



**Aboriginal and European Heritage Impact Assessment
For
Hanson Construction Materials Pty Ltd, Somersby**

Prepared by:

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EXECUTIVE SUMMARY

RPS Harper Somers O'Sullivan (RPS HSO) has been commissioned by Insite Planning Engineering Environmental on behalf of Hanson Construction Materials Pty Ltd (the proponent) to undertake an Aboriginal and European Heritage Impact Assessment (A&EHIA) relating to a quarry extension and associated access for Hanson Central Coast Sand Quarry at Somersby near Gosford in New South Wales.

This A&EHIA report has been prepared in accordance with the conditions as outlined by the Director-General of the NSW Department of Planning (DoP) on the 22nd October 2008 and Section 3 of the Environmental Assessment (EA) conditions from the Department of Environment, Climate Change and Water (DECCW) on the 11th September 2008. The survey area falls wholly within the Gosford Local Government Authority (LGA). The Statutory Planning Instrument that applies to the survey area is the Interim Development Order (IDO) No.122.

RPS HSO undertook an Aboriginal Cultural Heritage survey and assessment for the property located at Lot 33 DP 755246, Reserve Road at Somersby (south eastern corner of the existing quarry site) and Lot 10 DP 1090880, Keighley Road, Somersby in NSW (Refer Figure 1-1), herein referred to as the Project Area. The Project Area is located to the north west of Somersby Industrial Park (SIP) which opened in 1980. The SIP was established to facilitate industrial development in the Gosford-Somersby region.

The A&EHIA forms part of the Part 3A application for the proposed quarry extension and associated access, herein referred to as the survey area. The Part 3A application to expand the existing quarry seeks to incorporate approximately 8 hectares of land from the adjoining property at Lot 10 DP 1090880 Keighley Road. Two easements to provide access to the dwelling are also being sought; one along the north eastern boundary of Lot 10 Keighley Road and the other to the south east of the existing quarry extending to Reserve Road. The primary access for the dwelling (the northern easement) will be onto Keighley Road, with secondary access for the dwelling onto Reserve Road (the southern easement). The proposed access easement that extends to Reserve Road will follow an existing formed access track which will only require minor disturbance to link this track to Reserve Road. This area was included as part of the archaeological survey area. Access for the proposed quarry extension will be from the existing quarry to the west of the Project Area.

The current land use at Lot 10 DP 1090880, Keighley Road is Rural (Agriculture) and most of the property is cleared managed land. The land use at Lot 33 DP 755246 is an existing quarry for extracting friable sandstone. A narrow strip of open forest, comprised of both native and exotic plant species, lies along the southern and eastern boundaries of the existing quarry site and along the southern boundary of the Project Area (Refer Figure 6-1).

The survey was conducted by Gillian Goode, Field Archaeologist for RPS HSO, Sharon Hodgetts, the Sites Officer representing Darkinjung Local Aboriginal Land Council (DLALC) and David Pross, the Sites Officer for Guringai Tribal Link Aboriginal Corporation (GTLAC) on Tuesday 28th July 2009. The possible impacts of the proposed development on Aboriginal cultural heritage were considered.

A search of the AHIMS database revealed that there had been no sites recorded previously in the survey area, but, there were a number of sites in the region.

At the conclusion of the survey the Aboriginal stakeholders (DLALC and GTLAC), in discussions with the archaeologist, concluded that there were several Aboriginal cultural heritage sites located in the broader region, but that the pedestrian survey undertaken had determined there to be no sites located inside the immediate survey area. They requested that the overall cultural and archaeological significance of the broader region be noted when considering the survey area.

The survey area was deemed to have nil archaeological significance and as such it is considered that no archaeological constraints apply to the proposed Environmental Assessment.

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1.0 INTRODUCTION

RPS Harper Somers O'Sullivan (RPS HSO) has been commissioned by Insite Planning Engineering Environmental on behalf of Hanson Construction Materials Pty Ltd (the proponent) to undertake an Aboriginal and European Heritage Impact Assessment (A&EHIA) associated with the property at Lot 33 DP 755246, Reserve Road at Somersby (an existing quarry site) and Lot 10 DP 1090880, Keighley Road, Somersby currently zoned 1a Rural – Agriculture (hereon in referred to as the survey area – Refer Figure 1-1).

1.1 The Project Area

The overall survey area is located on the Somersby Plateau approximately 8 kilometres to the north west of the city of Gosford and approximately 3 kilometres to the west of the Sydney Newcastle F3 Freeway (Figure 1-1). It is wholly included in the Gosford City Council Local Government Area (LGA). The Quarry Extension Area (Figure 1-1), is herein referred to as the Project Area The Statutory Planning Instrument that applies to the Project Area is the Interim Development Order (IDO) No.122. Somersby Industrial Park (SIP), located directly to the south east of the Project Area was established in order to facilitate industrial development in the Gosford-Somersby region. The SIP which opened in 1980 was zoned for general industrial (4a1) and for associated businesses (3a2) in 1981 under the Local Environmental Plan (LEP) No. 22. The LEP was gazetted in July 1981 (Connell Wagner 2005).

Other development sites in the immediate area include Somersby Water Treatment Plant, Myoora reservoir and the Australian Reptile Park all of which lie to the south. Brisbane Water National Park lies to the west of the Project Area.

Since the issue of our Final Report on the 28th September 2009 the following boundaries have been delineated by the Proponent. The Project Area is on gently sloping land fronting onto Keighley Road at Lot 10 DP 1090880 which adjoins Lot 33 DP 755246, Reserve Road at Somersby and comprises a proposed quarry extension on approximately 8 hectares of land at Lot 10 Keighley Road. There are two proposed easements for provision of access to the dwelling on the property. The primary access for the dwelling (the northern easement) will be onto Keighley Road, with secondary access for the dwelling onto Reserve Road (the southern easement). The proposed access easement that extends to Reserve Road will follow an existing formed access track which will only require minor disturbance to link this track to Reserve Road. This area was included as part of the archaeological survey.

The survey boundary for the field survey included the narrow strip of native vegetation along the western boundary of Lot 10 Keighley Road and extends approximately 500m to the south of the Project Area shown on Figure 1-1 and Figure 6-1.

1.2 Background

This archaeological assessment has been prepared in support of a *Part 3A Major Project* application by the proponent under the *Environmental Planning and Assessment Act 1979* (EP&A Act) for a quarry extension and associated access for the Hanson Central Coast Sands Quarry at Somersby in New South Wales. This A&EHIA has been prepared in accordance with the conditions as outlined by the Director-General of the NSW Department of Planning (DoP) on the 22nd October 2008 and Section 3 of the Environmental Assessment (EA) conditions from the Department of Environment, Climate Change and Water (DECCW) on the 11th September 2008.

1.3 Legislative Context

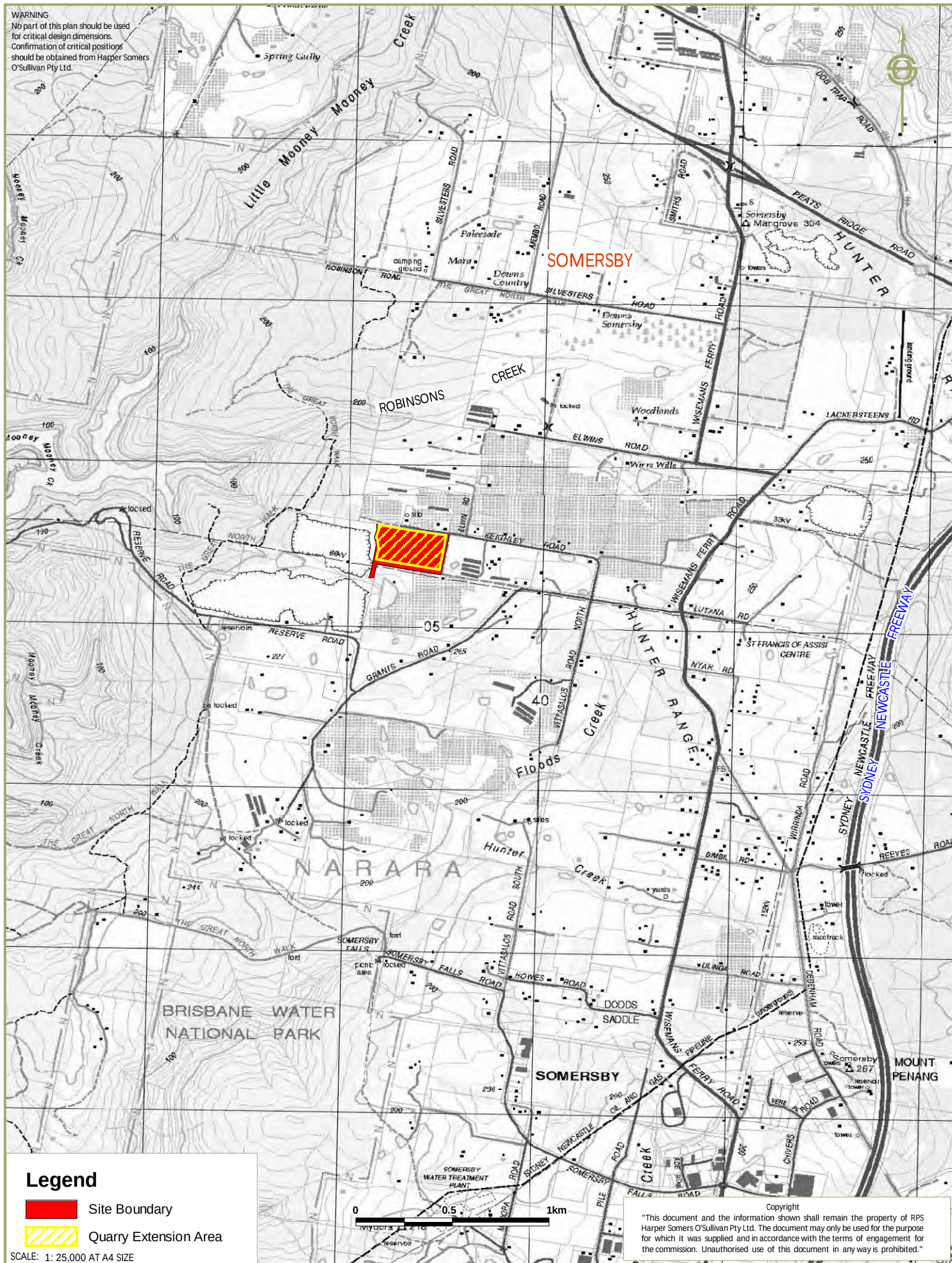
It is incumbent on any land manager to adhere to legislative requirements that protect both Aboriginal cultural heritage sites and non-Indigenous heritage sites in NSW.

1.3.1 Aboriginal Community Consultation

The DECCW, is the governing body that has the responsibility for managing and administering all facets of Aboriginal cultural heritage sites in New South Wales. All known Aboriginal sites are recorded on the Aboriginal Heritage Information Management System (AHIMS) database which is managed by the DECCW.

The primary state legislation relating to cultural heritage is the National Parks and Wildlife Act (NPW 1974, as amended). The Director General of the DECCW oversees the care, protection and appropriate management of these sites in accordance with the NPW Act (1974). Section 90 of the NPW Act (1974) as amended 2001 stipulates that it is a prosecutable offence if a person does not obtain the consent of the Director-General before disturbing an Aboriginal site, place or object, and Section 87 of the Act allows the permit holder to conduct investigations of areas considered to be potential sites for the purpose of research, and also for conservation work associated with known sites. An overview of the legislation is outlined in Appendix 1.

WARNING
No part of this plan should be used
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TITLE: FIGURE 1-1
LOCATION MAP

LOCATION: CENTRAL COAST
SANDS QUARRY

DATUM:
PROJECTION: LONG/LAT (WGS 84)

DATE: 18/05/2011
PURPOSE: HERITAGE ASSESSMENT

JOB LAYOUT: J:\0081103K1\03611 Somersby\29947 - SomDrafting\All Workspaces
VERSION (PLAN BY): B A4 (GG-LS-NW)

CLIENT: HANSON CONSTRUCTION MATERIALS PTY LTD
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1.4 Non-Indigenous Heritage Legislation

At the national level those items that are accorded National Significance status are under the control of the Commonwealth Government. These items are recorded and protected under the National Heritage List and the Commonwealth Heritage List. The extensive Register of the National Estate lists those items considered of value for future generations.

The State Heritage database is maintained by the NSW Heritage Office and lists all items that have been identified as of heritage value on Regional Environment Plans (REP) and Local Environment Plans (LEP) throughout NSW, and the State Heritage Register lists those places which are of State Significance. Extracts of the relevant legislation can be found in Appendix 1 of this report.

1.5 Scope of Assessment

This assessment considers the potential for Aboriginal archaeological sites and for non Aboriginal heritage sites to occur, the location of any registered sites within the survey area, and the implication for the proposed development of the survey area on any cultural heritage located in the area. In order to identify items of heritage significance in close proximity to the proposed development works, this Aboriginal and historical archaeological assessment included:

- Liaison and partnership with Aboriginal Stakeholders
- A review of relevant documentation and statutory requirements with regard to Indigenous cultural heritage, including consulting the DECCW AHIMS database (Appendix 2) for known Aboriginal sites.
- A review of the National Heritage List, the Commonwealth Heritage List, the Register of National Estate, the State Heritage Register, the Gosford Interim Development Order (IDO) No. 122, Gosford Local Environmental Plan (LEP), Regional Environmental Plans (REP) and the Register of the National Trust for non Aboriginal heritage sites.
- An investigation of regional and local environmental information to ascertain the probability of Aboriginal archaeological sites occurring, the type of site and the likelihood of disturbances that may affect the integrity of sites.
- An analysis of the previous archaeological work.
- An investigation of regional and local historical and environmental information to ascertain the probability of archaeological sites occurring, the type of sites likely to occur and the likelihood of disturbances that may affect the integrity of such sites.
- A pedestrian ground surface survey.
- Recording of any new sites if located during the survey.

1.6 Partnership with the Aboriginal Community

The DECCW issued their Interim Community Consultation Guidelines for Applicants (ICCG) in 2004 to replace all previous consultation guidelines that related to Part 6 of the NPW Act 1974. The requirement is for the proponent, or consultant for the proponent, to contact the Local Aboriginal Land Council(s), Registrar of Aboriginal Owners, Native Title Services, local councils and the DECC, to request contact information for any/all potential Aboriginal people/groups with an ancestral interest in the cultural heritage of the survey area.

The ICCG process was implemented for this project and Aboriginal Community Stakeholders for the Gosford LGA were consulted and participated in the archaeological field survey. The survey was conducted on Tuesday 28th July 2009 by Gillian Goode, Field Archaeologist for RPS HSO, Sharon Hodgetts the Sites Officer representing Darkinjung Local Aboriginal Land Council (DLALC) and David Pross the Sites Officer for Guringai Tribal Link Aboriginal Corporation (GTLAC). A full consultation log is included in Appendix 3.

1.7 Limitations

In accordance with the project brief, this Archaeological assessment includes considerations of Aboriginal cultural heritage and non Aboriginal heritage items. Although potential Aboriginal archaeological sites have been identified in the region, an in-depth investigation or research of the extent or integrity of all sites on the AHIMS register is outside the scope of this project. Management measures for potential sites and relics are included in the recommendations for the proponent to include in their planning strategy for the development associated with the subject area.

1.8 Authorship and Acknowledgements

This report was prepared by RPS HSO Archaeologist Gillian Goode and reviewed by Darrell Rigby, Principal Archaeologist RPS HSO. RPS HSO would like to acknowledge the following organisations and individuals who assisted in the preparation of this report.

Table 1-1: Acknowledgements

Name	Organisation
Mr David Pross	Sites Officer Guringai Tribal Link Aboriginal Corporation
Ms Sharon Hodgetts	Sites Officer Darkinjung Local

	Aboriginal Land Council
Mr Andrew Roach	Senior Planner Insite Planning Engineering Economic and Social

1.9 Terms and Definitions

• Aboriginal and European Heritage Impact Assessment	A&EHIA
• Aboriginal Heritage Information Management System	AHIMS
• Cleared Managed Land	CML
• Darkinjung Local Aboriginal Land Council	DLALC
• Department of Environment and Climate Change	DECC
• Environmental Assessment	EA
• Guringai Tribal Link Aboriginal Corporation	GTLAC
• Interim Community Consultation Guidelines	ICCG
• Interim Development Order	IDO
• Local Environment Plan	LEP
• Local Government Authority	LGA
• National Parks and Wildlife	NPW
• NSW Department of Planning	DoP
• Potential Archaeological Deposit	PAD
• Regional Environmental Plan	REP
• RPS Harper Somers O'Sullivan	RPS HSO
• Somersby Industrial Park	SIP

2.0 ENVIRONMENTAL CONTEXT

The environmental context section of the report describes data relevant to the specific survey area and to broader areas. Environmental factors included are geology, climatic conditions, topography and hydrology, and the likely availability of flora and fauna resources. This information is assessed and used to predict what the environment was like in the past. Interactions between people and their specific surroundings are important in considering both the initial formation of the archaeological record and its preservation.

2.1 Geology and Soils

The soils within the survey area are those of the Somersby Soil Landscape (Murphy 1993: 2-5, 23-27).

The Somersby Soil Landscape is comprised of gently undulating to rolling rises on deeply weathered Hawkesbury sandstone plateau. The local relief is to 40 metres with slopes of <15%. The landscape consists of medium to coarse-grained quartz sandstone with minor shale and laminate lenses. Weathering of the sandstone is widespread to a depth of 10 metres with weathering products of friable sandstone. Field surveys have indicated that the dominant lithology present is friable sandstone.

Table 2-1: Description of the Somersby Soil Landscape in the Survey Area

	So1	So2	So3	So4	So5
Colour and Features	Dark brown loamy sand/sandy loam	Earthy yellowish brown sandy clay loam	Pallid grey sandy clay	Friable sandstone	Saturated pallid greyish yellow, brown, sandy clay loam
Landform element	Steeper slopes and poorly drained lower slopes	Steeper slopes and poorly drained lower slopes	Mid slope	Parent material (C horizon)	Mid slope
Structure	Weak, sub-angular blocky with rough ped fabric.	Apedal massive and porous earthy fabric	Apedal massive and earthy porous fabric	Apedal and massive with sandy or occasional earthy fabric	Apedal massive and earthy porous fabric
ph level	Strongly and slightly acid (pH 4.5 – 6.5)	Moderately to slightly acid (pH 5.0-6.0)	Strongly to Slightly acid (pH 4.5-6.0)	Extremely to moderately acid (pH 5.5 – 5.0)	Strongly to Moderately acid (pH 4.0 – 5.5)
Permeability	High	High	Moderate	Moderate	High
Erosion	High	High	High	High	High
Fertility	Very low	Very low	Very low	Very low	Very low

2.2 Topography and Hydrology

The Somersby Plateau primarily consists of gently undulating plateau landscape on Hawkesbury Sandstone between the Watagan Mountains to the east and the McDonald Ranges to the west. These tablelands form an extension of the Hornsby Plateau which lies to the south (Murphy 1993: 2). The regional area is dominated by the Hawkesbury River and its tributaries and the area known as Brisbane Water. The topography of the region is varied and includes the rough rocky landscape with rolling to very steep hills of the Hawkesbury Landscape, the gently undulating and gently sloping rises of the Somersby Landscape and the undulating rolling low hills with moderately inclined slopes of the Sydney Town Landscape (Murphy 1993). The regional and local areas are well hydrated. Permanent water can generally be found within one kilometre from any given point and stable water sources such as rock holes and aquifers or ground water seepages are located on terraces near ridge tops and associated with sandstone benches and rock outcrops (Vinnicombe, 1980).

2.3 Climate

Approximately 18,000 years ago, the climatic conditions started to alter which affected movement and behaviour of past populations within their environs. During this time, notably at the start of the Holocene (more than 11,000 years ago), the melting of the ice sheets in the Northern Hemisphere and Antarctica caused the sea levels to rise, with a corresponding increase in rainfall and temperature. The change in climatic conditions reached its peak about 6,000 years ago (Short, 2000:19-21). Up until 1,500 years ago, temperatures decreased slightly and then stabilised about 1,000 years ago, which is similar to the temperatures currently experienced. Consequently, the climate of the survey area for the past 1,000 years would probably have been much the same as present day, providing a year round habitable environment.

The climatic conditions impact upon the soils, vegetation and potential occupation of an area. They may also affect the durability of associated cultural materials. The climatic conditions of the Somersby landscape is warm temperate with a maritime influence. Variations in the Somersby temperature and precipitation will be dependent upon the effects of altitude and proximity to the coast. Somersby temperatures are generally mild with the lowest ranges occurring on the coast. Minimum temperatures average 15.2°C with an average maximum of 27.2°C (Murphy 1993: 3 - 4). Winter temperatures drop to around 4.2°C with a maximum around 19.7°C. The average annual rainfall is highest along the coast at 1310 millimetres with the highest falls in February to June (Murphy 1993: 3 - 4). The temperate climate would be suitable for occupation for the majority of the year providing suitable shelter could be obtained during the wet periods.

2.4 Flora and Fauna

The large array of plant species available in the Somersby area before European settlement indicates that the broader area would have also supported a rich variety of fauna species which would have fed on the available flora. The wide diversity of flora and fauna species would in turn also have supported small groups or communities moving throughout the region. If the resources required for everyday needs were not available within the survey area, they would have been easily accessible within a comfortable days walk.

As a result of land clearing practices and changes in vegetation in the survey area, several of the flora and fauna resources that would have been available for foraging in the past are no longer represented at this location.

2.5 Condition of the Survey Area

The Gosford LGA has been extensively cultivated and European settlers cleared the native vegetation from the 1800's onwards in favour of pasture land. Treed areas were cleared and used for the construction of roads and in the early 1900's the grass trees (*Xanthorrhoea* sp.) were used for extracting their resinous sap and used for making glue. During the recent past the surrounding area has been used for sandstone mining, orchards and market gardening (predominantly citrus but also stone fruit, apples, avocados and various other fruits and vegetables), and farming practices (including dairy and poultry farming), water treatment works and residential development.

Land clearing practices, (fencing, drainage, erosion control and removal of erratics and boulders) can alter the landscape, affect erosion rates and displace and break artefacts if present. These factors can not only disturb the archaeological record but also destroy evidence of past occupation.

Today the majority of the surrounding area in the Somersby region can be classified as cleared managed land (CML), with varying degrees of disturbance. Disturbances in the area are generally from previous farming practices and land clearing, use of the area for the treatment works, adjoining industrial and residential development and associated recreational facilities. The immediate survey area for the proposed quarry extension at Lot 10 Keighley Road is zoned 1a Rural (Agriculture) and has been almost completely cleared for farming and agricultural purposes. The property comprises partially fenced land with a treed area in the north eastern part of the survey area which is Pine-Lantana Open Forest (proposed northern easement), and a small strip of Somersby Plateau Open Forest (native and exotic vegetation) on the south western perimeter which extends onto the existing quarry site at Lot 33 Reserve Road with access to the south to Reserve Road (proposed southern easement). The quarry is currently in

operation for extracting friable sandstone. A recent Ecological Assessment of the survey area conducted by RPS HSO (July 2009) identified the open forest area as being comprised of native and exotic vegetation.

2.6 Discussion

At a regional and a local level the Somersby environment would have been suitable to have sustained extensive pre-contact occupation in the area. A range of resources including water, fauna, flora and raw materials would have been available in the local area. Access to these resources was along creek lines, within hanging swamp areas, across the plateaus and along the ridge lines.

Previous land clearing, farming practice and the varied effects of erosion from heavy rain and water flow could have displaced cultural materials whilst vegetation cover may limit visibility. These factors may affect site integrity but this does not preclude the possibility that there may be in situ cultural material if the site conditions are favourable.

3.0 ABORIGINAL HISTORY

The ethnographic information used to interpret the archaeological record is often biased and may be deeply prejudiced particularly in relation to lifestyle, social practices, community interactions, religion and other facets of Aboriginal life (L'Oste-Brown et al 1998). It is important to recognise this possible bias when using early European accounts regarding the lifestyles of Aboriginal people, particularly in interpretation of their daily life and beliefs. Nonetheless, some of these ethnographic records can provide important information and insight on local Aboriginal customs and cultural materials evidenced during the early years of European settlement.

3.1 The Traditional Owners

There are a number of ethnohistorical descriptions from the late nineteenth century of various Aboriginal tribes who populated the surrounding area.

Somersby is located in the area known as Brisbane Water. Brisbane Water comprises the harbour area that lies to the south and west of Gosford and includes the Brisbane Water National Park which is located to the west of Mooney Mooney Creek and the Hawkesbury River. Early ethnographic records state that this area was populated by the coastal Guringai Aboriginals (described by early Europeans as Ku-ring-gai, Kuringgai or Guringhai (Australian Museum Business Services, 2002). There are various ethnographic accounts recording pre-contact and contact boundaries for the different tribes, but determining or reconstructing the tribal boundaries is not easy due to the variable available data. It is generally accepted that the Kuringgai refers to the people who inhabited a large stretch of the central coastline of New South Wales.

Threlkeld (1892) describes the hunting grounds (taurai) or territory of the Kuringgai extending from the Hawkesbury in the south to the Macleay River in the north. He also believed that the area around Sydney was occupied by sub tribes of the Kuringgai (Guringai tribal peoples). Therefore the Guringai probably occupied an area from the Port Jackson area (Sydney Harbour) to Lake Macquarie near Newcastle, whereas the Darkinjung people probably occupied the area from the west of Mangrove Creek to Rylstone and to the north to Cessnock and Wollombi. Mount Yengo is extremely important spiritually to the Darkinjung and is considered to be the place where Daramulun (also spelt Dhurramoolun and Daramulum) arrived and created the land following the Dreaming. Mount Warong and Mountt Yarramalong were also important areas as they are considered by the Darkinjung to be stepping stones to Mount Yengo. Daramulun flattened the mountains and left his footprint at Burra Gurra which is also known as Devils Rock.

Fraser (1892) stated that several tribes bordered the Kuringgai, listing the Murrinjari to the south, the Wiradhari to the west, the Kamalarai to the northwest and the Paikalyung and the Wachigari to the north. According to Tindale (1974), the Kuringgai was divided into several other tribes, which included the Awabakal, Birpai, Darkinjang, Dharuk, Eora, Ngamba, Tharawal and Worimi; there were probably three different linguistic groups; the Darkinjung, the Guringai and Awabakal speakers.

Attenbrow (2002), records that the earliest contact events in the region were those of Governor Phillip's expeditions after establishing the settlement at Sydney Cove. He explored several areas including Broken Bay and the north east arm tributary in 1788; in 1789 he explored another tributary later named Brisbane Water; and undertook another exploratory trip to the Hawkesbury River in 1791. A member of the exploration party Watkin Tench compiled two manuscripts which described the natural environment of the area and he recorded the first interaction between the Europeans and the Australian Aborigines. European settlement focusing on agriculture and fishing industries took place in the Brisbane Water area near Gosford in the 1820's.

Vinnicombe (1980: 7.1) states that the surveyor R H Matthews in 1897 discusses rock engravings from the sandstone country north of the Hawkesbury River. He also described Aboriginal initiation ceremonies in the Darkinjung region. W D Campbell, also a surveyor, recorded rock engraving sites to the south of Somersby in 1899 (Vinnicombe 1980: 7.2).

Vinnicombe (1980) documents trade between coastal and inland Aboriginal tribes. *Xanthorrhoea* stalks were exchanged for possum fur which was used to make belts and cords. The Hunter Ridge, a high ridgeline extending from Somersby to the Hunter River in the north, and south to Brisbane Water and the Hawkesbury, was used as a travel route by the local Aboriginal groups (McCarthy 1939).

Butlin (1993) stated that the estimated population in the region would have numbered around 1500 people prior to European contact. By 1789 it was reported that the numbers had dwindled to around 200 due to diseases such as measles, pneumonia, smallpox and tuberculosis and from 1821 to 1827 the population dropped down to 65 (Bennet 1968 in Hughes et al 1994).

3.1.1 Implements for Gathering Food and Weapons

V.W.J. Needham (1981) conducted interviews and research which resulted in a comprehensive study of Aboriginal sites in the Cessnock - Wollombi area. The work mainly centred on the Darkinjung people. He describes *Xanthorrhoea australis* (grass tree), as being an important resource. Various parts of the grass

tree were useful: it was used in making spear shafts; two pieces of the dried flower stem were rubbed together to produce fire; and gum from *Xanthorrhoea australis* was used to seal cracks in canoes and in securing stone tips to hunting spears.

3.1.2 Foods and Useful Plants

Miller (1886:352) recorded that kangaroos, emus and reptiles were used as sources of protein and described how a variety of roots, most importantly that of the water lily, were roasted and eaten. Fawcett (1898:152) included wallabies, bandicoots, kangaroo rats, opossums, rats, snakes, lizards, fish, shellfish, caterpillars, grubs, larvae of wasps, other insects and birds as food resources.

Various resource plants were used for food, medicines and as materials in making implements including Common Sneezeweed (*Centipeda cunninghamii*), Cumbungi or Reed Mace (*Typha sp.*), Kangaroo Grass (*Themeda australis*), Murnong or Yam Daisy (*Microseris lanceolata*), Gigantic Lily (*Doryanthes excelsa*) and Burrawang (*Macrozamia communis*) (Zola and Gott 1992; Vinnicombe 1980). Plants found along the edges of rivers and lakes include Common Sneezeweed, which when boiled produces a tonic that was useful as a medicine for coughs and colds and Cumbungi (Reed Mace) which had a fibrous root and was used to make string whilst in summer the stems and shoots were a resource food. Plants that grew in the plains were the Murnong (Yam Daisy) which was an important food source (flower and the tuber), Kangaroo Grass which was steamed to make fishing nets from the processed fibre, and on the plateau areas Burrawang nut was soaked for several days and then eaten and the Gigantic Lily root was used to make a cake-like food (Zola and Gott 1992).

Other foods were shellfish from the rocky coast habitat and from estuarine mudflats (Dallas, 1981), reptiles, flying foxes, possums, kangaroos and wallabies (Heritage Concepts 2007).

3.1.3 Clothing

Summer weather and the milder days of autumn and spring required little in the way of protective clothing; winter however, saw the use of animal skins for both clothing and as blankets. Miller (1886:352) describes Aboriginal people using opossum skin cloaks with a 'girdle of spun opossum hair next to the skin' with their principal ornament a nautilus shell suspended around the neck on a string.

3.1.4 Rock Art Engravings in the Somersby Area

The region of Somersby, previously known as Mount Penang, is well known for its rock art and has attracted extensive interest over the last 130 years. Rock art engravings from the sandstone country of the Hawkesbury river region were first mentioned by the surveyor R. H. Matthews in 1872 (Vinnicombe 1980). The rock art of the Sydney-Hawkesbury District is recognised as having a distinct regional

style (McDonald 1998). W. D. Campbell was a surveyor who recorded a number of rock engraving sites south of Somersby (Campbell 1899). The survey which covered the Port Jackson and Broken Bay area was a descriptive survey that recorded the art only. Environmental and archaeological contexts of the art were not recorded, but sketches of the art were made. Rock art engravings of the Sydney region are of a type described as 'simple figurative' (Maynard 1979) being of animals and people depicted lying on their left or right side (Stanbury and Clegg 1990). Often two different art styles of paintings and engravings will occur together in the region.

The earliest rock art recording within the Somersby Industrial Park is a notation attached to a missing glass plate negative entitled "rock carving of a hunting scene". George Clutton, a museum photographer, made a photograph of the rock art in 1930. These carvings were considered important enough to warrant tracing by W.W.Thorpe, a former head of Anthropology at the Australian Museum. Brown manila paper sheets were placed over the engravings and the engraved lines were carefully traced (Thorpe, 1931).

Rock engravings within the Sydney Hawkesbury region are often located in high up places often with an expansive panoramic view. Some sites are secluded and others are related by common themes and motifs (Stanbury and Clegg 1990). They often seem to express a spatial relationship with natural landscape features or with sites of significance (Australian Museum Business Services 2002).

Dating of some of the rock art of the region has provided dates up to 5,000 years before present. The last 3,000 years saw the rise of rock art techniques associated with other changes in Aboriginal life, such as population densities and changes in social organisation (McDonald 1998). Although there is little recorded evidence documenting the import that engraving or other art sites had for the Aboriginal populations of the Sydney Hawkesbury region, it is known that rock carvings, paintings and engravings were highly significant to the Aborigines (Stanbury and Clegg 1990). Fred McCarthy, a former Curator of Anthropology at the Australian Museum in Sydney, recorded extensive details of Aboriginal archaeological sites and artefacts from the Somersby region (McCarthy 1936 and 1943).

3.2 Aboriginal History before European Contact

A series of early occupation dates have been recorded in the Sydney region and it is known that the area has been inhabited by Aboriginal people for at least 20,000 years (Nanson et al, 1987). The earliest recorded site in the surrounding area is at Kings Tableland in the Blue Mountains with a radiocarbon date of around 22,000 BP (Stockton and Holland, 1974). The Hawkesbury and Nepean River System has yielded dates of circa 13,000 BP at Site K11 Shaws Creek,

which is located on the west bank of the Nepean River to the north of Penrith (Kohen et al, 1984) and Greaves Creek rock shelter site at Walls Cave near to Medlow Bath of around 12,000 BP (Stockton and Holland, 1974).

The large numbers of sites within the Holocene period (between around 12,000 BP and present time) is believed by many archaeologists (Wheeler, Lourandos, Tacon) to be the result of increased Aboriginal populations and subsequent 'intensification' of site usage. However, the high frequency of recorded sites dating to the mid Holocene may be due to pressures resulting from rising sea levels around 6,000 BP forcing inhabitants inland, and obliterating older sites located on coastal margins. Thus there is an apparent increase in use of sites from around 5,000 years ago compared to the irregular and spasmodic occupation pattern evidenced in the Pleistocene. There have also been several significant changes in tool technologies particularly between 8000 BP and 5000 BP. These changes have been documented and used as chronological markers to identify significant changes in tool kit composition and tool types (McCarthy 1948; Megaw 1965, Lambert 1971 and Wright 1997).

3.3 Aboriginal History after European Contact

The Central Coast Region has been subjected to extensive European settlement and land use practices such as logging, fishing, quarrying, agricultural grazing, dairy farming, land cultivation, tourism and ongoing residential development. The effect of this settlement pattern was devastating to the local Aboriginal people. Encroachment upon their territory reduced access to a variety of flora and fauna resources, introduced diseases, decimated their numbers and restricted free movement through some areas. These impacts compounded to have a detrimental effect on the Aboriginal population which is echoed in the ethnographic record.

The massive decline in population from the estimated 1500 Aboriginal people prior to European contact down to 65 Aboriginal people in 1827 was likely the result of the above discussed factors. The archaeological evidence in the Gosford LGA, which includes predominantly grinding grooves, rock engravings, rock art, shelters, artefact scatters, isolated finds and scarred trees, testifies to the extent of the area utilised by the Aboriginal people in the past.

4.0 ARCHAEOLOGICAL CONTEXT

The investigation of physical and documentary evidence is carried out to provide a baseline for considering the significance of cultural heritage found in the survey area. The process involves identifying both potential and registered Aboriginal archaeological sites plus existing built and landscape heritage items. A detailed investigation of each built, landscape and archaeological site is not part of the scope of this survey. However, the current investigation is considered sufficient to identify broad Aboriginal and historical heritage values unique to the survey area.

4.1 Regional Archaeological Context

The broader region encompasses the rugged terrain of Brisbane Water, the Hawkesbury River valley and its tributaries including creek lines, creek and river banks and river flats. The steeply inclined slopes are ideal for the formation of rock shelters, with ridge tops providing extensive exposures of sandstone suitable for rock engravings. The creek lines, such as Mooney Mooney Creek and other tributaries of the Hawkesbury River comprise shell middens, artefact scatters and grinding groove sites. The Gosford area borders onto the Wyong area traversed by routes from Port Jackson harbour in the south to the Hunter Valley in the north. Studies indicate the region was used for trade and Ethnographic records provide evidence of Aboriginal occupation along access routes.

4.2 Local Archaeological Context

The local archaeology details the most relevant investigations to the survey area and highlights the cultural landscape. Archaeological studies and ethnographic records from local residents such as the Howe family provide descriptive accounts of Aboriginal trade routes and activities in the Somersby area. Compiling this information assists with predictive modelling to help identify potential archaeological sites and allows for planning and management recommendations to be made. Archaeological assessments of the regional and local environments are examined to make predictions for the local archaeological context.

4.2.1 Local and Regional Aboriginal Archaeology of the Survey Area

Vinnicombe, 1980. Predilection and Prediction: a study of Aboriginal sites in the Gosford-Wyong region.

The survey was conducted in Ourimbah State Forest and provides information on possible access routes used by the local Aborigines. Specific areas were the Wallaby or Middle Ridge and Prestons or Blackbutt Ridge in the vicinity of known Aboriginal rock art sites. Mooney Mooney Creek and Patonga Creek were also part of the survey area.

The Ourimbah survey recorded a total of 19 sites which included 13 shelters containing art, 2 shelters with archaeological deposits and 4 grinding groove sites. Supplementary surveys and spot checks were conducted outside of the initial survey area as it was thought that specific ecotones and environmental contexts were not equally represented.

The Mooney Mooney and Patonga Creek survey identified 25 shell middens and shelters with PADs and rock art. The shoreline contained 20 shell middens; shelters near the shoreline contained middens; shelters containing art and shell was found on hill slopes and ridge tops.

Kelly 1980. The Northern Trunk of the Natural Gas Pipeline. Two Archaeological Sites on the Easement: An Engraving Site at Calga and An Axe Grinding Groove Site at Narara Creek.

One part of the study area lies approximately ten kilometres to the south of the current study area. The survey relocated several previously recorded sites close to Calga which were likely to be impacted upon by construction works associated with the northern trunk of a gas pipeline. The northern part of the survey relocated a site on Narara Creek on the eastern flank of the plateau approximately two kilometres to the east of the current study area. The sites were recorded in detail and recommendations were made to prevent impact to the sites during the gas pipeline works.

Dallas, 1981. An Archaeological Survey at Kariong, NSW.

The purpose of the survey was to relocate and record Aboriginal sites at Kariong within the study area and up to 30 metres around the perimeter. The survey area is bounded in the north by the Pacific Highway and in the east, south and west by Brisbane Water National Park and is located five kilometres to the south of the current study area.

The engraved sites recorded by Sim and Lough (1980) were not relocated during the survey. A total of six sites comprised an engraving site, an axe grinding groove, a shelter and a shelter with art and deposit, art with possible deposit and art were found in the northern section of the study area. It was recommended that all these sites be conserved as they are of significance both individually and

as a group. In addition three previously recorded rock engraving sites were located in the southern area. One was also located on the south eastern section. The centre of the study area identified three sites, two rock engraving sites and an isolated find.

Lough 1981 Archaeological Survey Somersby Industrial Estate

This report concerned the identification and significance assessment of Aboriginal sites within the Somersby Industrial Estate on behalf of the Department of Environment and Planning. The report incorporated material obtained from the archaeological survey for the EIS for the Department of Main Roads conducted by Lough in 1980. At the time it was proposed that the Somersby Industrial Estate would be developed, but a concept plan of such development had not been finalised.

Lough identified 12 axe grinding groove sites, and 23 rock engraving sites. The axe grinding groove sites varied in numbers of grooves from one or two, up to 37. The rock engraving sites had many varied motifs, from animals and reptiles, to anthropomorphic figures. 12 previously recorded sites were not relocated.

Lough recommended various management measures from no preservation to fencing, dependent upon the significance of each site. For one significant rock engraving site (SIE 18), Lough recommended that surrounding land be acquired and designated an Aboriginal area for the benefit of future generations.

Koettig, 1983. Archaeological Survey for Aboriginal Sites along the Proposed 33kV FDR 794A Route – Part A, Brisbane Waters National Park and Part B, Mooney Mooney Creek to the Gosford-Ourimbah Line.

The survey was conducted for Sydney County Council and covered a distance of 12.5km along the proposed 33kV transmission line linking Peats Ridge substation with the Gosford-Ourimbah line. The report was separated into two parts, Part A dealing with the area crossing Brisbane Waters National Park and Part B from Mooney Mooney Creek to the Gosford-Ourimbah line.

One rock shelter sites with art (Site 1) and one shelter with art and with the potential for subsurface deposit (Site 2) were located to the west of Mooney Mooney Creek during Part A of the survey. It was noted that few sites of this type had been recorded in the study area and therefore it was recommended that the proposed access track close to Site 1 be moved in order and protected by a barrier to prevent impacting upon the site.

Several sites were relocated which had been previously recorded but no new sites were found. Subsequent to the initial survey, further amendments were made to the proposed route for the transmission line and subsequent survey revealed no additional sites.

Koettig & McDonald, 1983. Report on a Survey for Archaeological Sites in the Mt Penang area, Somersby.

The survey area covered 170ha east of Debenham Road which is located four kilometres to the south east of the current study area. Eight sites had been previously recorded in the survey area. The survey only relocated five of these sites but found an additional six sites. These consisted of rock engraving sites, three of which had axe grinding grooves and one a rock shelter. Recommendations implemented were for the preservation of every site either by a buffer zone and fencing or by sealing the deposit of the shelter.

McDonald and Smith, 1984. Archaeological survey of proposed (F3) Freeway Extension Wahroonga – Berowra.

The survey consisted of an extended survey area 14 kilometres long and 300 metres wide. The survey uncovered a total of 13 sites, three of which were PADs. In the case of the PADs it was recommended that test pits be undertaken.

Du Cros & Rich. 1986. Proposed Industrial Development of Crown Land, DP 42612 at Mount Penang, near Gosford: Archaeological Survey for Aboriginal sites.

The study area covered the western side of Mount Penang and its slopes down to Piles Creek. Exposed sandstone was absent in most of the study area. The area had one sandstone platform suitable for engravings and one small platform containing ground water seepage and rock holes was suitable for axe grinding.

Previous surveys had identified two Aboriginal engraving sites (45-3-29 and 45-3-30).

Site 45-3-29 was relocated during the survey while site 45-3-30 had either been destroyed or was located outside the survey area. Site destruction may have occurred as a result of the Wiseman's Ferry Road development. There was potential for other engravings in the area but it was considered likely that they were hidden by vegetation or faded beyond recognition.

McDonald, 1988. The Proposed Warren Warren Aboriginal Place: McPherson State Forest Archaeological Investigation.

The study area was located directly south of Mangrove Creek dam catchment and also included the southern half of the McPherson state forest and additional private land. The survey identified a total of 34 sites with the most common site as shelter with art followed by engravings and grinding grooves.

Recommendations were that the Forestry Commission and National Parks and Wildlife should prepare a management plan for the Aboriginal place taking into consideration the sites high scientific and heritage value and that any future planning should take into consideration the presence and significance of these sites.

Silcox, 1989. Archaeological Survey of Lot 90, Somersby Industrial Estate, near Gosford, NSW.

The survey area is located two kilometres south of the current study area and on the eastern side of Somersby Falls Road. The survey area extends over the end of a prominent spur ridge in the north west corner of the industrial estate. The ridge forms a watershed between the valleys of the two watercourses. The western side slopes gradually towards Floods Creek and the eastern side slopes towards the headwaters of Piles Creek. No outcrops of sandstone were observed on the west side of the ridge but extensive outcropping occurred on the end of the ridge top and on the eastern slope. The survey was carried out on foot. Attention focused on vehicle tracks for the presence of stone artefacts and scattered sandstone surfaces for engravings and axe grinding grooves.

The survey identified a previous re-recorded Aboriginal engraving site (SIE 2) which was recorded by Lough (1981). The re-discovered engraving site (SIE 1) completed of a snake at the northern end of the outcrops that extended along the top of the eastern slope. It was recommended that the design of the estate avoid the sites. If not possible, NPWS was to be contacted for permission to destroy the site.

Silcox, 1989. Surevy for Aboriginal Sites on Lot 3, Somersby Industrial Estate, near Gosford, NSW.

The survey area was situated on the northern side of Somersby Falls Road located on the Somersby Plateau and more than two kilometres south of the current study area. The survey involved a relocation of two Aboriginal sites – an engraving site (45-3-17) and an axe grinding groove site (45-3-16).

The survey identified two previously recorded sites, SIE 10 (45-3-16) and SIE 11 (45-3-17). SIE 10 was a small group of axe sharpening grooves on a rock ledge on the bank of Piles Creek. SIE 11 was three anthropomorphic figures and a number of grooves on a sloping, flat expanse of sandstone. It was recommended that development avoid the registered sites.

Mills, 1999. Assessment of impact to Indigenous heritage items from the proposed stabilisation of cuttings on the F3 Freeway from Wahroonga to the Hawkesbury River.

The survey involved sectioned cuttings along the F3 Freeway for a total distance of 26 kilometres. There was no evidence for sites or PADs identified during the survey, although the surface visibility was approximately 40% on the steep slopes and 60% on the ridge crests and hill slopes. It was recommended that if any Aboriginal archaeological sites be uncovered during the stabilization of the cuttings then work will cease immediately and an appropriate course of action be determined before work proceeds.

Mills, 2000. An Assessment of Impact to Indigenous Heritage Items from the Installation of Power Devices and Cabling along the F3 from Berowra to Mount White.

The survey area included locations along the F3 highway and the Pacific Highway also areas linking between Berowra to Mooney and Mooney to Mount White. The survey found no Aboriginal sites or areas of potential archaeological deposits (PADs) although the surface visibility during the survey was greater than 50%.

Australian Museum Business Services, 2002. Somersby Industrial Park. Aboriginal Heritage Study for Plan of Management.

AMBS prepared an Aboriginal Heritage Study for a Plan of Management for the Somersby Industrial Park (AMBS 2007: Volumes 1-3) and provided an audit of all sites within the SIP area. The Management Plan provided comprehensive background information with a summary of each site including cataloguing the location, condition and site significance. Individual recommendations for each site were made.

Heritage Concepts, 2006. Aboriginal and Historical Archaeological and Cultural Heritage Assessment, Proposed High School Site, Pacific Highway, Kariong, Draft Report.

The survey was conducted at Kariong across the Lambert Soil Landscape, dominated by high relief and erosional processes which were likely to have removed or obscured potential surface and sub surface artefact scatters. Five sites were identified during the field survey of which three were previously recorded sites. Some overhangs in the study area were considered to be suitable for habitation and have the potential to contain archaeological deposits. Surface wash and vegetation had obscured large portions of the study area which meant that additional sites maybe found if clearing works were undertaken.

Heritage Concepts, 2007. Proposed Driver Training Facility Lot 422 DP 40341, Reeves Road, Somersby NSW. Aboriginal Archaeological & Cultural Heritage Assessment.

The study area was situated north west of Gosford on Reeves Road approximately five kilometres east of the current study area. The study area was located in the Somersby Plateau physiographic region where Hawkesbury Sandstone formation rocks (sandstones and shale) predominate. Access during the survey was generally restricted to dirt tracks. A spear sharpening and axe grinding groove on a sandstone rock exposure was identified several metres from a walking track. It was recommended that the site be avoided and monitoring undertaken during earth moving works.

Kayandel, 2007. Preliminary Indigenous Heritage Assessment of Somersby Plateau, Somersby.

The study area comprised a northern and southern precinct, both of which were located on the Somersby Plateau and approximately three kilometres to the south east of the current study area. The survey was successful in identifying a number of archaeological sites and evidence of Aboriginal occupation. The identified Aboriginal sites were a combination of grinding groove, rock shelter and engraving sites. It was recommended that a Cultural Heritage Management Plan be developed to ensure appropriate future management.

4.3 Aboriginal Heritage Information Management System

A search of the DECC Aboriginal Heritage Information Management System (AHIMS) was conducted on the 7th July 2009 which revealed that there were 97 previously recorded sites within eight kilometres of the central point of the survey area. The search area extended from co-ordinates 335151E to 343151E and 6301497N to 6309497N (AGD 84, Zone 56).

The sites recorded within two kilometres of the current survey area are shown on Figure 4-1 and the results from the AHIMS search are included in Appendix B. A glossary of Aboriginal site types can be found in Appendix D.

Sites included 39 grinding groove sites, 23 rock engraving sites, 11 shelter with art sites, 10 grinding groove sites with rock engraving, 9 open sites with number of artefacts unspecified, 2 stone arrangements, 1 shelter with art with grinding groove site and rock engraving, 1 grinding groove site with rock engraving and water hole or well, and 1 open camp site with artefact scatter. No isolated finds were specified on the database. The majority of sites are located to the east of the survey area with a few sites to the north, west and south west.

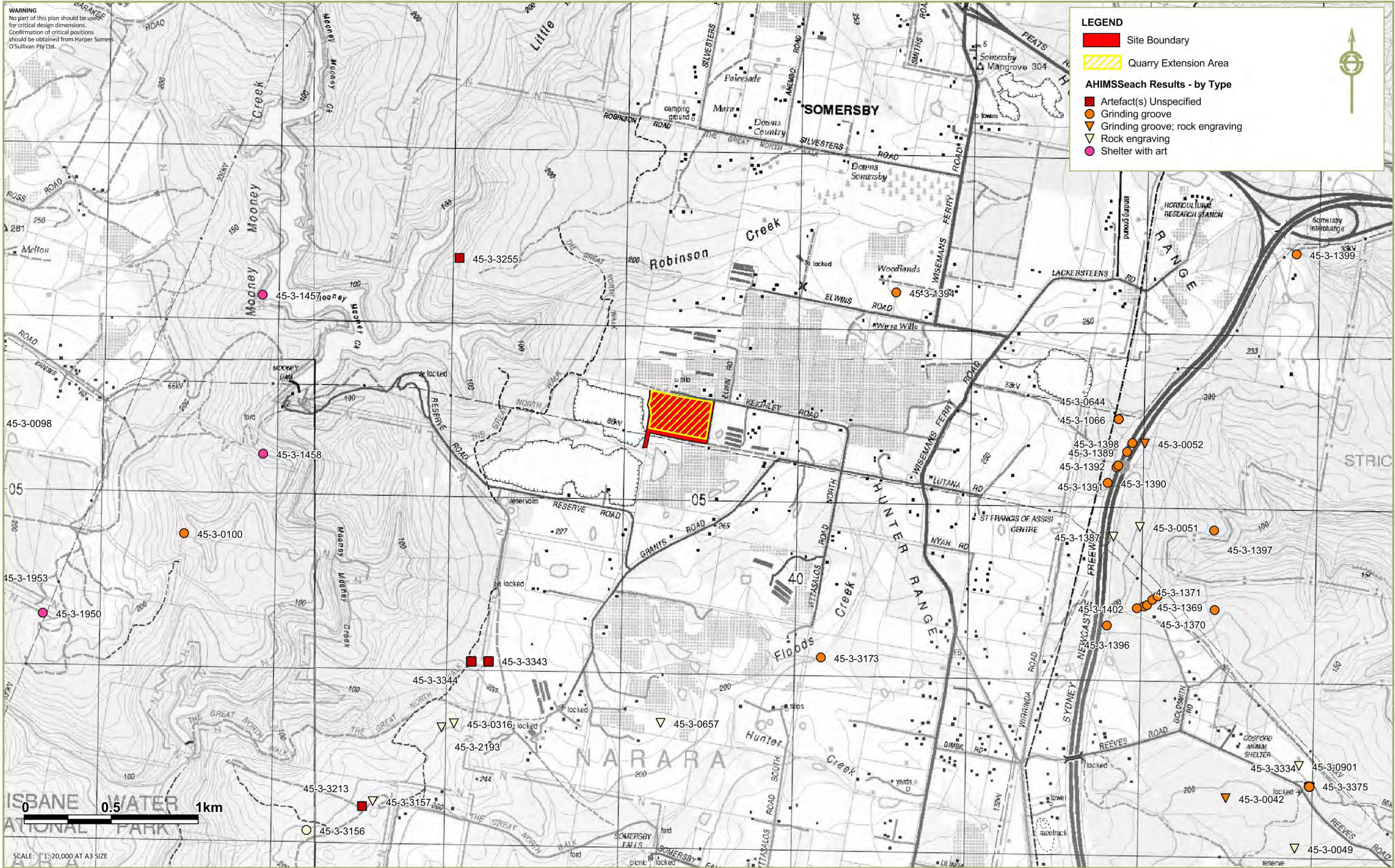
The AHIMS register shows no recorded sites previously located within the survey area (Figure 4-1). Although there are no previously recorded sites within one kilometre of the survey area, the patterning of sites in the broader area indicates the overall potential of the area for Aboriginal material remains, and for this reason a close inspection is necessary area.

Table 4-1: Summary of AHIMS Results Ordered by Site Types and Frequency

Site Type	Frequency in Search Area
Artefact Scatter	1
Artefact(s) Unspecified	9
Rock Engravings	23
Grinding Groove Sites	39
Grinding Groove with Rock Engraving	10

Site Type	Frequency in Search Area
Grinding Groove, Rock Engraving, Shelter with Art	1
Grinding Groove, Rock Engraving, Water Hole/ Well	1
Shelter with Art	11
Stone Arrangement	2
Total	97

One grinding groove site appears to have been recorded twice (45-3-0644 and 45-3-1066) reducing the number of sites in the search area to 96.



TITLE: FIGURE 4-1
AHIMS SEARCH RESULTS

LOCATION: CENTRAL COAST
SAND QUARRY

DATUM: PROJECTION: LONGITUDE / LATITUDE (WGS 84)

DATE: 18/05/2011
PURPOSE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT

LAYOUT REF: J:\OBS\103k\103611 Somersby\25947 - Somersby\Drafting
VERSION (PLAN BY): B A3 (GG-PS-LS-NW)

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4.4 Site Types Summary

The literature review for the local area comprising the Somersby Plateau documented above is dominated by rock engravings, grinding grooves and shelter with art, followed by artefact scatters. The plateau area with gently inclined slopes and flat sandstone benches, sandstone boulders and flat lying sandstone rocks has a nil to low potential for shelters and associated rock paintings but a high potential for rock engravings and grinding grooves. Rock engravings and grinding grooves are usually found in cohesive sandstone units. The immediate survey area is in the Somersby soil landscape which is typically friable sandstone and unlikely to provide outcrops suitable for rock engravings or grinding stone axes or tools.

Artefact sites are more commonly located on elevated slopes. The location of these sites, while potentially reflecting sloped areas as a preferred location for campsites and activities, may also reflect greater visibility through erosion or other disturbances such as the effects of localised water runoff. Generally sites are located close to watercourses or areas with ground fed water such as spring fed hanging swamp areas or water seepage in the sandstone bench areas. The immediate survey area is located on the top of the Somersby Plateau and is not close to perennial water courses.

4.5 Historical Archaeology

The State Heritage database is maintained by the NSW Heritage Branch and lists all items that have been identified as of heritage value on Regional Environment Plans and Local Environment Plans throughout NSW.

4.5.1 Registered Historical Sites

A search of known historical heritage items was made through accessing New South Wales State heritage registers, the Gosford Statutory Planning Instruments and Commonwealth Heritage List.

4.5.2 NSW State Heritage Branch Register

The State Heritage Register lists those places which are of State Significance.

Listed for the Gosford area are:

[Mount Penang Parklands, Pacific Highway, Somersby, NSW 2250](#)

The above listed item is located approximately four kilometres south east of the existing quarry area. Therefore the proposed quarry extension poses no threat to the State Listed item.

[Belbourie and Outbuildings, Howes Road, Somersby, NSW 2250](#)

The above listed item is located approximately two kilometres south east of the proposed quarry extension and as such the proposed industrial development poses no threat to the State Listed item.

4.5.3 Commonwealth Heritage List

The Commonwealth Heritage list controls the Australian Heritage Database and maintains a record of all items that have been identified as of heritage value. The Commonwealth Heritage list records those places which are of Commonwealth Significance.

Listed for the Somersby area are:

[Howe Aboriginal Area, Grants Rd, Somersby, NSW, Australia](#)

The above listed item is located approximately 800 metres to the south of the survey area but is not recorded on the AHIMS database. The rock engraving site is accessed from Grants Road. The Place Details, as recorded on the Australian Heritage Database, state that a road runs through the site, but not across any of the figures, although gravel washes onto the site from the road. Although this site is within one kilometre of the proposed southern easement for access to the quarry extension from Reserve Road, the proposed access road would not impact on this site and therefore poses no threat to the commonwealth listed item.

[Mooney Mooney Aboriginal Area, Pacific Hwy, Somersby, NSW, Australia](#)

The above listed item is located on the Pacific Highway at Somersby and as such the proposed industrial development poses no threat to the commonwealth listed item.

[Somersby Geological Site, Somersby, NSW, Australia](#)

The above listed item was located in the south west part of the existing quarry site, but according to the Place Details has apparently been destroyed by ongoing quarrying works. The site was nominated as it contained an *in situ* rare death assemblage of a Triassic fish community. The Australian Museum in co-operation with the quarry operators salvaged a number of the fossil fish in 1983 before the site was almost completely destroyed in 1989. As the site has now been recorded as destroyed, the proposed quarry development poses no threat to the site.

4.5.4 Gosford Statutory Planning Instruments - Interim Development Order No. 122 Dated 12 December 2008 and the Gosford Local Environmental Plan,

The Statutory Planning Instrument that applies to the survey area is the Interim Development Order (IDO) No.122. The Gosford [LEP](#), has no heritage listings in the area but the IDO No. 122 lists a number of heritage items of state significance under Schedule 2 (pp. 98-99) and Schedule 2A (pp. 100-101) in the surrounding area.

[Gosford Interim Development Order No. 122](#)

The proposed works pose no threat to any of these listed items.

4.5.5 Historical Archaeology Potential

It is predicted that the proposed industrial development will have no impact on the above listed historic items, based upon their distance from the survey area.

5.0 PREDICTIVE MODEL

Previous historical and archaeological information is used to compile sufficient information about European settlement patterns and Aboriginal sites, their types and localities, in order to construct a predictive model of sites in an area that is to be surveyed. The following information collected from studies covering the local and regional contexts will be used to produce a predictive model for the current survey area.

5.1 Predictive Modelling

A predictive model is created to form an estimate of the potential for an archaeological site to occur. It involves reviewing existing literature and consulting site databases to determine basic patterns of site distribution and correlating this distribution with the associated environment. The use of land systems and environmental factors in predictive modelling is based upon the assumption that these factors provided constraints that influenced land use patterns by past populations resulting in differing spatial distributions of various site types in the archaeological record. Predictive models can be used as a basis for the planning and management of Aboriginal heritage, and for formulating survey strategies to include areas of maximum archaeological potential.

The summary of environmental data (Section 2) and previous archaeological studies (Section 4) was used to create a predictive model for sites in the subject area.

5.2 Predictive Model for Aboriginal Archaeology in the Survey Area

The following is a predictive model designed for the broader area, but specifically focuses on the survey area. This model seeks to incorporate behavioural patterns associated with factors that affect the location of sites and the potential for preservation of material evidence. Generally, people utilise places to obtain resources and are therefore likely to utilise areas where resources are abundant. Resources considered essential include a permanent water supply, food, stone raw material, and shelter from environmental and biological elements. The social practices of the community and the link to the local environment are equally important in the choice of occupation areas, however, the evidence of these are not always present in a material form such as stone artefacts. The environmental relationship influencing occupation choice also includes (but is not limited to) ceremonial practices (e.g. corroborees), religious beliefs (e.g. mythological places) and social practices (e.g. collection of medicines) which are important for understanding how areas were utilised by past populations.

5.3 Site Predictions

The region would have potentially been able to sustain large groups of people for extended times and the large number of sites in the area indicated by the AHIMS search show that there were some areas of intense site use. These are generally those areas located on the ridgelines, slopes and areas adjacent to good supplies of fresh water.

After examining the results of the AHIMS search it is clear that the most frequent site likely to be located in the vicinity of the survey area could include rock engravings, possibly grinding grooves on sandstone benches and flat rock outcrops (close to creeks, hanging swamps or other water sources) and low density artefact scatters and/or isolated finds. If the sandstone outcrops are located in densely vegetated areas then they are likely to be covered in leaf litter or partially covered by soil. The likelihood of shelters with or without art is low due to the topography of the site. There is a low likelihood of stone arrangements, midden sites or burial sites as the area is cultivated managed land and the potential for carved or scarred trees will depend on the retention of suitable mature age trees in a disturbed landscape. Previous land clearing, farming practice and the varied effects of flooding could have displaced cultural materials, whilst vegetation cover may limit visibility. These factors may affect site integrity but this does not preclude the possibility that there may be the possibility of in situ cultural material if the site conditions are favourable. A full glossary of Aboriginal site types is available in Appendix 4.

5.3.1 Aspect

The survey area generally slopes to the south. A sandstone bench runs along the length of the boundary between Lot 10 Keighley Road and Lot 33 Reserve Road.

5.3.2 Slope

The terrain of the broader region is marked by the steeply elevated ridges of the Brisbane Water National Park to the west, but the immediate survey area forms part of the gently sloping Somersby plateau area.

5.3.3 Distance from Water

The area is not close to any major creek lines but does comprise a modified creek line which has been dammed and the creek line altered. Robinson Creek lies more than half a kilometre to the north of the site, Floods Creek around 700 metres to the south east, and Mooney Mooney Creek around one kilometre to the west.

5.3.4 Food

Within a one kilometre radius a range of resources were available, including fresh water, treed areas and elevated ground which according to early records provided considerable food resources. The area to the west is forested and the numerous drainage lines in that area indicate that the area would have been a reliable source for both flora and fauna habitat.

5.3.5 Summary

The broader area presents as a relatively stable environment for exploitation by Aboriginal peoples, but preference would have been for the drier grounds close to the creeks and wetlands areas which are not present in the survey area.

5.4 Historic Predictive Model for the Survey Area

The results of database searches (NSW Heritage Office) and the Gosford City Council LEP provided a concept of the types of sites and activities that could have been carried out in the survey area. The land use of this area was based on agriculture and the adjoining land on sand/sandstone mining. It is the cultural remains of this activity that is most likely to occur in the survey area. As such agricultural yards, implements and structures may be present at the site, although due to the intensive land use and disturbances it is unlikely that any relics would remain. On the adjoining sandstone quarry area it is unlikely that there would be any cultural remains as mapping of the site area shows that it is almost completely degraded.

In determining the value of sites from a heritage perspective an Assessment Criteria developed by the New South Wales Heritage Office is used (Appendix 5). Given that the survey area is much modified by previous agricultural and farming practices, it is unlikely any historic relics remain in the survey area.

6.0 FIELD SURVEY

The survey area was divided into six survey units (SU1 to SU6) which focused on natural and modified landform units (Figure 6-1). The survey area was further differentiated on the basis of land use (Figure 6-2).

6.1 Landforms

Landform types have been used for comparative purposes and predictive modelling. The survey area was located on Somersby Plateau and was comprised of both unmodified and modified landform units, including upper and mid slope areas, creek and drainage lines.

6.2 Land Uses

The current land use for Lot 10 DP 1090880 Keighley Road, Somersby is 1a Rural and the area has been extensively cleared for agricultural purposes. This area is under consideration for the proposed expansion of the existing quarry area located on Lot 33 DP 755246 Reserve Road, Somersby.

The existing quarry site on Reserve Road (Lot 33 DP 755246) is used for the extraction of friable sandstone. The eastern boundary of the quarry site is covered by open forest (degraded Somersby Plateau Open Forest and Pine-Lantana Open Forest) and adjoins the southern easement off Reserve Road which is also open forest (Somersby Plateau Open Forest). The quarry site lies directly to the west of Lot 10 DP 1090880 Keighley Road and the small strip of land along the southern and western boundaries of this lot is also Somersby Plateau Open Forest.

The majority of proposed quarry extension area on Lot 10 DP 1090880 Keighley Road has been severely disturbed as the site has been used for a range of agricultural practices. The upper slope area has been utilised predominantly for poultry sheds. An area within the chicken shed compound is used for timber cutting and milling. A large proportion of the mid slope area has been used for an avocado orchard and several dirt access roads cross the site. An open forest area (degraded Somersby Plateau Open Forest and Pine-Lantana Open Forest) runs along either side of the boundary line between Lot 10 Keighley Road and the adjoining quarry site at Lot 33 Reserve Road. A modified drainage channel has been excavated and runs along the length of the site incorporating a section of the original creek line. A second drainage channel or ditch has been excavated across the mid slope area to the south of the avocado orchard. A treed area, (Pine-Lantana Open Forest), lies along the eastern boundary of Lot

10 Keighley Road and along the mid slope drainage channel. A large dam has also been constructed truncating the natural flow of water along the creek line.

6.3 Methodology and Survey Strategy

The area was surveyed on foot by three people spaced approximately 2-3 metres apart walking abreast in order to maximise survey coverage. The ground surface was inspected in order to identify archaeological objects.

The field survey strategy was to comprehensively cover all ground surface areas on foot by conducting parallel transects across each section. It was designed to increase the potential for identifying Aboriginal cultural heritage items and archaeological material. The levels of disturbances from previous land use, ground visibility and erosion were to be assessed in order to determine the archaeological sensitivity of the area.

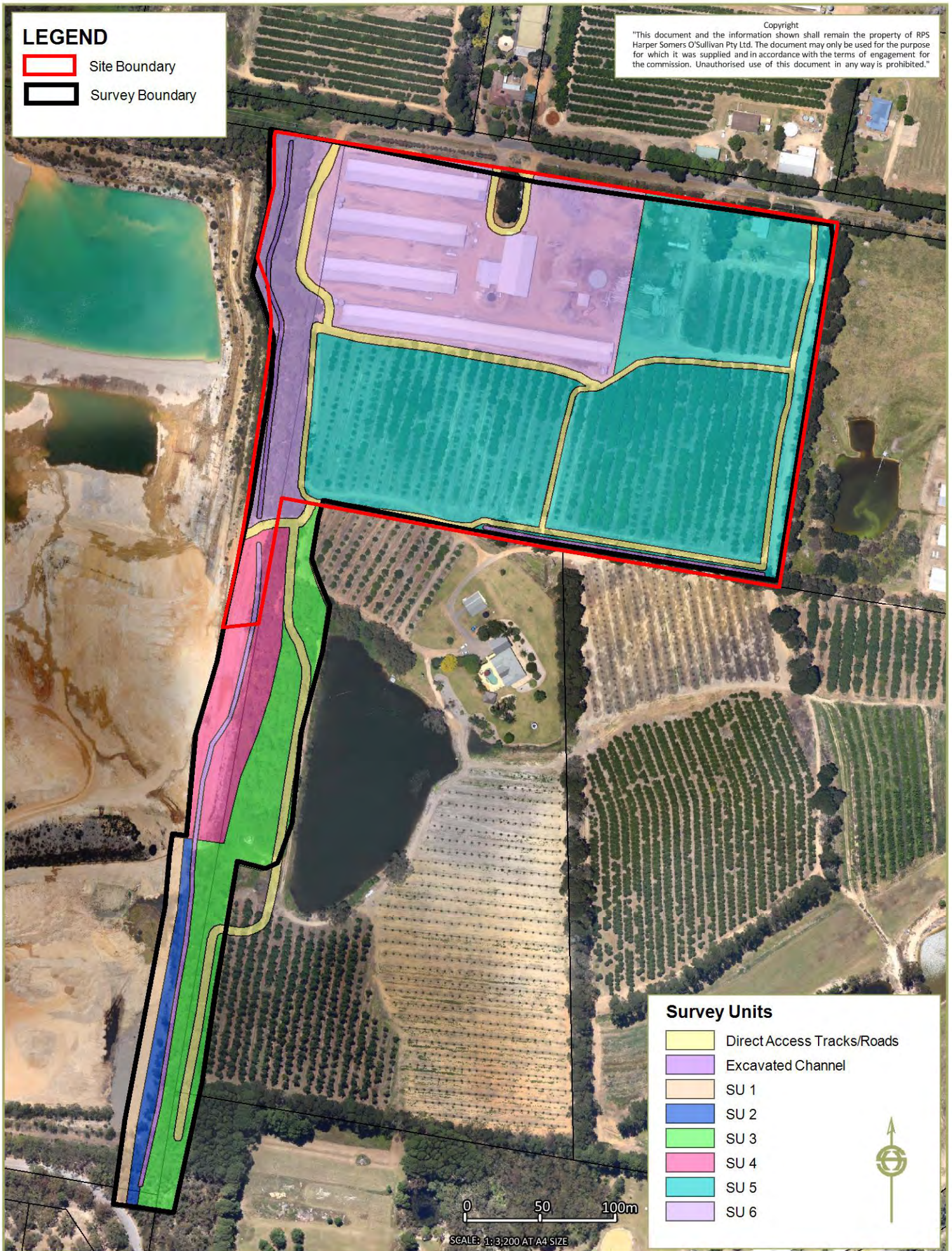
6.4 Survey Results

The area was separated into six survey units (Figure 1) which were based on natural and modified landform units and land use (Figure 2).

LEGEND

- Site Boundary
- Survey Boundary

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Survey Units

- Direct Access Tracks/Roads
- Excavated Channel
- SU 1
- SU 2
- SU 3
- SU 4
- SU 5
- SU 6



0 50 100m

SCALE: 1:3,200 AT A4 SIZE

TITLE: FIGURE 6-1
 SURVEY UNITS

LOCATION: CENTRAL COAST SANDS
 QUARRY, SOMERSBY

DATE: 18/05/2011
 PROJECTION: MGA ZONE 56 (GDA 94)

PURPOSE: ABORIGINAL CULTURAL
 HERITAGE ASSESSMENT

LAYOUT REF: 25947 - Som... \Drafting\All Work... \25947 Figure 6-1 Survey Units C A4
 VERSION (PLAN BY): C-A4 (GG-LS-NW)

CLIENT: HANSON CONSTRUCTION MATERIALS PTY LTD
 JOB REF: 25947

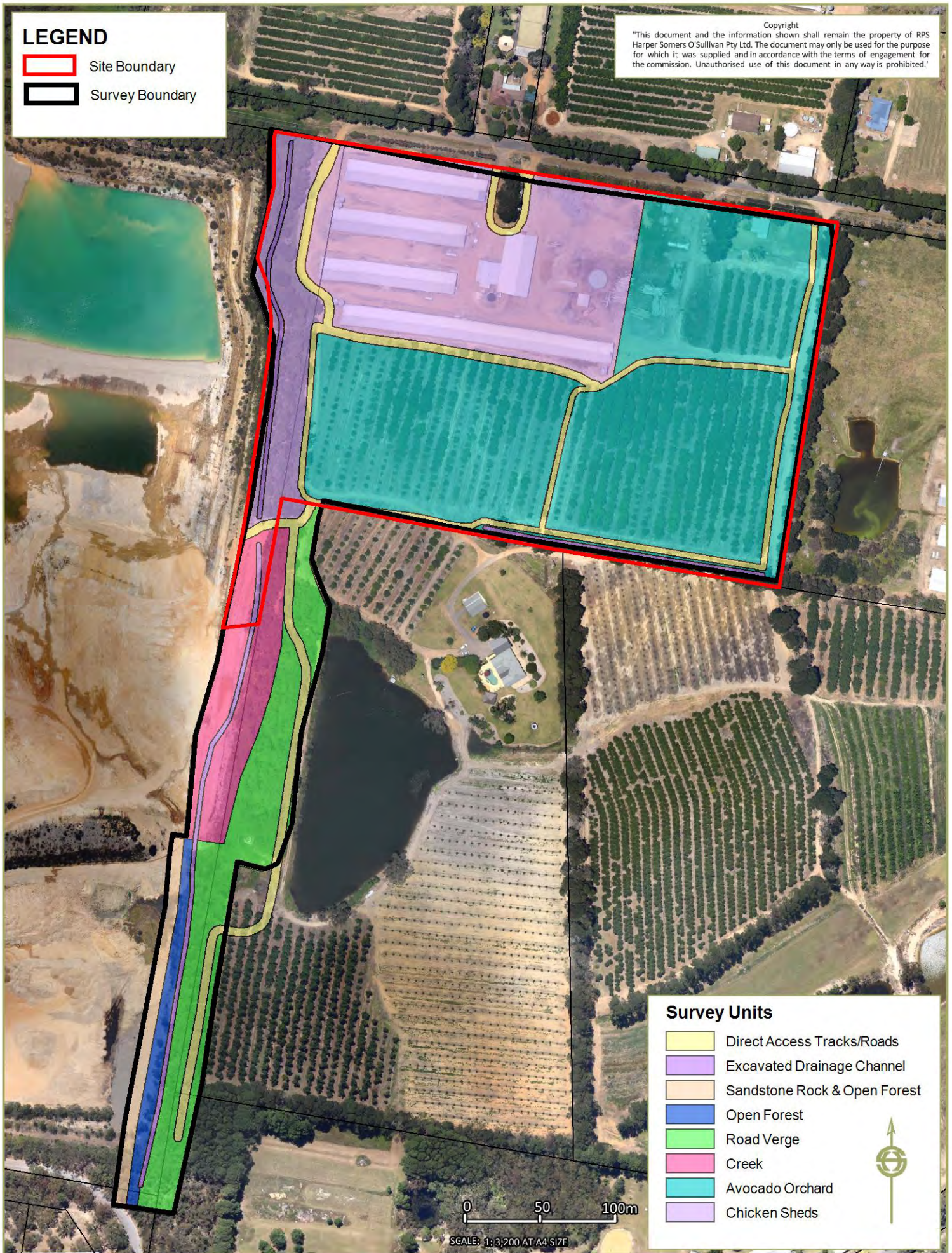
241 DENISON STREET BROADMEADOW PO BOX 428 HAMILTON NSW 2303
 T: 02 4961 6500 F: 02 4961 6794 www.rpsho.com.au

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LEGEND

- Site Boundary
- Survey Boundary

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Survey Units

- Direct Access Tracks/Roads
- Excavated Drainage Channel
- Sandstone Rock & Open Forest
- Open Forest
- Road Verge
- Creek
- Avocado Orchard
- Chicken Sheds



0 50 100m

SCALE: 1:3,200 AT A4 SIZE

TITLE: FIGURE 6-2
LAND USE

LOCATION: CENTRAL COAST SANDS
QUARRY, SOMERSBY

DATE: 18/05/2011
PROJECTION: MGA ZONE 56 (GDA 94)

PURPOSE: ABORIGINAL CULTURAL
HERITAGE ASSESSMENT

LAYOUT REF: J:\V085\103\103611 Somersby\25947 - Som.\Drafting\All Work\25947 Figure 6-1 Land Use B A4
VERSION (PLAN BY) B-A4 (GG-LS-NW)

CLIENT: HANSON CONSTRUCTION MATERIALS PTY LTD
JOB REF: 25947

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6.4.1 Survey Unit 1 – Sandstone Rock and Open Forest

This survey unit was located in the existing fenced quarry area and extended from Reserve Road to the south, along the eastern boundary of the quarry for a distance of approximately 250 metres to the north and about 15 metres in width. The survey unit was predominantly open forest with sandstone rock trending in a northerly direction. The composition of this soft, friable sandstone unit was considered unsuitable for rock engraving works, or for use for grinding axes or tools, as it was extremely friable and crumbled on contact. Visibility on the exposed sandstone rock shelf was fair. The open forest area in SU1 was fairly degraded and the topsoil had been disturbed by fencing works associated with the cyclone boundary fence between the quarry and the adjacent rural property. Visibility was fair to poor in this part of the survey unit. No archaeological or Aboriginal cultural heritage material was identified in this survey unit.

6.4.2 Survey Unit 2 – Open Forest

Survey Unit 2 was located to the east of the cyclone boundary fence adjacent to SU1 and extended for a distance of 250 metres in length and around 15 metres in width. This open forest area was fairly degraded due to works associated with an excavated drainage channel along the eastern edge of the tree line. Soil had been piled in the area of the fencing works. Visibility was poor due to the dense lantana and leaf litter. There were no artefacts or Aboriginal cultural material found in this survey unit.

This survey unit also encompassed the proposed southern easement enabling access from the south to the proposed quarry extension. The open forest along the proposed easement area had been disturbed by road construction and fencing works along Reserve Road. Visibility was fair and no Aboriginal cultural heritage or archaeological material was evident in this area. There were no sandstone exposures in this part of the survey unit

6.4.3 Survey Unit 3 – Road and Grass Covered Embankment

This survey unit comprised an existing dirt road for access to the southern part of the avocado plantation with a grass border on either side of the road and an embankment associated with a large dam to the east of the road. The land dropped steeply to a modified drainage line to the west of the road. The upper part of this sloped area had piles of cut timber across it, and the mid and lower slope areas to the north of the dam were covered by lantana and was densely vegetated. The area was highly disturbed with no evidence of intact topsoils as a result of dam and road construction works. Visibility was good and no Aboriginal cultural heritage or archaeological material was identified in SU3.

6.4.4 Survey Unit 4 - Creek Line and Drainage Channel

The original creek line had been dammed and the landscape had been altered by piling of soil to form an access road along the dam wall and for fencing works. The upper banks of the creek line were steep and severely eroded, and disturbances included rubbish dumping, piling of cut logs, soil slippage and weeds. The narrow creek bed was also severely disturbed by soil slippage along the lower banks and rubbish and tree logs lay along the creek bed. A rubbish dump was located at the southern end of this survey unit. Broken pebble-sized, friable limonitic sandstone pieces and limonite coated sandstone rocks were evident on the surface of the survey area. Visibility varied and was fair in the areas of eroded soils but poor in the densely vegetated areas. No archaeological or Aboriginal cultural heritage material was evident on the surface or in the banks of the creek in SU4.

6.4.5 Survey Unit 5 - Avocado Orchard

This survey unit was comprised predominantly of parallel rows of mounded earth which had been planted with avocado trees. A subsurface drip system had been laid to water the trees and the soils were heavily disturbed. Compost had been placed atop the mounds and chicken bones and friable sandstone rubble were evident on the surface. There were several areas of exposed limonitic sandstone rock in the channels between the linear tree planting mounds. Pebble sized friable and broken sandstone pieces lay on the surface.

A deep drainage channel had been excavated along the southern border of the avocado orchard and a line of trees lay along the southern side of the drainage channel. Excavated earth had been piled close to the channel and the area was highly disturbed. Soil profiles evident in the channel showed inter-bedded pebble and cobble sized friable sandstone and sandy clay. A power line ran alongside a dirt farm access road parallel to the tree line. This area was also heavily disturbed and there is no intact top soil.

This survey unit also comprised the proposed northern easement from Keighley Road along the eastern boundary of the avocado orchard marked by an existing dirt access road and Pine-Lantana Open Forest to the east of this road. A fenced area with a small dwelling and garden was situated at the north eastern part of this survey unit.

Visibility was good across SU5 and no archaeological or Aboriginal cultural heritage material was evident on the surface of the soil or in the exposed face of the drainage channel in this survey unit.

6.4.6 Survey Unit 6 – Poultry Sheds

Survey unit 6 is located in the north western part of Lot 10 Keighley Road. The area has been severely disturbed by excavation works associated with the construction of the poultry and farm sheds and associated infrastructure. The area around the poultry sheds had been benched and skeletal soils were exposed across SU6. The area to the west of the sheds had been excavated during drainage channel construction works. Farm sheds and a timber cutting and milling area lay in the eastern part of SU6 and the area was extremely disturbed with piling of timber logs and heavy vehicle access. There was no intact top soil remaining in any part of this survey unit. Visibility was good and no archaeological or Aboriginal cultural heritage material was found in this area.

6.5 Survey Coverage

The results of the survey show that topsoil has been heavily disturbed due to the ongoing use of the site as an orchard and poultry farm. Soil disturbance was due to extensive vegetation clearance, excavation works and mounding of earth for ditches and drainage channels, orchard rows and fencing and building works. Survey coverage of the area was complete (Figure 6-2) and visibility was generally fair except in areas covered by thick lantana and the steeply eroded banks of the creek line as access was hindered by the piled logs and weeds.

7.0 SIGNIFICANCE ASSESSMENT

The primary purpose of a significance assessment is to set criteria from which an effective determination of site significance can be made which can be used in the management of Aboriginal and European sites. A range of heritage values are considered which include but are not limited to Aboriginal cultural views, integrity of the site both locally and regionally, variability and complexity of the archaeological resource, research potential and spatial relationship of the site within the regional context.

7.1 Cultural Significance

An assessment of cultural significance incorporates a range of values which may vary for different individual groups and may relate to both the natural and cultural characteristics of places or sites. Cultural significance and Aboriginal cultural views can only be determined by the Aboriginal community using their own knowledge of the sites and their own value system.

As the cultural significance is a criterion that only Aboriginal people can assess, a detailed appraisal of cultural significance for the survey area has not been included as part of this survey. However, response and comment on the survey area provided by the Aboriginal Community stakeholders is included in Appendix 6 of this report. No *in situ* Aboriginal archaeological sites were located in the survey area and there were no areas of exposed sandstone rock suitable for rock engravings or grinding grooves in the survey area. The surface soils were eroded and highly disturbed with no intact topsoil suitable for *in situ* archaeological material.

7.2 Archaeological Significance

The term 'archaeological significance' (also referred to as scientific significance) is a value allocated to Aboriginal or European heritage sites by archaeologists to help determine appropriate management strategies and mitigation recommendations for their ongoing care and management. The archaeological significance given to a site or area in the absence of identified sites is based on several criteria. The criterion includes;

- Rarity in a local and regional context
- Representativeness in a local and regional context
- Integrity in a local and regional context
- Connectedness in a local and regional context
- Complexity in a local and regional context

- Ability to contribute to the archaeological understanding of the cultural sequence in a local and regional context

The majority of the survey area is highly modified and has been subjected to varying degrees of disturbance associated with the poultry sheds, timber cutting and milling, avocado orchard and other farming practices, including dam construction and drainage channel excavation works, formation of dirt access roads and fencing works. These factors informed the decision to classify the survey area generally as being of nil-low archaeological significance. The majority of the survey area is seen as being limited in terms of its ability to provide scientific information that can be used to contribute to our growing archaeological knowledge of how the area was used by past populations.

The areas targeted for the two access easements are located in open forest. The northern access easement along the eastern boundary of Lot 10 Keighley Road (primary access) is in Pine-Lantana Open Forest and is highly disturbed. This part of the survey area has therefore been classified as being of nil-low archaeological significance. The southern access easement (secondary access) is located in Somersby Plateau Open Forest and borders on the south eastern section of Lot 33 Reserve Road at the edge of the existing quarry site. It forms the boundary between Lot 10 Keighley Road and Lot 33 Reserve Road. The southern easement part of the survey area is located on the generally flat lying part of the Somersby Plateau. The sandstone rock found in the immediate survey area is friable and therefore considered unlikely to contain grinding grooves or rock engravings. Disturbance in this proposed easement area is high resulting from fencing works, excavation of a drainage channel and some rubbish dumping. The area adjoining Reserve Road and forming part of the road verge has been moderately disturbed by fencing and road construction works. This proposed access easement has therefore also been classified as being of nil-low archaeological significance.

Rarity: This criterion examines the site type against those occurring in the local and regional context. If the site type being assessed is considered to be rare at either regional or local levels, this raises its importance in the archaeological record. In Australia, the most common site type is an artefact scatter. In the Somersby local and regional area, the most common site types are grinding groove and rock engraving sites, open campsites with artefact scatters and isolated finds and on the steeper sloping areas, rock shelters with art.

Based on the nature and disturbance of the survey area, and absence of any evidence of in situ archaeological material, the survey area has been identified as having low to nil significance for rarity.

Representativeness: This criterion relates to determining if the site can be characterised as representative of the sites (types, integrity etc) present in the local and regional context. The purpose of this is to conduct further investigations on a sample of sites within a given area, in order to add to the archaeological understanding of the area, but to leave a representative sample in situ for future generations.

Based on the nature and disturbance of the survey area associated with existing quarrying works, existing agricultural and farming practices and infrastructure, and the absence of any evidence of *in situ* archaeological material, the survey area has been identified as having low to nil significance for representativeness.

Integrity: This criterion refers to how intact a site is and the level of disturbance associated with the site. A site with contextual integrity can provide information relating to chronology, social systems, tool technology, site formation processes, habitation and frequency of use, as well as other forms of analysis. If a site has been the subject of moderate to large degrees of disturbance, it has a low probability of retaining integrity, and thus the information able to be obtained from the site is reduced.

Based upon the above criterion, the area has been identified as having nil significance for integrity as the site has been disturbed by previous agricultural and farming practices and quarrying works.

Connectedness: The connectedness criterion relates to the relationship between a site and others in the local and regional environment. If a site is determined to have connectedness with other sites, the depth of knowledge that can be obtained from the connected sites increases and can be used to develop an understanding of more traditional practices that cannot be identified by looking at one site in isolation. The connectedness could relate to age, the landform in which they are contained, the contents of the sites etc. This criterion is often ascertained without subsurface investigations.

Based on the cultural and spiritual significance of the broader area, any intact and undisturbed sites in the broader surrounding region are considered to be moderate to high for connectedness. However, the area of the proposed quarry extension and access easements has been identified as having nil - low significance for connectedness due to the modified landforms and high level of disturbances across the survey area.

Complexity: The complexity criterion relates to the contents of the site. This may relate to a high number of artefacts per square metre or features which can add to the layer of information that can be obtained from a site (e.g. hearths, knapping floors, ochres etc).

Based on the nature and disturbance of the survey area and absence of any Aboriginal cultural heritage material and no evidence of *in situ* archaeological material, the survey area has been identified as having nil significance for complexity.

Contribution to Knowledge: The ability of a site to contribute to knowledge is largely dependent on the site having moderate to high significance assessments for the other criteria. The reason for this is that the ability to contribute to knowledge requires 'new' knowledge to be drawn from the site in order to add to the local and/or regional context.

Based on the assessments from each of the previous criteria the survey area has been determined to have a nil significance level for ability to contribute to knowledge.

8.0 CONCLUSION

The area for the proposed quarry extension and northern easement access for the dwelling at Lot 10 DP 1090880 Keighley Road is extremely disturbed and there is no visible potential for intact topsoils across the survey area. The pedestrian field survey showed the survey area is now predominantly cleared managed land and current and past land use has greatly impacted upon any evidence of past Aboriginal occupation. The site survey covered 100% of the survey area and directed equal attention to all parts of the survey area and landform units present (modified and unmodified). Given the complete coverage of the survey area, and the consistent disturbances across the whole of the survey area, as outlined above and fully described in Section 6, the likelihood of unearthing *in situ* and contextual Aboriginal archaeological deposits is extremely low. The proposed southern easement for secondary access to the dwelling will require minor disturbance.

Interpretation of the AHIMS search indicates that the Gosford LGA was extensively used for camping and as a resource gathering area, with an abundant water supply that provided suitable settings for year round Aboriginal occupation. On a regional basis sites were found to be more commonly located on elevated slopes close to fresh water. Rock engravings and grinding grooves predominate in the east and west of the area (refer Figure 4-1). A search of the AHIMS database revealed that there were no listed sites inside the survey area (Appendix 2) and the pedestrian survey revealed no new Aboriginal archaeological material.

On the basis of information gained through a review of ethno historical sources, and the distribution of known sites and the results of past studies in the Gosford region, there is the possibility that undetected Aboriginal sites may be expected in the vicinity of the Keighley Road property. However, during the survey conducted by RPS HSO in conjunction with representatives of the Aboriginal Community Stakeholders, no evidence of Aboriginal archaeological material was identified. The survey area holds no potential for site types, such as shelter with rock art, bora rings and ceremonial grounds due to the absence of suitable rock surfaces contained within the survey area.

The above claims for the immediate survey area being an extremely disturbed landscape is provided for by evidence of the current vegetation communities and there is evidence of extensive land clearing, and access road and fencing works along the boundaries of the property. Evidence is visible across the whole survey area for a large degree of soil disturbance by way of drainage channels, earth mounding for construction of the dam and avocado orchard and benching and earth mounding in the area of the poultry sheds. Consequently, the potential for undisturbed and *in situ* Aboriginal archaeological material is considered to be

nil. The above characteristics of the survey area indicate that it would be highly unlikely that Aboriginal archaeological material will be uncovered during any development works.

9.0 RECOMMENDATIONS

The management recommendations that are formulated from this archaeological assessment are based on the legislation designed to address the impact of development on sites of cultural significance.

It is recommended that works may proceed with regard to the following:

9.1 Aboriginal Community Consultation

At the conclusion of the survey, the Aboriginal Community Sites Officers, (identified during the ICCG process) in discussions with the archaeologist from RPS HSO, concluded that there was no evidence of any Aboriginal cultural heritage sites within the immediate survey area for the proposed quarry extension and associated access easements.

The predictive model and previous archaeological studies undertaken in the broader region showed that grinding grooves, rock engravings and open camp sites were likely to be present. However, a comprehensive search of the immediate survey area showed that all the sandstone rock exposed in this area was friable and fragmented sandstone which was unsuitable for grinding grooves or rock engravings and that the extreme disturbances across the site showed no evidence of surface or *in situ* Aboriginal archaeological material.

9.2 Aboriginal Archaeological Management

Recommendation 1

During the course of proposed construction work, if suspected Indigenous cultural heritage material is encountered, work should cease in that vicinity immediately and the NSW Department of Environment and Climate Change (DECC), DLALC and GTLAC immediately notified. Works should only recommence when an appropriate and approved management strategy has been agreed to by relevant stakeholders.

Recommendation 2

In the event that skeletal remains are uncovered whilst operations are underway, work is to stop in the vicinity immediately, the NSW Coroner's Office and NSW Police contacted. If the remains are deemed to be of Aboriginal origin, a representative of the local Aboriginal Community (DLALC, and GTLAC) and the DECC are also to be contacted.

Recommendation 3

If, during the course of clearing work, significant non-Indigenous cultural heritage material (for archaeological items it is those exceeding 50 years in age) is uncovered work should cease in that vicinity immediately. The NSW Heritage Branch should be notified and works only recommence when an appropriate and approved management strategy is instigated.

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11.0 PLATES



Plate 1: SU1 Open Forest - view to north along eastern boundary of existing quarry



Plate 2: SU1 Open Forest - view to west along southern boundary of quarry



Plate 3: SU 1 Sandstone Rock – view to north showing friable sandstone unit outcropping at northern end of open forest area at existing quarry site



Plate 4: SU2 Open Forest - view to north from Reserve Road showing proposed southern easement for secondary access to the dwelling



Plate 5: SU3 Access Road – view to south of showing farm access road and excavated drainage channel



Plate 6: SU3 Drainage Channel – View to west showing piled soils with friable sandstone pebbles and cobbles at edge of excavated drainage channel



Plate 7: SU4 Creek Line - view to south-west showing disturbed topsoils and rubbish heap between farm access road and creek line



Plate 8: SU4 Creek Line – view to west showing piling of timber logs along creek bank



Plate 9: SU4 Creek Bed – view to south west showing eroding creek banks at northern end of creek line



Plate 10: SU4 Creek Bed - view of rubbish dumping in creek bed at northern end of creek line near to creek crossing



Plate 11: SU4 Creek Crossing – view to south east showing access road to dam and diverted creek channel



Plate 12: SU4 Creek Bank – upper slopes of creek bank showing cut timber and disturbed soils



Plate 13: SU5 Avocado Orchard – view to south showing farm access track and shallow drainage channels between linear planting rows



Plate 14: SU5 Avocado Orchard – detail of earth mound with compost mixed friable sandstone rubble pieces



Plate 15: SU5 Avocado Orchard – view to east showing avocado plantation and power lines to the south of the excavated drainage channel



Plate 16: SU5 Excavated Drainage Channel – view to south east showing soil profile with friable limonitic sandstone pebbles and cobbles



Plate 17: SU5 Avocado Orchard – view to south from Keighley Road showing proposed northern easement on eastern boundary of Lot 10 Keighley Road



Plate 18: SU6 Poultry Sheds – view to south along western boundary of the proposed quarry extension at Lot 10 Keighley Road



Plate 19: SU6 Poultry Sheds – view to north to Keighley Road along western boundary of survey area



Plate 20: SU6 Poultry Sheds – view to east showing farm access road and area with topsoil completely removed for use in raising level of chicken sheds

APPENDIX 1

Legislative Requirements

SUMMARY OF STATUTORY CONTROLS

The following overview of the legal framework is provided solely for information purposes for the client, it should not be interpreted as legal advice. RPS Harper Somers O'Sullivan will not be liable for any actions taken by any person, body or group as a result of this general overview, and recommend that specific legal advice be obtained from a qualified legal practitioner prior to any action being taken as a result of the summary below.

COMMONWEALTH

Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (ATSIHP Act), Amendment 2006

The purpose of this Act is to preserve and protect all heritage places of particular significance to Aboriginal and Torres Strait Islander people. This Act applies to all sites and objects across Australia and in Australian waters (s4).

It would appear that the intention of this Act is to provide national baseline protection for Aboriginal places and objects where State legislation is absent. It is not to exclude or limit State laws (s7(1)). Should State legislation cover a matter already covered in the Commonwealth legislation, and a person contravenes that matter, that person may be prosecuted under either Act, but not both (s7(3)).

The Act provides for the preservation and protection of all Aboriginal objects and places from injury and/or desecration. A place is construed to be injured or desecrated if it is not treated consistently with the manner of Aboriginal tradition or is or likely to be adversely affected (s3).

THE AUSTRALIAN HERITAGE COMMISSION ACT 1975

The Australian Heritage Commission Act 1975 established the Australian Heritage Commission which assesses places to be included in the National Estate and maintains a register of those places. Places maintained in the register are those which are significant in terms of their association with particular community or social groups and they may be included for social, cultural or spiritual reasons. The Act does not include specific protective clauses.

The Australian Heritage Council Act 2003 together with The Environment Protection and Biodiversity Conservation Act 1999 (Amended) includes a National Heritage List of places of National heritage significance, maintains a Commonwealth Heritage List of heritage places owned or managed by the Commonwealth and ongoing management of the Register of the National Estate.

STATE

It is incumbent on any land manager to adhere to legislative requirements that protect indigenous culture heritage in NSW. The relevant legislation includes but is not limited to:

National Parks & Wildlife Act 1974 (NPW Act), Amended 2001.

The DECC issued their Interim Community Consultation Requirements in January 2005 to replace all previous consultation guidelines that related to Part 6 of the NPW Act 1974.

The requirement of the guidelines is for the proponent, or consultant for the proponent, to contact the Local Aboriginal Land Council(s), Registrar of Aboriginal Owners, Native Title Services, local councils and the DECC, to request contact information for any/all potential Aboriginal people/groups with an ancestral interest in the cultural heritage of the project area.

The NPW Act provides statutory protection for all Aboriginal relics (not being a handicraft made for sale), with penalties levied for breaches of the Act. Part 6 of this Act is the relevant part concerned Aboriginal objects and places, with the Section 86 and Section 90 being the most pertinent:

Section 91: Under Section 91 of the Act it stipulates that a person who is aware of unregistered Aboriginal sites must report these to the DECC, regardless of the land status (Freehold, leasehold, Crown land).

Section 90: "A person who, without first obtaining the consent of the Director-General, knowingly destroys, defaces or damages, or knowingly causes or permits the destruction or defacement of or damage to, an Aboriginal object or Aboriginal place is guilty of an offence against this Act." Under s.5 of the Act "object" means any deposit, object or material evidence (not being a handicraft made for sale) relating to indigenous habitation of the area. This applies to habitation both prior to and concurrent with the occupation of that area by persons of non Aboriginal extraction, and includes Aboriginal remains.

Section 87: Preliminary Research Permits issued under Section 87 of the Act, allow the permit holder to conduct investigations of areas considered to be potential sites for the purpose of research, and also for conservation work associated with known sites.

Impact Permits issued under Section 90 of the Act are for salvaging sites prior to ground disturbance works associated with construction. Any disturbance, damage or destruction of Aboriginal sites, known or unknown, is considered to contravene the NPW Act (1974) and the DECC will pursue the person/company responsible.

Penalties under these two sections are currently 50 penalty units, or 6 months in gaol, or both for an individual and 200 penalty units for a corporation. The DECC record all S.87 and S.90 permits issued in order to manage Aboriginal sites and ensure representative samples of sites are left in situ for future generations. In order to achieve this, the DECC need to be made aware of all Aboriginal sites located in NSW.

Section 86: This section of the Act states that "A person, other than the Director-General or a person authorised by the Director-General in that behalf, who:

- (a) disturbs or excavates any land, or causes any land to be disturbed or excavated, for the purpose of discovering an Aboriginal object,
- (b) disturbs or moves on any land an Aboriginal object that is the property of the Crown, other than an Aboriginal object that is in the custody or under the control of the Australian Museum Trust,
- (c) takes possession of an Aboriginal object that is in a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area,
- (d) removes an Aboriginal object from a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area, or

- (e) erects or maintains, in a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area, a building or structure for the safe custody, storage or exhibition of any Aboriginal object,

except in accordance with the terms and conditions of an unrevoked permit issued to the person under section 87, being terms and conditions having force and effect at the time the act or thing to which the permit relates is done, is guilty of an offence against this Act.”

Section 84: Aboriginal places of traditional significance (that may or may not contain archaeological material) are given protection under Section 84 of the NPW Act. To be an Aboriginal place for the purposes of this Act, this is a place that, in the opinion of the Minister, is or was of special significance with respect to Aboriginal culture.

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979 (EP&A ACT)

This Act regulates a system of environmental planning and assessment for New South Wales. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage and specifically Aboriginal heritage. Within the EP&A Acts, Parts III, IV, and V relate to Aboriginal heritage.

Part III regulates the preparation of planning policies and plans. Part IV governs the manner in which consent authorities determine development applications and outlines those that require an environmental impact statement. Part V regulates government agencies that act as determining authorities for activities conducted by that agency or by authority from the agency. The National Parks & Wildlife Service is a Part V authority under the EP&A Act.

In brief, the NPW Act provides protection for Aboriginal objects or places, while the EP&A Act ensures that Aboriginal cultural heritage is properly assessed in land use planning and development.

Part 3A of the EPA relates to major projects, and if applicable, obviates the need to conform to other specific legislation. In particular, s75U of the EPA Act explicitly removes the need to apply for s87 or s90 permits under the NPW Act. This means that although Aboriginal cultural heritage is considered during the planning process, a permit is not required to disturb or destroy an Aboriginal object or place. However, the Director-General of Planning must nonetheless consult with other government agencies, including DECC and National Parks & Wildlife, prior to any decision being made.

THE HERITAGE ACT 1977

This Act protects the natural and cultural history of NSW with emphasis on non-indigenous cultural heritage through protection provisions and the establishment of a Heritage Council. Although Aboriginal heritage sites and objects are primarily protected by the National Parks & Wildlife Act 1974 (NPW Act), Amended 2001, if an Aboriginal site, object or place is of great significance, it may be protected by a heritage order issued by the Minister subject to advice by the Heritage Council.

Other legislation of relevance to Aboriginal cultural heritage in NSW includes the NSW Local Government Act (1993). Local planning instruments also contain provisions relating to indigenous heritage and development conditions of consent.

APPENDIX 2

AHIMS Registered Sites



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-0014	<u>Sommersby:</u>	AGD	56	339082	6302837	Open Site	GDG :-	Axe Grinding Groove	Sim		NRS/17798/1/312
		Status Valid									
	Primary Contact										
45-3-0039	<u>Old Gosford Road:Piles Creek:</u>	AGD	56	341690	6301680	Open Site	ART :-	Rock Engraving	Permit(s) ASRSYS		NRS/17798/1/312
		Status Valid									
	Primary Contact										
45-3-0040	<u>Old Gosford Road:Piles Creek:</u>	AGD	56	341010	6302180	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	Permit(s) Lough	1157	NRS/17798/1/312
		Status Valid									
	Primary Contact										
45-3-0041	<u>Old Gosford Road:Piles Creek:</u>	AGD	56	341435	6302565	Open Site	ART :-	Rock Engraving	Permit(s) Sim		NRS/17798/1/312
		Status Valid									
	Primary Contact										
45-3-0042	<u>Old Gosford Road:Piles Creek:</u>	AGD	56	342400	6303150	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	Permit(s) Koettig		NRS/17798/1/312
		Status Valid									
	Primary Contact										
45-3-0044	<u>Old Gosford Road:Piles Creek:</u>	AGD	56	342365	6301760	Open Site	GDG :-	Axe Grinding Groove	Permit(s) Sim		NRS/17798/1/312
		Status Valid									
	Primary Contact										
45-3-0045	<u>Old Gosford Road Piles Creek Strickland S.F.</u>	AGD	56	342930	6301540	Enclosed Shelter	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving, Shelter with Art	Permit(s) Sim	492	NRS/17798/1/312
		Status Valid									
	Primary Contact										
45-3-0049	<u>Narara Creek:</u>	AGD	56	342801	6302866	Open Site	ART :-	Rock Engraving	Permit(s) ASRSYS		NRS/17798/1/312
		Status Valid									
	Primary Contact										



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-0051	<u>Narara Creek:</u>	AGD	56	341880	6304700	Open Site	ART :-	Rock Engraving	Lough		NRS/17798/1/312
	Status Valid										
	Primary Contact										
45-3-0052	<u>Narara Creek:</u>	AGD	56	341900	6305180	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	Permit(s) ASRSYS	287	NRS/17798/1/312
	Status Valid										
	Primary Contact										
45-3-0053	<u>Sommersby:</u>	AGD	56	341316	6308782	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	Permit(s) Lembit		NRS/17798/1/312
	Status Valid										
	Primary Contact										
45-3-0054	<u>Sommersby:</u>	AGD	56	342265	6306971	Open Site	ART :-	Rock Engraving	Permit(s) Sim	1572	NRS/17798/1/312
	Status Valid										
	Primary Contact										
45-3-0055	<u>Sommersby:</u>	AGD	56	342813	6306981	Open Site	ART :-	Rock Engraving	Permit(s) ASRSYS	1572	NRS/17798/1/312
	Status Valid										
	Primary Contact										
45-3-0096	<u>Sommersby:</u>	AGD	56	335828	6308859	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	Permit(s) ASRSYS	308	NRS/17798/1/313
	Status Valid										
	Primary Contact										
45-3-0097	<u>Sommersby:</u>	AGD	56	336600	6309400	Open Site	GDG :-	Axe Grinding Groove	Permit(s) Webb		NRS/17798/1/313
	Status Valid										
	Primary Contact										
45-3-0098	<u>Sommersby:</u>	AGD	56	335258	6305190	Open Site	ART :-	Rock Engraving	Permit(s) Sim		NRS/17798/1/313
	Status Valid										
	Primary Contact										



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting to = 343151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-0100	<u>Sommersby:</u>	AGD	56	336367	6304571	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/313
		Status Valid									
	Primary Contact								Permit(s)		
45-3-0315	<u>Sommersby:</u>	AGD	56	338674	6303518	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	Sim		NRS/17798/1/317
		Status Valid									
	Primary Contact								Permit(s)		
45-3-0316	<u>Sommersby:</u>	AGD	56	337942	6303504	Open Site	ART :-	Rock Engraving	Sim		NRS/17798/1/317
		Status Valid									
	Primary Contact								Permit(s)		
45-3-0376	<u>Popran Creek:Peats Ridge:</u>	AGD	56	335166	6305188	Open Site	ART :-	Rock Engraving	Sim		NRS/17798/1/318
		Status Valid									
	Primary Contact								Permit(s)		
45-3-0456	<u>Old Gosford Road:</u>	AGD	56	341268	6301739	Open Site	ART :-	Rock Engraving	McKenzie		NRS/17798/1/319
		Status Valid									
	Primary Contact								Permit(s)		
45-3-0468	<u>Old Gosford Road:</u>	AGD	56	341330	6302060	Open Site	ART :-	Rock Engraving	McKenzie		NRS/17798/1/319
		Status Valid									
	Primary Contact								Permit(s)		
45-3-0612	<u>Old Gosford Road:</u>	AGD	56	341390	6301990	Open Site	ART :-	Rock Engraving	Lough		NRS/17798/1/322
		Status Valid									
	Primary Contact								Permit(s)		
45-3-0644	<u>Narara Creek:</u>	AGD	56	341748	6305315	Open Site	GDG :-	Axe Grinding Groove	Kelly	480	NRS/17798/1/322
		Status Valid									
	Primary Contact								Permit(s)		



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 58, Easting From = 335151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-0657	<u>Somersby:Howe Aboriginal Area:</u>	AGD	58	339131	6303527	Open Site	ART :-	Rock Engraving	McCarthy		NRS/17798/1/322
		Status Valid									
	<u>Primary Contact</u>										
45-3-0899	<u>Dog Trap Road:</u>	AGD	58	342050	6307420	Open Site	GDG :-	Axe Grinding Groove	Permit(s) ASRSYS		NRS/17798/1/327
		Status Valid									
	<u>Primary Contact</u>										
45-3-0901	<u>Narara Creek:Reeves Road:</u>	AGD	58	342820	6303340	Open Site	ART :-	Rock Engraving	Permit(s) Attenbrow	17	NRS/17798/1/327
		Status Valid									
	<u>Primary Contact</u>										
45-3-1066	<u>Narara Creek:</u>	AGD	58	341748	6305315	Open Site	GDG :-	Axe Grinding Groove	Permit(s) Kelly	480	NRS/17798/1/330
		Status Valid									
	<u>Primary Contact</u>										
45-3-1369	<u>Narara Creek:</u>	AGD	58	341910	6304240	Open Site	GDG :-	Axe Grinding Groove	Permit(s) ASRSYS		NRS/17798/1/335
		Status Valid									
	<u>Primary Contact</u>										
45-3-1370	<u>Narara Creek:</u>	AGD	58	341930	6304250	Open Site	GDG :-	Axe Grinding Groove	Permit(s) ASRSYS		NRS/17798/1/335
		Status Valid									
	<u>Primary Contact</u>										
45-3-1371	<u>Narara Creek:</u>	AGD	58	342318	6304228	Open Site	GDG :-	Axe Grinding Groove	Permit(s) ASRSYS		NRS/17798/1/335
		Status Valid									
	<u>Primary Contact</u>										
45-3-1386	<u>Belltrees K-O-37:</u>	AGD	58	341530	6302420	Open Site	GDG :-	Axe Grinding Groove	Permit(s) ASRSYS		NRS/17798/1/335
		Status Valid									
	<u>Primary Contact</u>										



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting to = 343151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-1387	Narara Creek K-O-40;	AGD	56	341730	6304840	Open Site	ART :-	Rock Engraving	ASRSYS		NRS/17798/1/335
	Status Valid										
	Primary Contact										
45-3-1389	Glen Allen;Narara Creek K-O-43;	AGD	56	341800	6305130	Open Site	GDG :-	Axe Grinding Groove	ASRSYS	287	NRS/17798/1/335
	Status Valid								Permit(s)		
	Primary Contact										
45-3-1390	Glen Allen;K-O-44;	AGD	56	341890	6304950	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
	Status Valid								Permit(s)		
	Primary Contact										
45-3-1391	Glen Allen;Narara Creek K-O-45;	AGD	56	341740	6305040	Open Site	GDG :-	Axe Grinding Groove	ASRSYS	287	NRS/17798/1/335
	Status Valid								Permit(s)		
	Primary Contact										
45-3-1392	Glen Allen;K-O-46;	AGD	56	341750	6305050	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
	Status Valid								Permit(s)		
	Primary Contact										
45-3-1394	Somersby;K-O-48;	AGD	56	340454	6306022	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
	Status Valid								Permit(s)		
	Primary Contact										
45-3-1396	Narara Creek;K-O-52;	AGD	56	341700	6304130	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
	Status Valid								Permit(s)		
	Primary Contact										
45-3-1397	Narara Creek;K-O-53;	AGD	56	342309	6304885	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
	Status Valid								Permit(s)		
	Primary Contact										



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting to = 343151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-1398	<u>Narara Creek:K-O-54:</u>	AGD	56	341830	6305180	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1399	<u>Narara Crik:K-O-55:</u>	AGD	56	342760	6306280	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1402	<u>Narara Creek:</u>	AGD	56	341870	6304230	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1403	<u>Mazoe:Belitrees:</u>	AGD	56	341150	6302000	Open Site	ART :-	Rock Engraving	ASRSYS		NRS/17798/1/335
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1405	<u>Narara Creek:</u>	AGD	56	341860	6304280	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/335
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1406	<u>Belitrees:</u>	AGD	56	341090	6302130	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	ASRSYS		NRS/17798/1/336
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1407	<u>Belitrees:</u>	AGD	56	341000	6302240	Open Site	ART :-	Rock Engraving	ASRSYS		NRS/17798/1/336
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1408	<u>Belitrees:</u>	AGD	56	340370	6302330	Open Site	ART :-, GDG :-, WTR :-	Axe Grinding Groove, Rock Engraving, Water Hole/Well	ASRSYS		NRS/17798/1/336
		Status Valid									
	Primary Contact								Permit(s)		



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting To = 343151, Northing From = 6301497, Northing To = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-1409	<u>Belltrees:</u>	AGD	56	341030	6302070	Open Site	GDG :-	Axe Grinding Groove	Lough		NRS/17798/1/336
	Status Valid										
	Primary Contact								Permit(s)		
45-3-1411	<u>Narara Creek:</u>	AGD	56	341990	6304300	Open Site	GDG :-	Axe Grinding Groove	ASRSYS		NRS/17798/1/336
	Status Valid										
	Primary Contact								Permit(s)		
45-3-1457	<u>Brisbane Waters National Park</u>	AGD	56	336798	6305951	Enclosed Shelter	ART :-	Shelter with Art	ASRSYS	508	NRS/17798/1/336
	Status Valid										
	Primary Contact								Permit(s)		
45-3-1458	<u>Brisbane Waters National Park</u>	AGD	56	336815	6305037	Enclosed Shelter	ART :-	Shelter with Art	ASRSYS	508	NRS/17798/1/336
	Status Valid										
	Primary Contact								Permit(s)		
45-3-1752	<u>Kawana:</u>	AGD	56	336810	6308570	Enclosed Shelter	ART :-	Shelter with Art	Bluff		NRS/17798/1/341
	Status Valid										
	Primary Contact								Permit(s)		
45-3-1753	<u>Peats Ridge:</u>	AGD	56	336050	6308910	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	Bluff		NRS/17798/1/341
	Status Valid										
	Primary Contact								Permit(s)		
45-3-1754	<u>Kawana:</u>	AGD	56	336050	6308900	Open Site	ART :-	Rock Engraving	Bluff		NRS/17798/1/341
	Status Valid										
	Primary Contact								Permit(s)		
45-3-1755	<u>Peats Ridge:</u>	AGD	56	336040	6308860	Open Site	GDG :-	Axe Grinding Groove	Bluff		NRS/17798/1/341
	Status Valid										
	Primary Contact								Permit(s)		



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting to = 343151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-1756	<u>Emu (Peats Ridge);</u>	AGD	56	336080	6308860	Enclosed Shelter	ART :-	Shelter with Art	Bluff		NRS/17798/1/341
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1757	<u>Kawana;</u>	AGD	56	336470	6308890	Open Site	GDG :-	Axe Grinding Groove	Bluff		NRS/17798/1/341
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1758	<u>Kawana;</u>	AGD	56	336490	6308850	Open Site	GDG :-	Axe Grinding Groove	Bluff		NRS/17798/1/341
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1759	<u>Kawana;</u>	AGD	56	336350	6308530	Open Site	GDG :-	Axe Grinding Groove	Bluff		NRS/17798/1/341
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1760	<u>Kawana;</u>	AGD	56	336120	6308360	Open Site	GDG :-	Axe Grinding Groove	Bluff		NRS/17798/1/341
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1950	<u>Calga;Gunderman;</u>	AGD	56	335560	6304100	Enclosed Shelter	ART :-	Shelter with Art	Bluff	1333	NRS/17798/1/343
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1951	<u>Strictland State Forest;</u>	AGD	56	342910	6301500	Enclosed Shelter	ART :-	Shelter with Art	Bluff	1333	NRS/17798/1/343
		Status Valid									
	Primary Contact								Permit(s)		
45-3-1953	<u>Calga;Gunderman;</u>	AGD	56	335250	6304300	Open Site	GDG :-	Axe Grinding Groove	Bluff	1333	NRS/17798/1/343
		Status Valid									
	Primary Contact								Permit(s)		

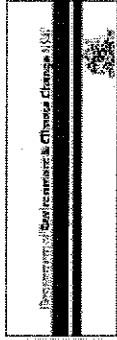


List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting to = 343151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Eastings	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-2114	<u>Somersby:</u>	AGD	56	340240	6302200	Open Site	GDG :-	Axe Grinding Groove	Bluff	1333	NRS/17798/1/346
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		
45-3-2115	<u>Somersby:</u>	AGD	56	340180	6302020	Enclosed Shelter	ART :-	Shelter with Art	Bluff	1333	NRS/17798/1/346
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		
45-3-2116	<u>Somersby:</u>	AGD	56	340150	6301930	Enclosed Shelter	ART :-	Shelter with Art	Bluff	1333	NRS/17798/1/346
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		
45-3-2117	<u>Somersby:</u>	AGD	56	340150	6301900	Enclosed Shelter	ART :-	Shelter with Art	Bluff	1333	NRS/17798/1/346
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		
45-3-2118	<u>Somersby:</u>	AGD	56	340100	6301900	Open Site	ART :-	Rock Engraving	Bluff	1333	NRS/17798/1/346
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		
45-3-2120	<u>BWNP:</u>	AGD	56	336980	6309240	Open Site	GDG :-	Axe Grinding Groove	Bluff	1333	NRS/17798/1/346
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		
45-3-2121	<u>BWNP:</u>	AGD	56	337060	6309240	Enclosed Shelter	ART :-	Shelter with Art	Bluff	1333	NRS/17798/1/346
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		
45-3-2122	<u>BWNP:</u>	AGD	56	336800	6309370	Open Site	GDG :-	Axe Grinding Groove	Bluff	1333	NRS/17798/1/346
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
<u>45-3-2193</u>	<u>B.W.N.P.:</u>	AGD	56	337870	6303480	Open Site	ART :-	Rock Engraving	Bluff	1333	NRS/17798/1/347
	Status Valid										
	Primary Contact								Permit(s)		
<u>45-3-2339</u>	<u>None Specified</u>	AGD	56	341100	6302100	Open Site	ART :-, GDG :-	Axe Grinding Groove, Rock Engraving	Unknown Author		NRS/17798/1/349
	Status Valid										
	Primary Contact								Permit(s)		
<u>45-3-3156</u>	<u>BWNP</u>	AGD	56	337100	6302880	Open Site	STA :-	Stone Arrangement	Bluff	1333	NRS/17798/1/358
	Status Valid										
	Primary Contact								Permit(s)		
<u>45-3-3157</u>	<u>BWNP</u>	AGD	56	337480	6303050	Open Site	ART :-	Rock Engraving	Bluff	1333	NRS/17798/1/358
	Status Valid										
	Primary Contact								Permit(s)		
<u>45-3-3158</u>	<u>BWNP</u>	AGD	56	338620	6301610	Open Site	ART :-	Rock Engraving	Bluff	1333	NRS/17798/1/358
	Status Valid										
	Primary Contact								Permit(s)		
<u>45-3-3159</u>	<u>BWNP</u>	AGD	56	338600	6301560	Open Site	GDG :-	Axe Grinding Groove	Bluff	1333	NRS/17798/1/358
	Status Valid										
	Primary Contact								Permit(s)		
<u>45-3-3160</u>	<u>BWNP</u>	AGD	56	338560	6301590	Open Site	ART :-	Rock Engraving	Bluff	1333	NRS/17798/1/358
	Status Valid										
	Primary Contact								Permit(s)		
<u>45-3-3161</u>	<u>BWNP</u>	AGD	56	338670	6301570	Open Site	GDG :-	Axe Grinding Groove	Bluff	1333	NRS/17798/1/358
	Status Valid										
	Primary Contact								Permit(s)		

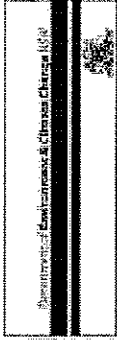


List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting to = 343151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-3173	<u>FLOODS CREEK</u>	AGD	56	340050	6303920	Open Site	GDG :-	None	Bluff		NRS/17798/1/359
		Status Valid									
	<u>Primary Contact</u>										
45-3-3189	<u>BWNP/RE</u>	AGD	56	337080	6301810	Open Site	ART :-	None	Permit(s) Bluff		NRS/17798/1/359
		Status Valid									
	<u>Primary Contact</u>										
45-3-3200	<u>BWNP/GG2</u>	AGD	56	337040	6301850	Open Site	GDG :-	None	Permit(s) Bluff	1333	NRS/17798/1/359
		Status Valid									
	<u>Primary Contact</u>										
45-3-3213	<u>BWNP ENGRAVING</u>	AGD	56	337420	6303020	Enclosed Shelter	ART :-	None	Permit(s) Bluff		NRS/17798/1/359
		Status Valid									
	<u>Primary Contact</u>										
45-3-3255	<u>Little Mooney Mooney Creek</u>	AGD	56	337930	6306180	Open Site	ART : 8	None	Permit(s) Bluff		NRS/17798/1/360
		Status Valid									
	<u>Primary Contact</u>										
45-3-3284	<u>Somersby, GG</u>	AGD	56	339990	6301790	Open Site	GDG :-	None	Permit(s) Bluff		
		Status Valid									
	<u>Primary Contact</u>										
45-3-3334	<u>SDS1</u>	GDA	56	342987	6303420	Open Site	ART : 1, GDG : 1	None	Permit(s) Heritage Concepts	100470	
		Status Valid									
	<u>Primary Contact</u>										
45-3-3343	<u>granits rd re 1</u>	GDA	56	338241	6304060	Open Site	ART :-	None	Permit(s) Besant		
		Status Valid									
	<u>Primary Contact</u>								Permit(s)		



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting to = 343151, Northing From = 6301497, Northing to = 6309497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
<u>45-3-3344</u>	<u>grants rd re 2</u>	GDA	56	338141	6304060	Open Site	ART :-	None	Besant		
		Status Valid									
	Primary Contact								Permit(s)		
<u>45-3-3347</u>	<u>SIE 12</u>	GDA	56	340950	6302310	Open Site	STA :-	None	Martin		
		Status Valid									
	Primary Contact								Permit(s)		
<u>45-3-3348</u>	<u>SIE 3</u>	GDA	56	340010	6301830	Open Site	AFT :-	None	Martin		
		Status Valid									
	Primary Contact								Permit(s)		
<u>45-3-3350</u>	<u>SIE 5</u>	GDA	56	340190	6301970	Open Site	AFT :-	None	Martin		
		Status Valid									
	Primary Contact								Permit(s)		
<u>45-3-3351</u>	<u>SIE 13</u>	GDA	56	341020	6302220	Open Site	AFT :-	None	Martin		
		Status Valid									
	Primary Contact								Permit(s)		
<u>45-3-3353</u>	<u>SIE 14</u>	GDA	56	341060	6302130	Open Site	AFT :-	None	Martin		
		Status Valid									
	Primary Contact								Permit(s)		
<u>45-3-3354</u>	<u>SIE 16</u>	GDA	56	341090	6302040	Open Site	AFT :-	None	Martin		
		Status Valid									
	Primary Contact								Permit(s)		
<u>45-3-3355</u>	<u>SIE 19</u>	GDA	56	341400	6302000	Open Site	AFT :-	None	Martin		
		Status Valid									
	Primary Contact								Permit(s)		



List of Sites (List - Short)

Somersby

Grid Reference Type = AGD (Australian Geodetic Datum), Zone = 56, Easting From = 335151, Easting to = 343151, Northing From = 6301497, Northing to = 6308497, Feature Search Type = AHIMS Features

Site ID	Site Name	Datum	Zone	Easting	Northing	Context	Site Features	Site Types (recorded prior to June 2001)	Recording (Primary)	Reports (Catalogue Number)	State Arch. Box No (for office use only)
45-3-3375	SDS1A	GDA	56	342987	6303420	Open Site	GDG : - Status Valid Primary Contact	None	Heritage Concepts		
						Heritage Archaeology			Permit(s)		

APPENDIX 3

Aboriginal Consultation Log

Date	Contacted	RPS HSO Staff	Location	Subject	Outcomes
24/06/09	Jodi Higginbottom (RPS Admin)	Philippa Sokol	Email	Forward advert & info to JH to place in Central Coast Express Advocate for Wyong and Gosford on 26/06/09	Communication error at the paper caused advert not to appear in paper until 01/07/09. Advert expired on 14/07/09
26/06/09	Registrar Of Aboriginal Owners	Philippa Sokol	Mail	Aboriginal Consultation for Registration of Interest	Awaiting Response for Registration of Interest
26/06/09	NSW Native Title Services	Philippa Sokol	Mail	Aboriginal Consultation for Registration of Interest	Awaiting Response for Registration of Interest
26/06/09	Guringai Tribal Link Aboriginal Corp.	Philippa Sokol	Mail	Aboriginal Consultation for Registration of Interest	Awaiting Response for Registration of Interest
26/06/09	Darkinjung Local Aboriginal Land Council	Philippa Sokol	Mail	Aboriginal Consultation for Registration of Interest	Awaiting Response for Registration of Interest
26/06/09	Gosford City Council	Philippa Sokol	Mail	Aboriginal Consultation for Registration of Interest	Awaiting Response for Registration of Interest
26/06/09	Department of Environment and Climate Change	Philippa Sokol	Mail	Aboriginal Consultation for Registration of Interest	Awaiting Response for Registration of Interest
30/06/09	Tracey Howie (Guringai)	Philippa Sokol	Telephone	TH called to register interest	PS returned email confirming RPS received the Registration of Interest 30/06/09
01/07/09	Suzanne Naden (DLALC)	Chris Neader (RPS Admin Manager)	Telephone	SN called to register interest. CN forwarded telephone email on to Darrell Rigby (Archaeology Manager)	PS returned email confirming RPS received the registration of interest 09/07/09
14/07/09	Suzanne Naden (DLALC)	Philippa Sokol	Email	Stage 2 Info: field survey details, map of study area and AHIMS sites, methodology	Awaiting response
14/07/09	Tracey Howie (Guringai) & Suzanne Naden (DLALC)	Philippa Sokol	Email	Stage 2 Info: field survey details, map of study area and AHIMS sites, methodology	Awaiting response
17/07/09	Tracey Howie (Guringai)	Gillian Goode	Telephone	Tracey informed GG that her sister will attend the survey on 28/07/09	Tracey to send through current insurance documents

17/07/09	Tracey Howie (Guringai)	Gillian Goode	Email	Email sent confirming the telephone conversation regarding site survey details	Confirming documents required for survey
21/07/09	Cara (DLALC)	Gillian Goode	Telephone	GG called to see if any site officers would be available to attend the site survey	Cara requested GG to call Suzanne Naden (CEO) to find out who will be attending.
21/07/09	Suzanne Naden (CEO DLALC)	Gillian Goode	Email	Chasing up DLALC insurances for survey; availability of Sites Officer and providing survey date, time and meeting place details again	Awaiting response regarding Sites Officer and insurances
21/07/09	Tracey Howie (Guringai)	Gillian Goode	Email	Chasing up Guringai insurances for survey, availability of Sites Officer and providing survey date, time and meeting place details again	Awaiting response regarding insurances
22/07/09	David Pross (Guringai sites officer)	Gillian Goode	Telephone	Confirming meeting time and place for site survey and requested insurances again	Awaiting Guringai insurances
14/8/09	Guringai	Gillian Goode	Email	Report on Survey	To be inserted into Final Report
14/09/09	DLALC	Gillian Goode	Email	Invoice for Client	Forwarded to Client
14/09/09	DLALC	Gillian Goode	Email	Report on Survey	To be inserted into Final Report

Our Ref: 25947:PS

26 June 2009

REGISTRAR OF ABORIGINAL OWNERS
NSW DEPARTMENT OF ABORIGINAL AFFAIRS
LEVEL 13, TOWER B, 280 ELIZABETH STREET
SURREY HILLS NSW 2010

ATTENTION: TO WHOM IT MAY CONCERN

Dear Sir/ Madam,

**RE: REGISTRATION OF ABORIGINAL INTEREST GROUPS FOR
ARCHAEOLOGICAL INVESTIGATION**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) will be conducting archaeological works in the Somersby area, which is located in the Gosford City Council LGA.

RPS HSO is writing to you to ask if you are aware of any Aboriginal interest groups who may wish to register their interest in this project. We have also been in contact with Darkinjung LALC, DECC, the local council and NNTT as per the ICCG requirements.

If you have any queries in relation to this please do not hesitate to contact the writer or Darrell Rigby on (02) 4961 6500.

Yours faithfully

HARPER SOMERS O'SULLIVAN PTY LTD



**Philippa Sokol
Archaeologist**

Our Ref: 25947: PS

26 June 2009

DEPARTMENT OF ENVIRONMENT AND CLIMATE CHANGE
PO BOX J200
COFFS HARBOUR NSW 2450

Dear Sir/Madam,

**RE: REGISTRATION OF ABORIGINAL INTEREST GROUPS FOR
ARCHAEOLOGICAL INVESTIGATION**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) will be conducting archaeological works in the Somersby area, which is located in the Gosford City Council LGA.

RPS HSO is writing to you to ask if you are aware of any Aboriginal interest groups who may wish to register their interest in this project. We have also been in contact with Darkinjung LALC, the local council, the registrar and NNTT as per the ICCG requirements.

If you have any queries in relation to this please do not hesitate to contact the writer or Darrell Rigby on (02) 4961 6500.

Yours faithfully

RPS HARPER SOMERS O'SULLIVAN



**Philippa Sokol
Archaeologist**

Our Ref: 25947: PS

26 June 2009

THE DIRECTOR
NSW NATIVE TITLE SERVICES
PO BOX 2105
STRAWBERRY HILLS NSW 1232

ATTENTION: THE DIRECTOR

Dear Sir/ Madam,

**RE: REGISTRATION OF ABORIGINAL INTEREST GROUPS FOR
ARCHAEOLOGICAL INVESTIGATION**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) will be conducting archaeological works in the Somersby area, which is located in the Gosford City Council LGA.

RPS HSO is writing to you to ask if you are aware of any Aboriginal interest groups who may wish to register their interest in this project. We have also been in contact with Darkinjung LALC, the local council, the registrar and DECC as per the ICCG requirements.

If you have any queries in relation to this please do not hesitate to contact the writer or Darrell Rigby on (02) 4961 6500.

Yours faithfully

RPS HARPER SOMERS O'SULLIVAN



**Philippa Sokol
Archaeologist**

Our Ref: 25947: PS

26 June 2009

GOSFORD CITY COUNCIL
PO BOX 21
GOSFORD NSW 2250

ATTENTION: THE GENERAL MANAGER

Dear Sir/Madam,

**RE: REGISTRATION OF ABORIGINAL INTEREST GROUPS FOR
ARCHAEOLOGICAL INVESTIGATION**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) will be conducting archaeological works in the Somersby area, which is located in the Gosford City Council LGA.

RPS HSO is writing to you to ask if you are aware of any Aboriginal interest groups who may wish to register their interest in this project. We have also been in contact with Darkinjung LALC, DECC, the registrar and NNTT as per the ICCG requirements.

If you have any queries in relation to this please do not hesitate to contact the writer or Darrell Rigby on (02) 4961 6500.

Yours faithfully

RPS HARPER SOMERS O'SULLIVAN



**Philippa Sokol
Archaeologist**

Our Ref: 25947: PS

26 June 2009

DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL
PO BOX 401
WYONG NSW 2259

ATTENTION: ROGER SENTENCE

Dear Roger,

**RE: REGISTRATION OF ABORIGINAL INTEREST GROUPS FOR
ARCHAEOLOGICAL INVESTIGATION**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) will be conducting archaeological works in the Wyee area, which is located in the Lake Macquarie City Council LGA.

RPS HSO is seeking Aboriginal interest groups to register their interest in this project. We are aware of your interest in the area, and have already registered Darkinjung LALC as an interest group.

If you have any queries in relation to this please do not hesitate to contact the writer or Darrell Rigby on (02) 4961 6500.

Yours faithfully

RPS HARPER SOMERS O'SULLIVAN



**Philippa Sokol
Archaeologist**

Our Ref: 25599: PS

26 June 2009

GURINGAI TRIBAL LINK ABORIGINAL CORP.
PO BOX 4061
WYONGAH NSW 2259

ATTENTION: TRACEY-LEE HOWIE

Dear Tracey,

**RE: REGISTRATION OF ABORIGINAL INTEREST GROUPS FOR
ARCHAEOLOGICAL INVESTIGATION**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) will be conducting Aboriginal archaeological investigations in the Somersby area which is located in the Gosford City Council LGA.

RPS HSO is seeking Aboriginal interest groups to register their interest in this project. We are aware of your interest in the area. We have also been in contact with the local council, the registrar, NNTT, Darkinjung LALC and DECC as per the ICCG requirements.

If you have any queries in relation to this please do not hesitate to contact the writer or Darrell Rigby on (02) 4961 6500.

Yours faithfully

RPS HARPER SOMERS O'SULLIVAN PTY LTD



**Philippa Sokol
Archaeologist**

PUBLIC EXHIBITION OF AMENDED POLICIES

Notice is hereby given that the following amended policies are currently on public exhibition at Gosford City Council Customer Service Centres at Gosford, Erina, Woy Woy, Kincumber and other Libraries.

The policy may be viewed between 8.38 am and 5.00 pm Monday to Friday (public holidays excepted).



Corporate Services

- A1.32 Processing of Correspondence received by Councillors
- A1.43 Protected Disclosures Act, 1994 - Reporting Procedure
- A1.50 Complaints Handling Policy - Maladministration
- A1.52 Legal Services
- A2.19 Record and Document Management
- A2.21 Internet Access and Use

- A2.25 Privacy and Personal Information
- A3.07 Invitation & Assessment of Tenders & Quotations for the Acquisition or Sale of Goods, Materials & Services
- A3.12 Investment Policy
- A3.19 Corporate Integrated Total Asset Management
- A5.01 Rental - Council Properties
- A5.09 Business Use of Public Footway

Community Services & Organisation Development

- C0.03 Freedom of Collection & Access
- C0.06 Opening Hours
- C0.08 Standards
- C0.11 Equity of Access - Libraries
- C1.04 Sponsorship - Gosford Regional Gallery
- C2.01 Media Statements
- C2.03 Use of Council's Coat of Arms/Corporate Logo
- C2.04 Council Advertising & Public Notices in Newspapers & Publications
- C2.05 Council Sponsorship of Community Activities
- C2.06 Corporate Sponsorship of Community Activities
- C5.01 Communicable Diseases in Child Care Centres
- C5.02 Parent Committees - Child Care Centres
- C5.04 Community Use of Buildings - (Including Day Care, Educational, Recreational, Social, Fitness and Relaxation Programs)
- C5.08 Hiring of Senior Centres
- C5.09 Senior Transport
- C5.13 Community Printing
- C5.25 Grievance Policy - Child Care Centres
- C5.26 Positive Aging
- C5.28 Seniors Centre Programs
- C5.29 Convenors
- O5.01 National Competition Policy
- O5.02 Fraud Control Policy
- O5.04 Conflicts of Interest

Environment & Planning

- D1.02 Oil Spillages - Navigable Waters
- D1.05 Watercourses - Obstruction
- D1.06 Complaints regarding Nuisances
- D1.08 Disposal of Waste from Pest Control Equipment
- D2.06 Charities - Exemption from Service Contributions
- D2.07 Environmental Policy
- D6.01 Council Subdivision - Fencing
- D6.03 Awning - Height
- D6.14 Structural Details from Practising Structural Engineers
- D6.16 Use of Reflective Glass in External Walls
- D6.18 Awnings Constructed over Council's Footpath in Terrigal Business District
- D6.35 Waiving DA Fees - Resubmitted Applications
- D6.36 Waiving DA Fees - Council Owned Community Buildings
- D6.37 Bush Fire Management
- D6.38 Height Poles or Profiles to be erected on Building Sites for Inspection
- D6.43 Sub-Stations - Energy Australia
- D6.54 Energy Efficient Design of New Council Buildings
- D8.07 Photocopying Applications

City Services

- H0.01 Asbestos Materials - Transportation and Disposal
- R0.04 Use of Public Reserves
- R0.09 Provision of Electric Barbeques
- R0.13 Natural Area Bushland
- R0.16 Lagoons
- R1.02 Allocations - Seasonal use
- R1.04 Closure of Sporting Fields
- R1.09 Public Amenities Buildings - Design & Erection
- R2.01 Children's Playspace - Analysis & Forward Planning
- R.3.03 Access Across Beaches - Commercial Fisherman
- R2.04 Mobile Stage/Dais
- R3.08 Prohibiting Water Skiing - Lobster Beach
- T0.02 Private Works - Quotations
- T0.05 Contribution for Kerb & Guttering, Paving
- T0.08 Reimbursement of Kerb, Gutter & Concrete Paving Costs - Industrial, Commercial, Business & Residential Premises
- T0.10 Road Widening - Advising Affected Property Owners
- T0.13 Civil Engineering Works
- T1.03 Mowing or Clearing of Footpaths
- T1.04 Obstruction or Encroachments on Roads
- T0.06 Contribution for Kerb & Guttering - Redundant Access Crossing
- T1.05 Pipelines within Road Reserves
- T1.08 Hire of Plant and Trucks
- T1.09 Use of Council Equipment During Clean Up & Relief Operations
- T1.10 Approvals for Vehicular and Access Crossings
- T1.12 Removal/Cost of Removal and/or Lopping of Trees
- T4.01 Traffic Committee
- T4.03 Erection of Street Banners
- T4.04 Temporary Road Closure - Short Term (Less than 24 hours)
- T5.01 Bicycle Policy - Objectives & Action Plan
- T5.02 Conduct of Street Stalls and Raffles on Public Property
- T5.03 William Street Plaza

Water and Sewerage

- W4.09 Annual Water Charges to Strata Units
- WS5.03 Water Supply and Sewerage Development Charges
- WS5.05 Urban Subdivision Service Conduit

Notice is hereby given that the following proposed New Policies are currently on public exhibition at the Gosford City Council Customer Service Centres at Gosford, Erina, Woy Woy, Kincumber and other Libraries. The policy may be viewed between 8.38 am and 5.00 pm Monday to Friday (public holidays excepted).

Community Services and Organisation Development

- C6.01 Youth Services - Aims and Objectives
- C6.02 Youth Services - Partnership Agreements
- C6.03 Youth Services - Donated Goods
- C6.04 Youth Services - Additional Opening Hours
- C6.05 Youth Services - Confidentiality
- C6.06 Youth Services - Communicable Diseases

Corporate Services

- A3.18 Use of Information and Telecommunications Technology

Water and Sewerage

- W4.11 Recycled Water Quality

A copy of these policies are also available for viewing and public comment on Council's web site at: www.gosford.nsw.gov.au

The exhibition period is for 28 days from Wednesday 1 July 2009 to Thursday 29 July 2009.

Residents may wish to make comments on the any of the above mentioned policies. Submissions should be addressed to the General Manager, quoting the policy name and number, marked to "Secretariat" and lodged with Council by 29 July, 2009. Submissions can be sent to PO. Box 21, Gosford NSW 2250 or via email at goscity@gosford.nsw.gov.au . Telephone enquiries can be directed to the Secretariat on (02) 4325 8379.

Submissions received may be read and copied and made available to members of the public. To maintain privacy, Council may obliterate personal details such as the author of the representation. However any person, under Freedom of Information and other legislation, may seek access to the submissions and Council cannot give an assurance that the document will remain confidential.

Peter Wilson

General Manager

NOTICE BOARD

Public notices

AGM. The Central Coast & Lower Hunter Hack Assoc AGM will be held on Wed 15/7, 7pm at Wyong Golf Club. All welcome

TIME for a new bed? Sell your old one with Cumberland Classifieds. Call the Classifieds team now on 13 19 79

Public notices

Lifeline

Central Coast NSW

Volunteer Telephone Counsellor Training

Information night TONIGHT 1/7/09

15 Cary Street Wyoming 7pm

Attendance at the information session is compulsory if participating in training.

Training Commences 29th July

Information packages will be available on the night

Available Water Determination

The Minister for Water has made Available Water Determinations for the water sources listed below commencing 1 July 2009. Full details of each respective Order are available on the Department of Water and Energy website: www.dwe.nsw.gov.au

Ourimbah Creek Water Source

Jilliby Jiliby Creek Water Source

Kulnura Mangrove Mountain Groundwater Sources

Further information can be obtained by telephoning the Department's Newcastle office on 4904 2572. GA2: 465071

Registration of Interest Aboriginal Archaeological Survey and Assessment

Aboriginal stakeholders who wish to register their interest in work located in the Gosford City Council LGA are requested to register their interest in writing before 14th July 2009.

Written applications should be forwarded to:
Philippa Sokol
RPS Harper Somers O'Sullivan
PO Box 428 Hamilton NSW 2303
Tel: 02 4961 6500
archaeology@rpshso.com.au

ALISON Buchan be advised Royal Wolf Trading will be disposing of goods, household items & junk stored in containers held at 38 Nells Rd, West Gosford within 14 days of this notice. Disposal will take place on 15/7/09 at Woy Woy Waste Disposal. You can contact Royal Wolf Trading at 38 Nells Rd, West Gosford or call (02) 4325 2540

WANTED Serious people to Lose Weight and earn extra money. Text 'slim' to 0417-683-685

WANTED! 30 people to try Weight loss sample. Lose 5-15kg in 90 days! 9432 6592

Philippa Sokol

From: Philippa Sokol
Sent: Tuesday, 30 June 2009 12:12 PM
To: 'guringai@kooee.com.au'
Subject: Registration of Interest in Archaeological work at Somersby
Importance: High

Dear Tracey,

RPS Harper Somers O'Sullivan acknowledges your registration of Interest in Archaeological works to be conducted in the Somersby area.

Your registration of interest was received and acknowledged by Philippa Sokol on 30th June 2009.

Regards,

Philippa Sokol
BArts (Arch) DipSc
Archaeologist

Ph: 02 4961 6500
Fax: 02 4961 6794

 cid:949590706@29092C

archaeology - project management - surveying - ecology - planning - quantity surveying

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Philippa Sokol

From: Philippa Sokol
Sent: Thursday, 9 July 2009 10:36 AM
To: 's.naden@dlalc.org.au'
Subject: Confirmed Registration of Interest
Importance: High

Dear Suzanne,

RPS Harper Somers O'Sullivan acknowledges your registration of Interest in Archaeological works to be conducted in the Somersby area.

Your registration of interest was received and acknowledged on 1st July 2009.

Regards

Philippa Sokol
BArts (Arch) DipSc
Archaeologist

Ph: 02 4961 6500
Fax: 02 4961 6794

 cid:949590706@290920

archaeology - project management - surveying - ecology - planning - quantity surveying

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Ms Philippa Sokol
Archaeologist
Harper Somers O'sullivan Pty Ltd
PO Box 428 Hamilton
NSW 2303

07 JUL 2009

Dear Ms Sokol

Re: Request - Search for Registered Aboriginal Owners

I refer to your letter dated 26 June 2009 regarding an archaeological works in the Somersby area.

I have searched the Register of Aboriginal Owners and the subject land does not appear to have Registered Aboriginal Owners pursuant to Division 3 of the *Aboriginal Land Rights Act 1983* (NSW).

I trust that you are in contact with the Darkinjung Local Aboriginal Land Council. The land council may be able to assist you with information and contact details for other interested groups.

Yours sincerely



Megan Mebberson
Senior Project Officer
Office of the Registrar, *Aboriginal Land Rights Act* (1983)

3 July 2009

Your reference : 25947:PS
Our reference : DOC09/31000, Fil07/8855
Contact : Ciaron Dunn (02) 6659 8221
Date : 21 July 2009

RECEIVED
24 JUL 2009
BY:

Philippa Sokol
Archaeologist
RPS Harper Somers O'Sullivan
PO Box 428
BROADMEADOW NSW 2303

Dear Ms Sokol

Re: Registration of Aboriginal interest groups for archaeological investigation – Somersby, NSW

I refer to your correspondence to the Department of Environment and Climate Change (DECC), dated 26 June 2009 regarding the above matter. I apologise for the delay in responding.

Please find attached a list of known Aboriginal parties that DECC feels is likely to have an interest in your development. I note this is not necessarily an exhaustive list of all interested Aboriginal parties and receipt of this list does not remove the requirement of a proponent/consultant to advertise the proposal in the local print media and contact other bodies and community groups seeking interested Aboriginal parties, in accordance with DECC's *Interim Community Consultation Requirements for Applicants (2004)*.

If you encounter any changes to the contact details of interested Aboriginal parties or become aware of additional parties, we encourage you to forward this information to the Department so we can update our records.

If you have any further question regarding this matter, please contact Ciaron Dunn, Aboriginal Heritage Planning Officer on (02) 6659 8221.

Yours sincerely



BRETT NUDD
A/Manager Planning and Aboriginal Heritage – North East
Environment Protection & Regulation Group

Encl: Attachment 1

Our Ref: 25947: PS

14 July 2009

DARKINJUNG LOCAL ABORIGINAL LAND COUNCIL
PO BOX 401
WYONG NSW 2259

ATTENTION: SUZANNE NADEN

Dear Suzanne,

**RE: ARCHAEOLOGICAL INVESTIGATION AT CENTRAL COAST SANDS
QUARRY, SOMERSBY**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) will be conducting an archaeological field survey for the Central Coast Sands Quarry, Somersby. The project area is located in the Gosford City Council LGA.

In response to your registration of interest, RPS HSO is writing to you to ask if you will be interested in taking part in the above mentioned archaeological project. The archaeological works for this project include a field survey that we anticipate will take no longer than one day to complete. We propose that the survey works will be conducted on 28th July 2009 in order to facilitate the timely delivery of the archaeological assessment report.

Please confirm your availability on this date in writing by return mail or via email to philippa@rpshso.com.au. In order for your participation in the Somersby project we require a valid copy of your Certificate of Currency and Workers Compensation (the documents we hold on file from the previous Somersby job have expired). If you have any queries in relation to this please do not hesitate to contact the writer or Gillian Goode on (02) 4961 6500.

Kind Regards

RPS HARPER SOMERS O'SULLIVAN



**Philippa Sokol
Archaeologist**

Our Ref: 25947: PS

14 July 2009

GURINGAI TRIBAL LINK ABORIGINAL CORP.
PO BOX 4061
WYONGAH NSW 2259

ATTENTION: TRACEY-LEE HOWIE

Dear Tracey,

**RE: ARCHAEOLOGICAL INVESTIGATION AT CENTRAL COAST SANDS
QUARRY, SOMERSBY**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) will be conducting an archaeological field survey for the Central Coast Sands Quarry, Somersby. The project area is located in the Gosford City Council LGA.

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Kind Regards

RPS HARPER SOMERS O'SULLIVAN



Philippa Sokol
Archaeologist

Philippa Sokol

From: Philippa Sokol
Sent: Tuesday, 14 July 2009 4:18 PM
To: 's.naden@dlalc.org.au'
Subject: 25947 Somersby Quarry Survey 28th July 2009
Importance: High
Attachments: STAGE 2 Proposed Survey Date Darkinjung 140709.pdf; 25947 Somersby Sands Quarry Archaeological Survey Methodology.pdf; Study Area and AHIMS Sites.pdf

Dear Suzanne,

Please find attached information regarding the Central Coast Sands Quarry, Somersby archaeological site survey.

Attached is a letter outlining field work details, the Survey Methodology and a map showing the Study Area with AHIMS Registered Sites.

Regards

Philippa Sokol
BArts (Arch) DipSc
Archaeologist

Ph: 02 4961 6500
Fax: 02 4961 6794

 cid:949590706@290920

archaeology - project management - surveying - ecology - planning - quantity surveying

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This archaeological assessment will be undertaken in 3 stages, which are outlined below:

Research

Prior to undertaking fieldwork, research will be undertaken to gather information relating to the environmental and archaeological context of the Study Area. This research will include analysis of the AHIMS data and a review of other literature and archaeological consultants' reports that have been prepared for the region surrounding the Study Area.

The information gathered from this research will be used to create a predictive model for the Study Area that will indicate the types of sites that are likely to be identified during the survey. The predictive model will then be compared with the results from the field survey.

Field Survey

The survey will be undertaken on foot. The survey will cover the landform units and ground surfaces in the Study Area. The aim of the survey will be to identify any Aboriginal Cultural Heritage sites, objects or Potential Archaeological Deposits (PADs) located in the survey area. Any identified sites and artefacts will be recorded using site recording forms.

The survey will also include an assessment of past land-uses, which will be used to assess the depth and potential integrity of natural soil profiles.

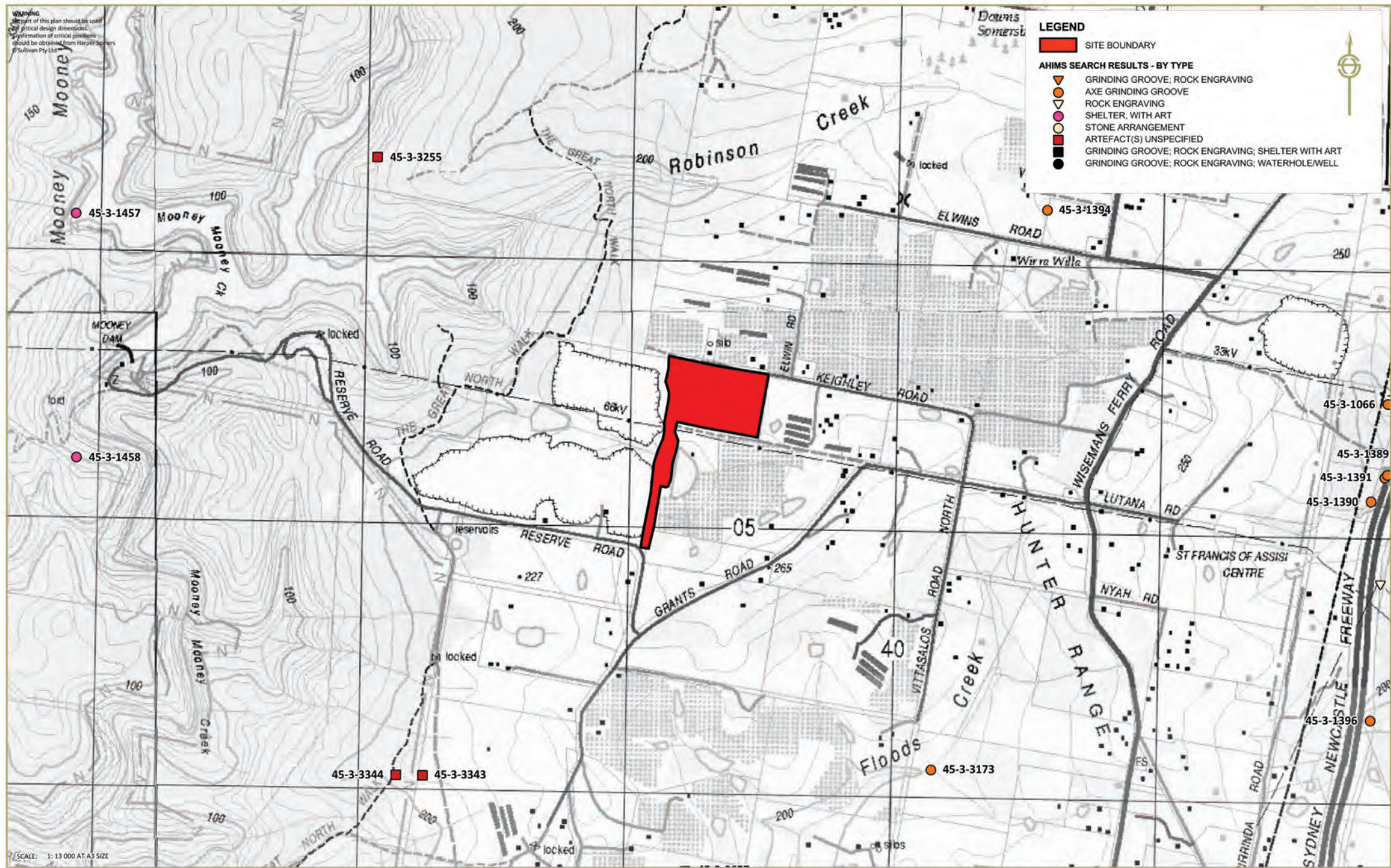
The survey, archaeological site recording and subsequent reporting will be undertaken in accordance with the *National Parks and Wildlife Service Aboriginal Cultural Heritage Standards and Guidelines Kit* (1997).

Reporting

Following the completion of the survey, site cards for any sites identified during the survey will be submitted to the DECC AHIMS registrar. The results of the survey will be presented in a report. A copy of the draft report will be sent to registered interest parties for their review and comment in accordance with the DECC *Interim Community Consultation Requirements for Applicants* (2004).

After written comment regarding the report has been received from the registered interested parties, their comments and views shall be incorporated into the report and the report finalised.

A site map has been provided which outlines the Study Area and AHIMS Registered sites for the archaeological survey.



TITLE: FIGURE 4-1
AHIMS SEARCH RESULTS

LOCATION: Reserve Road, Somersby

DATUM: LONGITUDE / LATITUDE (WGS 84)

DATE: 14/7/2009
PURPOSE: ABORIGINAL CULTURAL HERITAGE ASSESSMENT

LAYOUT REF: J:\JOBS\25K\25947 - Somersby\Drafting\ All Workspaces\25947 Figure 4-1 AHIMS A-A3.WOR
VERSION (PLAN BY): A-A3 L STEEL/P.SOKOL

Copyright
This document and the information shown shall remain the property of RPS Harper Somers O'Sullivan Pty Ltd. The document may only be used for the purpose for which it was supplied and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited.

CLIENT: INSITE PLANNING
JOB REF: 25947

241 DENISON STREET BROADMEADOW PO BOX 428 HAMILTON NSW 2303
T: 02 4961 6500 F: 02 4961 6794 www.rpshso.com.au

creativepeople
making a difference

RPS HARPER SOMERS O'SULLIVAN

Philippa Sokol

From: Philippa Sokol
Sent: Tuesday, 14 July 2009 4:19 PM
To: 'guringai@kooee.com.au'
Subject: 25947 Somersby Quarry Survey 28th July 2009
Importance: High
Attachments: STAGE 2 Proposed Survey Date Gurnagai 140709.pdf; 25947 Somersby Sands Quarry Archaeological Survey Methodology.pdf; Study Area and AHIMS Sites.pdf

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Attached is a letter outlining field work details, the Survey Methodology and a map showing the Study Area with AHIMS Registered Sites.

Regards

Philippa Sokol
BArts (Arch) DipSc
Archaeologist

Ph: 02 4961 6500
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After written comment regarding the report has been received from the registered interested parties, their comments and views shall be incorporated into the report and the report finalised.

A site map has been provided which outlines the Study Area and AHIMS Registered sites for the archaeological survey.

APPENDIX 4

Glossary of Site Types

GLOSSARY OF SITE TYPES

The following is a brief description of most Aboriginal site types.

Artefact Scatters

Artefact scatters are defined by the presence of two or more stone artefacts in close association (i.e. within fifty metres of each other). An artefact scatter may consist solely of surface material exposed by erosion, or may contain sub-surface deposit of varying depth. Associated features may include hearths or stone-lined fireplaces, and heat treatment pits.

Artefact scatters may represent:

- Camp sites: involving short or long-term habitation, manufacture and maintenance of stone or wooden tools, raw material management, tool storage and food preparation and consumption;
- Hunting or gathering activities;
- Activities spatially separated from camp sites (e.g. tool manufacture or maintenance); or
- Transient movement through the landscape.

The detection of artefact scatters depends upon conditions of surface visibility, including vegetation cover, ground disturbance and recent sediment deposition. Unfavourable conditions obscure artefact scatters and prevent their detection during surface surveys.

Bora Grounds

Bora grounds are a ceremonial site associated with initiations. They usually comprise two circular depressions in the earth, and may be edged with stone. Bora grounds generally occur on soft sediments in river valleys, although they may also be located on high, rocky ground in association with stone arrangements.

Burials

Human remains were often placed in hollow trees, caves or sand deposits and may have been marked by carved or scarred trees. Burials have been identified eroding out of sand deposits or creek banks, or when disturbed by development. The probability of detecting burials during archaeological fieldwork is extremely low.

Culturally Modified Trees

Culturally modified trees include scarred and carved trees. Scarred trees are caused by the removal of bark for use in manufacturing canoes, containers, shields or shelters. Notches were also carved in trees to permit easier climbing. Scarred trees are only likely to be present on mature trees remaining from original vegetation. Carved trees, the easiest to identify, are caused by the removal of bark to create a working surface on which engravings are incised. Carved trees were used as markers for ceremonial and symbolic purposes, including burials. Although, carved trees were relatively common in NSW in the early 20th century, vegetation removal has rendered this site type extremely rare. Modified trees, where bark was removed for often domestic use are less easily identified. Criteria for identifying modified trees include: the age of the tree; type of tree (the bark of many trees is not suitable, also introduced species would be unlikely subjects); axe marks (with the need to determine the type of axe - stone or steel – though Aborigines after settlement did use steel); shape of the scar (natural or humanly scarred); height of the

scar above the ground (reasonable working height with consideration given to subsequent growth).

Fish Traps

Fish traps comprised arrangements of stone, branches and/or wickerwork placed in watercourses, estuaries and along coasts to trap or permit the easier capture of sea-life.

Grinding Grooves

Grinding grooves are elongated narrow depressions in soft rocks (particularly sedimentary), generally associated with watercourses, that are created by the shaping and sharpening of ground-edge implements. To produce a sharp edge the axe blank (or re-worked axe) was honed on a natural stone surface near a source of water. The water was required for lubricating the grinding process. Axe grinding grooves can be identified by features such as a narrow short groove, with greatest depth near the groove centre. The grooves also display a patina developed through friction between stone surfaces. Generally a series of grooves are found as a result of the repetitive process.

Isolated Finds

Isolated finds occur where only one artefact is visible in a survey area. These finds are not found in apparent association with other evidence for prehistoric activity or occupation. Isolated finds occur anywhere and may represent loss, deliberate discard or abandonment of an artefact, or may be the remains of a dispersed artefact scatter. Numerous isolated finds have been recorded within the survey area. An isolated find may flag the occurrence of other less visible artefacts in the vicinity or may indicate disturbance or relocation after the original discard.

Middens

Shell middens comprise deposits of shell remaining from consumption and are common in coastal regions and along watercourses. Middens vary in size, preservation and content, although they often contain artefacts made from stone, bone or shell, charcoal, and the remains of terrestrial or aquatic fauna that formed an additional component of Aboriginal diet. Middens can provide significant information on land-use patterns, diet, chronology of occupation and environmental conditions.

Mythological / Traditional Sites

Mythological and traditional sites of significance to Aboriginal people may occur in any location, although they are often associated with natural landscape features. They include sites associated with dreaming stories, massacre sites, traditional camp sites and contact sites. Consultation with the local Aboriginal community is essential for identifying these sites.

Rock Shelters with Art and / or Occupation Deposit

Rock shelters occur where geological formations suitable for habitation or use are present, such as rock overhangs, shelters or caves. Rock shelter sites generally contain artefacts, food remains and/or rock art and may include sites with areas of potential archaeological deposit, where evidence of rock-art or human occupation is expected but not visible. The geological composition of the survey area greatly increases the likelihood for rock shelters to occur.

Stone Arrangements

Stone arrangements include lines, circles, mounds, or other patterns of stone arranged by Aboriginal people. These may be associated with bora grounds, ceremonial sites, mythological or sacred sites. Stone arrangements are more likely to occur on hill tops and ridge crests that contain stone outcrops or surface stone, where impact from recent land use practices has been minimal.

Stone Quarries

A stone quarry is a place at which stone resource exploitation has occurred. Quarry sites are only located where the exposed stone material is suitable for use either for ceremonial purposes (e.g. ochre) or for artefact manufacture.

APPENDIX 5

NSW Heritage Branch Significance Criteria

Heritage Council



of New South Wales

Heritage Act 1977

CRITERIA FOR LISTING ON THE STATE HERITAGE REGISTER

The State Heritage Register is established under Part 3A of the Heritage Act (as amended in 1998) for listing of items of environmental heritage¹ which are of state heritage significance².

To be assessed for listing on the State Heritage Register an item will, in the opinion of the Heritage Council of NSW, meet one or more of the following criteria³:

- a) an item is important in the course, or pattern, of NSW's cultural or natural history;
- b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history;
- c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW;
- d) an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons;
- e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history;
- f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history;
- g) an item is important in demonstrating the principal characteristics of a class of NSW's
 - cultural or natural places; or
 - cultural or natural environments.

An item is not to be excluded from the Register on the ground that items with similar characteristics have already been listed on the Register.

¹ **environmental heritage** means those places, buildings, works, relics, moveable objects, and precincts, of state or local heritage significance (section 4, *Heritage Act, 1977*).

² **state heritage significance**, in relation to a place, building, work, relic, moveable object or precinct, means significance to the State in relation to the historical, scientific cultural, social, archaeological, architectural, natural or aesthetic value of the item (section 4A(1), *Heritage Act, 1977*).

³ Guidelines for the application of these criteria may be published by the NSW Heritage Office.

APPENDIX 6

Aboriginal Community Stakeholders Written Responses to Draft Report

ABORIGINAL HERITAGE ASSESSMENT
ATTACHMENT TO
ARCHAEOLOGICAL INVESTIGATION
CENTRAL COAST SANDS QUARRY
RESERVE ROAD SOMERSBY

28 July 2009

Client: RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO)
On behalf of, Central Coast Sands Pty Ltd

Assessment Location: Reserve and Keighley Roads Somersby

Prepared by: David Pross
Advanced Diploma of Applied Aboriginal Studies
Diploma of Community Development
Sites Officer
Guringai Tribal Link
Po Box 4061
Wyongah NSW 2259

What is Heritage and Culture?

Heritage

“That which comes or belongs to one by reason of birth”

Heritage is special gift given at birth, a gift from our past and must be protected by us and passed on to the future generations. It can consist of art, songs, stories, dance, objects, places, land and the environment, both tangible and intangible. Heritage is powerfully connected to culture and the dreaming therefore culture assists our awareness of the past and the assessment of what is worth keeping as our heritage.

Culture

“To live and practice our lore and laws that is gifted to us”

Culture is a permissible right of any human or group to practice their lore, laws, rituals, songs, dance and beliefs that have been passed down for generations; it is what makes one group of people different from another. It is a way of understanding and protecting our existence, the way we live and remember our dreaming, be it through expressions of song, music, dance, art, poetry or stories. It is how we are attached to the environment, land and sacred places, the use plants for medicine and certain foods, culture is our religion and how we understand and connect to the spiritual world, it is the system of knowledge and learning, that allows us to organize our families and communities to the social rules, lore and laws.

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1. Introduction

This report was prepared as an Aboriginal Heritage Assessment as part of the Archaeological Investigation undertaken by RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) on two parcels of land at Somersby for their client Central Coast Sands, parcel one Central Coast sands Quarry Reserve Road and parcel two at the Britten family property Keighley Road.

This report assesses the impacts if any, for any future proposed construction at this site, on unknown or known and identified places of significance to the Aboriginal community. In so doing it reviews the regions prehistory, ethnography and the sites recent history and provides a description of the features of the cultural landscape, and methodology used to identify these features.

The report also makes an assessment of the significance of the cultural landscape to the local Aboriginal and wider community and provides recommendations for ensuring that the cultural features if any on the identified portions of land are conserved during the upgrade processes in the future.

2. Project background and development proposal

The proponent Hanson Construction Materials Pty Ltd is proposing to expand the sand quarry known as Central Coast Sands (CCS) located at Reserve Road Somersby, to incorporate an adjoining parcel Lot 10 DP1090880 Kieghley Road Somersby located to the east of the existing sand quarry, and extract approximately 5 million tons of sand this expansion also covers Lot 33DP775246. CCS quarry has been in operation for approximately 30 years, and was once owned by Pioneer Concrete. Lot 10 is owned by the Britten family and present the land is being used as an avocado orchard and egg hatchery.

3. Assessment aim and objectives

The overall aim of this assessment was to establish whether there are any Aboriginal Heritage constraints to the proposed development. To achieve these aims the **six** objectives were established:

- 1.** Consult with the local Aboriginal Community and the local historians as to the specific social value of the land;
- 2.** To determine the presence of identified Aboriginal Heritage Artifacts or Potential Archaeological Deposit (PAD) pertaining to pre and post European settlement.
- 3.** Assess the Aboriginal Heritage significance of any Artifacts or PADs identified within the study area that may be affected by works associated with the proposed development;
- 4.** Assess the impact of the proposed development on Aboriginal Heritage and values (Cultural and Heritage)

5. Prepare recommendations to the proponent on the management of any Aboriginal Heritage values, Artifacts or PADs identified (if any pertaining) to pre and post European settlement

6. Prepare recommendations on the management of Aboriginal Heritage values or Artifact or PAD, in consultation with the local Aboriginal Community; including Guringia Tribal Link Aboriginal Corporation the Traditional Owners / Native Title Group the Darkinjung Local Aboriginal Land Council, and Department of Environment Climate Change.

4. Statutory requirements

“Sites of cultural heritage significance in N.S.W. are protected by laws that are designed to accord with Australia’s responsibilities as a signatory to the World Heritage Convention (1975).”

There are four main pieces of legislation in NSW that provide the legislative framework for the management of Aboriginal heritage:

National Parks and Wildlife Act (1974) that provides protection for all Aboriginal places and objects, the Environmental Protection Act (1979) which establishes the requirements for the assessment of Indigenous Heritage values in the environmental planning and development process.

Heritage Act 1977 which provides for the protection of sites listed on the State Heritage Register.

The Native title Act (1993) also provides a vehicle for assessing and defending native title rights that may exist on certain lands.

The Commonwealth’s Aboriginal and Torres Strait islanders Heritage Protection Act 1984 may also be used to protect places of national significance if State based laws and processes described above are unable to do so.

National Parks and Wildlife Act 1974

Under the National Parks and Wildlife Act (1974) an Aboriginal ‘object’ is any deposit or material evidence relating to (pre-contact) Aboriginal habitation and can include pre-contact features such as scarred trees, middens and artifact scatters, as well as physical evidence of post contact use of the area in question. An ‘Aboriginal place’ is a place that has been declared by the minister because he or she believes it has special significance to Aboriginal culture (and may, or may not contain aboriginal objects).

NP&W Act - Section 84

*This section provides protection for '**Aboriginal places**'. Aboriginal places have been defined by the Act as 'areas of cultural significance to the Aboriginal community'. An area will only be regarded as an Aboriginal Place if the Minister is satisfied that sufficient evidence exists to conclude the area was or is of significance to the Aboriginal community.*

NP&W Act - Section 86 and 87

Under section 86 it is an offence to disturb or excavate land for the purposes of discovering an Aboriginal object, or remove an object from land, without first obtaining permission from the Director General (s.87). This is particularly relevant to the development application (DA) process where archaeological excavation is required to assess an area's Aboriginal heritage potential, and for any activity that would contact Aboriginal rock art or engraving sites.

NP&W Act - Section 90

*This section provides protection for all '**Aboriginal objects**'. Aboriginal objects have been defined by the Act as 'any material evidence of the indigenous occupation of New South Wales'. This protection is provided regardless of the level of significance (unlike Section 84) or land tenure. Also under this section a developer may seek permission to impact or destroy an Aboriginal object by applying for a Heritage Impact Permit (formerly Consent to Destroy) from the Director General of the Department of Environment and Conservation.*

NP&W Act - Section.91AA)

*The Director General's **right to issue a stop-work order** for actions likely to significantly affect an Aboriginal object or place*

Aboriginal Heritage Impact Assessments commonly occur as part of the approvals process for a wide range of developments and activities. For the purposes of Section 91 of the EPA Act an Aboriginal Heritage Impact Assessment is required if the development will or is likely to impact on an Aboriginal object or place. Under Section 79C(b) of the EPA act, consent authorities must consider the impacts of a proposed development, including the impacts on Aboriginal heritage values. Under the draft guidelines for Aboriginal Heritage Impact Assessment issued by the National Parks and Wildlife Service

Environmental Planning and Assessment Act

EPA Act - Part III

Part III governs the preparation of the following three planning instruments:

State Environmental Planning Policies (SEPP's);

Regional Environmental Plans (REP's); and

Local Environmental Plans. (LEP's)

These planning instruments cover permissible uses and potential constraints on the land use. When assessing potential uses and constraints during the preparation of a planning instrument, guidelines produced by the Department of Planning New South Wales must be followed. These guidelines specify that Aboriginal sites and places of significance should be assessed as part of the process. Once developed, the planning instruments, such as LEP's, may specify the level of assessment required in relation to

environmental assessment or more specifically Aboriginal heritage investigations for development applications.

EPA Act - Part IV

This section of the legislation governs the decision making process by local government (consent) authorities during a development application. Section 90, under Part IV, lists a number of impacts which must be considered before development approval is granted. Section 90 Subsection (1) 9b states that consideration must be given for 'the impact of that development on the environment (whether or not the subject of an environmental impact statement)'. It is legally understood that s90 (1) 9b should be taken to include Aboriginal sites and heritage.

Part IV also covers the integrated development approvals (IDA) process whereby the approvals of State government agencies are linked to the development consent process. If an Aboriginal site will be impacted by a development, requiring a Heritage Impact Permit under s.90 of the NPW Act, then the Department of Environment and Conservation becomes an approval body.

EPA Act - Part V

This section of the legislation governs the decision making process by State government (determining) authorities related to activity approval. In the decision making process, under Section 111, it is the State government agencies' duty to consider environmental impacts; and then under Section 112, determine whether the level of impact is sufficient to require the preparation of an Environmental Impact Statement (EIS).

As mentioned in Part IV, 'environmental impacts' under the law should be taken to include Aboriginal sites and places. Furthermore, the Department of Planning New South Wales have developed a set of guidelines for interpretation of Section 112 which requires that Aboriginal heritage is assessed as part of the process.

5. Aboriginal community; involvement and consultation

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) contacted Guringai Tribal Link Aboriginal Corporation (GTLAC) and Darkinjung Aboriginal Land Council (DLALC) advising the groups of the intentions to extend the Quarry at Somersby, and invited both groups to attend the field survey at Somersby.

Mr. David Pross is accepted as an Aboriginal Person by the Central Coast Community and is a member DLALC and other Aboriginal organizations and is employed on as need bases with GTLAC in the Culture and Heritage Section as a Senior Sites Officer, Mr. Pross who has considerable experience in heritage management of the Central Coast territory, was aware of the sites history and the GTLAC people's continued interest in the cultural landscape.

Mrs. Sharon Hodgetts is accepted as an Aboriginal Person by the Central Coast Community and a member of DLALC and other Aboriginal organizations.

6. Identifying Heritage Values of the area

A quantity of features support the argument that assessed area had some strategic importance for the local Aboriginal people that resided and ranged the area what is now known as Somersby. The site location is close to numerous waterway food resources, two of these water ways Little Mooney Mooney Creek and Mooney Mooney Creek are within a nowadays both a part of Mooney Mooney Dam, Another Important resource area for the local Aboriginal communities was Somersby Falls and Floods Creek, Somersby Falls was and still is a very significant place to the Aboriginal people of this area in its perimeter are several hundred grinding grooves and rock engravings. The Somersby Plateau still has many species of trees and vegetation growing that was day to day food for the local Aboriginal communities that resided in the area.

7. Aboriginal Heritage Site Classification

Rock Engravings

The Aboriginal People of the Central Coast were also known as the Sandstone People this been given because of the many Engravings Sites that exist in the area. Rock engravings, carving or pecking where produced using a pointed edge of a stone and hitting it with a hammer stone very similar to a hammer and chisel method, creating a drawing very similar to a child's join the dots painting, once the outline was marked a smoother stone was used to join all the pecks together, with the finished product looking like a channel. Figures of animals, fish, birds and humans are the most common found, some sites have animal tracks and human feet and some areas also circles, on more scarred engraving sites figure of ancestral heroes are displayed. Engraving sites are commonly found on sandstone outcrops located on ridgelines and cliff tops, some have been located in creek beds and shelters.

Grinding Grooves

Grooves where made for sharpening axe's and other tools and weapons, axe grinding grooves are more commonly found in creek beds or water holes which provide the water for the sharpening process, several shelters have flat rocks with grinding grooves engraved on them.

Water & Cooking Holes and diversion channels

Some water holes where manufactured by Aboriginal people by placing a hot fire on the sandstone to brake and weaken it, once weakened they could dig the stone out leaving a hole in the platform surface, then smooth the sides of the hole. The local Aboriginal groups where one of these groups that carved channels on the sandstone platform leading to the holes, thus directing water to them, they also carved channels around the holes diverting the water away from the hole and these holes could be used for cooking. David Pross uncovered such channels and grinding grooves in a pristine state, with sharp edges whilst undertaking an Aboriginal Heritage Survey of the

Somersby Industrial Estate in conjunction with the Australian Museum, Sydney (2001)

Midden Sites

Middens contain waste material from meals, such as fish bones, shellfish shells along with animal bones, they are primarily found on or close to the seashore, estuaries, riverbanks and inland lakes. Burial Sites have also been located beside middens.

Open Camp Sites

Open camp sites are detected primarily by the discovery of waste material or scattered artifacts on the surface or just below the ground cover, these sites may constitute the remains of gathering or hunting activities, or living areas for a longer period. These sites are more commonly found on open flatter land, but can also be located close to or in shelters.

Modified Trees

Scarred trees: Are known to be located in all landscapes in New South Wales, Scarred trees result when the bark has been removed from the tree to manufacture tools and implements such as shields, coolamons and some times shelters.

Canoe tress: another form of modified tree.

Shelter Trees: They have been burned and dug out to make a hole to shelter in

Toe Hole Trees Are more commonly found in the western region of NSW, to my knowledge very few have been located on the Central Coast.

Carved trees Have geometric patterns carved into the wood to indicate the presence of ceremonial grounds, initiation sites and burial grounds

Isolated Find

An isolated find could consist of one to several artifacts usually 10 to 50 meters from another artifact, the artifacts might have been dropped on a walk to another area, or whilst hunting, or even a tool that was not right and thrown away..

Shelters

There are four groups of shelter sites:

1.Shelter with art:

Some shelters have art in the form of drawings of animal, fish, birds, tools, weapons, human or hero figures, done in ochre or charcoal or both. Some shelter have stencil art of hands, feet, weapons or tools, the stencils are done by placing the hand or tool

etc on the rock face surface, and then ochre mixed with water, and sometimes blood added and placed the mouth, then sprayed over or around the item.

2. Shelter with deposit:

Shelters with deposit on the floor surface, where more commonly used for domestic usage than for ceremony use, they are similar to middens as food material is often found, or maybe just small stone tool artifacts.

3. Shelter with art and deposit

4: Habitat Shelters

Used for sleeping, protection from the elements, cooking, storage, and even birthing caves.

Quarry Sites

Stone Quarry Sites show evidence of where human extraction or processing of siliceous, basalt, chert and quartz rock types has been conducted for tools or weapons.

Ochre Quarry Sites where used for the removal of the colored clays and sands for artwork or body paint for ceremony and battle.

8. NPWS Minark and AHIMS data

Gillian Goode has the AHIMS data in her report the main assessment report.

9. Aboriginal history of Central Coast

The beginning and peoples

The debate still continues of how long Aboriginal people have been here, our Dreaming Stories say we have been here forever, but the world of science has to give dates and times before it is believable. They say the oldest signs of life in the Sydney Basin is 40 to 50,000 years, there is some possible evidence for occupation of the Central Coast region around 40,000 years, the earliest undisputed radiocarbon date from the region comes from rock shelter sites, on Mangrove Creek, approximately 10 kilometers north west of the present study area, shelters where investigated with some being excavated prior to Mangrove Creek Dam being constructed, one of these shelters had a date of 11.050 years old.

There is debate also on what language group resided where in the greater Sydney area, some say the people of this area were the Guringai/Kuringai and some the Darkinjang / Darkinong, this debate will continue on and on as most of the information and documentation was written by European people, and sometime written with prejudice. The majority of the documentation or details, structure and language of different social group's greater Sydney region were not recorded until the late 19th century, and as we now know the wars and the disease had taken its toll

significantly on these societies and a huge amount of the knowledge was lost or not told in fear.

According to Tindale (1974) the study area was once inhabited by the *Darkinjang*, bordered closely by the *Guringai* tribe who inhabited the land between them and the coastline, it is more likely the area was inhabited by both groups, and these two language groups were part of a wider clan group as these two groups were on friendly terms, unlike the *Awabakal* groups that inhabited the region to the north.

Information gathered by R.H Matthews provides a valuable insight into the lives of the *Darkinjang* people, although this information was recorded within an already disjointed and decimated community. He stated that all members of the *Darkinjang* community were segregated into two moieties *Dilbi* and *Kuparthin*, and each moiety was further divided into two sections (Matthews 1897 in McDonald 1994:39). The *Guringai* have a similar moiety structure *Bya* and *Kumbo* and was further divided into four other sections of each moiety.

On the basis of these moieties and sections, totemic affiliation and marriage relations were determined. Totems consisted of animals or inanimate objects, such as animals, plants, heavenly bodies, the elements or seasons. It has been suggested that the *Darkinjang* would move to the coast, within *Guringai* territory during summer months, to exploit the abundant coastal resources, and the reverse was true for the *Guringai* who moved inland during winter months to participate in ritual kangaroo hunts, and possum pelts gathering.

Renowned Aboriginal people of the area

Bungaree or Bongaree

Bungaree was born along the Brisbane Water foreshore in 1775, and settled in Sydney in the 1790s, he was described as witty, intelligent and something of a diplomat and "smart enough to keep a foot in both black and white camps" after two prior expeditions with Mathew Flinders, the 1st to Tasmania and the 2nd the North Coast NSW, he was asked to join Flinders and Bass in their mapping the coastline Australia. He again sailed with Phillip Parker King to north - western Australia where he proved very helpful in making contact with new groups.

In 1815 Governor Macquarie appointed Bungaree "King", he was given a gold breastplate which bore the engraving "Bungaree - King of the Broken Bay Tribe" which he proudly wore every day after, also around this time Macquarie gave him land at Middle Head in what is known as the Bungaree Farm Experiment, it is said also that he was given land on the Central Coast, what is now known as Norah Head, after Bungaree Norah, there are many descendants of Bungaree that reside here on the Central Coast.

Before Governor Macquarie left the colony for England he convinced Bungaree to leave the ancestral land at Woy Woy, it then became Crown Land in 1821, three land grants were granted on this new Crown Land one to James Webb, ironically Webb

takes tribal land to use in a European fashion, and he then has a child out of wedlock (possible rape) to a local Aboriginal woman named Sophie "Booratora" Bungaree's and Matora's daughter, the child was given the name Charlotte Webb and was the 1st registered Aboriginal baby born at Gosford hospital.

Bungaree died in 1830 and was buried in an unmarked grave at Rose Bay with the first of his 5 wives Matora and his breastplate. Mossman Council has a bust of Bungaree at the entrance to the Council chambers I had the honor of giving of Presenting this Bust to the people of Mossman on the unveiling of the bust.

Musquito

'Hanging no good for black fellow'

On the morning of 25 February 1825 in the Hobart Town , Musquito a proud Brisbane Water/Broken Bay Aboriginal man faced the hangman, he was not alone another Aboriginal Black Jack was there to meet his fate also. The authorities had accused Musquito of aiding and abetting the murder of settler William Holyoak, offering no evidence except his presence in a crowd of 60 or 70, and he had lawyer to help him with the bewildering complexities of foreign law. Musquito's last words "*Hanging no good for black fellow'* when asked, "Why not as good for blackfellow as whitefellow?" he replied, "Oh, very good for whitefellow, he used to it." these hangings and then another two a year later of two Aboriginal men finally caused the Black War.

Musquito was approx five years younger than Bungaree (c.1780-1825), he was an Aboriginal warrior from Broken Bay/Brisbane Water. The authorities had blamed him for inciting black resistance to white colonisation, and banished him to Norfolk Island. From there he was sent to Tasmania in 1814 and assigned as ticket-of-leave stockman to a white settler. In 1817, Lieutenant Governor Sorrell pressed "black trackers" into the hunt for famous bushranger Michael Howe. In return for tracking Howe down, Musquito was promised freedom and a return home. The authorities broke the promise. Musquito responded by acts of rebellion which became more and more overt.

For a time he became a leader of detribalised Aboriginals in the settled areas; later he led Aboriginal fighters against settlers. He trained in Gorilla warfare, explaining that the settlers and soldiers rifles needed to be loaded and reloaded to shoot; therefore you throw many spears whilst they were reloading. He also trained them how to set traps by having a couple of men attacking then running away, the British would chase these men and find themselves faced by many more warriors.

They hanged Musquito, but that didn't calm the settlers' genocidal fury. In fact he remained a pretext. Four years later, Arthur wrote to justify the continuing extermination of black Tasmanians:

"I regret that the natives led on by a Sydney black, and by two Aborigines of this island, men partially civilised (a circumstance which augurs ill for any endeavour to

instruct these object beings) have committed many murders [which] have so inflamed the passions of the settlers ... that further forbearance would be totally indefensible."

What was really indefensible was capitalism's genocidal war on indigenous Australians. We should celebrate Mosquito's resistance to it, like the descendents of his that reside on the Central Coast do.

The Rock Engravings of the area.

The most frequently occurring site type in the region is the many and varied rock engravings that can be found on outcropping sandstone. It has been suggested that some of the rock engravings of the Hawkesbury Sandstone (of which this is a part) are thought to be a regional variation of the Panaramitee engraving tradition with considerable antiquity and found throughout much of Australia. The Panaramitee style is characterised by generally small esoteric motifs dominated by circles and animal tracks. Recent finds have been made of classic Panaramitee engravings elsewhere on the central Coast (D.Pross and Andrew Roberts, pers.comm. 2005). A more figurative style is thought to have replaced this style by 4,000BP (Morwood 2002).

Frederick McCarthy recorded over 400 engravings in the Sydney-Hawkesbury sandstone. He suggested that the ridge system to the west and northern side of Kariong allowed access to the Hunter region and was used as a trade and travel route from the Hunter, through Kulnara to the Gosford region (McCarthy 1957). McCarthy stated that the engravings of the Somersby and Kariong areas are thought to record clan and individual totems...and incidents in the lives of the ancestral beings and other spirits, hunting, fishing, ceremonial and social activities and figures connected with hunting and fishing magic. Predominant subjects included ancestral beings and mythological spirits; men and women; animals of all kinds and their tracks, weapons, utensils, baskets, implements and ornaments and plain (sic) circles' (McCarthy 1957 185).

Many sites have been described for the Somersby region by a number of observers. In 1979-80 Pat Vinnicombe carried out an Extensive Study of Aboriginal Sites in the Gosford Wyong region prior to the extension of urban development in the area. Earlier studies required for Environmental Impact Assessment to this date were uncoordinated

Vinnicombe predicted that engravings would be found widely along ridge tops in catchment areas (Vinnicombe 1980. 99). Most of the engravings sites recorded within the region are comprised of figurative silhouette figures whose subjects including macropods, fish, whales and humans. Research in the Sydney Basin by McDonald (1991) observed representations of emu tracks at 41% of engraving sites, fish at 34.9 %, macropods at 34%, men at 27%, other land mammals at (23%), and mudoos (ancestor tracks) at 15%.

The Bulgandry Aboriginal Engraving Site is typical of the engraving sites found in the region. This site is located less than five kilometers as the bird flies from the study area and is widely recognised as being highly significant to the understanding of the regions prehistory and to the local Aboriginal people. The Bulgandry engraving

site is registered on the National Estate and is has been managed with boardwalks and interpretation since 1978. This site contains the 'type' features of the cultural landscape in the region including both figurative and abstract engravings, grinding grooves associated with rock holes, mondos and pecked tracks.

Howes Aboriginal Area a very significant site is within one kilometer to assessment area, this Aboriginal Area was created in July 1976. Controversy is still around over the creation of the area, people think the area should not have been handed over to DECC/NPWS as the land was given to the people of New South Wales by Peter Howe as a Trust Reserve because of the very significant engravings and spiritual being, these engravings have links to several other sites in the Somersby region and also to places and sites further afield, the site is situated on an area of 6.9 hectares.

The Groups and life style

The tribes were based on family groups and was at least 18 family groups again broken into sub-sections, living along the coast and inland , these families main section were located at: Kincumber , Patonga - Pearl Beach , Brisbane Water - Woy Woy - Gosford , Somersby Falls , Erina - Terrigal - Wamberal - Avoca , Ourimbah - Narrara , Jiliby , Tacoma , Tuggerah , Munmora - Norah Head , Cooranbong - Morriset , Mangrove Mountain - Kulnura and Wollombi.

The groups around Gosford lived contentedly, along the foreshores, creeks and areas close by in the summer months, and in the cooler months sometimes resided in the many sandstone caves. Lived on a diet of local plants, berries and tubers, animals, reptiles, birds and the plentiful seafood located in the creeks and Brisbane Water, they made tools out of the stone to be found on the escarpment above, and also out of the trees, canoes were also made out of these trees, in torrential rains they had shelters in some trees, that had been burnt and the inside dug out.

They created a sequence of signs and pointers carved on trees and rock, and stone arrangements erected throughout the land, similar to road signs and neon lighting. These signs pointed to many things, like water holes-camp sites-community meeting places-burial grounds –water ways, and sometimes warning signs, letting people know they were approaching, sacred places, men's and women's places.

The Central Coast Aboriginals also carved water and cooking holes into the sandstone, along with water channels, R H Matthews commented and wrote several articles about this in the 1890s. David Pross the writer of this report uncovered a series of channels and grinding grooves that were in pristine condition whilst conducting an Aboriginal Heritage Assessment of the Somersby Industrial Estate along with the Australian Museum in 2002.

10. European History of Brisbane Water and the study area

Governor Phillip decided that more land s had to be explored to sustain the new colony, so in March 1788 he set sail for what is now the Central Coast, first landing at

Pearl Beach, when they landed the long boats many Aboriginal people appeared, he mixed among them, found them friendly, they offered water and food, which was taken, but did not trust them, so slept in the ships, so fear and no trust was established from day one of contact. The next day they set sail into what they named Broken Bay, and continued through to Gosford via Brisbane Water.

On Phillip's second trip, he camped along Brisbane Water, it would have to be around Point Clare because of the water depth, he met many local Aboriginal men and was impressed with them, one of these men was Bungaree, the local men were impressed with Phillip also because he had one of his front teeth missing, so if they had been through initiation they would have a front tooth missing, so hence they thought he was an initiated man. Also on this trip was a young marine named Robert Webb who was an adapt ship builder and seaman, he noted the Aboriginal canoes and marveled at their lightness and construction, he also noted that the hillsides were covered with trees like mahogany, cedar, beech and many other species suitable for shipbuilding. It is thought that he was a relative of James Webb the first settler of the Central Coast and also ship builder

In the pioneering period, the attractions of the Brisbane Water area were its proximity to Sydney and its wealth of trees and shell resources, both these resources were needed in Sydney for buildings, the shells for lime kilns turned into then mortar for the bricks, and the trees timber.

James Webb the first settler arrived as a free man on the convict transport 'Scarborough' in 1790, a soldier in the 102nd Regiment. He served until 1794. After his discharge, Webb was granted land in the district of Mulgrave Place on the Hawkesbury River. In October, 1823, Webb received permission to temporarily occupy 300 acres on the eastern side of the north-east (formerly the north-west) arm of Broken Bay, for the purposes of a cattle run. Late in 1824, Governor Sir Thomas Brisbane received a request for a grant of land in the same area. Webb's request was granted, and in September 1824 he received 100 acres on the western side of The Rip, what is now known as Orange Grove, Webb named the area 'Mulbong Farm'. As I said earlier in this report Webb took a local Aboriginal Girl as his partner, it is said it was Bungaree's sister. James Webb died at Brisbane Water in June 1848. His age was given as 90, but this is believed to have been a rough guess.

The earliest settler I could find of the Somersby area was Henry Pile and his wife Annie they took up lands around 1886 there is a creek and a road named after them in the area, following the Pile family was William Dodd and his family, hence the area of Dodd's Saddle obtaining its name, and the first land holders of the quarry area were the Howe's. Peter Howe would be the most likeliest to have been the land owner of the surveyed land, he donated land situated at the of Grants Road to the people of NSW, becoming the Peter Howe Trust Reserve, this reserve was one of the first Aboriginal Areas gazetted in NSW, having a very significant engraving site on it.

Somersby was still considered a wilderness even around 1910 as the promise of a railway was never met by the state government, so many who settled there earlier on sold out to adjoining land holders and moved on as transporting produce was such a major task. Wisemans Ferry Road was not constructed to early 1930 along with Pacific Highway prior to these new road's, travelers endured a long journey via

Wiseman's Ferry and Mangrove Mountain over rough and winding roads, including cutting across Peats Ridge Road into Briess Road, down a steep decent, then over a causeway and then a long climb back up on what is now Reservoir Road, then across to Debenham Road, and finally onto Old Gosford Road, traveling down a winding hill to Gosford.

Somersby was named by orchardist Charles Robinson, whose family originated in Somersby, Lincolnshire, England.

Brisbane Water was named after Sir Thomas Makdougall Brisbane, Governor of N.S.W. between 1821 and 1825.

Gosford is believed to have been named after Archibald Acheson. He was the 2nd Earl of Gosford (1776-1849), and N.S.W. Governor Gipps served with him in Canada.

11. Assessment methodology

The strategy used to identify sites if any located in the survey area was focused on: Identifying new features with respect to the study area in general, perusing topographic maps and air photographs was utilised to identify areas of interest if any. Talking with local people who know the area, including historians researching known data of the assessment area. Peruse the NPWS AHIMS and MINARK data bases checking for known sites.

12. Assessment fieldwork

The assessment was undertaken on Tuesday the 28th July 2009

In attendance:

David Pross Consultant Heritage Officer for Guringai Tribal Link Aboriginal Corporation (GTLAC)

Sharon Hodgets Heritage Officer Darkijung Local Aboriginal Land Council (DLALC)

Gillian Goode Archaeologist of RPS Harper Somers O'Sullivan

Assessment was conducted in six sections:

Survey Unit One:

A traverse on foot was conducted on the quarry land along the eastern boundary fence line, next to the proposed quarry extension, shown in orange (in Gillian's map attached) sandstone rock and open forest. Visibility was very limited in places making it impossible to locate any artifacts if any, and with several areas that appear to be earth placed and mounded up as a barrier.

Survey Unit Two:

This section is the other side of the boundary fence in the adjoining property that is shown in blue, mainly open forest, again covered in vegetation making impossible to locate any heritage if any. This area also mounded earth in several places.

Survey Unit Three:

Drove to the property on Keighley Road owned and operated by the Britten family walked along the path/road to end of the avocado orchard and began the assessment to the southern boundary, this area is shown in olive green and was mainly the road verge, again earth works have been conducted on the western side. The area had dense groundcover (virtually complete cover) of grasses reeds weeds including Crofton weed, leaf litter, grass trees, Gynea lilies and other trees making it impossible to locate any Aboriginal heritage items.

Survey Unit Four:

This unit is the pink area, mainly the creek and banks, Sharon and I walked the western side, and Gillian checked the eastern side, I then climbed down the bank and walked the creek to where it crosses under the boundary fence into the quarry. The vegetation was again dense along the creek banks making impossible to locate any heritage items, and no grinding grooves, engravings or artifacts were noticed in the creeks sandstone bed.

Survey Unit Five:

This is the blue green color on the plan, an avocado orchard; the orchard is in an L shape, the southern section the largest with approx 40 rows of trees, and the northern section having 8 rows. There are tracks about the same width as a road running around and through the orchard, and narrower tracks between each row, a detailed investigation was given to all these tracks, for any scatters or other heritage items, none located.

Survey Unit Six:

The purple area, chicken sheds and timber milling area the whole area has been disturbed with earthworks that have leveled the land formation, erection of five large chicken sheds, a large machinery shed and a smaller machinery shed. There is a house on the northern boundary, and beside and behind the house the area has been used for making and piling compost. Again no artifacts or any other item were located.

13. Fieldwork results

No artifacts, engravings, grinding grooves, scarred trees or other objects pertaining to prehistoric and contact period were uncovered whilst the assessment was undertaken.

14. Recommendations

Recommendation One

If any Aboriginal Artifact or any other object pertaining to prehistoric and contact period are uncovered whilst the road-works, earth removal during quarrying is undertaken, continuing from day one of operation life of the quarry, all work cease and a representative from both Guringia Tribal Link Aboriginal Corporation (GTLAC) and Darkinjung Local Aboriginal Land Council (DLALC) Heritage Office be contacted to arrange a meeting with, GTLAC, DLALC and DECC to decide what action must be taken. And the artifact/s be removed and kept in a safe keeping place.

Recommendation Two

As no artifacts or other object pertaining to prehistoric and contact period where uncovered whilst the assessment was undertaken.

The above recommendation (Recommendation one) is adhered to and a more formal agreement entered into that the Guringai Tribal Link Aboriginal Corporation Committee show no objection to the quarry extension as no cultural artifacts, engravings, scarred trees or any other object was located.

David Pross
Adv,Dipl, Aboriginal Studies
Adv,Dipl, Community Development

**Aboriginal Heritage Site Assessment
Report**

**Proposed extension of the Central Coast
Sands Quarry, Somersby**

July 2009

Prepared by: Sharon Hodgetts

**For Darkinjung Local Aboriginal Land
Council**

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Aboriginal Heritage Site Assessment Report

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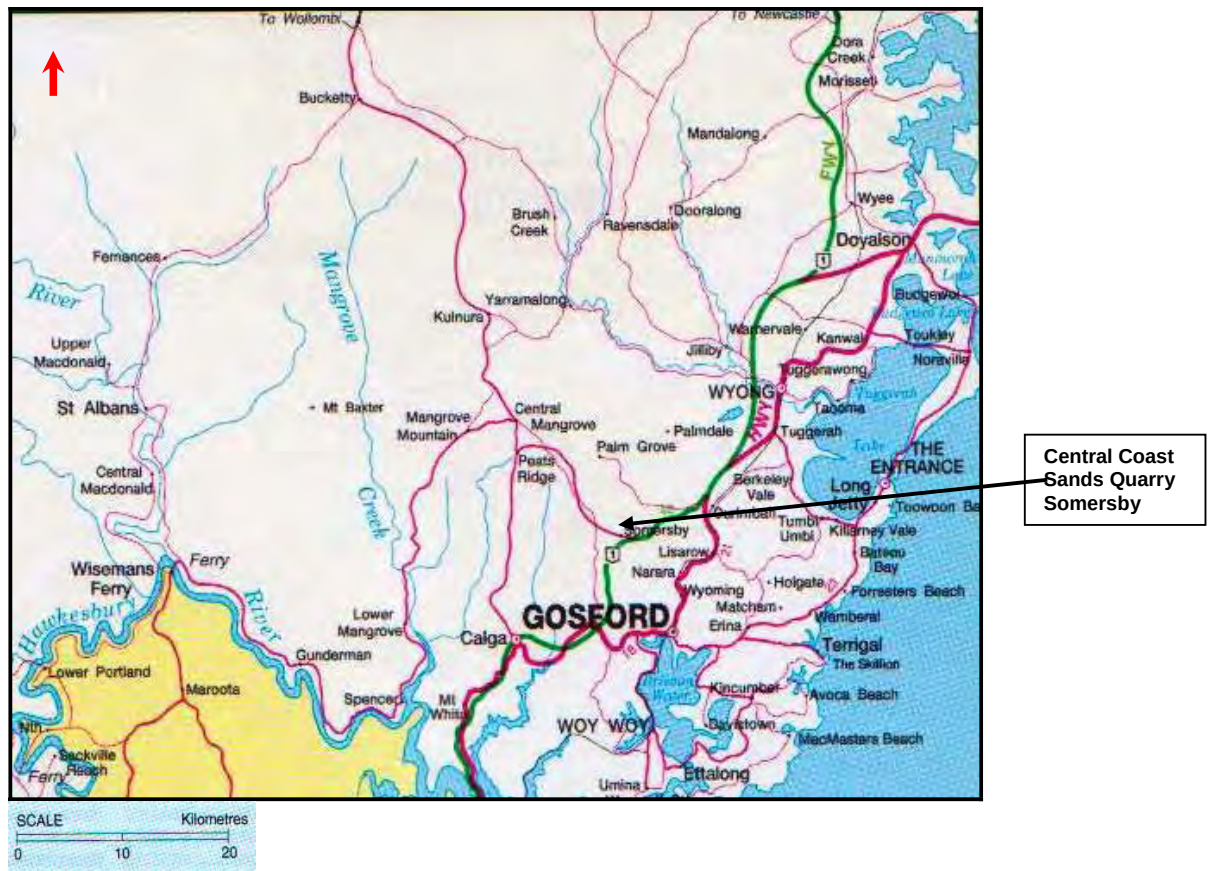


Figure 1: Map shows location of Somersby and the survey site .

Source: UBD 2006 Central Coast. From Morisset to Mooney Street Directory.

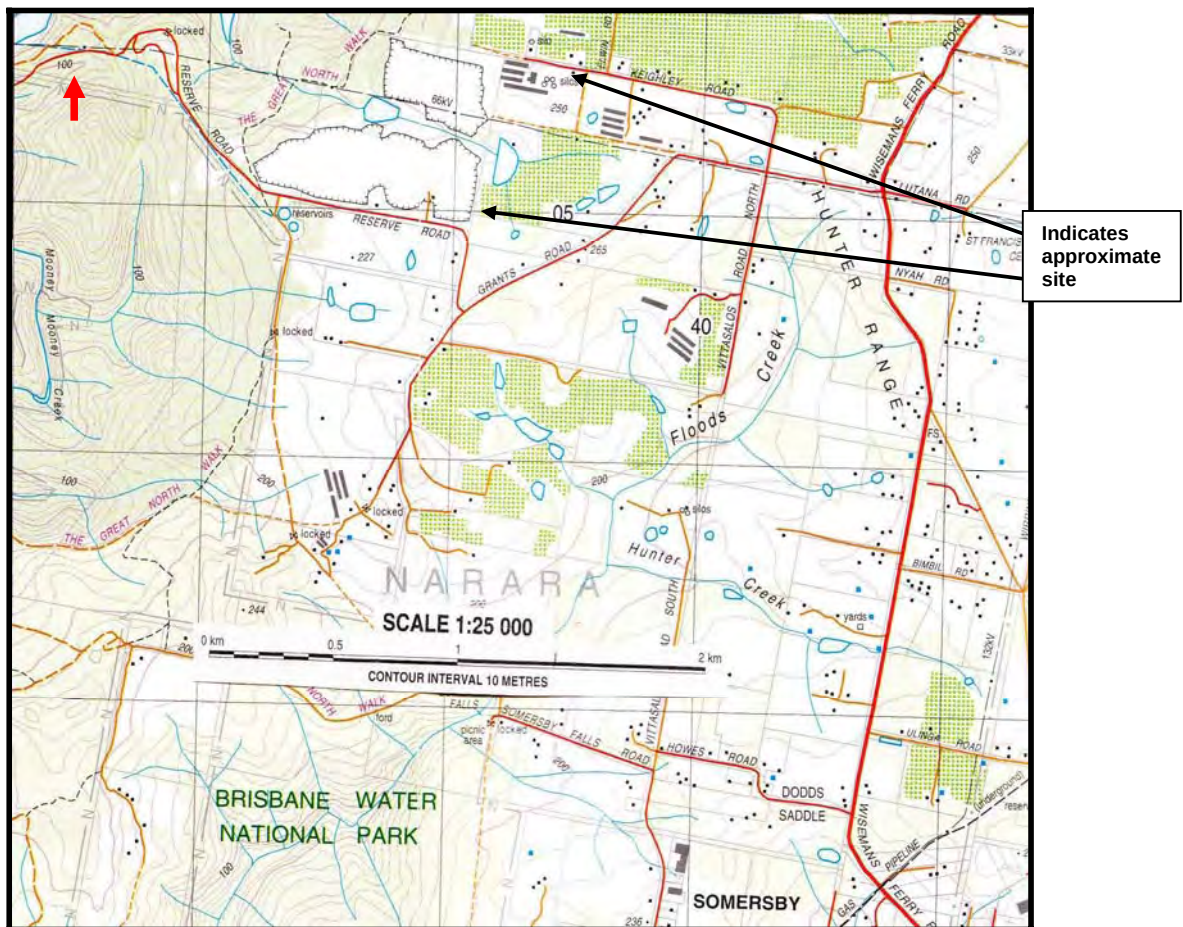


Figure 2: Map shows the approximate area of the proposed Central Coast Sand Quarry survey site.

Source: Section of NSW Department of Lands, Topographical Map 1:25 000 Third Edition, Gosford 9131-2S, 2001



Source: RPS Harper Somers O'Sullivan.

1. Introduction.

This Report has been prepared as part of an Aboriginal Heritage Assessment for Darkinjung Local Aboriginal Land Council and on behalf of RPS Harper Somers O'Sullivan. The assessment was undertaken over one day.

The aim of the report was to identify indigenous archaeology, places, or objects, of significance to the Aboriginal community, and for the site's developer to meet the statutory obligations and requirements under the National Parks and Wildlife Act (1974) and the Environmental Protection Act (1979).

2. Description of study area.

The study site falls within the boundaries of the Darkinjung Local Aboriginal Land Council and is located on the Somersby plateau which is abundant in recorded indigenous archaeological sites.

The site lies to the east of the Central Coast Sands Quarry and extends between Reserve Road (also known as Reservoir Road) and Keighley Road Somersby including the eastern edge of the quarry. The site consists of bush land, small water coarse and agricultural lands.

The landscape and vegetation in the study area is dominated by agricultural land mainly in the northern section of the site. comprising of Avocado (*Persea* spp), and Orange (*Citrus* spp) orchards, chicken sheds, farming infrastructure and some introduced and native vegetation. The native species are predominantly found along a narrow stretch of land to the west of the site, running the length of the survey are in a north-south direction which includes man made water channels and a creek. The creek may have had its flow impacted and altered by farming and sand quarry activities.

The main vegetation in the area includes trees such as Scribbly gum (*Eucalyptus haemastoma*), Blackbutt (*Eucalyptus pilularis*), Sydney Peppermint (*Eucalyptus piperita*), Christmas Bush (*Ceratopetalum gummiferum*), Scrub She-Oak (*Allocasuarina distyla*), Red Bloodwood (*Corymbia gummifera*), and Turpentine (*Syncarpia glomulifera*).

Shrubs include Flax Wattle (*Acacia linifolia*), Spike Wattle (*Acacia oxycedrus*), Sunshine Wattle (*Acacia terminalis*), Yellow Pea (*Dillwynia floribunda*), Bacon & Eggs (*Dillwynia retorta*), Gynea Lily (*Doryanthes excelsa*), Wattle (*Acacia* spp), Geebung (*Persoonia* spp), Tea-tree (*Leptospermum* spp), Prickly Tea-tree (*Leptospermum juniperinum*), Paperbark Tea-tree (*Leptospermum trinervium*), Mountain Devils (*Lambertia formosa*), Heath-leaf Banksia (*Banksia ericifolia*), Old Man Banksia (*Banksia serrata*), Hill Banksia (*Banksia spinulosa*), Pink Spider Flower (*Grevillea sericea*), Red Spider Flower (*Grevillea speciosa*), Rice Flower (*Pimelea linifolia*), *Hakea* spp, Purple Pea (*Hovea linearis*), Yellow Guinea Flower (*Hibbertia bracteata*).

Groundcover include, scramblers, herbs, grasses and sedges, including Bracken (*Pteridium esculentum*), Mat Rush (*Lomandra longifolia*), Silky Purple Flag (*Patersonia sericea*), Saw-Sedges (*Gahnia* spp) and grasses.

Introduced species include Pine Trees (*Pinus* spp), Lantana (*Lantana camera*), Wild Tobacco (*Solanum mauritianum*), Crofton weed (*Ageratina adenophora*), and Kikuyu (*Pennisetum clandestinum*) also various native species such as *Acacia longifolia* var. *sophorae* and Black Wattle (*Acacia mearnsii*) where observed. These are not endemic to the local area and usually occurs as a weed in disturbed sites.

The Somersby Plateau is also the primary location for the endangered Somersby Mintbush (*Prostanthera junonis*) (Department of Environment and Climate Change NSW, threatened species).

3. Description of Impact.

The impact will be a result of earth works including land and vegetation clearing, open cut excavation of the soil to extract sand and gravel. The main types of impact from this type of development are in the form of open cut excavation and erosion. Open cut excavation totally destroys any original material within the excavation zone while erosion can expose and or destroy artefacts on top of, or below the soil surface in the surrounding area. Impact can also include the destruction or compromise of vegetation and the surrounding landscape which can contain indigenous remains or cultural places. Other impacts associated with the quarry construction including impact from the excavation and construction machinery and associated infrastructure used on and around the site.

This type of development will impact on any potential indigenous archaeological sites located within the proposed quarry area. The Aboriginal material culture at risk from this type of development is burials, scar trees, open sites and isolated artefact. Other forms of indigenous sites at risk include cultural and spiritual places. Adverse impact could include exposure of artefacts or burials and other indigenous archaeology and destruction of indigenous places, the removal of vast amounts of soil, including water runoff and soil erosion and impact from machinery, construction infrastructure and treadage. These impacts occur during the construction phase of the project, while after development impacts from altered runoff and natural water movement are also a threat to surrounding areas. The greatest impact on Aboriginal heritage places in NSW occurs in the form of soil erosion (Byrne1997:1). Runoff and erosion can potentially cause siltation and destruction of indigenous archaeological sites. Indirect impacts may occur in the form of alterations to drainage and erosion patterns (Byrne 1997:2) which is likely in the area surrounding the quarry.

Trampling and treadage has had a significant impact on Aboriginal sites in NSW. The impact of treadage on open sites can result in displacement and damage to individual artefacts. Treadage can also initiate soil erosion (Byrne 1997:3).

Machinery and vehicles used in the development and post development phase has the potential to destroy or adversely alter sites if the area is not adequately protected.

4. Qualifications, Relevant Experience and Community Endorsement

I have completed Certificate III Horticulture, Parks and Garden through the TAFE Open Training and Education Network (OTEN), Certificate III Conservation and Land Management, Specialising in Indigenous Land Management through the Ryde College of TAFE Ryde NSW and have completed the Diploma in Indigenous Archaeology at the University of New England, Armidale NSW.

I have worked under the guidance of Darkinjung Local Aboriginal Land Council and have the endorsement of the council and the local Aboriginal Community.

5. Statutory Requirements and Legislation.

Aboriginal heritage and places are protected by law under Legislation. Two basic pieces of legislation concerned with Aboriginal Heritage Management are the *National Parks and Wildlife Act 1974* (NPW Act) and The *Environmental Planning and Assessment Act 1979* (EP&A Act)

Section 84 of the *National Parks and Wildlife Act (1974)* provides protection for 'Aboriginal Places'. The act defines Aboriginal places as 'areas of cultural significance to the Aboriginal Community'. Section 90 of this Act gives protection for all 'Aboriginal Relics'. The act defines Aboriginal relics as 'any material evidence of the indigenous occupation of New South Wales'. The Minister will gazette areas as Aboriginal places if satisfied that adequate evidence exist to show that the area was or is of special importance to the Aboriginal community.

The *National Parks and Wildlife Act 1974* (NPW Act) Legislation does not structure any formal mechanisms to make sure that areas with potential to contain Aboriginal sites or places of special significance are evaluated before impact on those areas. It is the *Environmental Planning and Assessment Act* (EP&A Act) which carries out this function.

The *Environmental Planning and Assessment Acts* principal function is to consider 'environmental impacts' in land use and decision making. Environmental impacts include impacts on Aboriginal Heritage. There are three main sections in the EP&A Act which are applicable to Aboriginal Heritage. Part III, administrate the preparation of planning instruments; Part IV relates to development evaluation process for local government (consent) authorities; and Part V which communicate to activity approvals by Government (determining) authorities.

Part III of the Act governs the preparation of the following three planning instruments: 1. State Environmental Planning Policies (SEPPs); 2. Regional Environmental Plans (REPs); 3. Local Environmental Plans (LEPs). These planning instruments dictate allowable uses and potential constraints on land use. When preparing planning instruments the Department of Urban Affairs and Planning have guidelines which should be followed. These guidelines list Aboriginal sites and places of significant to the Aboriginal community as values which should be assessed.

Part IV of the legislation governs the decision making process by local government authorities during a development application. Section 90 of the Act lists impacts which must be considered before development approval is granted. Under section 90 (1) 9b consideration must be given for 'the impact of that development on the environment (whether or not the subject of an environmental impact statement)'. Section 90 (1) 9b includes Aboriginal sites and heritage.

Part V of the legislation governs the decision making process by State Government authorities for activities conducted by that agency or under authority from the agency are controlled by Part V of the EP&A Act. It is mandatory for these agencies to consider environmental impacts of proposed activities then, determine whether the level of impact is adequate to necessitate the planning of an Environmental Impact Statement (EIS). Environmental impacts include Aboriginal sites and places. The Department of Planning New South Wales has created a set of guidelines for explaining Section 112 which requires that Aboriginal Heritage is assessed as part of the process. (Byrne 1997: 2-3).

6. Aboriginal Cultural Heritage, Values and Significance

Aboriginal people have inhabited Australia between 50,000 and 60,000 years, evidence for this can be found from material dated from Malakunanja and Nauwalabila rock shelter in the Northern Territory (Mulvaney & Kamminga 1999:141). Further evidence for human occupation is displayed through the skeletal remains of Mungo 3 discovered at Lake Mungo New South Wales. These remains have been dated to be between 28 000 and 32 000 years old (Morwood 2002:12). Stone artefacts in the Upper Mangrove Creek area of the Central Coast have been dated between 10,000 to 15,000 years old (Attenbrow 2002: 153). These provide some reliable evidence of indigenous occupation of the region. Indigenous occupation of the Central Coast shown through Aboriginal archaeological material and spiritual places provides the local indigenous community with a sense of connection to the land, the people and culture. These materials and places present tangible evidence of the past and should be conserved.

The first inhabitants of the Central Coast region were members of the Darkinjung (Darginung, Darginyung), Guringai (Kuringgai) and Awabakal language groups. Several researches and publications, show tribal or language group boundaries within similar areas, but exact boundaries are unlikely. For example Attenbrow states that, *It is likely that the actual boundary between Darug and Darkinjung on the west of the Hawkesbury River was not a defined line* (Attenbrow 2002: 34). There was probable a zone between language groups which was shared and utilised by neighbouring groups.

European exploration of the Central Coast area began soon after the arrival of the First Fleet in 1788. Settlement of the Hawkesbury River began about 1794 and in 1820 the area between the Hawkesbury and the Hunter Rivers become available for settlement (Brisbane Water National Park Plan of Management 1992:19).

Evidence for Aboriginal habitation, includes midden's, which consist of shell, bone, charcoal, tools and sometimes burials. A midden is likely to contain only a selection of shell fish species available in the local environment. It may contain a high proportion of individuals of a edible size, stone artefact, charcoal from camp fires, pumice, coral, faunal bone and human burials (Bynes1997:5), other evidence includes, fish traps and stone arrangements, deposits in sandstone shelters, including artefact, charcoal, shell and bone remains, rock engravings and pigment art. Other forms of indigenous evidence can consist of abraded channels, grooves and grinding stones, axe grinding grooves, scarred and carved trees, water holes, quarry sites, open sites or camp sites, stone artefact scatters, graves, mythological and ceremonial sites. In some cases landscape alteration can provide evidence of indigenous occupation.

The, Darkinjung, Guringai and Awabakal people were fishers, hunters and gatherer of plants and animals of the land, rivers, estuaries and sea. These places including the hills, valleys, creeks, wetlands, lakes and coastline provided food, medicines, and raw material for tools, weapons, shelter and decoration. These environments and landforms also provided the basis for spiritual and cultural life and are of value and significance to the local Aboriginal community. Certain environments can be considered to have a higher Aboriginal archaeological potential because of their ecology and landform and the associated flora, fauna and other resources needed for everyday life. The proposed development site lies in land of the Darkinjung people in an area with a high Aboriginal archaeological value. This is because of the surrounding, mountains, plateaus, lakes, creeks, coastline and associated woodland and wetland habitats. These environments and ecological zones provided the local Aboriginal population with many food and other natural resources.

Therefore considering the long Aboriginal occupation of Australia and the Central Coast it can be predicted that most areas, particularly those with minimal disturbance have the potential to produced indigenous archaeological material. A number of places and sites can hold spiritual and cultural importance to the local indigenous community through their physical link to ancestors and the past. This connection attaches the community to land, traditions and strengthens bonds within the Aboriginal community. These indigenous materials and places have value and significance to the local Aboriginal community and need to be protected.

7. The Site. Proposed extension of the Central Coast sand quarry

The site, approximately 0.1100 km² or 11 hectare in size is situated in the Somersby area on the Central Coast of NSW.

The site or survey area is located between Reserve Road, approximate Grid Reference Gosford, 9131-2S, 391049 GDA (Geographic coordinate S33 22.958 E151 16.188) and Keighley Road, Grid Reference Gosford, 9131-2S, 396051 GDA (Geographic coordinate S33 22.614 E151 16.362) Somersby.

The survey site is situated on the Somersby plateau, a area surrounded by various hills, ranges, valleys, creeks, wetlands and coast line. The site is less than 2km from Mooney Dam and Mooney-Mooney Creek, a tributary of the Hawkesbury River. As shown previously these types of environments and the resources they provided to local indigenous people, was very important. The Somersby plateau is abundant in indigenous archaeological sites. Several Aboriginal sites have been recorded near the survey area. Aboriginal site have been recorded within a 1.5 km radius of the site. Details of recorded Aboriginal sites on the Somersby plateau can be found on the Department of Environment and Conservation (DEC) Aboriginal Heritage Information Management System (AHIMS).

The topography of the assessment area ranges from flat to gently undulating and to moderately steep along the drainage lines and creek.

Vegetation in the survey area consists mainly of native species with some introduced weed and agricultural species which are found mainly in the paddocks, creek line and road sites.

The main plant species observed on the site include, Scribbly gum (*Eucalyptus haemastoma*), Sydney Peppermint (*Eucalyptus piperita*), Christmas Bush (*Ceratopetalum gummiferum*). Shrubs include Wattle (*Acacia* spp), Bacon & Eggs (*Dillwynia* spp), Gynea Lily (*Doryanthes excelsa*), Geebung (*Persoonia* spp), Tea-tree (*Leptospermum* spp), Old Man Banksia (*Banksia serrata*), Hill Banksia (*Banksia spinulosa*), Pink Spider Flower (*Grevillea sericea*), Red Spider Flower (*Grevillea speciosa*), Rice Flower (*Pimelea linifolia*), *Hakea* spp, Yellow Guinea Flower (*Hibbertia bracteata*). Bracken (*Pteridium esculentum*), Mat Rush (*Lomandra longifolia*), Silky Purple Flag (*Patersonia sericea*), Saw-Sedges (*Gahnia* spp) and grasses.

Introduced species include the orchards plantings comprising of Avocado (*Persea* spp), and Orange (*Citrus* spp) trees. Pine Trees (*Pinus* spp) where observed mainly in the southern end of the site, while, Lantana (*Lantana camera*), Wild Tobacco (*Solanum mauritianum*) Crofton weed (*Ageratina adenophora*), Kikuyu (*Pennisetum clandestinum*) and including some none endemic Wattle species *Acacia longifolia* var. *sophorae* (occur naturally nearer to the coast) and Black Wattle (*Acacia mearnsii*) where found mainly in the agricultural area and along the creek line and dirt tracks.

Many of the native plant species found on the site are considered a valuable food and material resource for the local indigenous inhabitants. Examples of those resource plants found on the site are, Mat Rush (*Lomandra longifolia*) used for string and food (Stewart & Percival 1997:33-35) and Bracken (*Pteridium esculentum*) used for food and medicine (Stewart & Percival 1997:44). Many of the, Tea Trees (*Leptospermum* spp), Bottlebrush (*Callistemons* spp) and Wattle (*Acacia* spp), provide food, medicinal and other resources through the nectar from flowers, leaves and bark (Robinson 1991:55). Many of the Gum trees (*Eucalyptus*, *Corymbia* and *Angophora* spp) provide resource from various parts of the plant. The resources include string, tools, weapons, shelter, canoes, food, medicinal and spiritual uses.

The survey site is considered to have potential for indigenous sites or artefacts which may be concealed by the thick vegetation or be covered by leaf litter and silt. The areas of the site with a higher potential for indigenous archaeology include places where there has been minimal disturbance, areas with intact soil and vegetation and possibly near watercourses. Parts of the survey site with a lower potential for indigenous archaeology include disturbed areas such as in the orchards and near the chicken shed and farm infrastructure, along the property dirt tracks, and along the edge of the quarry. The creek area has also been disturbed, the original flow may have been altered in the past as is indicated by heaped soil, logs and weed growth and the construction of water channels which drain into the creek. These activities could have negatively impacted on, or destroyed any indigenous archaeology on the site, while there is still the possibility that the erosion of soil through the altered drainage patterns could reveal indigenous material and artefacts.

8. Assessment Methodology.

The main strategy used to assess the area was to consult the relevant topographical and survey maps. The aim was to physically walk over the site where access was not restricted by very dense vegetation or dangerous topography and concentrating on areas with higher indigenous archaeological potential. Each member of the team walked a few metres apart (distance depending on ground visibility) to cover the survey efficiently. Reference to topographical and survey maps was the main method used to assess areas of the site with the potential for Aboriginal archaeology and cultural heritage value, then to inspect these sites in more detail on foot.

9. Assessment Fieldwork.

The assessment of the site for indigenous archaeology and sites was conducted on the 28th July 2009. Involved in the survey of the site representing Darkinjung Local Aboriginal Land Council was my self, Sharon Hodgetts, representing Guringai Tribal Link Aboriginal Corporation was David Pross, and representing RPS Harper Somers O'Sullivan was Archaeologists Gillian Goode.

The aim was to physically walk over the sites in transect within survey units, concentrating on areas with higher indigenous archaeological potential. This was considered a preliminary survey of the site to identify areas with a higher indigenous archaeological potential then to investigate those areas in more detail.

The site was divided into 6 survey units and transects walked within these units. Below is a summary of 7 transects walked over one day. A more detailed description of each transect' s length between direction points, ground visibility and vegetation can be discussed by contacting my self, Sharon Hodgetts the author of this report.

Day One.

Transect 1 -Survey Unit 1

Weather conditions clam, fine and sunny.

Access is from the Central Coast Sand Quarry, Reserve Road. This transects starts in the south-east section of the site on the western side of a high fence on the edge of the quarry and heads in a northerly direction. The transect ends approximately half way along the length of the site. At this point the area becomes inaccessible.

The vegetation includes native, trees, shrubs and pine trees.

The visibility on this transect was good along the edge of the quarry and exposed sand stone, but more limited by vegetation and ground cover further in towards the fence line.

No visible indigenous archaeology was located within this transect.

Transect 2. -Survey Unit 2

Access from Reserve Road. This transect starts in the south-east section of the site on the eastern site of the quarry boundary fence and proceeds in a northerly direction. The transect passes through another fence line which runs in a east-west direction. The transect ends approximately at the same level along the site parallel with Transect 1. Observed was heaped dirt in the bush along this transect.

The vegetation includes native, trees, shrubs and pine trees

The ground visibility on this transect was limited by ground cover and vegetation.

No visible indigenous archaeology was located within this transect.

Transect 3- Survey Unit 3

Access from Keighley Road. This transect starts from approximately half way along the width of the northern section of the site near farm sheds. The transect proceeds south towards, then along the southern side of the largest chicken shed in a westerly direction. The transect intersects with a dirt track located between the orchard and a strip of vegetation. The transect turns to proceed in a southerly direction inspecting a strip of vegetation on the western side of the site. The transect ends near a clearing in the vegetation near the quarry boundary fence, overlooking the quarry. Heaped dirt was observed in the vegetative areas indicating past disturbance.

The vegetation includes garden plantings, weeds and native vegetation.

The ground visibility was good along the track and around the sheds, but limited in the strip of vegetation.

No visible indigenous archaeology was located within this transect.

Transect 4 -Survey Unit 4

Transect 4 begins at the end of Transect 3 and proceeds in a southerly direction along a dirt track. The track crosses a small creek. The creek and bush land are inspected to the point where access is restricted. The transect then proceeds along the dirt track. The track is located on top of a built up area between a dam to the tracks east and the creek on the west. The transect ends in a clearing near the southern end of the dam near an orchard. Observed was heaped dirt, felled logs and erosions along the creek bank.

The vegetation includes native trees, shrubs and weeds

The ground visibility is good along the track and in some parts of the creek, but very limited on the creek banks.

No visible indigenous archaeology was located within this transect.

Transect 5 -Survey Unit 5

Transect 5 begins where Transect 4 ends. Proceeding in a southerly direction between the orchard and a drain/water channel. The channel flows in a north-south direction. This transect ends at a fence line which runs in a east-west direction and is part of Transect 2. Observed was dumped rubbish, heaped dirt on the sides of the drain (fill from the drain construction) and in the vegetation areas.

The vegetation includes native vegetation and weeds

The ground visibility was good along the drain/channel, but limited in the vegetation areas.

No visible indigenous archaeology was located within this transect.

Transect 6-Survey Unit 3

This transect starts back in Survey Unit 3 in the north and north-eastern section of the site and covers the rows of trees in the orchard on the southern and eastern side of the chicken sheds. The transect ends in the north of the site near Survey Unit 6.

The vegetation includes Avocado trees and some scattered weeds.

The ground visibility was poor due to thick mulching, but good in some patches where the mulch was eroded.

No visible indigenous archaeology was located within this transect.

Transect 7- Survey Unit 6

This transect starts in Survey Unit 6 in the northern section of the site near the farm sheds. The transect proceeds in a westerly direction towards the farm boundary fence on the western side of chicken sheds. This transect was to inspect vegetation shown on the map, which has since been cleared.

The vegetation consist of scattered weeds.

The ground visibility was good around the chicken sheds, but poor on the other side of the boundary fence which was not part of the survey site.

No visible indigenous archaeology was located within this transect.

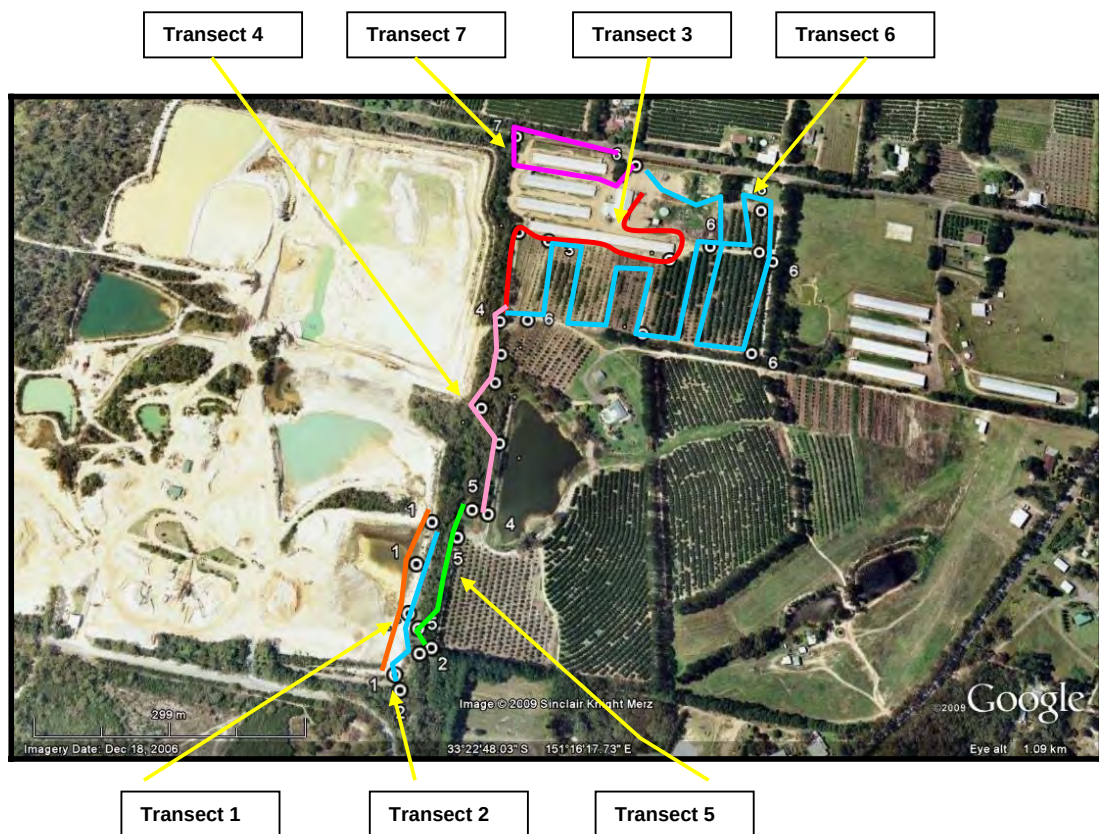


Figure 4: Map shows the approximate location of transects walked and numbered GPS points within the proposed extension of the Central Coast Sands Quarry site.

Source: Google Earth and Garmin Map Source.

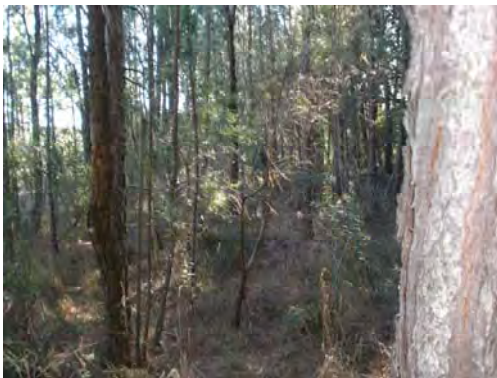
10. Photographs.

Figure 5: Photograph shows part of Transect 1, facing north on the south-western side of the site.



(Photograph S. Hodgetts)

Figure 6: Photograph shows part of Transect 2, facing north



(Photograph S. Hodgetts)

Figure 7: Photograph shows, Bacon & Eggs (*Dillwynia* spp) an example of the vegetation on the site, located in Transect 2.



(Photograph S. Hodgetts)

Figure 8: Photograph shows, Pink Spider Flower (*Grevillea sericea*) located in Transect 2.



(Photograph S. Hodgetts)

Figure 9: Photograph shows part of Transect 3. In the northern section of the site, facing east along the chicken shed.



(Photograph S. Hodgetts)

Figure 10: Photograph show part of Transect 3. Facing south, note orchard trees to left of photograph and dirt track and vegetation to the right.



(Photograph S. Hodgetts)

Figure 11: Photograph shows part of Transect 3 towards Transect 4, facing south. Note the two different non endemic wattle species in the right of the photograph. Black Wattle (*Acacia mearnsii*) in flower and *Acacia longifolia* var. *sophorae* below.



(Photograph S. Hodgetts)

Figure 12: Photograph shows part of Transect 4, facing south into the creek.



(Photograph S. Hodgetts)

Figure 13: Photograph shows part of Transect 4, facing south. The track located between the dam on the left of photograph and the creek embankment on the right.



(Photograph S. Hodgetts)

Figure 14: Photograph shows part of Transect 5, facing west. Burning rubbish and weed growth can be seen .



(Photograph S. Hodgetts)

Figure 15: Photograph shows part of Transect 5 facing south, An orchard is located on left of photograph and a drainage line and vegetation to the right.



(Photograph S. Hodgetts)

Figure 16: Photograph shows part of Transect 6, facing north across the orchard towards chicken sheds.



(Photograph S. Hodgetts)

Figure 17: Photograph shows part of Transect 6 looking west toward Transect 3 and the chicken sheds.



(Photograph S. Hodgetts)

Figure 18: Photograph shows part of Transect 7, facing south on the north-western side of the site. Sites boundary fence can be seen to the right of photograph.



(Photograph S. Hodgetts)

11. Fieldwork Results.

No Aboriginal archaeology or sites were found on the survey site.

12. Recommendations.

There is a possibility for objects or sites of indigenous archaeology within the survey area. All have Aboriginal Cultural Heritage value. Areas of higher indigenous archaeology potential are those areas with minimal disturbance including in some parts of the creek and vegetative areas. There is a low possibility for objects or sites of indigenous archaeology in the disturbed areas of the survey area. This includes areas along dirt tracks, in the orchards, around chicken sheds and farm infrastructure and many of the parts of the property which have been impacted by agriculture activities including along the edge of the quarry and some parts of the creek line.

I recommend that sub soil testing is carried out on those parts of the site with minimal disturbance. This should be done before construction of the quarry begins to determine whether there is a possibility for indigenous artefacts below the surface. Development employee's, contractors and personnel should receive basic training in the recognition of Aboriginal archaeological material and have an awareness of the importance of such material and places to both the indigenous and non indigenous community. The survey site should then be monitored for indigenous archaeology when vegetation clearing and earth works are carried out. When vegetation clearing or earth work activities are conducted workers should be observant and keep a look out for surface shell, bone, rocks or any other artefact material. If any artefact material is found the area should be avoided until a suitably qualified person, such as a Cultural Heritage Officer from Darkinjung Local Aboriginal Land Council or Archaeologist can investigate the material further.

Overview of recommendation

- Subsoil testing on the site before construction work is carried out in areas which have had minimal disturbance.
- Development employees, contractors and personnel should receive basic training in the recognition of Aboriginal archaeological material.
- If indigenous archaeological material is found, the area should be avoided by construction and development personnel and equipment.
- Monitoring and inspection of high potential areas for indigenous archaeology by a suitably qualified person during site preparation, vegetation clearing and earth works.

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Davis Pross representing Guringai Tribal Link Aboriginal Corporation and
Darkinjung Local Aboriginal Land Council, Wyong NSW

Appendix A

Darkinjung Standard Additional Recommendations.

Recommendation One

Darkinjung LALC must be notified of any proposed developments or earthworks prior to work being conducted for this site.

Recommendation Two

Gosford City Council must give notice to Darkinjung LALC 30 days prior to any commencement of construction work and to engage a Darkinjung LALC Sites Officer to monitor any earthworks or excavations. This is due to the possibility of uncovering Aboriginal objects/items of significance whilst earthmoving/excavation takes place.

Recommendation Three

If during the course of excavation, earthmoving and/or construction if suspected Aboriginal cultural heritage material is encountered, work should cease immediately in that area immediately and the NSW Department of Environment and Climate Change (DECC) and Darkinjung LALC immediately notified. Work should only recommence when an appropriate and approved management strategy has been agreed to by Darkinjung LALC and DECC.

Contact Details

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