</b>	E2 Environmental Conservation  RU2 Rural Landscape	No change	Supported
<b>Minimum Lot Size</b>	40 ha  20 ha	No change	Supported
<b>Schedule 1- Additional permitted uses</b>	Nil	<ol style="list-style-type: none"> <li>1. On land zoned E2 Environmental Conservation, development for the purpose of recreation facilities (outdoor) and eco-tourist facilities.</li> <li>2. On land zoned RU2 Rural Landscape, development for the purposes of eco-tourist facilities, camping grounds, tourist and visitor accommodation.</li> <li>3. On existing cleared land comprising part of Lots 19, 20, 21, 23, 25, 30, 32, 33, 37, 50, 53, 64, 68, 85, 86, 87, 89, 91, 108 and 145 DP 755221, part of Lots 22 and 32 DP 755253, part of Lot 3 DP 617088, part of Lot 245 DP 48817, part of Lot 7039 DP 1059766 and part of Lot 7303 DP 1154929; development for the purpose of extensive agriculture.</li> <li>4. On existing cleared land comprising part of Lots 22 and 32 DP 755253 and part of Lots 19, 37 and 89 DP 755221; development for the purposes of camping ground and function centre.</li> <li>5. On that part of Lot 89 DP 755221 accommodating the existing multi-purpose building; development for the purposes of function centre, entertainment facility and food and drink premises.</li> <li>6. The total floor area for the permanent building for the function centre, entertainment facility and food and drink premises is to be no greater than</li> </ol>	Supported

		1500m <sup>2</sup> and any additions to be attached to, or directly adjacent to, it. 7. On existing cleared land comprising part of Lots 108 and 145 DP 755221; development for the purpose of tourist and visitor accommodation.	
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**Resolved Items Action Statement**

Action is required for the following item as per the Council Resolution.

**NOTICE OF COUNCIL RESOLUTION****COUNCIL MEETING – 17/12/2013****TITLE**

Directorate: Environment and Planning  
Business Unit: Integrated Planning

*The following item is defined as a planning matter pursuant to the Local Government Act, 1993 & Environmental Planning & Assessment Act, 1979*

Councillor Ward declared his less than significant non-pecuniary interest in relation to this item, under Chapter 14 of the Local Government Act 1993, as during a recent Gosford City Council delegation to Tokyo, he represented some local tourist destinations, however considered he was capable of making an impartial decision in respect to this matter.

MOVED (Doyle/Morris) that the recommendation of the Director - Environment and Planning be adopted subject to the amendment of Parts A and B as follows:

- A **Council request the General Manager, prior to sending the Planning Proposal to the Department of Planning, to amend it to give effect to the following:**
- **For the land located down in the valley list the land in Schedule 1 of LEP 2013 and insert Extensive Agriculture as an additional nominated use.**
  - **For the land located in the ridge tops above the valley, rezone the residual cleared, pasture improved, farmland that is scheduled to be zoned E2 so that it matches the adjoining land in this area which is zoned RU2.**
  - **Reinstate the originally requested tourist uses in the Schedule 1 list of uses that apply to the site, being Camping Ground and Visitor and Tourist Accommodation.**
- B **Subject to Part A** Council initiate the Local Environmental Plan 'Gateway' process pursuant to Section 55 Environmental Planning and Assessment Act by endorsing the preparation of a Planning Proposal to list in Schedule 1 of Gosford Local Environmental Plan 2013 to provide for:

On being put to the meeting the MOTION WAS CARRIED with the following votes being recorded:

For the Motion: Councillors Ward, Bocking, Bowles, Burke, Doyle, Macfadyen, Morris and Scott.

**RESOLVED that:**

- A **Council request the General Manager prior to sending the Planning Proposal to the Department of Planning to amend it to give effect to the following:**
- **For the land located down in the valley list the land in Schedule 1 of LEP 2013 and insert Extensive Agriculture as an additional nominated use.**

- **For the land located in the ridge tops above the valley, rezone the residual cleared, pasture improved, farmland that is scheduled to be zoned E2 so that it matches the adjoining land in this area which is zoned RU2.**
  - **Reinstate the originally requested tourist uses in the Schedule 1 list of uses that apply to the site, being Camping Ground and Visitor and Tourist Accommodation.**
- B Subject to Part A** Council initiate the Local Environmental Plan 'Gateway' process pursuant to Section 55 Environmental Planning and Assessment Act by endorsing the preparation of a Planning Proposal to list in Schedule 1 of Gosford Local Environmental Plan 2013 to provide for:
- a on that land that is zoned E2 Environmental Conservation, development for the purposes of eco-tourist facilities and recreation facilities (outdoor)
  - b on land that is zoned RU2 Rural Landscape, development for the purposes of eco-tourist facilities.
- on the following lots
- i Land owned by Glenworth Valley Pastoral Company Pty Ltd, being Lots 1 and 3 DP 617088, Lots 19, 20, 21, 23, 24, 25, 30, 31, 32, 33, 37, 50, 53, 64, 65, 68, 81, 82, 85, 86, 87, 89, 91, 108 and 145 DP 755221, Lots 22, 23, 32, 73, 75 and 76 DP 755253, part of Lot 102 DP 1139060, Lot C DP 382358, Lot 2 DP 1139242, Lots 881 and 882 DP 563889 or are the subject of a Permissive Occupancy held by Glenworth Valley, being Lot 7012 DP 1059767, Lot 7039 DP 1059766, Lot 7303 DP 1161109, and Lot 7303 DP 1154929;
  - ii Land that is Crown land and not the subject of permissive occupancy, being Lot 7027 DP 1051931, Lot 7029 DP 93603, Lot 7035 DP 1051932, Lot 7036 DP 1059768, Lot 7037 DP 1059769, and Lot 7038 DP 1059769; and
  - iii Land owned by the Darkinjung Local Aboriginal Land Council, being Lot 245 DP 48817
- C** Prior to referral of the Planning Proposal to the Department of Planning and Infrastructure, Council write to the owners of Crown Land (being Lot 7027 DP 1051931, Lot 7029 DP 93603, Lot 7035 DP 1051932, Lot 7036 DP 1059768, Lot 7037 DP 1059769, Lot 7038 DP 1059769) and Darkinjung LALC land (being Lot 245 DP 48817) inviting them to advise Council whether they consent to the inclusion of their land in this Planning Proposal. If not, the Planning Proposal is to be amended to delete these lots.
- D** Council notify the Department of Planning and Infrastructure of Council's resolution requesting a 'Gateway' determination pursuant to Section 56(1) Environmental Planning and Assessment Act and forward the Planning Proposal and all necessary documentation according to their requirements and this report:
- E** Council recommend to the Gateway that the following public authorities be consulted:
- Office of Environment and Heritage
  - National Parks and Wildlife Service
  - Rural Fire Service
  - Trade and Investment - Mineral Resources
  - Environment Protection Authority
  - Roads and Maritime Service
  - Darkinjung Local Aboriginal Land Council
  - Destination NSW

***Attachment 2***

***Former Gosford City Council Resolution - 17 December 2013***

- F After public exhibition of the Planning Proposal, should the Minister for Planning and Infrastructure support it, if no submissions objecting to the planning proposal are received, the Planning Proposal is to be sent to the Department of Planning and Infrastructure in order to make the plan.
- G The applicant be advised of Council's resolution.
- H Council seeks delegations from the Department of Planning and Infrastructure for this Planning Proposal.





## NOTICE OF COUNCIL RESOLUTION

### COUNCIL MEETING – 10/06/2014

#### TITLE

Department: Governance & Planning  
Service Unit: Sustainable Corporate & City Planning

*The following item is defined as a planning matter pursuant to the Local Government Act, 1993 & Environmental Planning & Assessment Act, 1979.*

Councillor Morris declared her pecuniary interest in relation to this item, under Chapter 14 of the Local Government Act 1993, as her firm is currently involved in a matter with the applicant and did not take part in the consideration or discussion of, or vote on any question relating to this item.

Councillor Morris left the meeting at 6.50 pm.

#### ADJOURNMENT OF MEETING AT 6.50 PM

The Chairperson advised the meeting that due to a lack of quorum the meeting was adjourned.

Councillors Morris returned to the meeting at 6.51 pm.

The meeting resumed at 6.51 pm. The following Councillors were present:

Councillors G L Bowles, C L Doyle, J M Macfadyen, H A Morris, V L Scott and J C Strickson.

**MOVED** (Strickson/Macfadyen) that ***this matter be referred to the Chief Executive Officer to be considered under delegated authority.***

On being put to the meeting the MOTION WAS CARRIED.

**RESOLVED** that ***this matter be referred to the Chief Executive Officer to be considered under delegated authority.***

For the Resolution: Councillors Bowles, Doyle, Macfadyen, Morris, Scott and Strickson.

On 27 June 2014 the Acting CEO approved the following amendment:

- A *With regard to the subject Planning Proposal for various lots in Glenworth Valley and Council's resolution of 17 December 2013 to support a request for a 'Gateway' determination pursuant to Section 55 Environmental Planning and Assessment Act, that Crown Land (being Lot 7027 DP 1051931, Lot 7029 DP 93603, Lot 7035 DP 1051932, Lot 7036 DP 1059768, Lot 7037 DP 1059769, Lot 7038 DP 1059769) be included in an amended Planning Proposal to be sent to the Department of Planning and Environment for a Gateway determination, and Department of Trade and Investment be consulted during consultation with public agencies.*
- B *Council seeks delegations from the Department of Planning and Infrastructure for this Planning Proposal.*
  - 1 *Upon Council receipt of the Department of Planning & Infrastructure's intention to issue delegation, Council will submit to the Department of Planning & Infrastructure a "Written Authorisation to Exercise Delegation" for the same*
  - 2 *Any delegation to Council is to be delegated to the Chief Executive Officer - Paul Anderson, per s381 of the Local Government Act 1993, who will complete the "Authorisation" on behalf of Council and submit to the Department of Planning & Infrastructure.*

**ATTACHMENT 5 – Strategic Assessment**



## Central Coast Council

### Strategic Planning Framework Assessment

Lots 19, 20, 21, 23, 24, 25, 30, 31, 32, 33, 37, 50, 53, 64, 65, 68, 81, 82, 85, 86, 87, 89, 91, 108, 145 DP 755221, Lots 22, 23, 32, 73, 75, 76 DP 755253, Lots 1, 3 DP 617088, Lot 881 DP 563889, Lot 1 DP 1222754, Lot 245 DP 48817, Lot 7 DP 1230083, Lot 7012 DP 1059767, Lot 7029 DP 93603, Lot 7035 DP 1051932, Lot 7036 DP 1059768, Lot 7303 DP 1154929, Glenworth Valley, and Lot 882 DP 563889, Lot A DP 365595, Lot C DP 382358, Lot 2 DP 1139242, part of Lot 102 DP 1139060, Lot 7039 DP 1059766, Lot 7303 DP 1161109, Calga

PP/38/2013;  
November 2019

(a)

### Relationship to strategic planning framework

Where a regional or sub-regional strategy is in place:

1. Is the planning proposal consistent with the objectives and actions of the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?

#### Central Coast Regional Plan 2036

The *Central Coast Regional Strategy 2036 (CCRP)* applies to both of the former Gosford and Wyong local government areas (LGAs). The vision of the CCRP is for a healthy natural environment, a flourishing economy and well-connected communities.

The CCRP is to provide the basis of planning by Council and sets out a number of actions. The table below demonstrates that the Planning Proposal is consistent with the relevant actions identified in the CCRP:

3	Direction 3: Support priority economic sectors	
	Action	Assessment
3.5	Capitalise on the region's location and coastline to enhance the visitor economy with a focus on events-based tourism and update planning controls.	The Planning Proposal will allow a regionally significant nature-based tourist development to add complementary nature based tourist facilities, including accommodation that will build on existing capital investment, and allow additional outdoor recreational opportunities as they emerge.
7	Direction 7: Increase job containment in the region	
	Action	Assessment
7.1	Facilitate economic development that will lead to more local employment opportunities on the Central Coast.	The applicant has advised that the current use of the land for a range of outdoor recreation activities employs approximately 25 full-time and 80 part-time employees and attracts up to 200,000 tourists per annum. The planning proposal will enable the continued operation and ongoing growth and development of the business which will provide additional employment opportunities and growth within the tourist industry.
8	Direction 8: Recognise the cultural landscape of the Central Coast	
	Action	Assessment
8.1	Protect the Central Coast's scenic amenity by planning for development that respects the distinct qualities of different places.	The scenic significance of Glenworth Valley will be retained by including additional permitted uses in Schedule 1 of GLEP 2014 whilst retaining the E2 Environmental Conservation zone.

12	Direction 12: Protect and manage environmental values	
	Action	Assessment
12.1	Identify terrestrial and aquatic biodiversity values and protect areas of high environmental value to sustain lifestyle, economic success and environmental health of the region.	That part of the subject land zoned E2 consists of coastal wetlands to the south and vegetated escarpment surrounding the valley. It has characteristics of environmental value, scenic quality and habitat for native flora and fauna which is reflective of the environmental and scenic significance of the locality.
12.5	Sensitively manage natural areas on the fringe of urban areas to mitigate land use incompatibility issues and provide important quality of life and tourism benefits	Some of the proposed recreational and tourism uses currently operate on the site and are not incompatible with the site's natural setting. Specific on-site effects of any proposed uses are able to be managed through the development assessment process.

Table 1: Central Coast Regional Plan Assessment

**2. Is the planning proposal consistent with the local Council's Community Strategic Plan, or other local strategic plan?**

**Central Coast Community Strategic Plan (One – Central Coast)**

One – Central Coast outlines a set of guiding principles, aspirations and values for the community. These reflect on social, economic, environmental and governance aspects for now and the future.

The following objectives outlined in One- Central Coast are applicable to this Planning Proposal:

C	Focus Area – A growing and competitive region	
	Objectives	Assessment
C4	Promote and grow tourism that celebrates the natural and cultural assets of the Central Coast in a way that is accessible, sustainable and eco-friendly.	The planning proposal will showcase the environmental values and recreational opportunities of the region and offer significant economic benefits and synergies. The planning proposal will also have the potential to encourage greater expenditure by tourists and therefore benefit the local economy.
F	Focus Area – Cherished and protected natural beauty	
	Objectives	Assessment
F1	Protect our rich environmental heritage by conserving beaches, waterways, bushland, wildlife corridors and inland areas and the diversity of local native species.	The Planning Proposal will protect the intrinsic environmental values of the land by retaining it generally in an environmental zone, whilst allowing it to grow and develop with additional recreation activities and to provide a range of appropriate tourist accommodation.
L	Focus Area – Healthy lifestyles for a growing community	
	Objectives	Assessment
L1	Promote healthy living and ensure sport, leisure,	The planning proposal will enable the public to participate in outdoor recreational activities within a

	recreation and aquatic facilities and open spaces are well maintained and activated.	natural setting which would enhance personal well-being. The planning proposal will permit additional uses on-site which have the potential to encourage greater expenditure by tourists and therefore benefit the local economy.
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**Table 2 – Central Coast Community Strategic Plan Assessment**

### **Biodiversity Strategy**

The Biodiversity Strategy provides a framework and guide for the management of biodiversity in Gosford area that is consistent with regional, state, national and international strategies, plans and policies. The following Actions in the Biodiversity Strategy are applicable to the Planning Proposal:

- *enable biodiversity conservation to be taken into consideration in Council's strategic planning.*
- *environmental zoned lands need to be retained with current minimum lot area standards to enable the lot sizes to allow sufficient space for land uses to occur without loss of biodiversity.*
- *the land zoning and permitted land uses within identified vegetation and wildlife corridors and riparian habitats need to reflect the biodiversity values.*
- *consider biodiversity criteria for conserving areas of high biodiversity working towards maintenance and enhancement of existing biodiversity as a key priority with the aim of no net loss in development assessments and future LEPs.*
- *identify, protect and manage wildlife and vegetation corridors to maintain biodiversity.*

The Planning Proposal is consistent with these actions in that the land will be retained in the existing RU2 Rural Landscape and E2 Environmental Conservation zones, and that appropriate activities will be listed in Schedule 1 of GLEP 2014 that are intrinsically linked to the environmental values of the land.

### **Policy D2.02 – Rezoning of Land Zoned Conservation & Scenic Protection (Conservation) 7(a)/Environmental Conservation E2**

As part of the subject land is zoned E2, this Policy applies. The Policy objectives are:

- 1 *To define objectives for the Conservation 7(a) / E2 zone to ensure the long term preservation of the scenic and environmental qualities of the region and to ensure Planning Proposals (ie LEPs) are consistent with the prescribed objectives.*
- 2 *To establish criteria to be used by Council to assess requirements to prepare a Planning Proposal (ie local environmental plan) primarily for the purpose of providing dedication of strategically environmentally/scenically important land for the community benefit in exchange for additional development rights having regard to the land's attributes pertaining to the zone boundary of the 7(a) Conservation zone / Environmental Conservation E2, but also for the purpose to alter the zone, uses, subdivision or other provisions.*

All Planning Proposals must be in conformity with the objectives of the Conservation and Scenic Protection 7(a) (Conservation) / Environmental Conservation E2 as prescribed within this Policy.

The objectives of the Conservation 7(a) / Environmental Conservation E2 Zone:

- a *The conservation and rehabilitation of areas of high environmental value.*



- b The preservation and rehabilitation of areas of high visual and scenic quality in the natural landscape.*
- c The provision and retention of suitable habitats for native flora and fauna.*
- d The prohibition of development on or within proximity to significant ecosystems, including rainforests, estuarine wetlands etc.*
- e The provision and retention of areas of visual contrast within the City, particularly the "backdrop" created by retention to the ridgelines in their natural state.*
- f The provision of opportunities for informal recreation pursuits, such as bushwalking, picnic areas, environmental education, etc in appropriate locations.*
- g The minimisation or prohibition of development so that the environmental and visual qualities of the natural areas are not eroded by the cumulative impact of incremental individually minor developments.*
- h The minimisation or prohibition of development in areas that are unsuitable for development by virtue of soil erosion, land slip, slope instability, coastal erosion or bushfire hazard.*

The additional uses proposed to be permitted on land within the E2 zone are outdoor recreation facilities, extensive agriculture, camping grounds and function centre/entertainment facility/food and drink premises. These uses are the standard LEP definitions of the existing uses operating on the site at present. These low impact uses, or similar, are generally compatible with the E2 zone. Any other uses permitted under the definition of recreation facility (outdoor) would be required to satisfy the objectives of the E2 zone.

The overall use and management of the site as a nature based recreation facility would be consistent with the policy, as it promotes environmental awareness and education by users and provide opportunities for informal recreation. The more environmentally sensitive parts of the site would be evaluated and protected as part of the assessment process for individual applications.

Besides being assessed on environmental, statutory and strategic grounds any Planning Proposal pertaining to 7(a)/E2 zoned land must include the following:

- Land capability assessment
- Vegetation analysis
- Faunal analysis
- Visual assessment
- Bushfire hazard analysis
- SEPP 19 - Bushland in Urban Areas
- Strategic basis
- Preparation of DCP
- Dedication of land to COSS

Since the preparation of this Policy, the matters relating to land capability, vegetation, fauna and bushfire have become statutory matters which have to be addressed in any Planning Proposal assessment, and have been addressed separately to this Policy later in the report. SEPP 19 is a statutory matter and has been addressed later in the report. The matters relating to visual quality and COSS are the subject of Council's DCPs or strategies which have also been addressed separately in the report, if applicable.

### 3. Is the planning proposal consistent with applicable state environmental planning policies?

The proposal has been considered against the relevant State Environmental Planning Policies (SEPPs) as detailed below.

State Environmental Planning Policy	Comment
<b>SEPP No 19 – Bushland in Urban Areas</b>	
<p>The general aim of this Policy is to protect and preserve bushland within the urban areas referred to in Schedule 1 because of:</p> <ul style="list-style-type: none"> <li>(a) its value to the community as part of the natural heritage,</li> <li>(b) its aesthetic value, and</li> <li>(c) its value as a recreational, educational and scientific resource.</li> </ul> <p>The specific aims of this policy are:</p> <ul style="list-style-type: none"> <li>(a) to protect the remnants of plant communities which were once characteristic of land now within an urban area,</li> <li>(b) to retain bushland in parcels of a size and configuration which will enable the existing plant and animal communities to survive in the long term,</li> <li>(c) to protect rare and endangered flora and fauna species,</li> <li>(d) to protect habitats for native flora and fauna,</li> <li>(e) to protect wildlife corridors and vegetation links with other nearby bushland,</li> <li>(f) to protect bushland as a natural stabiliser of the soil surface,</li> <li>(g) to protect bushland for its scenic values, and to retain the unique visual identity of the landscape,</li> <li>(h) to protect significant geological features,</li> <li>(i) to protect existing landforms, such as natural drainage lines, watercourses and foreshores,</li> <li>(j) to protect archaeological relics,</li> <li>(k) to protect the recreational potential of bushland,</li> </ul>	<p>The objectives of the SEPP relate to protecting rare and endangered flora and fauna, protecting habitat, protecting vegetation links and retaining the unique visual identity of the landscape within the E2 zoned part of the subject site.</p> <p>Glenworth Valley adjoins both National Park and Crown Land which accommodate significant bushland areas, as do substantial areas of the subject site. The planning proposal seeks to permit additional uses on the site and given its large size, any effects on any particular part of the site will be subject to detailed development assessment of the effects on bushland, with the opportunity for site works in less significant areas..</p>



State Environmental Planning Policy	Comment
<p>(l) to protect the educational potential of bushland,</p> <p>(m) to maintain bushland in locations which are readily accessible to the community, and</p> <p>(n) to promote the management of bushland in a manner which protects and enhances the quality of the bushland and facilitates public enjoyment of the bushland compatible with its conservation..</p>	
<b>SEPP No 44 – Koala Habitat</b>	
<p>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:</p> <p>(a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and</p> <p>(b) by encouraging the identification of areas of core koala habitat, and</p> <p>(c) by encouraging the inclusion of areas of core koala habitat in environment protection zones</p>	<p>Individual assessment of any potential koala habitat would need to be undertaken on a case by case basis depending on where works were proposed to be undertaken. It is envisaged that any works would be located away from areas that may provide koala habitat, or otherwise assessment would need to be undertaken to ensure no adverse impact.</p>
<b>SEPP No. 55 – Remediation of Land</b>	
<p>Aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment</p> <p>(b) by specifying when consent is required, and when it is not required, for a remediation work, and</p> <p>(c) by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and</p> <p>(d) by requiring that a remediation work meet certain standards and notification requirements.</p>	<p>The SEPP lists some activities that may cause contamination, one of which is agricultural or horticultural activities.</p> <p>The initial Gateway Determination required an initial site contamination investigation to be undertaken to demonstrate that the site is suitable for rezoning. A Stage 1 Site Contamination Assessment was prepared and the conclusion states:</p> <p><i>Based on the desk study and field investigation the site is assessed to be of low risk of contamination. It is assessed that a Stage 2 Contamination Assessment is not required for the proposed re-zoning of land.</i></p> <p>The then owner of Lot A DP 365595 Cooks Road submitted a Preliminary Site Contamination Investigation Report which concludes:</p>

State Environmental Planning Policy	Comment
	<p><i>A Preliminary Site Contamination Investigation Report has been prepared for Lot A DP 365595, as is required under SEPP 55 for Planning Proposal. The report finds there is unlikely to be any contamination of the site arising from the previous use as a citrus orchard and current use for cattle grazing. There is storage of diesel fuel and oil on the property, consistent with rural use, and there could be some minor contamination associated with this in 2 small, localised areas. Any future development application impacting on these areas would be able to address the issue in more detail through soil testing and remediation, if required. If remediation was required, this would be expected to be minor and not of a nature or scale that the land could not be made suitable for the uses proposed in the Planning Proposal.</i></p> <p><i>The report concludes that Lot A DP 365595 is suitable or can be made suitable for the uses proposed in Planning Proposal.</i></p>
<b>SEPP Mining, Petroleum Production and Extractive Industries 2008</b>	
<p>Aims to :</p> <p>(a) provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting social and economic welfare of the State;</p> <p>(b) to facilitate the orderly and economic use of development of land containing mineral, petroleum and extractive material resources; and</p> <p>(c) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment and sustainable management of development of mineral, petroleum and extractive material resources.</p> <p>Before determining a development application in the vicinity of an existing mine, petroleum production facility or extractive industry, the consent authority must consider:</p> <p>(a) the existing uses and approved uses of land in the vicinity of the development;</p> <p>(b) whether or not the development is likely to have a significant impact on current or future</p>	<p>Calga Sands, an existing quarry of regional significance, immediately adjoins part of the site located off Cooks Road, being located on Lot 2 DP 229889. It is noted that this quarry has been the subject of protracted concerns by the community in relation to its impacts. It is considered that there is sufficient area on the Glenworth Valley landholding overall so as to locate activities, including those which will be permitted through the Schedule 1 listing, in areas remote from the impacts of the quarry. The Planning Proposal should not have the effect of restricting the obtaining of extractive material from the Calga Sands Quarry.</p>

State Environmental Planning Policy	Comment
<p>extraction or recovery of minerals, petroleum or extractive materials;</p> <p>(c) any ways in which the development may be incompatible with any of the existing or approved uses or that current or future extraction or recovery.</p>	
<b>SEPP Coastal Management 2018</b>	
<p>The aim is to promote an integrated and co-ordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016, including the management objectives for each coastal management area, by</p> <p>(a) managing development in the coastal zone and protecting the environmental assets of the coast; and</p> <p>(b) establishing a framework for land use planning to guide decision-making in the coastal zone; and</p> <p>(c) mapping 4 coastal management areas that comprise the NSW coastal zone for the purpose of the definitions in the Coastal Management Act 2016.</p> <p>All development within the Coastal Wetlands Area requires development consent. All development, except environmental protection works is declared designated development. Consent must not be granted for development within the Coastal Wetlands Area unless sufficient measures have been or will be taken to protect the biophysical, hydrological and ecological integrity of the coastal wetland.</p> <p>Development consent must not be granted to development on land identified as "proximity area for coastal wetlands" unless the proposed development will not significantly impact on:</p> <p>(a) the biophysical, hydrological or ecological integrity of the adjacent coastal wetland, or</p> <p>(b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland.</p> <p>Consent must not be granted for development within the Coastal Environment Area if the</p>	<p>The southern part of the subject site adjoining Popran Creek is identified as "coastal wetlands" and "proximity area for coastal wetlands". Therefore the additional permitted uses allowed on this land as a result of the planning proposal would be treated as designated development if a development application was received to locate such uses within the coastal wetlands.</p> <p>Future development applications for uses in the Coastal Wetland Area and the Proximity Area for Coastal Wetlands will be assessed to ensure the biophysical, hydrological and ecological integrity of the coastal wetland is maintained.</p> <p>The flats adjoining the upper reaches of Popran Creek and the lower slopes are located within the Coastal Environment Area. The proposal to permit additional uses within this Area would not adversely impact on the coastal environment values and natural processes of the locality. However the future outdoor recreation proposed for this land would have to be considered in detail at the development application stage when and if such uses are proposed.</p>

State Environmental Planning Policy	Comment
<p>proposed development is likely to cause adverse impacts on the following</p> <p>(a) the integrity and resilience of the biophysical, hydrological and ecological environment;</p> <p>(b) coastal environmental values and natural coastal processes;</p> <p>(c) the water quality of the marine estate, in particular the cumulative impacts of the proposed development on any sensitive coastal lakes</p> <p>(d) marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms</p> <p>(e) existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public</p> <p>(f) Aboriginal cultural heritage, practices and places</p> <p>(g) The use of the surf zone.</p>	
<b>Deemed SEPP Sydney REP No 8 – Central Coast Plateau Areas</b>	
<p>Aims:</p> <p>(a) to provide for the environmental protection of the Central Coast plateau areas and to provide a basis for evaluating competing land uses,</p> <p>(b) to encourage the use of land having a high agricultural capability for that purpose and, as much as possible, to direct development for non-agricultural purposes to land of lesser agricultural capability,</p> <p>(c) (Repealed)</p> <p>(d) to protect regionally significant mining resources and extractive materials from sterilization,</p> <p>(e) to enable development for the purposes of extractive industries in specified locations,</p> <p>(f) (Repealed)</p> <p>(g) to protect the natural ecosystems of the region, and</p> <p>(h) to maintain opportunities for wildlife movement across the region, and</p>	<p>All of the land is within the boundary of SREP 8, however only the land near Cooks Road which is zoned RU2 has been the subject of detailed mapping of agricultural land. This land is identified as Classes 3 and 4 (coloured in pink) Prime Agricultural Land, with the upper side slopes as Classes 4-5 and 5, which are not prime agricultural land. Land within the valley floor has not been mapped under the REP. The planning proposal does not reduce the agricultural capability of the land as it seeks to retain the RU2 zone and all the uses permitted within that zone.</p> <p>The issues to be addressed in any draft local environmental plan are addressed in order below:</p> <p>(a) The additional uses are proposed to be undertaken on the E2 component of the site and are located away from any adjoining agricultural operation. For the RU2 component located off Cooks Road, adjoining land is within the same RU2 zoning, and the planning</p>



State Environmental Planning Policy	Comment
<p>(i) to discourage the preparation of draft local environmental plans designed to permit rural residential development, and</p> <p>(j) to encourage the preparation of draft local environmental plans based on merits.</p> <p>In preparing any draft local environmental plan applying to land to which this plan applies, the council should have regard to the objective that any development allowed by the plan should:</p> <p>(a) not impact upon the current or future use of adjoining land for existing or future agricultural uses, and</p> <p>(b) not result in an increased settlement pattern (by way of urban development, rural residential development, residential accommodation of a permanent or semi-permanent nature, community titles subdivisions or any other features that would facilitate increased settlement), and</p> <p>(c) have a significant positive economic contribution to the area and result in employment generation, and</p> <p>(d) not result in any adverse environmental effect on or off the site, and</p> <p>(e) be consistent with the strategic direction for water quality standards and river flow objectives developed through the State Government's water reform process, and</p> <p>(f) be consistent with rural amenity (including rural industries) and not detract significantly from scenic quality, and</p> <p>(g) not encourage urban (residential, commercial or industrial) land uses, and</p> <p>(h) not require augmentation of the existing public infrastructure (except public infrastructure that is satisfactory to the council concerned and is provided without cost to public authorities), and</p> <p>(i) result in building works being directed to lesser class soils.</p>	<p>proposal reflects existing approved uses (i.e. the motel). It is considered there is adequate separation between Glenworth Valley holdings land and adjoining agricultural land to provide sufficient separation between uses.</p> <p>(b) An eco-tourist facility, camping ground and tourist accommodation will not practically be able to be separately titled, and is only for the transient accommodation of tourists/visitors to the site. Hence the planning proposal would not result in an increased settlement pattern.</p> <p>(c) Allowing additional outdoor recreation facilities and tourist facilities will value add to the existing tourist infrastructure at the site and have a positive economic contribution and employment generation, and will benefit wider local businesses.</p> <p>(d) Adverse environmental effects will be minimised through regulation of development, and allowing flexibility in siting of works and activities.</p> <p>(e) Water quality standards will be assessed on an individual case by case basis and do not represent an impediment to the planning proposal as they can be managed through appropriate on-site practices.</p> <p>(f) The additional uses proposed will need to be sited and designed so as to not detract from scenic quality.</p> <p>(g) The land use will remain for conservation and environmental values for the valley floor, side slopes and ridgelines, with additional uses complementary to these values. The proposal will not encourage urban development.</p> <p>(h) Augmentation of any infrastructure that may be required (e.g. electricity) will need to be funded by the developer dependent upon what is required.</p> <p>(i) Building location within the RU2 zoned land can be assessed on an individual case by case basis and do not represent an impediment to the planning proposal. Soil classes within the valley have not been mapped.</p>
Deemed SEPP Sydney REP No 9 - Extractive Industry (No 2 - 1995)	

State Environmental Planning Policy	Comment
<p>Aims:</p> <p>(a) to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area by identifying land which contains extractive material of regional significance, and</p> <p>(b) to permit, with the consent of the council, development for the purpose of extractive industries on land described in Schedule 1 or 2, and</p> <p>(c) to ensure consideration is given to the impact of encroaching development on the ability of extractive industries to realise their full potential, and</p> <p>(d) to promote the carrying out of development for the purpose of extractive industries in an environmentally acceptable manner, and</p> <p>(e) to prohibit development for the purpose of extractive industry on the land described in Schedule 3 in the Macdonald, Colo, Hawkesbury and Nepean Rivers, being land which is environmentally sensitive.</p>	<p>Division 4 of Schedule 1 of the SREP identifies Lot 2 DP 229889 (Calga Sands) as a "sand extraction area of regional significance - current and potential". Lot 108 DP 755221, owned by Glenworth Valley holdings, off Cooks Road immediately adjoins this land. A separate DA has already been approved on the RU2 zoned part of Lot 108 for a motel comprising a 3 unit motel and five caravan park sites (as permissible in the existing zoning) (DA 43465 approved on 11 November 2013 refers). The proposed listing of tourist and visitor accommodation in Schedule 1 of GLEP 2014 as it relates to the RU2 zone will reflect existing approved uses. Other eco-tourist components would be located further away from the Calga Sands Quarry and hence would not have the impact of sterilising the extractive resource.</p> <p>The amended Gateway is likely to require consultation with Director General of Trade and Investment - Mineral Resources and The Director General of the Environment Protection Authority (or their equivalent under the new State Government structure).</p>
<b>Deemed SEPP Sydney REP No 20 - Hawkesbury-Nepean River (No 2 - 1997)</b>	
<p>The aim of this plan is to protect the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of future land uses are considered in a regional context.</p> <p>The plan contains a number of specific policies aimed at protecting water quality, recreational values, ecosystems, cultural heritage, flora and fauna communities, scenic quality and tourist values.</p>	<p>Popran Creek (including the creekline, river flats and vegetated hillsides) are within the riverine corridor as mapped under SREP 20. There are also mapped SREP 20 wetlands on the lower portions of Glenworth Valley landholding, and further downstream. Retention of the valley area and ridgelines in the E2 zone will assist in ensuring that downstream impacts and effects on receiving wetlands are considered as part of any future application. There is sufficient area available on-site to manage water quality and nutrients. The Planning Proposal seeks to permit extensive agriculture on the cleared riverflats. The grazing of horses and growing of fodder is already operating on the site so no additional impact on the environment would occur. The Planning Proposal seeks to facilitate a range of nature-based recreational activities (as outdoor recreation facilities), and environmentally appropriate tourist accommodation. This will further achieve the</p>

State Environmental Planning Policy	Comment
	goals of SREP 20 by building on the existing tourist values of Glenworth Valley.

**Table 3** – State Environmental Planning Policy Assessment

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

No.	Direction	Applicable	Consistent
<b>Employment &amp; Resources</b>			
1.1	Business & Industrial Zones	N	N/A
1.2	Rural Zones	Y	Y
1.3	Mining, Petroleum Production and Extractive Industries	Y	Y
1.4	Oyster Aquaculture	N	N/A
1.5	Rural Lands	N	N/A
<b>Environment &amp; Heritage</b>			
2.1	Environmental Protection Zones	Y	Y
2.2	Coastal Management	Y	Y
2.3	Heritage Conservation	Y	Y
2.4	Recreation Vehicle Areas	N	N/A
2.5	Application of E2 and E3 Zones and Environmental Overlays in Par North LEPs	N	N/A
<b>Housing, Infrastructure &amp; Urban Development</b>			
3.1	Residential Zones	N	N/A
3.2	Caravan Parks and Manufactured Home Estates	N	N/A
3.3	Home Occupations	N	N/A
3.4	Integrating Land Use & Transport	N	N/A
3.5	Development Near Licensed Aerodromes	N	N/A
3.6	Shooting Ranges	N	N/A
3.7	Reduction in non-hosted short term rental accommodation period	N	N/A

No.	Direction	Applicable	Consistent
<b>Hazard &amp; Risk</b>			
4.1	Acid Sulfate Soils	Y	Y
4.2	Mine Subsidence and Unstable Land	N	N/A
4.3	Flood Prone Land	Y	Y
4.4	Planning for Bushfire Protection	Y	Y
<b>Regional Planning</b>			
5.1	Implementation of Regional Strategies	N	N/A
5.2	Sydney Drinking Water Catchments	N	N/A
5.3	Farmland of State and Regional Significance on the NSW Far North Coast	N	N/A
5.4	Commercial and Retail Development along the Pacific Highway, North Coast	N	N/A
5.8	Sydney's Second Airport: Badgery's Creek:	N	N/A
5.9	North West Rail Link Corridor Strategy	N	N/A
5.10	Implementation of Regional Plans	Y	Y
5.11	Development of Aboriginal Land Council land	N	N/A
<b>Local Plan Making</b>			
6.1	Approval and Referral Requirements	Y	Y
6.2	Reserving Land for Public Purposes	N	N/A
6.3	Site Specific Provisions	Y	Y
<b>Metropolitan Planning</b>			
7.1	Implementation of A Plan for Growing Sydney	N	N/A
7.2	Implementation of Greater Macarthur Land Release Investigation	N	N/A
7.3	Parramatta Road Corridor Urban Transformation Strategy	N	N/A
7.4	Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	N	N/A



No.	Direction	Applicable	Consistent
7.5	Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N	N/A
7.6	Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N	N/A
7.7	Implementation of Glenfield to Macarthur Urban Renewal Corridor	N	N/A
7.8	Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan	N	N/A
7.9	Implementation of Bayside West Precincts 2036 Plan	N	N/A
7.10	Implementation of Planning Principles for the Cooks Cove Precinct	N	N/A

Table 4 – S9.1 Ministerial Direction Compliance

## Ministerial Section 9.1 Directions

Direction	Comment
<b>Employment &amp; Resources</b>	
<b>1.2 Rural Zones</b>	
<p>Aims to protect the agricultural production value of rural land</p> <p>Applies when the relevant planning authority prepares a planning proposal that will affect land within an existing or proposed rural zone.</p> <p>A planning proposal must not:</p> <p>(a) rezone land from a rural zoned to a residential, business, industry, village or tourist zone;</p> <p>(b) contain provisions that will increase the permissible density of land within a rural zone.</p>	<p>Some of the subject land fronting Cooks Road is zoned RU12 so this Direction applies. The planning proposal does not propose to rezone rural land to a more intensive zone nor is it increasing density within the RU2 zone. However it is proposing to include additional uses on the RU2 zoned land which would be permitted subject to development consent. These uses for tourist accommodation are temporary and generally low key thus unlikely to affect the agricultural viability of the land. Hence the Planning Proposal is consistent with this Direction.</p>
<b>1.3 Mining, Petroleum Production and Extractive Industries</b>	
<p>Aims to ensure that the future extraction of State or regionally significant reserves of coal, other minerals, petroleum and extractive materials are not compromised by inappropriate development.</p> <p>Applies when a relevant planning authority prepares a planning proposal that would have the effect of:</p> <p>(a) prohibiting the mining of coal or other minerals, production of petroleum, or winning or obtaining of extractive materials, or</p>	<p>Part of the subject land (i.e. Lot 108 DP 755221) immediately adjoins the existing Calga Sands quarry. However is considered that the planning proposal is satisfactory, as a motel has already been approved on the RU2 zoned part of Lot 108 in the vicinity of the quarry. Furthermore the majority of the land subject to this planning proposal is located away from the quarry and any additional uses would not impact on the quarry or would be</p>

Direction	Comment
<p>(b) restricting the potential development of resources of coal, other minerals, petroleum or extractive materials which are of State or regional significance by permitting a land use that is likely to be incompatible with such development.</p> <p>The relevant planning authority must consult with the Director-General of the Department of Primary Industries regarding the development potential of resources and any likely land use conflicts.</p>	<p>impacted upon by the quarry operation. However the planning proposal will be referred to the relevant State Department for comment.</p>
<b>Environment &amp; Heritage</b>	
<b>2.1 Environmental Protection Zones</b>	
<p>Aims to protect and conserve environmentally sensitive areas.</p> <p>Applies when the relevant planning authority prepares a planning proposal.</p> <p>A planning proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas.</p> <p>A planning proposal that applies to land within an environment protection zone or land otherwise identified for environment protection purposes in a LEP must not reduce the environmental protection standards that apply to the land (including by modifying development standards that apply to the land). This requirement does not apply to a change to a development standard for minimum lot size for a dwelling in accordance with clause (5) of Direction 1.5 "Rural Lands".</p>	<p>The additional outdoor recreational facilities proposed to be permitted in the E2 zone reflect the existing uses operating on site at present i.e. horse riding trails, quad biking, kayaking, and abseiling. These low impact uses, or similar, are compatible with the Environmental Conservation zone. Any other uses permitted under the definition of recreation facility (outdoor) would be required to satisfy the objectives of the E2 zone.</p> <p>The use of extensive agriculture in the E2 zone is proposed to be permitted on the cleared land within the valley and on the escarpment adjacent to RU2 zoned land. The use is currently conducted in these areas so no additional environmental impact would occur.</p> <p>The additional uses of function centre, entertainment facility and food and drink premises are proposed to be permitted in, and around the existing multi-purpose building. The surrounding land is generally cleared so will not impact on the environmental qualities of the site.</p> <p>Likewise, the cleared areas of adjoining lots are suitable for outdoor functions and camping.</p> <p>The additional use of tourist and visitor accommodation on cleared E2 zoned land adjoining the RU2 zone is considered to be compatible with the scenic amenity and environmental character of the locality.</p>
<b>2.2 Coastal Management</b>	
<p>Aims to protect and manage coastal areas of NSW.</p> <p>Applies when a relevant planning authority prepares a planning proposal that applies to land within the coastal zone as identified by SEPP (Coastal Management) 2018.</p>	<p>That part of the subject land adjacent to Popran Creek, which is a tidal creek, is in the coastal zone. The land is an estuarine environment and not subject to active coastal processes.</p> <p>The objects of the Coastal Management Act 2016 are to manage the coastal environment of New South</p>

Direction	Comment
<p>A planning proposal must include provisions that give effect to and are consistent with:</p> <p>(a) the objects of the Coastal Management Act 2016 and the objectives of the of the relevant coastal management areas, and</p> <p>(b) the NSW Coastal Management Manual and associated toolkit,</p> <p>(c) the NSW Coastal Design Guidelines 2003.</p> <p>A planning proposal must not rezone land which would enable increased development or more intensive land use on land:</p> <p>(a) within a coastal vulnerability area identified by the SEPP (Coastal Management) 2018, or</p> <p>(b) that has been identified as land affected by current or future coastal hazard in a LEP or DCP, or a study or assessment undertaken by a public authority or a relevant planning authority.</p>	<p>Wales in a manner consistent with the principles of ecologically sustainable development for the social, cultural and economic well-being of the people of the State.</p> <p>The additional uses proposed for the site relate to forms of outdoor recreational pursuits, camping ground and use of an existing building and surrounds for functions. These additional uses would be able to fit unobtrusively within the landscape and be ecologically sustainable. The operation of these tourist related uses would benefit the local economy and benefit the well-being of the people who visit the site and partake in the activities.</p> <p>The NSW Coastline Management Manual provides "information to assist present and potential users and occupiers of the coastline to understand the nature of coastline hazards and the options available for their management." As the site is not subject to immediate coastal processes it is not relevant to the Planning Proposal.</p> <p>The Coastal Design Guidelines relates to design of dwellings and location of new settlements and is not strictly relevant to this Planning Proposal. The following objective is however pertinent to this Planning Proposal:</p> <p>-To protect and enhance the cultural, ecological and visual characteristics of a locality.</p> <p>Due to the size of the subject land (approx. 1000 Ha), the additional permitted uses would be able to be accommodated within the landscape with minimal impact on the cultural, ecological and visual characteristics of the locality.</p> <p>The listing of additional permitted uses in the planning instrument will not have any substantive impact in terms of coastal protection and the proposal is considered to be consistent with this direction.</p>
<b>2.3 Heritage Conservation</b>	
<p>Aims to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance.</p> <p>Applies when the relevant planning authority prepares a planning proposal.</p>	<p>Since 1 October 2019 Calga Aboriginal Cultural Landscape became a State Heritage Item. This area generally applies to Australian Wildlife Walkabout Park and surrounding landscape. Part of this surrounding landscape applies to the eastern part of Lot 108 DP 755221. Future uses permitted in this area of Lot 108 would be low impact activities identified</p>

Direction	Comment
	<p>in a future Conservation Management Plan endorsed by the Heritage Council.</p> <p>The area of Lot 108 affected by the State Heritage Item is zoned E2 and inaccessible from Cooks Road so the proposed additional permitted uses of eco-tourist facilities and recreation facilities (outdoor) are unlikely to occur in this area.</p> <p>There are currently three (3) local environmental heritage items in the Valley:</p> <ul style="list-style-type: none"> <li>- Grave of Owen Maloney - Lot 19 DP 755221</li> <li>- Remains of stone walling - Lot 37 DP 755221</li> <li>- House "Glenworth Valley" - Lot 89 DP 755221</li> </ul> <p>These heritage items are identified and protected under the provisions of the Gosford LEP 2014.</p> <p>In relation to aboriginal archaeology, given the setting of the land, with a permanent creek, sandstone ridgelines and exposed rocky outcrops, it could be expected that items may be identified. Future development would need to comply with relevant legislation (National Parks and Wildlife Act, 1974) in relation to archaeological heritage. Given the variability of site characteristics, there is flexibility in the location of works to minimise disturbance and the E2 zone over the valley area is the most appropriate having regard to potential for further archaeological sites. Archaeological values could also be complementary to nature-based recreational activities. Given the size of the subject site (i.e. approx. 1000 Ha) it is unreasonable to undertake a detailed Aboriginal Heritage Study over the whole site when only small areas will in reality be subject to future development applications. A more reasonable approach would be to undertake detailed investigations for the specific locations of future individual development applications.</p>
<b>Hazard &amp; Risk</b>	
<b>4.1 Acid Sulfate Soils</b>	
<p>Aims to avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulfate soils.</p> <p>Applies when a relevant planning authority prepares a planning proposal that will apply to land having a probability of containing acid sulfate soils.</p>	<p>Land adjacent to Popran Creek is identified on the Acid Sulfate Soils Planning Maps as having a probability of acid sulfate soils. Planning for acid sulphate soils is now incorporated as a general provision in the LEP and will apply to any future development on land affected by acid sulfate soils.</p>

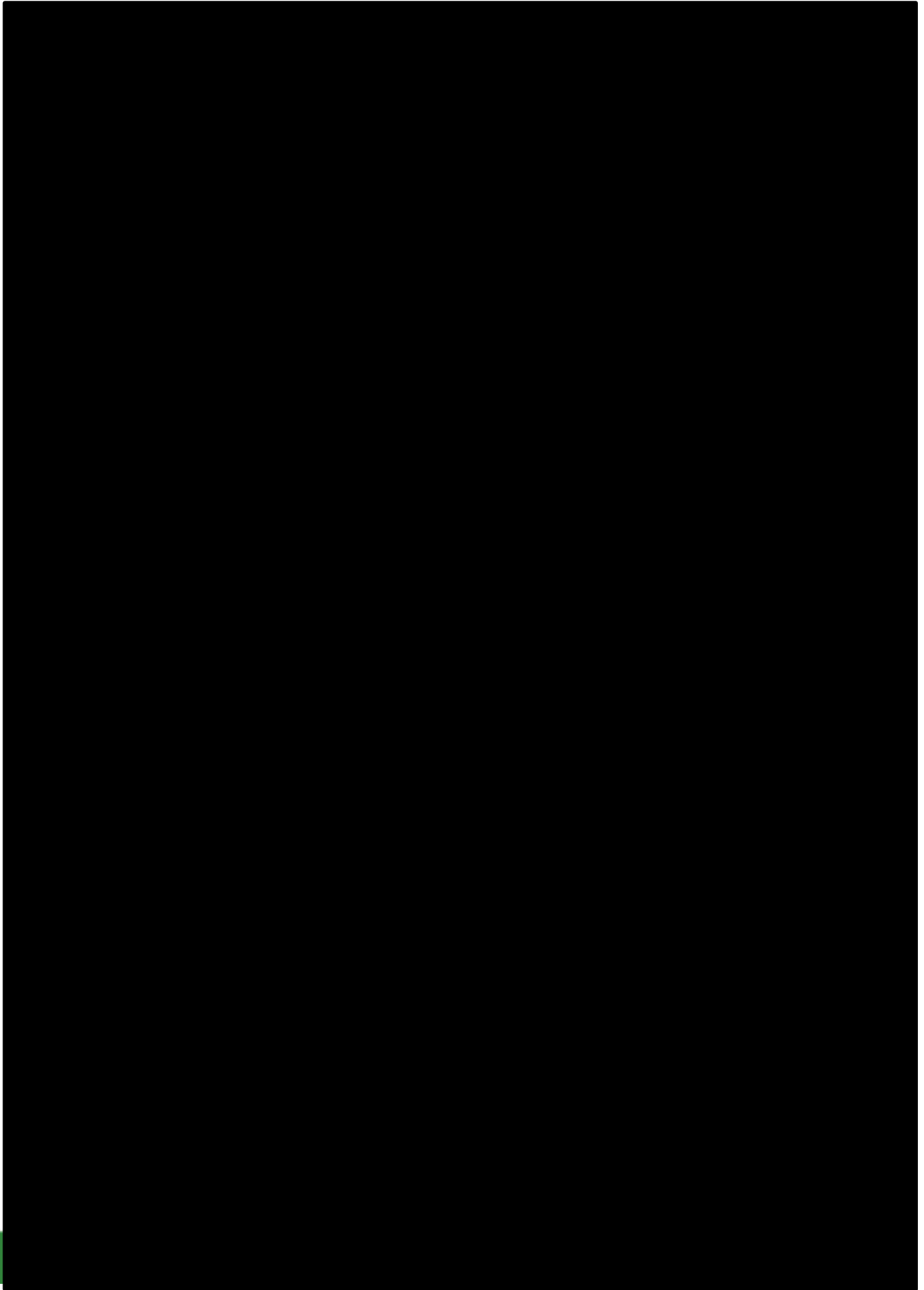
Direction	Comment
<b>4.3 Flood Prone Land</b>	
<p>Aims to ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005, and ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land.</p> <p>Applies when a relevant planning authority prepares a planning proposal that creates, removes or alters a zone or a provision that affects flood prone land.</p>	<p>The river flats adjacent to Popran Creek are mapped as flood liable. If building works are proposed in proximity to the creek, a specific flood investigation may be required to support future development and there may be issues associated with flood free access and/or isolation as a result of flood waters. The management of the site would respond to adverse weather conditions, including rain events and flooding, and adapt to conditions appropriate at the time.</p> <p>The rezoning is consistent with this Direction.</p>
<b>4.4 Planning for Bushfire Protection</b>	
<p>Aims to protect life, property and the environment from bushfire hazards, and encourage sound management of bushfire prone areas.</p> <p>Applies when a planning proposal affects or is in proximity to land mapped as bushfire prone land.</p>	<p>The land is mapped as Vegetation Categories 1 and 2 as well as Buffer. As the subject site is bushfire prone, it is considered necessary to refer the Planning Proposal to the Rural Fire Service for comment following the receipt of a Gateway determination. Issues that may be of relevance would relate to emergency evacuation procedures, on-site fire refuge, etc that may be more of an operational than planning nature.</p>
<b>Regional Planning</b>	
<b>5.10 Implementation of Regional Plans</b>	
<p>Aims to give legal effect to the vision, land use strategy, policies, outcomes and actions contained within regional strategies.</p> <p>Applies when the relevant planning authority prepares a planning proposal.</p>	<p>The Planning Proposal is considered to be consistent with the directions and actions contained in the Central Coast Regional Plan as indicated in the response to Question 1 above.</p>
<b>Local Plan Making</b>	
<b>6.1 Approval and Referral Requirements</b>	
<p>Aims to ensure that LEP provisions encourage the efficient and appropriate assessment of development.</p> <p>A Planning Proposal must minimise the inclusion of provisions that require concurrence, consultation or referral of development applications to a Minister or public authority and not identify development as designated development.</p>	<p>The planning proposal will not increase the need for referrals for development applications.</p>
<b>6.3 Site Specific Provisions</b>	



Direction	Comment
<p>Aims to discourage unnecessarily restrictive site specific planning controls.</p> <p>Applies when the relevant planning authority prepares a planning proposal to allow particular development to be carried out.</p> <p>The Planning Proposal must use an existing zone already applying in an environmental planning instrument and not impose any development standards in addition to those already contained in the environmental planning instrument. The proposal shall not contain or refer to drawings/concept plans that show details of the proposed development.</p>	<p>The Glenworth Valley site is unique in that it is of significant size (approx. 1000 Ha), allowing uses to be dispersed through the site and being located in less constrained areas, is relatively isolated from more urbanised coastal areas and has an existing nature based tourist development operating from the land. Given this and the inappropriateness of other zones (other than those existing) for the overall holding, the addition of uses in Schedule 1 of the relevant LEP is justified.</p> <p>If relevant mapping was updated no additional development standards than currently exist would be applied.</p>

**Table 5 – S9.1 Ministerial Direction Assessment**

## APPENDIX THREE



## APPENDIX FOUR –

