

Reference: 22044

22 April 2022

Japrico Development Pty Ltd  
C/o - Eleisha Burton  
Senior Associate  
Willowtree Planning  
By email: [eburton@willowtp.com.au](mailto:eburton@willowtp.com.au)

Dear Eleisha,

**RE: ABORIGINAL CULTURAL HERITAGE DUE DILIGENCE ADVICE FOR  
10 YOUNG STREET, WEST GOSFORD, NEW SOUTH WALES**

Austral Archaeology Pty Ltd (Austral) has been engaged by Willowtree Planning on behalf of Japrico Development Pty Ltd to provide Aboriginal Cultural Heritage Due Diligence Advice (ACHDDA) for the proposed commercial development at 10 Young Street, West Gosford, New South Wales (NSW) [the study area] (Figure 1 and Figure 2). This advice is intended to assist Willowtree Planning in determining their obligations with regard to the *National Parks and Wildlife Act 1974* (NPW Act) and to determine whether the project will involve activities that may harm Aboriginal objects or places.

The study area is 1.015 hectares in size, and the proposed development is the construction of a multipurpose building within boundaries of the identified study area. Section 87 of the NPW Act makes it a strict liability offence to knowingly or unknowingly harm Aboriginal objects or declared Aboriginal places without an AHIP. Harm is defined under the NPW Act as “*any act or omission that destroys, defaces or damages the object or place or in relation to an object, moves the object from the land on which it had been situated*”. The NPW Act allows for a person or organisation to exercise due diligence in determining whether their actions will or are likely to impact upon Aboriginal objects or places. Any person or organisation who can demonstrate that they have exercised due diligence has a defence against prosecution under the strict liability provisions of the NPW Act. Where an activity is likely to harm Aboriginal objects or places, consent in the form of an Aboriginal Heritage Impact Permit (AHIP) is required

The *National Parks and Wildlife Regulation 2009* (NPW Regulation) adopted the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010a) [the Code]. The Code sets out the reasonable and practicable steps which individuals and organisations need to take in order to:

- Identify whether Aboriginal objects are, or are likely to be, present within the study area.
- If Aboriginal objects are, or are likely to be present, determine whether their activities are likely to cause harm.
- Determine whether further assessment or an AHIP application is required for the activity to proceed.

This advice has been formulated to provide a robust assessment that will identify whether Aboriginal objects or places are present or are likely to be present within the study area. This has been achieved through the completion of a desktop review and archaeological survey of the study area. The Code provides a series of questions that clarify whether it is applicable to a proposed project. These questions are addressed in Table 1.

**Table 1                      Applicability of the Code to the proposed activity.**

Question	Response
Is the activity a declared project under Part 3A of the EP&A Act?	No
Is the activity an exempt activity listed in the NPW Act or other legislation?	No
Will the activity involve harm that is trivial or negligible?	No
Is the activity in an Aboriginal place or are you already aware of Aboriginal objects on the land?	No
Is the activity a low impact activity for which there is a defence in the NPW Regulation?	No
Do you want to use an industry specific code of practice?	No
Do you wish to follow your own procedure?	No

As none of the questions outlined in Table 1 apply to the project, due diligence must be established through using the Code. The Code consists of a series of 5 steps outlined below.

### **STEP 1. WILL THE ACTIVITY DISTURB THE GROUND SURFACE OR ANY CULTURALLY MODIFIED TREES?**

The activity will disturb the ground surface and therefore consideration of steps 2a and 2b of the Code is required. The study area does not contain old growth vegetation and as such no culturally modified trees will be impacted by the proposed activity.

### **STEP 2A. SEARCH THE ABORIGINAL HERITAGE INFORMATION MANAGEMENT SYSTEM (AHIMS) DATABASE AND USE ANY OTHER SOURCES OF INFORMATION OF WHICH YOU ARE ALREADY AWARE**

An extensive search of the Aboriginal Heritage Information Management System (AHIMS) database was conducted on 11 April 2022 (Client service ID: 674591). The search identified 106 Aboriginal archaeological sites within a 3-kilometre search area centred on the proposed study area (Table 2 and Figure 3). None of these registered sites are located within the study area, and the closest site is located 400 metres north-east of the study area in proximity to Waterview Park, "Gosford CBD 1" (AHIMS #45-3-4525).

Spatial information for this report is displayed using the GDA94 Datum. Where AHIMS site records were provided on a different datum, they were converted using standard functions in QGIS software. There were no previously recorded sites at locations where either their original or converted datum placed them in or near the study area.

Most of the AHIMS sites are located in the Point Clare and West Gosford bushland west of the study area, in between the Central Coast Highway and the Pacific Motorway. The highest site type occurrence surrounding the study area are sites featuring rock art. Of the 106 sites within a 3-kilometre radius, 64 (60.38%) include rock art (pigment or engraved) as a component of the site and 32 (30.19%) of the identified sites include grinding grooves.

The majority of these sites are found in the ridges and crests of the surrounding hills, specifically the range to the west of the study area encompasses a large number of rock art site types. Furthermore, there are sites known as Rumbalara 1, 2 and 3 (AHIMS # 45-3-3429, AHIMS #45-3-3430 and AHIMS #45-3-3431) which follow the ridge lines of Mount Elliott located to the east of the study area. In comparison to the west ridge lines where art sites are prevalent, the eastern ridgelines include artefact sites and shelters with deposits of shells and artefacts. The contrast between the 2 ridgelines on either side of the study area highlights the ongoing use of the local area for both spiritual activities and purposes of occupation. Additionally, the sites surrounding the study area include artefacts, PADs and shell sites which emphasises the historical use of Narara Creek as predominant resource for subsistence.

The closest sites to the study area aside from the sites mentioned above are located on the banks of Narara Creek, 800 metres north-west of the study area. Narara Creek runs directly into Brisbane Water and would have most likely provided important resources for Aboriginal people in the past. Additionally, the flat, elevated areas surrounding it are an ideal location for camping. The sites on Narara Creek area are identified as “Old Gosford Road Gosford Racecourse” (AHIMS #43-3-1455), “Gosford Narara CK” (AHIMS #43-3-0558), and “Old Gosford Road (Gosford Racecourse)” (AHIMS #45-3-1456), all of which are Aboriginal shell middens with artefacts (Figure 4). Alongside these 3 sites, another is recorded on the western banks of Narara Creek further upstream known as “NC-M-1 (Gosford)” (AHIMS #45-3-3170), located in proximity to a small ephemeral creek line, consisting of a shell lens of a light scatter of cockle shell over an area measuring 8 by 7 metres (Virtus Heritage 2018). Similarly, along the northern shore of Brisbane Water are 2 sites, “Dane Drive PAD” (AHIMS #45-3-3340), a potential archaeological deposit (PAD) located on reclaimed fill which no longer holds archaeological material, and “ATO Mann Street” (AHIMS #45-3-3699), a site consisting of 2 stone artefacts located along the eastern slope adjacent to “Dane Drive PAD” (AHIMS #45-3-3340). These sites are located within similar landforms and environmental zones as the study area.

**Table 2 AHIMS sites identified within 3 kilometres of the study area.**

Site type	Occurrence	Frequency (%)
Rock Engraving	23	21.70%
Shelter with Art	12	11.32%
Art Site	10	9.43%
Axe Grinding Groove	10	9.43%
Axe Grinding Groove, Rock Engraving	10	9.43%
Midden	6	5.66%
Grinding Groove	4	3.77%
Shell	3	2.83%
Axe Grinding Groove, Rock Engraving, Shelter with Art	3	2.83%
Axe Grinding Groove, Shelter with Midden	2	1.89%
Artefact Site	2	1.89%
Scarred Tree	2	1.89%
Shelter with Shell	2	1.89%
Shelter with PAD	2	1.89%
Art Site, Water Hole	2	1.89%
Artefact Site, Shell	1	0.94%
Axe Grinding Groove, Shelter with Art	1	0.94%
Shelter with Deposit, Shell	1	0.94%
Shelter with PAD and Shell	1	0.94%
Axe Grinding Groove, Shelter with Deposit	1	0.94%
Rock Engraving, Shelter with Art	1	0.94%
Shelter with Deposit	1	0.94%
Rock Engraving, Shelter with Deposit	1	0.94%
Grinding Groove, Water Hole	1	0.94%
Rock Engraving, Stone Arrangement	1	0.94%
PAD	1	0.94%

Midden, Rock Engraving	1	0.94%
Modified Tree	1	0.94%
<b>Total</b>	<b>106</b>	<b>100%</b>

A review of the reports held on the AHIMS database identified several archaeological studies which have been undertaken in the locality of the study area. These are summarised in Table 3. Austral has also undertaken a review of information to identify whether the activity is located within landscape features likely to contain Aboriginal objects. This includes an assessment of ethnographic information, soils, geology, landform, disturbance and resource information pertinent to the study area. The outcome of this review is outlined in Table 4.

**Table 3 Archaeological studies undertaken in the vicinity of the study area.**

Author	Name	Detail
Kelly (1977)	Gosford to Ourimbah Transmission line. Approximately 703m from the study area.	Kelly was commissioned to undertake an Aboriginal archaeological survey for the proposed development of the easement of transmission lines along the Gosford to Ourimbah first and second line. The research noted the discovery of 5 sites. The first 2 consisted of a cluster of 17 grinding grooves and 2 engraved male figures located in a creek basin. The third was a cluster of 60 grinding grooves located along a 20m stretch; the fourth was 2 faint grinding grooves in a creek, and the fifth was 4 grinding grooves within a sandstone shelf in a cascading rock creek bed. Kelly concluded with the likelihood of finding more sites within the area as high and that they should be avoided along with areas of high rock platforms.
Haglund (1983)	Narara Creek to the Kincumber Tunnel. Approximately 4.8km from the study area.	Haglund was commissioned by the Public Works Department NSW to undertake an archaeological survey for the Gosford Regional Sewage scheme. The research noted the discovery of 3 archaeological sites including shell and artefact site "Old Gosford Road (Gosford Racecourse)" (AHIMS #45-3-1456), located in a slight rise of sand along Narara Creek in a clearing with a narrow belt of casuarinas. It contained cockles, whelks and fragmented oysters over a maximum depth of 100 to 200mm. Haglund concluded by stating that the discovery of subsurface artefacts within this study area would be unlikely.
Koettig and McDonald (1983)	Mount Penang area, Somersby. Approximately 2.85km west of the study area.	Koettig and McDonald were commissioned by Lester Firth Associates Pty Ltd to undertake a survey of archaeological sites in the Mount Penang area, for a proposed rural residential subdivision development. The research noted the re-identification of 5 out of 8 previously recorded sites as well as 6 new sites within this project area. The authors surmised that the majority of sites within the plateau or

Author	Name	Detail
		escarpment of the Gosford Somersby region are rock engravings, shelter sites, PADs or grinding grooves.
Hardy (2003)	Intersection of Avoca Drive and The Entrance Road at Erina. Approximately 4.3km east of the study area.	Hardy was commissioned to undertake an Aboriginal archaeological assessment for upgrade of the intersection of Avoca Drive and The Entrance Road. No Aboriginal material was discovered, and it was concluded that the potential for future discoveries would be unlikely given the extent of past disturbances to the site.
Archaeological and Heritage Management Solutions Pty Ltd (AHMS) (2007)	Dane Drive and Mason Parade intersection. Approximately 1.6km south-east of the study area.	AHMS was commissioned to undertake an ACHA for the proposed upgrade of the intersection of Dane Drive and Mason Parade in Gosford. The research noted the recording of a PAD. No artefacts or features of Aboriginal significance was located and the site card was amended in consequence.
OzArk Environmental and Heritage Management Pty Ltd (OzArk) (2018)	Manns Road Upgrade . Approximately 880m west of the study area.	Ozark was commissioned by the Central Coast Council to undertake an Aboriginal cultural heritage survey for the proposed Manns Road upgrade. A previously recorded shell midden site "NC-M-1" (AHIMS #45-3-3170), located upstream on the western banks of Narara Creek, was known to be approximately 1.4km north from the project area. However, shell material was not located during the survey, and the proposed works were deemed to avoid impact on this site. The report concluded with the prediction that landforms associated with Aboriginal occupation are flat alluvial terrain and sloping elevated landforms. These could contain low density artefact scatters if urban disturbance remains at a minimum.
Artefact Heritage Pty Ltd (Artefact) (2019)	Northside Private Hospital, West Gosford, NSW. Approximately 550m north from the study area.	Artefact was commissioned by Donald Cant Watts Corke to undertake an Aboriginal Heritage Impact Assessment for the proposed development of the Northside Private Hospital. The research noted no previously or newly recorded sites found within this project area, with heavy disturbance across it and an overall low potential for Aboriginal archaeology.
Archaeological Management and Consulting Group (AMAC) in conjunction with Streat Archaeological Services (2020)	26-32 Mann Street, Gosford, NSW. Approximately 1.22km east from the study area.	AMAC, in conjunction with Streat Archaeological Services, undertook an Aboriginal Cultural Heritage Assessment (ACHA) and an accompanying Aboriginal archaeological Report (AAR) for the proposed mixed-use development. It noted the prior identification of site "ATO Mann Street" (AHIMS #45-3-3699),

Author	Name	Detail
		where 2 stone artefacts were located along the eastern slope to the north of the project area and within an intact A-horizon.

**Table 4      Assessment of landscape features**

Information	Details
Ethnographic	<p>The pre-European context of the Gosford-Wyong region is one of small bands of Aboriginal people living a mobile hunting and gathering lifestyle. Traditionally, this district falls within the tribal area of the Darkinjung Peoples. Their occupation stretched along a small strip of the coastal land between Gosford and Wyong (Archaeological Management &amp; Consulting Group and Streat Archaeological Services 2020, p.16). The traditional boundaries extend from “the Hawksbury River in the south, to Lake Macquarie to the North, the McDonald River and Wollombi township up to Mount Yengo in the west and to the Pacific Ocean to the east (<i>Darkinjung - Culture and Heritage</i> n.d.).</p> <p>The social structure of Aboriginal groups was slightly stratified, with elders of clans holding decision making capabilities. Subsistence activities were sexually dimorphic, and the spirituality of groups is detailed and explained through an oral tradition of Dreamtime. Material culture, such as tools, was made of a variety of materials such as bark, resin, shell, bone and reeds. Hard stone raw material that was made into stone tools is the main element of this tool kit to remain in the archaeological record. The pre-European landscape of the Gosford-Wyong region would have been the setting for a variety of human activity. This human activity would have included camping, fishing, gathering, cooking, ceremonies, and other cultural activities associated with semi-permanent settlement sites in the region.</p>

Information	Details
Soils	<p>The majority of the study area is located within the Erina soil landscape and a portion of the western edges are considered disturbed terrain (Figure 5). The Erina soil landscape ranges from moderately deep to deep. It consists of 3 main soil types formed on shale, sandstone and on weathered coarse sandstone. These soil types are; 1 to 2m of Yellow Podzolic Soils on fine grained bedrock and poorly drained areas; 500mm to 1.5m of Yellow Podzolic Soils; and finally Yellow Earths located on foot slopes and which are more than 3m deep, while Structured Loams and Yellow Earths occur on drainage lines.</p> <p>The soil of the disturbed terrain is highly variable. The majority of the original soil has been removed, buried or greatly disturbed and it can consist of imported topsoil or be covered by concrete or bitumen. It is not uncommon that industrial and household waste along with other sediments from nearby soil landscapes are transported and mixed together over the course of European occupation and development within the region (NSW Department of Planning, Industry and Environment n.d.).</p>
Hydrology	<p>The study area is located within proximity to 2 major water bodies: Narara Creek and Brisbane Water (Figure 6). Brisbane Water is a wave-dominated barrier estuary located approximately 200m south from the study area. It covers an area of 165km<sup>2</sup> and would have provided a range of attractive resources for Aboriginal peoples of the past. The origin of this barrier estuary is at the confluence of Narara and Coorumbine creeks, south-east of the study area and it runs for 18km.</p> <p>The lake system of Brisbane Water is an example of a drowned river valley that would have been above water prior to the rise in sea levels which occurred at the end of the Last Glacial Maximum, approximately 24,000 to 18,000 years ago.</p> <p>Narara Creek, which runs on a north to south alignment approximately 440m west from the study area, is a 3<sup>rd</sup> order stream whose waters flows into Brisbane Water. Four sites, between 27 and 100 metres from the creek's shores, have been identified in close proximity to the study area. The 3 closest to the study area, all in or within proximity to the current racecourse, are shell middens and the site further upstream contains shell material. This is evidence of frequent and repeated occupation by small groups of Aboriginal peoples, in accordance with the predictive modelling using stream order model (McDonald &amp; Mitchell 1994).</p>
Geology	<p>The study area lies within the Sydney Basin; a large depositional geological feature that stretches from Batemans Bay to Newcastle and from the Pacific Ocean to Lithgow. The underlying geology is a Terrigal Formation of the Narrabeen Group. It consists of a lithic and quartz sandstone and siltstone, with minor sedimentary breccia, claystone and conglomerate. Some of the sandstone is highly weathered and friable (NSW Department of Planning, Industry and Environment n.d.).</p>

Information	Details
Landform	<p>The study area is located in the Gosford-Wyong region on the northern boundary of the Sydney Basin. It is typically characterised by rolling hills and foot slopes of the Rina Hills (Hazelton et al. 1992). The local area includes residential and commercial properties typical of an urban setting.</p> <p>After conducting a walking survey of the study area, it was found that the current car park is layered on top of a natural gentle slope most likely associated with the foot slopes of Waterview Park which overlooks the study area. No other significant landforms are present within the study area.</p> <p>The proximity of water to both the south and the west, as well as this relatively level terrain makes for moderate archaeological potential excluding areas of modern disturbances.</p>
Disturbance	<p>The study area today consists of a level car park associated with the car dealership to the south and is located on a slight north-eastern to south-western slope. The bitumen and gravel fill seen today on the surface would have been laid within the last 5 years. Before that, an empty lot, sandy car park, sedimentation basins and sheds existed at some point over the last 20 years.</p> <p>Until 2011, traces of an old secondary railway track can be observed among these disturbances. This line branches from the original Sydney to Newcastle track laid down in 1887 and ran through the study area during the 1940's and 1950's. It encompasses the western half of the study area and runs from Gosford train station and then parallel to Narara Creek towards the north. It is present on a parish map dated to 1942 and is still visible in a 1965 historical aerial (Figure 7).</p> <p>The adjacent water drainage to the east and along the southern and western edges of the study area are indicative of sub-surface disturbance for the construction of services.</p>

Information	Details
Resources	<p>The study area has been cleared as a result of historical European farming and urban land use practices. However, prior to this, it would have featured a diverse range of flora and fauna resources that would have been utilised by Aboriginal people. Aboriginal people frequenting the study area would have exploited primary resources from the nearby Brisbane Waters as well those within the nearby Narara Creek. These would have included a wide range of fish species, of migratory wetland birds, and a variety of lizards and frogs. The cabbage palm and bracken fern roots would have supplemented these resources (Dyall 1971). The study area and its nearby surroundings would have also provided habitats for the usual variety of macropods found in the Central Coast, most notably the grey eastern kangaroo (<i>Macropus giganteus</i>). The practice of firestick farming would have attracted new game of these types.</p> <p>Vegetation would have consisted of tall open forests with open heath in exposed coastal areas. Due to Brisbane Water's poor drainage, its coastal boundary would have most likely been lined predominantly with blackbutt (<i>Eucalyptus pilularis</i>), forest oak (<i>Allocasuarina torulosa</i>), turpentine (<i>Syncarpia glomulifera</i>), spotted gum (<i>E. Maculata</i>), smooth or barked apple (<i>Angophora costata</i>), grey ironbark (<i>E. paniculate</i>), the Sydney blue gum (<i>E. saligna</i>), swamp mahogany (<i>E. Robusta</i>), and swamp oak (<i>Casuarina glauca</i>) (Archaeological Management &amp; Consulting Group and Streat Archaeological Services 2020, p.18).</p>

A multitude of studies have been undertaken that have established a general criterion for predicting the location of Aboriginal sites in landforms associated with the Gosford-Wyong region (c.f. Kelly 1977, Haglund 1983, Koettig & McDonald 1983, Archaeological and Heritage Management Solutions Pty Ltd 2007, OzArk Environmental and Heritage Management P/L 2018, Artefact Heritage Pty Ltd 2019, Archaeological Management & Consulting Group and Streat Archaeological Services 2019).

Based upon the results of these background studies combined with Step 2a of the Code, Austral has been able to develop a series of predictive statements relating to the type and character of Aboriginal cultural heritage sites that are likely to exist in the study area and where they are more likely to be located. These predictive statements indicate that:

- Disturbance including historical land clearance, building construction, and limiting factors including areas of tall grass coverage, gravel and fill overlay may impact visibility and the potential to identify artefacts. Some of these may also impact the integrity of the surface and sub-surface deposits.
- Furthermore, high levels of past disturbances within the study area mean that the general archaeological landscape is not suitable for conservation.
- Stone artefacts, shell material and middens as well as PADs are the types of sites most likely to occur within the study area due to the proximity of Narara Creek and Brisbane Water.
- Sites would most commonly be found near creeks and on high ground near water, as well as along ridgelines and spurs with flat or gently sloping crests.
- Stone artefact sites may be present on flat terrain adjacent to water, however disturbances including urban development or flooding events may relocate these objects.
- Scarred trees are unlikely to be present within cleared and regrowth areas.

- Grinding grooves are unlikely to be present due to a lack of suitable requirements (i.e. exposed bedrock near to a water source).
- Ceremonial grounds are unlikely to be present due to their general rarity within NSW.
- Burials are unlikely to be present, due the lack of deep sandy locations suitable for burial.
- Shell middens are likely due to the proximity of both the Narara Creek and Brisbane Waters.
- Stone arrangements are unlikely to be present due to their general rarity within NSW.

## STEP 2B. ACTIVITIES IN AREAS WHERE LANDSCAPE FEATURES INDICATE THE PRESENCE OF ABORIGINAL OBJECTS

**Table 5** Applicability landscape features from the Code likely to have Aboriginal objects to the study area.

Question	Response
Is the activity within 200m of 'waters'?	No
Is the activity within a sand dune system?	No
Is the activity located on a ridge top, ridge line or headland?	No
Is the activity located within 200m below or above a cliff face?	No
Is the activity within 20m of or in a cave, rock shelter or cave mouth?	No
Is the activity (or any part of it) on land that is disturbed?	Yes
Do the predictive statements of 2A indicate Aboriginal Objects or places are likely to occur on any of the topographic elements of the activity area?	No

Based upon the above, whilst the study area is located in reasonably close proximity to a known water source in Narara Creek, the study area's potential to contain Aboriginal objects is reduced through the presence of high levels of modern disturbance across the entirety of the study area.

## STEP 3. CAN YOU AVOID HARM TO THE OBJECT OR DISTURBANCE OF THE LANDSCAPE FEATURE?

It is not possible to avoid harm to the objects or landscape features within the study area.

## STEP 4. DESKTOP ASSESSMENT AND VISUAL INSPECTION

In order to ground-truth the desktop assessment, a visual inspection of the study area was undertaken on 20 May 2020 by Alexander Beben (Director, Austral) and Pauline Ramsey (Graduate Archaeologist, Austral). No Aboriginal heritage sites or objects were discovered during this inspection. The visual inspection consisted of a systematic survey of the study area to identify and record any Aboriginal archaeological sites visible on the surface or areas of Aboriginal archaeological potential and cultural sensitivity. The archaeological survey was conducted on foot. The methods used during the visual inspection conformed to requirements 5 to 8 of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW 2010b).

The visual inspection identified that the study area was characterised by a very low ground visibility and areas of disturbances along with modern infrastructures (Figure 8 and Figure 9). The study area contains a car park layered with gravel over a light brown silty clay fill and a road layered with bitumen along its eastern boundary. This means that ground visibility throughout this survey was less than 1%. There is underground drainage infrastructure along the outside of the western, southern and eastern boundaries of the car park. These are lined with tall grasses which cover some of the exposed areas along those boundaries. To the north of the study area is a fence dividing the car park from adjacent lots which are also lined with tall grasses (Figure 10).

The study area is located on a natural slope, as it is found on the foot slopes of Waterview Park to the north-east of the study area (Figure 11). The top of Waterview Park dominates the north-eastern landscape.

These overlaid disturbances, along with the use of the site as a car park and the amount of daily foot and tyre traffic likely to be occurring within the study area makes the potential for surface finds unlikely to occur. The potential for sub-surface sites is therefore low throughout the study area due to high levels of disturbance documented across the study area. These include the construction of the railway siding in the 1940s in the western part of the study area, and constant disturbance from construction of various sheds, warehouses and drainage infrastructure in the east.

## **STEP 5. FURTHER INVESTIGATIONS AND IMPACT ASSESSMENT**

Based upon the outcome of Steps 1 to 4 of the Code, further assessment is not warranted. As such the project may proceed with caution. The following recommendations apply:

1. There is low potential for the study area to contain Aboriginal cultural material and no further works are required in this regard.
2. All Aboriginal objects and Places are protected under the NPW Act. It is an offence to knowingly disturb an Aboriginal site without a consent permit issued by Heritage NSW. Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object, the archaeologist will provide further recommendations. These may include notifying Heritage NSW and Aboriginal stakeholders.
3. Aboriginal ancestral remains may be found in a variety of landscapes in NSW, including middens and sandy or soft sedimentary soils. If any suspected human remains are discovered during any activity, you must:
  - Immediately cease all work at that location and not further move or disturb the remains
  - Notify the NSW Police and Heritage NSW's Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location
  - Not recommence work at that location unless authorised in writing by Heritage NSW.

If you have any questions regarding the advice within this letter, please do not hesitate to contact me on the details below.

Yours sincerely,



Peta Rice

Archaeologist

Austral Archaeology

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## REFERENCES

Archaeological and Heritage Management Solutions Pty Ltd 2007, *Dane Drive & Mason Parade Intersection Upgrade Archaeological Assessment*.

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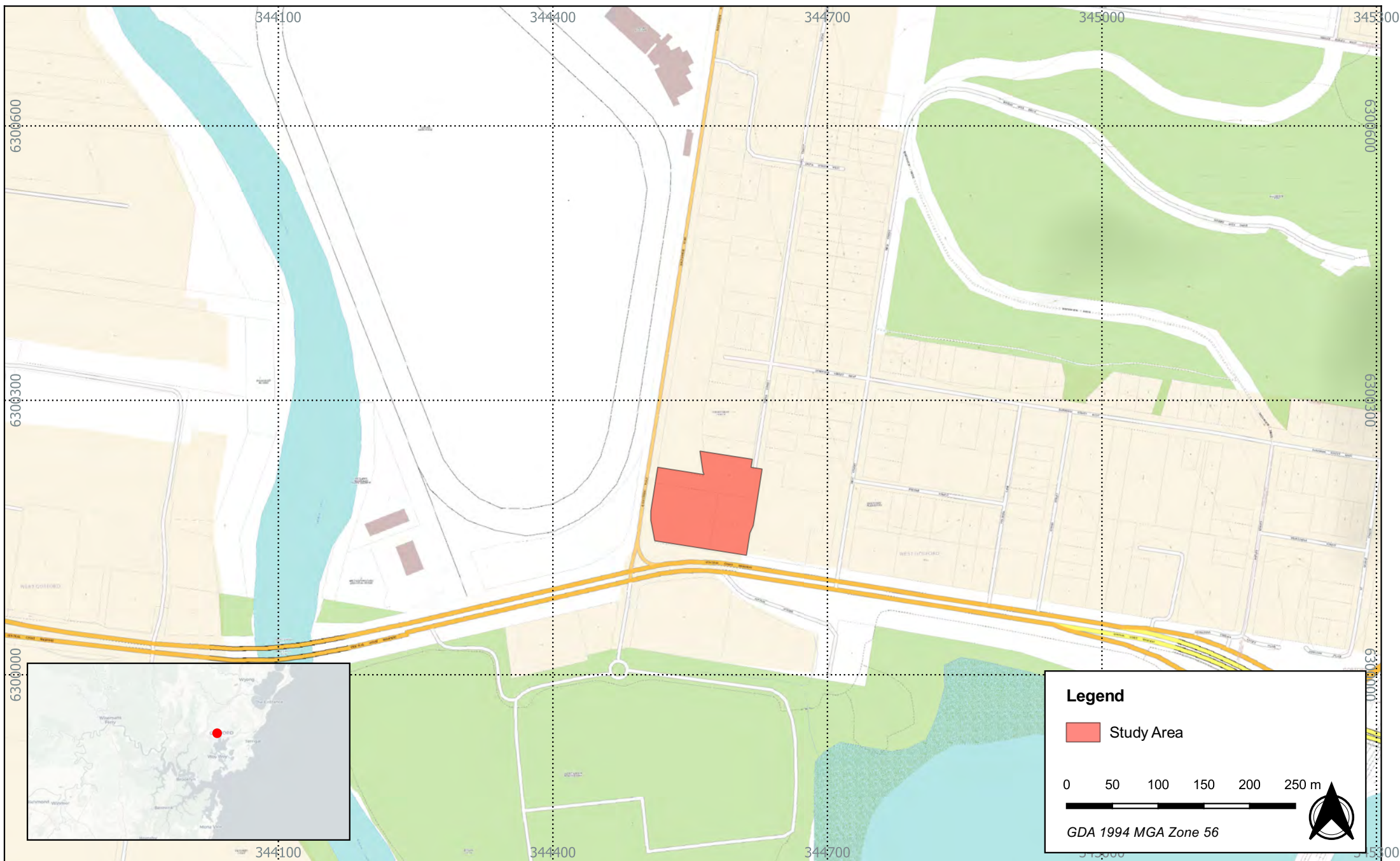
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**Figure 1 - Location of the study area**

22044 - 10 Young Street West Gosford, 61 Central Coast Highway West Gosford - ACHDDA

Source: NSW LPI Basemap, CartoDB Positron

Drawn by: ARH Date: 2022-04-12



**A U S T R A L**  
A R C H A E O L O G Y



**Figure 2 - Detailed aerial of the study area**

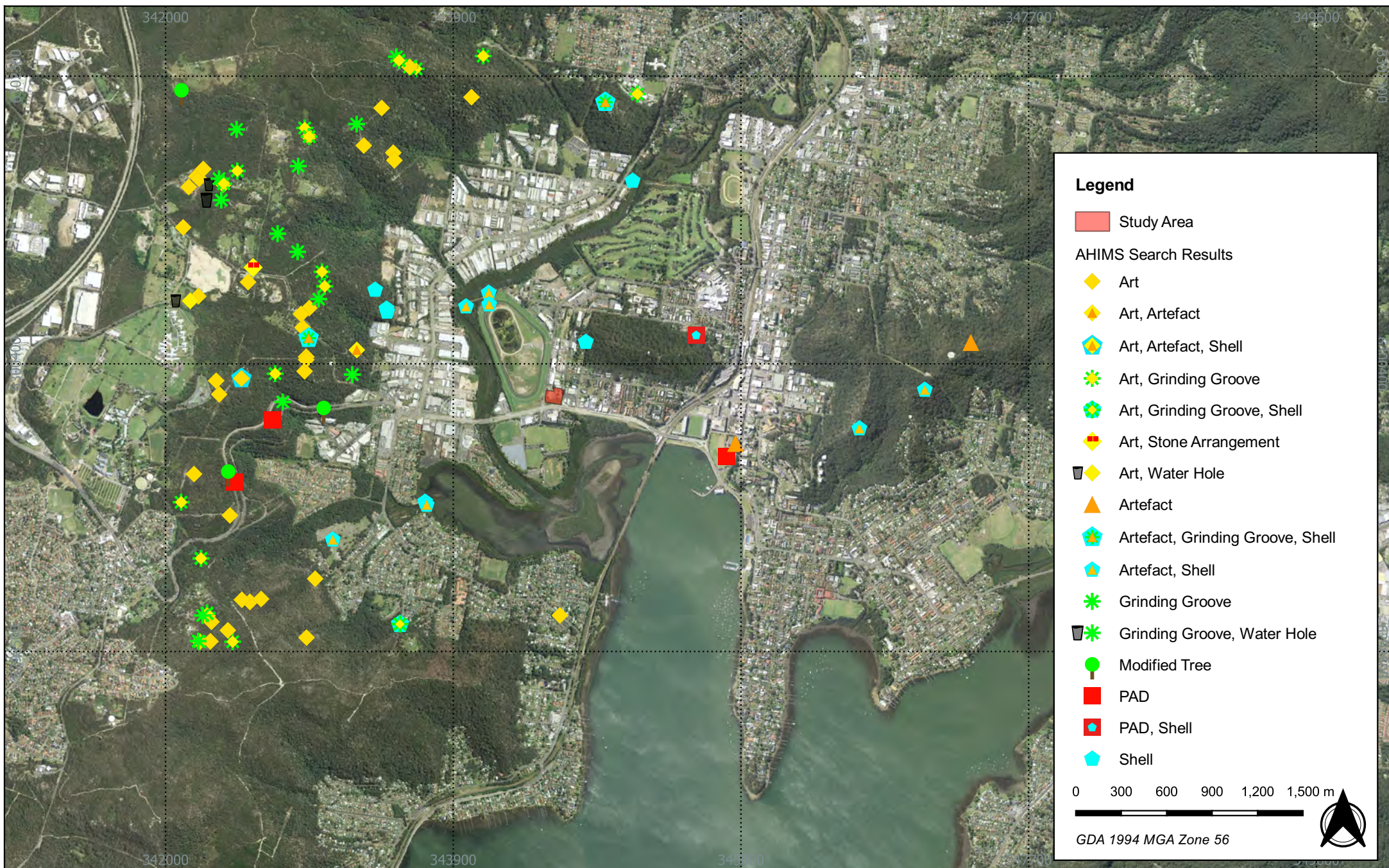
22044 - 10 Young Street West Gosford, 61 Central Coast Highway West Gosford - ACHDDA

Source: NSW LPI Aerial, CartoDB Positron

Drawn by: ARH Date: 2022-04-12



**AUSTRAL**  
ARCHAEOLOGY



**Figure 3 - AHIMS within 3km of the study area**

22044 - 10 Young Street West Gosford, 61 Central Coast Highway West Gosford - ACHDDA

Source: NSW LPI Aerial

Drawn by: ARH Date: 2022-04-12



**AUSTRAL**  
ARCHAEOLOGY



AUSTRAL  
ARCHAEOLOGY



**Figure 5 - Soil Landscapes of the study area**

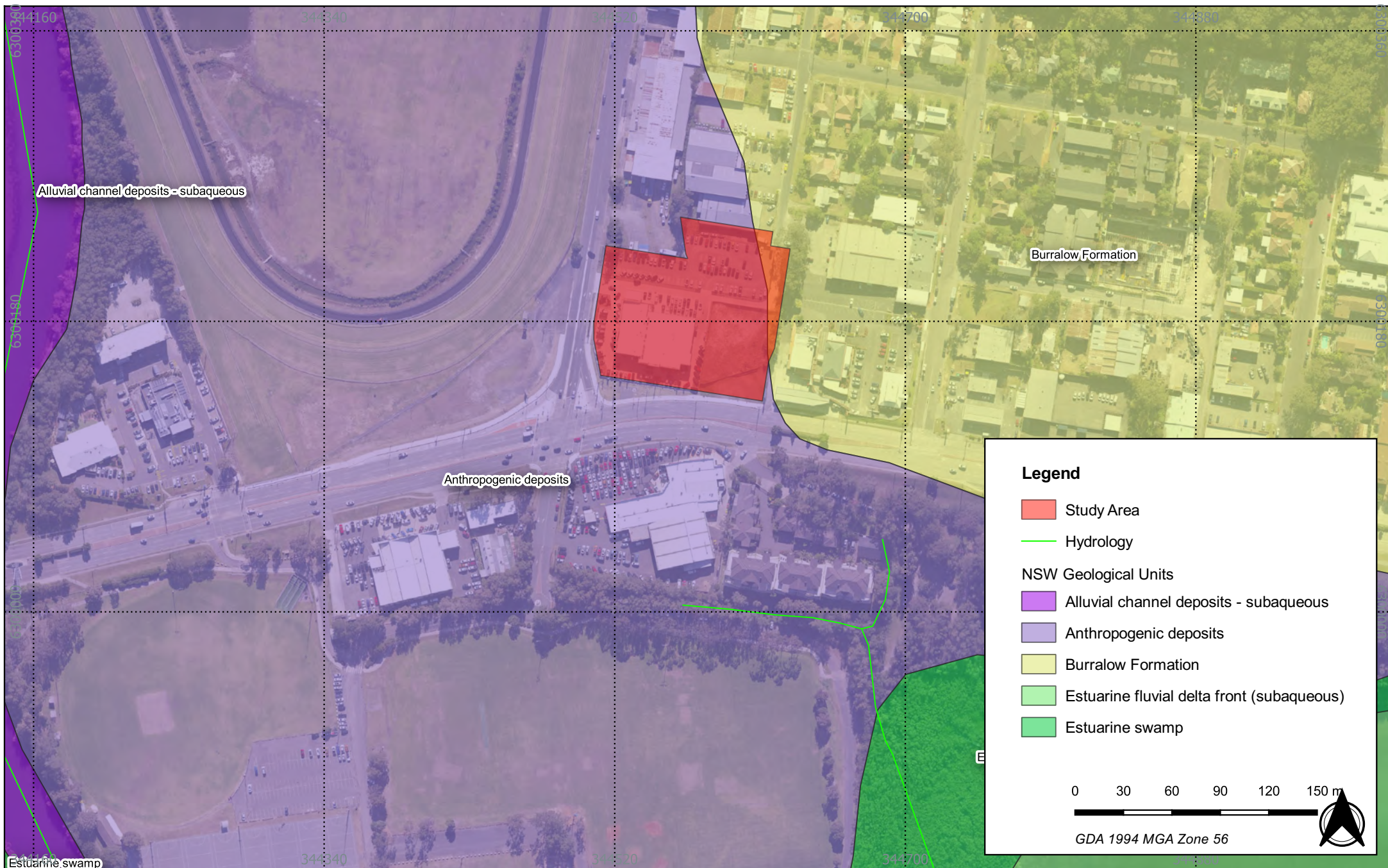
22044 - 10 Young Street West Gosford, 61 Central Coast Highway West Gosford - ACHDDA

Source: NSW LPI Aerial, NSW Soils Landscapes

Drawn by: ARH Date: 2022-04-12



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**Figure 6 - Geology and Hydrology of the study area**

22044 - 10 Young Street West Gosford, 61 Central Coast Highway West Gosford - ACHDDA

Source: NSW LPI Aerial, NSW Geological units

Drawn by: ARH Date: 2022-04-12



**A U S T R A L**  
A R C H A E O L O G Y





**Figure 8** View facing north of entrance to car park.



**Figure 9** View facing south with obscured ground visibility due to parked cars.



**Figure 10** View of exposed ground covered by tall grasses and fence.



**Figure 11**      **View facing east of gravel and gentle slope of terrain.**