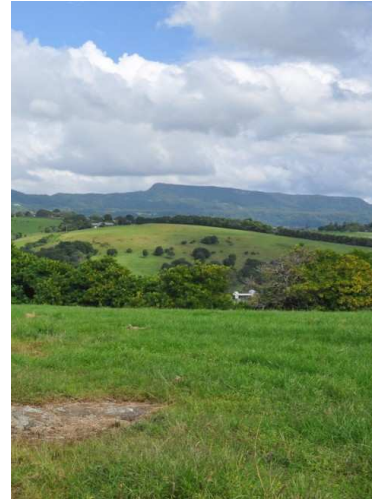


Godden Mackay Logan

Heritage Consultants



Jamberoo Road, Kiama

Archaeological Due Diligence Assessment Report

Report prepared for White Constructions Pty Ltd
May 2012

Godden Mackay Logan Pty Ltd
ABN 60 001 179 362

78 George Street Redfern
NSW Australia 2016

T +61 2 9319 4811

F +61 2 9319 4383

www.gml.com.au

Report Register

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Contents	Page
1.0 Introduction	5
1.1 Study Area Location	5
1.2 Description of the Proposed Development	5
1.3 Impacts Arising from the Proposed Development	5
1.4 Objectives	5
1.5 Limitations	6
1.6 Statutory Context	6
1.6.1 <i>Heritage Act 1977 (NSW)</i>	6
1.6.2 <i>Kiama Local Environmental Plan 2011</i>	6
1.6.3 <i>Illawarra Regional Environmental Plan No 1 (2009)</i>	7
1.6.4 <i>National Parks and Wildlife Act 1974 (NSW)</i>	7
1.7 Authorship	8
2.0 Aboriginal Archaeology	10
2.1 Due Diligence Process	10
2.2 AHIMS Search	10
2.3 Environment Context	11
2.3.1 <i>Geology and Soils</i>	11
2.3.2 <i>Landforms and Landscape Features</i>	11
2.3.3 <i>Hydrology</i>	11
2.3.4 <i>Fauna and Flora</i>	11
2.4 Synopsis of the AHIMS Search and Environmental Context	11
2.5 Aboriginal Ethno-history	12
2.6 Previous Archaeological Investigations	12
2.7 Aboriginal Community Consultation	12
3.0 Historical Outline and Archaeology	14
3.1 Historical Background	14
3.1.1 <i>History of Kiama</i>	14
3.1.2 <i>Dry Stone Walls in the Kiama</i>	14
3.2 Historical Land Use	15
3.2.1 <i>Parish Maps</i>	15
3.2.2 <i>Historical Aerial Photographs</i>	15
3.3 Statutory Heritage Listings	16
3.4 Local Heritage Studies and Literature	16
3.5 Synopsis of Historical Heritage Context	16
4.0 Study Area and Visual Inspection	20
4.1 Visual Inspection of the Study Area	20
4.2 Aboriginal Archaeology	20
4.3 Historical Archaeology	21
4.4 Synopsis of the Desktop Assessment and Visual Inspection	21
5.0 Conclusions and Recommendations	24
5.1 Conclusions	24

5.1.1 Aboriginal Archaeology.....	24
5.1.2 Historical Archaeology.....	24
5.2 Recommendations.....	24
5.2.1 Aboriginal Archaeology.....	24
5.2.2 Historical Archaeology.....	25
6.0 Endnotes.....	26
7.0 Appendices	
Appendix A	
Documents from Kiama Municipal Council	
Appendix B	
Letter from Illawarra Local Aboriginal Land Council	

1.0 Introduction

Godden Mackay Logan Pty Ltd (GML) has been engaged by White Constructions Pty Ltd to prepare an Archaeological Due Diligence Assessment for both Aboriginal and historic heritage, with regard to the residential rezoning of Lots 1, 2, 3 and 4, Section 67 DP 758563, and Lots 1 and 2 DP797732, Jamberoo Road, Kiama (the study area). This report will support a planning proposal for the study area on the advice of Kiama Council.

This report addresses historical and Aboriginal archaeology for the study area which includes a desktop historical archaeological assessment and an Aboriginal 'Due Diligence' heritage assessment.

The purpose of this report is to identify whether the study area possesses or has the potential to possess Aboriginal and/or historic cultural heritage values. This assessment has been undertaken in accordance with the Office of Environment and Heritage (OEH) guidelines *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*, (DECCW, 2010), and *Assessing Significance for Historical Archaeology and 'Relics'* (NSW Heritage Branch, 2009).

This report does not provide a significance assessment for any Aboriginal or historic sites, places and/or values. This project does not follow the OEH guidelines for Aboriginal community consultation. However, recommendations are provided as to whether further Aboriginal or historic heritage assessment and management will be necessary for the study area following the rezoning process.

1.1 Study Area Location

The study area comprises undeveloped agricultural land located in the western outskirts of the suburb of Kiama, NSW (Figure 1.1), approximately 500m west of the Princes Highway. The study area is bounded to the north by a residential development and lies approximately 200m south of Jamberoo Road. The study area is also bounded to the east and west by bushland, and to the southwest by agricultural land and a residential zone (Figure 1.2). The site includes six land allotments: Lots 1, 2, 3 and 4, Section 67 DP 758563, and Lots 1 and 2 DP797732.

1.2 Description of the Proposed Development

White Constructions is submitting a planning proposal for rezoning of the land to R2 residential under Kiama Council land use designations.

1.3 Impacts Arising from the Proposed Development

Residential development of the land has the potential to remove any Aboriginal and historic archaeological deposits, as there would be a need for top soil stripping in order to create roads, level platform for houses and other associated buildings (such as garages), landscaping and deep excavation for services and associated infrastructure.

1.4 Objectives

The objectives of this report are to:

- determine the Aboriginal and historical archaeological potential of the study area;

- identify whether any potential Aboriginal or historical archaeological remains in the study area could have heritage significance;
- identify potential archaeological constraints and opportunities associated with any future development of the site;
- consult with local Aboriginal community with respect to other potential Aboriginal heritage values; and
- outline archaeological management policies and further necessary heritage studies in order to guide any future development of the study area and mitigate any potential archaeological impacts.

1.5 Limitations

This Due Diligence report was based on the basic desktop research from available sources accessed online. It did not include Aboriginal community consultation following the OEHL guidelines *Aboriginal cultural heritage consultation requirements of proponents 2010* (DECCW 2010); however, a representative from the Illawarra Local Aboriginal Land Council (ILALC) was invited to and did participate in the site inspection.

1.6 Statutory Context

1.6.1 Heritage Act 1977 (NSW)

The *Heritage Act 1977* (NSW) affords automatic statutory protection to 'relics' which form part of archaeological deposits. The Act defines a 'relic' as any deposit, object or material evidence that:

(a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) is of State or local heritage significance

Sections 139–145 of the Heritage Act prevent the excavation of a relic, except in accordance with an excavation permit (or an exception from the need for a permit) issued by the Heritage Council of New South Wales.

Section 139 of the Heritage Act states that:

A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.

1.6.2 Kiama Local Environmental Plan 2011

The Kiama Local Environmental Plan (LEP) 2011 contains statutory provisions for protecting heritage items within the municipality of Kiama.

The dry stone walls, located along the western, southern and eastern boundary of the study area, are part of a general listing for 'Dry Stone Walls' in Kiama. The walls are identified as heritage item no. 164 in Schedule 5—Environmental Heritage: Part 1—Heritage Items. Clause 5.10 of the LEP contains the Provisions relating to Environmental Heritage.

1.6.3 Illawarra Regional Environmental Plan No 1 (2009)

The Illawarra Regional Plan No 1 (REP) 2009 contains statutory provisions for protecting heritage items within the cities of Shellharbour, Shoalhaven and Wollongong, and the municipality of Kiama.

The dry stone walls, located along the western, southern and eastern boundary of the study area, are part of a larger general listing for 'Dry Stone Walls, Jamberoo, Dunmore and Foxground areas, Kiama'. The walls are identified in Schedule 1—Items of the Environmental Heritage and Part 15 contains the Provisions relating to Environmental Heritage.

1.6.4 National Parks and Wildlife Act 1974 (NSW)

All Aboriginal cultural material receives statutory protection under the *National Parks and Wildlife Act 1974 (NSW)* (NPW Act). If Aboriginal cultural material is found, the NSW National Parks and Wildlife Service (NPWS) must be informed under Section 89A of the NPW Act.

New offences relating to the harm to, or desecration of, an Aboriginal object or declared Aboriginal Place were introduced with the *NPW Amendment (Aboriginal Objects and Places) Regulation 2010* on 1 October 2010. The definition of 'harm' now includes to destroy, deface, damage or move an Aboriginal object or declared Aboriginal Place. The OEH has stated:

The most significant change is the introduction of tiered offences and penalties. Offences committed with knowledge, in aggravating circumstances or in relation to an Aboriginal Place will attract higher penalties than previously. There is a new strict liability offence of harming Aboriginal objects and of harming or desecrating Aboriginal Places.¹

The strict liability offence of harming Aboriginal objects has a number of defences. The two defences relevant to this project include the statutory defence of due diligence through complying with an adopted industry code of practice (see due diligence below) or compliance with the conditions of an Aboriginal Heritage Impact Permit (AHIP).

Due Diligence Approach

The OEH has issued a code of practice guideline that defines a 'due diligence' approach to Aboriginal heritage: *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (13 September 2010)*. This guideline is designed to assist individuals and organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects, and/or Aboriginal Places, and to determine whether they should apply for consent in the form of an AHIP.

In a case in which an AHIP is required, then adherence to the following guidelines would be necessary:

- OEH *Guide to Determining and Issuing Aboriginal Heritage Impact Permits (2009)*;
- OEH *Operational Policy: Protecting Aboriginal Cultural Heritage (February 2009)*;
- OEH *Aboriginal cultural heritage consultation requirements for proponents 2010. Part 6 National Parks and Wildlife Act 1974 (April 2010)*; and
- OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (24 September 2010)*.

The *Due Diligence Code of Practice* sets out the reasonable and practicable steps which individuals and organisations need to take in order to:

- identify whether or not Aboriginal objects are, or are likely to be, present in an area;
- determine whether or not their activities are likely to harm Aboriginal objects (if present); and
- determine whether an AHIP application is required.

The OEH has defined due diligence thus:

Due diligence is a legal concept describing a standard of care. Exercising due diligence means turning your mind to the likely risks of your proposed course of action. It is not enough to perform activities carefully. Due diligence requires consideration of your obligations under, in this case, the NPW Act, and the consideration and adoption of a course of action that is directed towards preventing a breach of the Act.

In the context of protecting Aboriginal cultural heritage, due diligence involves taking reasonable and practicable measures to determine whether your actions will harm an Aboriginal object and if so avoiding that harm.²

The steps that are required to follow the due diligence process are:

- searching the Aboriginal Heritage Information Management System (AHIMS);
- checking for landscape features which may indicate the presence of Aboriginal objects;
- considering strategies to avoid harming Aboriginal objects; and
- desktop assessment and visual inspection to confirm the presence of Aboriginal objects.³

The Aboriginal heritage component of this report follows the guidelines set out in *Due Diligence Code of Practice*.

1.7 Authorship

This report has been prepared by Angela So, Consultant and Archaeologist, and Sam Cooling, Consultant and Archaeologist, of GML. The report has been reviewed by Dr Tim Owen, Associate.

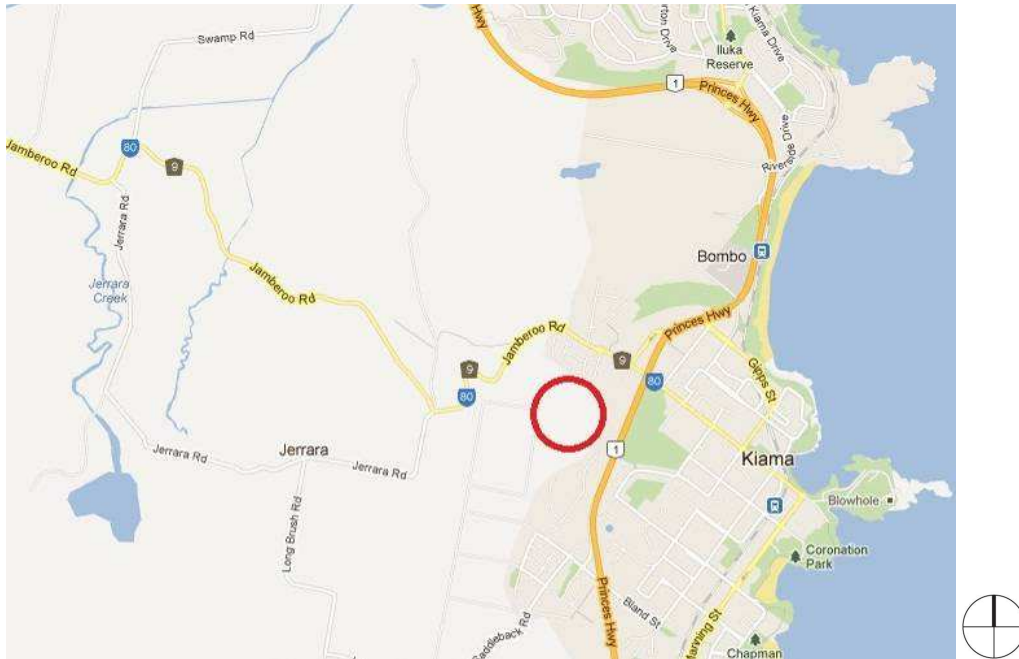


Figure 1.1 Site Locality Plan. The location of the study area is indicated by the red circle. (Source: GoogleMaps with GML amendments 2012).



Figure 1.2 2012 Aerial of Study Area. The study area boundary is outlined in red. (Source: Google Earth with GML amendments 2012).

2.0 Aboriginal Archaeology

2.1 Due Diligence Process

Following the OEH Due Diligence process Step 1 asks: Will the activity disturb the ground surface or any culturally modified trees? If an activity will disturb the ground surface there is a higher likelihood that Aboriginal objects if present, could be “harmed”. Disturbance of the ground surface is often significant when machinery is used to dig, grade, bulldoze, scrap, plough, or drill the ground surface for the purpose of, for example, building a structure or removing vegetation.

This assessment is for the purposes of rezoning the study area, which may lead to residential development. As such, the due diligence process will be conducted as if the proposed activity will disturb the ground surface. Therefore the following due diligence steps will be undertaken:

Step 2a—AHIMS database search (Section 2.0 of this report);

Step 2b—the identification of landscape features that indicate the presence of Aboriginal objects (Section 2.0);

Step 3—discussion with respect to the extent of the development footprint (Section 3.0);

Step 4—desktop assessment and visual inspection (Section 4.0); and

Step 5—further investigation and impact assessment (Section 5.0).

2.2 AHIMS Search

A search of the OEH Aboriginal Heritage Information Management Systems (AHIMS) database for a zone with a 1km buffer surrounding the study area (GDA, Zone 56, Eastings: 302066–302079, Northings: 6161539–6162034) was undertaken on 13 March 2012. The search identified one recorded Aboriginal site, which comprised of an isolated stone artefact.

A subsequent search of the AHIMS database of the study area was undertaken on 16 March 2012, in order to include up to 3km around the study area (GDA, Zone 56, Eastings 300300–305000, Northings 6159000–6164000). This second search identified seven Aboriginal sites, including the isolated stone artefact site as identified in the initial AHIMS search of 13 March 2012.

The results of this extended area search are summarised in table 2.1.

Table 2.1 Results of extended AHIMS Search

Site Feature	Frequency	Percentage (%)
Open Site (Artefacts)	1	14%
PAD (Potential Archaeological Deposit)	4	58%
Midden	1	14%
Burial	1	14%
Total	7	100%

No registered Aboriginal sites are located directly within the study area.

2.3 Environment Context

This section provides environmental contextual information for developing a predictive model of Aboriginal site locations associated with the study area. Interactions between people and their surroundings are of integral importance in both the initial formation and the subsequent preservation of the archaeological record. The nature and availability of resources, including water, flora and fauna and suitable raw materials for the manufacture of stone tools and other items, had (and continues to have) a significant influence over the way in which people utilise the landscape.

Alterations to the natural environment also impact upon the preservation and integrity of any cultural materials that may have been deposited, while current vegetation and erosional regimes affect the visibility and detectability of Aboriginal sites and objects. For these reasons, it is essential to consider the environmental context as a component of any heritage assessment.

2.3.1 Geology and Soils

The underlying geology of the study area is the Bombo Latite Member of the Gerringong Volcanics, a Permian geological formation (part of the Shoalhaven group), comprised predominantly of aphanitic to porphyritic latites⁴. The soils overlying this geological formation can range from shallow (<50cm) loams on crests, to depths of 50-100cm depths on upper slopes and benches.⁵

2.3.2 Landforms and Landscape Features

The landscape of the Bombo Latite Member of the Gerringong Volcanic formation is characterised by rolling low hills with benched slopes and sea cliffs with extensive rock platforms on Bombo Latite. Hill crests in the area are generally narrow, associated with moderately inclined slopes as well as isolated steep slopes (25-40%), and are surrounded and dissected by narrow incised drainage lines.⁶

2.3.3 Hydrology

The study area is located approximately 1.5km from the coast. It is bounded to the east and southeast by Willow Gully Creek, and to the west by Spring Creek (located approximately 250m east of the study area's western boundary), both with associated riparian corridors.

2.3.4 Fauna and Flora

Although the region has been subject to extensive clearing, isolated areas of remnant closed-forest and tall open-forest remain across the landscape. Common closed-forest species in the area include the cabbage tree palm (*Livistona australis*), moreton bay fig (*Ficus macrophylla*) and port Jackson fig (*Ficus rubiginosa*).

The study area itself has been cleared of all native vegetation; however, it is bounded to the east and west by areas of regrowth vegetation, located along the riparian corridors of the bounding creeks. Several fig trees are evident within the vegetation of Willow Gully to the east.

2.4 Synopsis of the AHIMS Search and Environmental Context

Based upon the AHIMS search, it can be stated that the most common archaeological sites in the area are open artefact sites and potential archaeological deposits (PADs).

The assessment of the environmental context within which the study area is located suggests that there may have been Aboriginal use and/or occupation of the land contained within the study area.

However, the predominant landforms (ie low rolling hills dissected by creeks and ephemeral drainage lines) which the study area contains are not a rare or uncommon landform in the area, and therefore it is not likely that Aboriginal use of the land was of greater intensity or frequency than any similar landforms in the vicinity of the study area.

2.5 Aboriginal Ethno-history

The study area falls within the traditional boundary of *Wodi Wodi*⁷ which stretches from Wollongong in the north, to Shoalhaven River in the south, and inland to Moss Vale. The language spoken in this region was a variant of the *Dharawal* language.⁸ Horton's map of Aboriginal Australia lists the language group of the Illawarra region as *Tharawal*, a spelling derivative of *Dharawal*.

The study area falls within the boundaries of the Illawarra Local Aboriginal Land Council (ILALC).

2.6 Previous Archaeological Investigations

No previous Aboriginal archaeological studies or academic works have been prepared that include the study area. However, one previous Aboriginal archaeological study has been conducted directly to the north of the study area. Details of this work are briefly provided below in order to provide additional context for this report.

Archaeological Heritage Surveys, Patricia Saunders 2004

An archaeological assessment (including both Aboriginal and European archaeology) was undertaken of 6.7ha of land extending west from Willow Gully Creek and south from Jamberoo Road, Kiama, to accompany a development application for residential development now known as *Cedar Grove Estate*. The assessment was undertaken in order to assess the site for potential archaeological deposits, to carry out a site investigation to confirm the presence or absence of archaeological deposits, and to advise of any restrictions which could affect the estate design.⁹

This study located no Aboriginal or European archaeological sites within the area designated for residential development and made the recommendation that no further investigation or assessment was required of the area.

The proposed residential area development investigated in this report has since been completed and is now the residential development that bounds the current study area immediately to the north.

Overall, it may be stated that the study area does not contain previously recorded Aboriginal sites. A synopsis of regional studies indicates that the study area has a low potential of yielding any intact Aboriginal archaeological deposits, such as Aboriginal objects associated with the low hill top landforms and/or buried soil horizons below the current surface level.

2.7 Aboriginal Community Consultation

In order to determine whether the study area held any sites and/or values known to the local Aboriginal community consultation was undertaken with the ILALC. Margaret Montga, Aboriginal Site Officer from the ILALC, participated in the site inspection that took place on 27 March 2012.

Margaret noted that the study area location provided an ideal view of the surrounding hills, coast, and escarpment to the south, and would likely been used by Aboriginal people at some point in the past.

Ms Montga stated that: Aboriginal people would have definitely travelled in the area along a similar route to the footprint now occupied by Jamberoo Road, from the coast to Jamberoo for food and trade, as well as along the creek lines from the coast to Gerringong (located to the south of Kiama), and would likely have camped along or just above the creek line.

3.0 Historical Outline and Archaeology

3.1 Historical Background

The following sections provide a brief history for Kiama and dry stone walls within the Kiama area. They are based on research into the general history of the Illawarra region and information readily available online, including on the NSW Heritage Branch website.

3.1.1 History of Kiama

The first European exploration of Kiama was undertaken by George Bass in December 1797, who had anchored offshore briefly during his voyage to the Bass Straits.¹⁰ An abundance of cedar around Kiama drew in early European settlers to the area. There was such high demand for this timber that by the 1820s, Kiama was supplying 90% of the Sydney cedar market. In 1819 surveyor James Meehan surveyed Kiama and John Oxley, surveyor-general, also explored the area.¹¹ Seven years later, Oxley was to reserve the land adjacent to the harbour for the development of the township, which was gazetted in 1839.

Kiama developed as a shipping and service centre for local industries from the 1840s onwards. Mooring chains were affixed to the rocks on either side of Black Beach to provide secure moorings.¹² A jetty was erected in 1849. Dairying was soon to become a staple industry of the Illawarra region and the dairy industry in Kiama was established in 1841, including shipping butter direct to England by the 1880s.

The development of the harbour was completed in 1876 and was one of the factors that contributed to the development of the basalt-quarrying industry in Kiama.¹³ The first quarry was established in 1855 and located less than 1km from the Kiama Harbour. The basalt was being laid between the tracks of Sydney's tramways, roadways and railways from 1879. In 1880 two quarries opened in North Kiama (Bombo). Around 400 tonnes of rock was being transported each day from the area.

A railway from Sydney to Bombo was established in 1887 and extended to Kiama in 1893. While Kiama was a popular tourist destination, the only way to travel there from Sydney had been by boat. The railway allowed for more people to visit and a faster journey.¹⁴

3.1.2 Dry Stone Walls in the Kiama

Dry stone walls have been constructed in Kiama since the 1830s.¹⁵ They were originally built by convicts within the region but evidence of these walls is now negligible. After the 1840s, the original land grants were subdivided into small portions for farming and the new settlers found that their fields were covered with polymeric stone, a result of the weathering of Permian volcanic lava that once flowed through Kiama.

The settlers originally collected the stones in large piles but then began to use the stones for constructing fencing walls. With the assistance of Thomas Newing, an English settler from Kent who had knowledge of dry stone wall constructions, walls were being built throughout Kiama for the purposes of defining lot and paddock boundary fences, roadway boundaries, animal holding yards, and retaining walls (although these are considered to be uncommon). Stone walls were built up until 1880 when wire for fencing became easily and cheaply available.

Dry stone walls are located along the western, southern and eastern boundaries of the study area.

3.2 Historical Land Use

This section relates specifically to the historical land use of the study area. Information was gathered from NSW Department of Lands and Property Management Authority (Department of Lands) through their website and in person. A search for historical maps (in addition to Parish Maps) was undertaken via the Picture Australia website <<http://www.pictureaustralia.org>>; however, no further maps could be found.

3.2.1 Parish Maps

A search of Parish Maps which shows the study area was undertaken on the Department of Lands Parish Map Preservation Project website <<http://parishmaps.lands.nsw.gov.au/pmap.html>>. The study area is included on the Kiama Parish Maps, dating from 1891 until 1932 (Figure 3.1). They show the study area to be comprised of the entirety of Section 67, four lots, and the western portion of Section 69, therefore two out of the four lots. All of the study area land was granted to William King (Figure 3.2).

The Parish Maps delineate a number of roads running along the boundaries of the study area (north–Bong Bong Street, east of Section 67 only–Dido Street, south–Barney Street, west–Cuba Street) and also through the study area, between Section 67 and 60 (Noorinan Street). These roads would appear to be ‘paper’ roads and never actually constructed.

For further information regarding the land grantee and occupants within the study area, a Lands Title Search would need to be undertaken at the Department of Lands and Information (NSW). This search was beyond the scope of this project.

3.2.2 Historical Aerial Photographs

Two historical aerial photographs of study area, dating 1949 and 1979, were obtained from the Department of Lands. A third aerial photograph of the site, dated 2005, was sourced from Google Earth.

The 1949 aerial (Figure 3.3) show the study area to be a green field. There is no evidence of any ploughing or cropping. There was also no evidence for any buildings. There was a notable line, possibly a fence, running east–west through the site, in the approximate location of the Section 69 northern boundary. There was also a faint line along the approximate location of the Section 67 northern boundary. The copse of trees located along the western and eastern boundaries of the study area was less dense than its current condition.

The 1979 aerial (Figure 3.4) shows that within the approximate location of Section 69, the land had been mostly ploughed, while Section 67 had been divided into two portions, running east–west, and has been cropped. There was still no evidence of any buildings within the study area. The copse of trees along the western boundary had become denser since 1949.

The 2005 aerial (Figure 3.5) shows that there was some preliminary grading works for road constructions, undertaken within the north-west corner of the site. These works appeared to have been related to the residential development north of the site. There was a notable line running east–west through the middle of Section 67.

3.3 Statutory Heritage Listings

A general listing of Dry Stone Walls in Kiama was included in the State Heritage Inventory (SHI) by virtue of its listing in Schedule 1 of the Illawarra Regional Environmental Plan (2009). The Dry Stone Walls are also included in Schedule 5 Part 1 of the Kiama Local Environmental Plan 2011.

3.4 Local Heritage Studies and Literature

The report *Conserving the Dry Stone Walls of Kiama* by Mayne-Wilson and Associates (2000) provides some detail on the heritage research that was carried out with regard to the Dry Stone Walls within Kiama:

- A heritage study of the Dry Stone Walls by Mayne-Wilson and Associates (West Kiama: A Heritage Assessment of its Dry Stone Walls) was carried out in 1987.
- As a result of the study, the NSW Heritage Branch (the NSW Heritage Office) and Kiama Council provided funding to locate, record and assess the heritage values of every wall within Kiama.
- With the help of land owners, over 379 walls were recorded, including photography and GPS.
- The walls within the study area have been recorded as 153 (west), 210 (south) and 211 (east). (Refer to Appendix A.)

Searches of the Kiama Library online catalogue, Kiama Municipal Council website and NSW Heritage Branch website had identified the following studies related to the dry stone walls of Kiama. No works relating specifically to the study area were found:

- Mayne-Wilson and Associates, 1987 *West Kiama: A Heritage Assessment of its Dry Stone Walls*.
- W. V. Abraham, 1991 *The Dry Stone Walls of Kiama's Hinterland*, W. V. Abraham, Kiama, NSW.
- J. MacKenzie, 2002, *Photographic survey dry stone rock walls at Old Silver Hill*, Capital Land Australia, Milsons Point, NSW.

These studies were not available for the current report and a review of them is beyond the scope of this project. Any future works carried out for the study area should include a review of these reports.

3.5 Synopsis of Historical Heritage Context

A desktop review of the historical material has shown that the study area was originally granted to William King. By 1891 (the earliest Parish Map sourced for this report) the land was subdivided into several lots and the study area comprised the entirety of Section 67 and the two western lots of Section 69. According to historical aerial photographs of study area there were no buildings erected and the study area appears to have had a continued use associated with agriculture.



Figure 3.1 Parish Map—July 1932. The approximate boundary of the study area is outlined in red. (Source: Department of Lands)

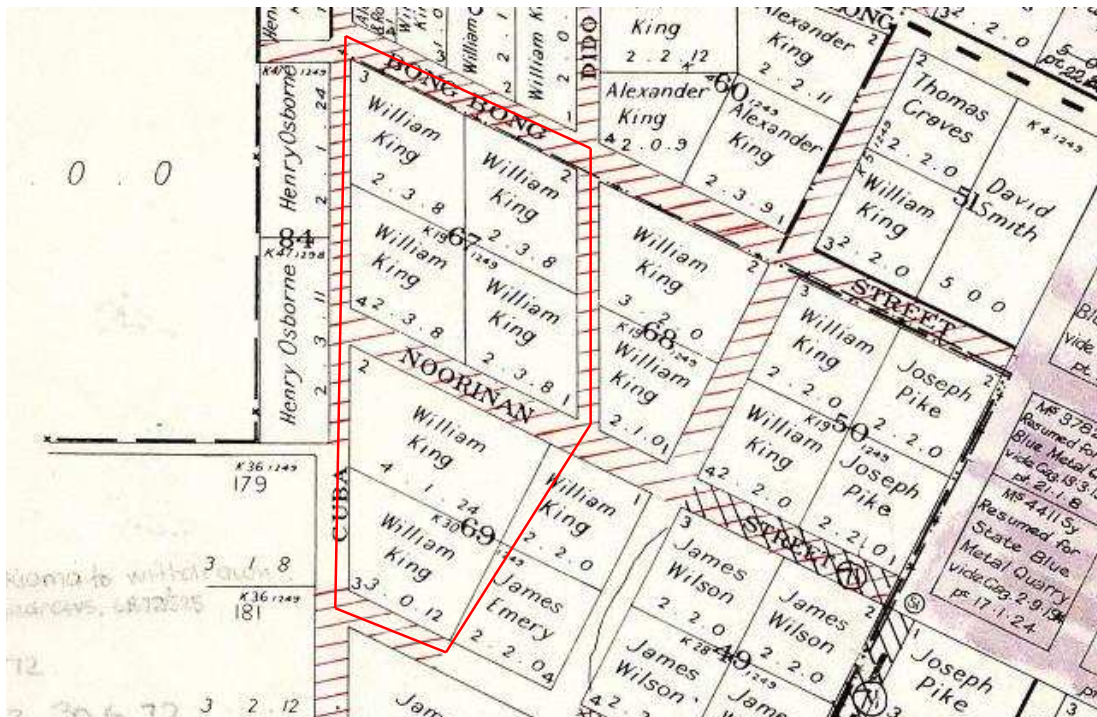


Figure 3.2 Parish Map—July 1932. A close up of the study area. The approximate boundary of the study area is outlined in red. (Source: Department of Lands)



Figure 3.3 1949 Aerial Photograph. The approximate boundary of the study area is outlined in red. (Source: Department of Lands)



Figure 3.4 1979 Aerial Photograph. The approximate boundary of the study area is outlined in red. (Source: Department of Lands)



Figure 3.5 2005 Aerial Photograph. (Source: Google Earth 2012)

4.0 Study Area and Visual Inspection

4.1 Visual Inspection of the Study Area

A visual inspection of the study area was undertaken by Angela So, Sam Cooling and Dr Tim Owen, archaeologists with GML, on 27 March 2012. They were accompanied by Margaret Montga, ILALC Aboriginal Site Officer, and Trevor Unicomb, Unicomb Development Services Pty Ltd.

The study area was typical of the extensively cleared, low rolling hills described above in Section 2.0, and was one of approximately 10-15 similar hills located in the local area adjacent to the coast. The study area comprised of a grassed paddock area with a steep southerly-trending slope at the northern portion of the site, and moderate slopes to the east and west, both terminating at creeks, outside the study area (Spring Creek to the west, and Willow Gully Creek to the east). During the site inspection, there was low grass cover across the study area, exposing outcrops of bedrocks along the two hill promontories and the connecting saddle.

The four boundaries of the study area were heavily vegetated.

4.2 Aboriginal Archaeology

Landforms within the study area were inspected for soil/bedrock exposures with a level ground surface visibility. These features were inspected for evidence of possible Aboriginal occupation or use of the land.

The study area had been completely cleared of native vegetation, and the majority of the land was covered in grass with 0% soil exposure; however, there were areas of heavily eroded, exposed rock (granites and quartzites) as well as locations in which geotechnical work had been undertaken that showed 100% soil exposure.

A number of bedrock exposures were noted along the crest of the hill, and mid-slopes across the study area. A particularly large area of exposed bedrock was located towards the south of the site along the crest of the hill (this rock exposure can be seen in recent aerial photographs of the site). This indicated that soil depth across the majority of the site was fairly shallow (Figure 4.1).

No evidence was recorded for Aboriginal sites within the study area. There were no locations which could hold a moderate, or higher, potential for buried Aboriginal sites and/or objects.

Soil Condition

Areas of soil exposure associated with exposed bedrock indicated the presence of very shallow (<15cm) A-horizon soils (reddish-brown sandy clay loam) overlying bedrock along the crest of the hill. The depths of the soils across the site ranged from 0-15cm along the crest of the hill, to approximately 30cm to the north of the site, or in association with the moderate slopes (to the east and west).

Soil Integrity

The soil integrity across the site was assessed to be of moderate to low integrity, due to a combination of shallow soils, a history of agricultural use of the land in modern times, and evident erosion of the exposed soil and bedrock in the study area. Soil integrity would likely be of a moderate integrity where soils are of greater depth (ie towards the northern end of the site before

the steep southerly slope toward an existing residential development), and of low integrity in areas of shallow soils, such as those to the south of the site, and those associated with bedrock exposures.

Aboriginal Landscapes

The landforms of the study area are connected with other landforms that may have been of importance or held traditional meaning for Aboriginal people, such as beaches, the southerly escarpment, coastal headland features and the nearby Kiama blowhole. However, the landforms located within the study area itself are not uncommon within the region (Figure 4.2).

The higher escarpments that are visible to the south of the study area would likely have held significance to Aboriginal people in the Illawarra region.

4.3 Historical Archaeology

Historical sources indicate that the study area had been primarily used for agricultural purposes. The study area was inspected for any evidence of levelling and grading in order to create a platform for buildings, postholes, stone alignments (other than the dry stone walls), historical artefacts, etc, which may provide indication of other land use.

Dry stone walls were observed along the western, southern and eastern boundaries of the study area. The walls were constructed from local stone and varied in their states of deterioration. The walls are a maximum of 1m in height (Figure 4.3 and Figure 4.4).

No other historical archaeological features were observed.

4.4 Synopsis of the Desktop Assessment and Visual Inspection

The desktop assessment and visual inspection does not indicate the presence, or likelihood of Aboriginal or historical archaeological remains within the study area. Therefore, the study area is considered to have little archaeological potential.



Figure 4.1 Exposed bedrock to south of study area in foreground, view to southwest from study area, area of dense vegetation is Spring Creek, and southerly escarpment in background. (Source: GML 2012)



Figure 4.2 View from north of site. Example of similar low rolling hill landform to the west, Willow Gully Creek to east (heavily vegetated area), view to the coastline and headland in the background. (Source: GML 2012)



Figure 4.3 An example of the dry stone walls that lined the boundaries of the study area. (Source: GML 2012)



Figure 4.4 Close up of a dry stone wall that lined the boundaries of the study area. (Source: GML 2012)

5.0 Conclusions and Recommendations

5.1 Conclusions

5.1.1 Aboriginal Archaeology

- A search of the AHIMS register shows there are no previously recorded Aboriginal objects or declared Aboriginal places on or within 50m of the study area.
- The low hill that the majority of the study area consists of is not a unique or uncommon landform within the region (being one of 10-15 similar hill locations visible from the study area), and does not possess any visible evidence of Aboriginal occupation.
- The soils across the study area are assessed of being of low condition (a low level of ability of soil to yield intact archaeological deposits), and of low integrity (possessing a generally high level of soil disturbance across the study area).
- Subsurface excavation across the study area is unlikely to yield any intact archaeological deposits that could contribute to a better understanding of Aboriginal site use and occupation of this study area or within the wider Illawarra region.
- The aspect from the hill on which the study area is located would have afforded advantageous views of the adjacent landscape within the region, and it is possible that it was used by Aboriginal people prior to European colonisation. It is unlikely that an archaeological signature would be present within the study area.
- The study area is assessed to have no Aboriginal archaeological potential.

5.1.2 Historical Archaeology

- The Dry Stone Walls located along the western, southern and eastern boundaries of the site are listed in and afforded statutory protection by the Illawarra REP and Kiama LEP.
- Any proposed development of the site that would impact the Dry Stone Walls would require approval from Kiama Council.
- On the basis of this desktop analysis, this study area has no subsurface historical archaeological potential.

5.2 Recommendations

5.2.1 Aboriginal Archaeology

The investigation of Aboriginal archaeology as undertaken through the due diligence assessment process has identified that Aboriginal objects are not present (or likely to be present) in the area of the proposed activity. Therefore, given the nature and constraints associated with the study area, the following recommendations are made:

- It is recommended that the proponent can proceed with caution without a Section 90 Aboriginal Heritage Impact Permit (AHIP) application.

- Should Aboriginal objects be located during the course of any future development within the study area, work should cease immediately, and an archaeologist should be called to document and assess these finds. The objects must be reported to the OEH under Section 90 of the NPW Act.

5.2.2 Historical Archaeology

The investigation of historical archaeology, as undertaken through the due diligence assessment process has identified that:

- subsurface historical archaeological remains are not present (or likely to be present) within the study area; and
- no further historical archaeology studies are required; however, the dry stone walls must be conserved in accordance to the Kiama Council guidelines.

6.0 Endnotes

- ¹ DECCW 2010. NPWS Act 1974. *Fact sheet 1*. September 2010.
- ² DECCW. 24 April 2009. *Due diligence guidelines for protection of Aboriginal objects in NSW*. Accessed Online.
- ³ DECCW 2010. NPWS Act 1974. *Fact sheet 2*. September 2010.
- ⁴ Branagan, D F, & G H Packham 2000, *Field Geology of New South Wales*. New South Wales Department of Mineral Resources, Sydney.
- ⁵ Hazelton, P A 1992, *Soil Landscapes of Kiama 1:100 000 Series Sheet 9028*. Department of Conservation and Land Management NSW. Sydney. Map.
- ⁶ *ibid.*
- ⁷ Tindale, N 1974, *Aboriginal Tribes of Australia*. University of California Press.
- ⁸ Wesson, S ND, *Murni Dhungang Jirrar-Living in the Illawarra*, viewed on 20 March 2012.
NSW NPWS <<http://www.environment.nsw.gov.au/resources/cultureheritage/illawarraAboriginalResourceUseIntroduction.pdf>>.
- ⁹ Archaeological Heritage Surveys. 2004, *Cedar Grove Estate, Kiama. Archaeological Survey*. Report to Don Fox Planning Pty Ltd.
- ¹⁰ Jarvis, J 1942, "Illawarra: A Century of History 1788–1888", *Royal Australian Historical Society Journal and Proceedings*, Vol. 28, Part 2, p 72.
- ¹¹ *ibid.*, pp 79–80.
- ¹² McCarthy, K 1983, "Industrial Heritage", in Dovers S (ed), *Illawarra Heritage: an Introduction to a Region*, Environmental Heritage Committee, Wollongong, p 44.
- ¹³ McCarthy, K 1983, "Industrial Heritage", in Dovers S (ed), *Illawarra Heritage: an Introduction to a Region*, Environmental Heritage Committee, Wollongong, p 44.
- ¹⁴ 21 November 2008 "Kiama—City and Culture", *Sydney Morning Herald*, viewed on 20 March 2012, <<http://www.smh.com.au/travel/travel-factsheet/kiama--culture-and-history-20081121-6df2.html#ixzz1pbeEVtfg>>.
- ¹⁵ Mayne-Wilson and Associates 2000, *Conserving the Dry Stone Walls of Kiama*, viewed on 20 March 2012, <www.heritage.nsw.gov.au/heritagensw/aut01/9_art.htm>.

7.0 Appendices

Appendix A

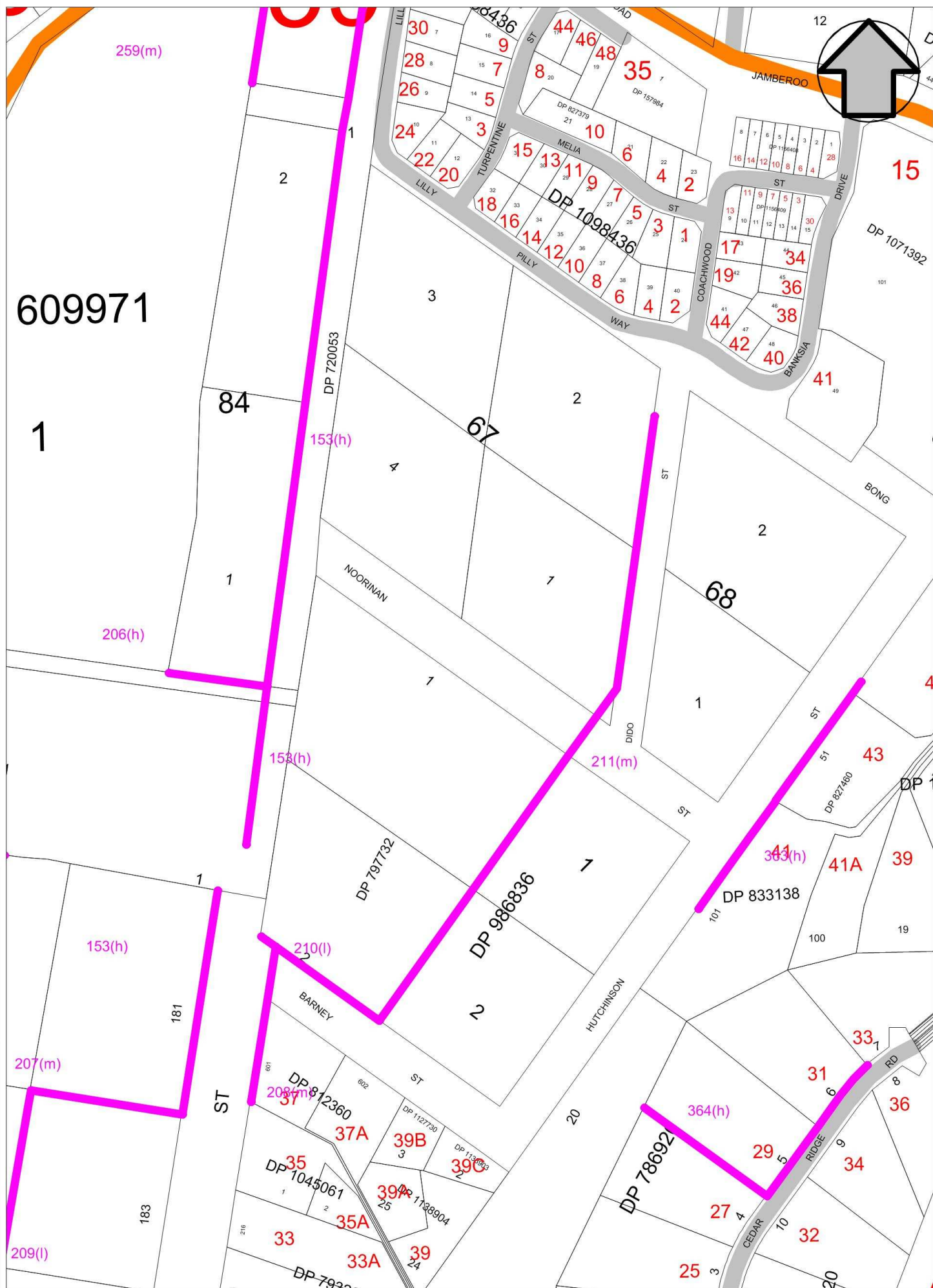
Documents from Kiama Municipal Council

Appendix B

Letter from Illawarra Local Aboriginal Land Council

Appendix A

Documents from Kiama Municipal Council



Kiama Dry Stone Walls

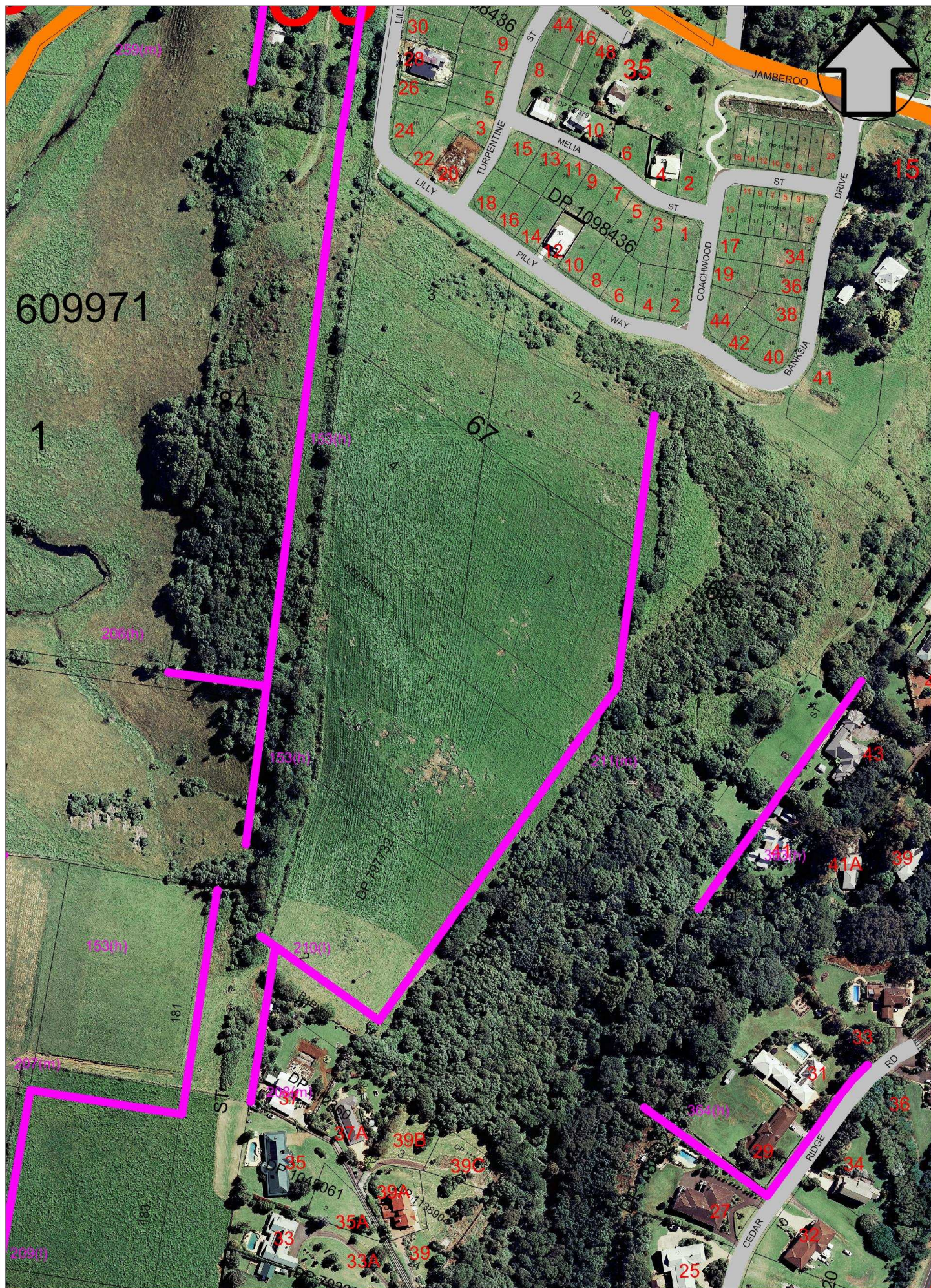
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Kiama Dry Stone Walls

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Date: 27/03/12

Scale: 1:3200

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Property	425.10	WALL NO. 153	Estate RW Weir / Milne property
Lot	1		
D.P.	609971		
SIGNIFICANCE	High/Medium/Low		
Heritage values	Assessment attributes	Comment	
A. Historical values	Likely date of construction *	c. 1870-80	
	Land use	Dairying	
	Builder *	Unknown	
	Purpose of wall	Property boundary	
	Commissioning owner *	Partially by Milne family since 1908	
B. Aesthetic values	Visual and / or sensory appeal	Its distinct textured line adjacent to roadway provides good enhancement of rural character	
	Landmark qualities	Significant landmark, extending up and over a major ridge adjoining Jamberoo Road	
	Creative / technical qualities	Correct stacking and stone size order up wall suggests skilled layout prior to construction	
	Aesthetically distinctive	It is distinguishable for its length and associations with surrounding original homesteads	
	Exemplifier of a style	An example of that style of wall development established for the skilled use of local stone	
C. Technical values	Good proportions ?	Correct overall proportions for stability	
	Type of foundation stones ?	Medium-large base course support	
	Face stones well interlocked ?	Tight engagement of face rock	
	Good coping stones ?	Most of coping remains intact at northern end	
D. Social values	Identified with partic. group *	Evokes an association with original farming uses and the original settlement of the area	
	Signif. to contemp. community *	High significance due to proximity of wall to a major public thoroughfare and entry to town	
E. Representative	Has characteristics of a class	Yes - typical dry stone wall of the region	
	A seminal or optimal example *	Good representative example	
	Esteemed for its integrity	As an original, extensive property divider	
F. Rarity value	Rare	Not in Kiama Shire	
	Endangered	Only by vegetation consumption at its south	
	Unusual aspect of our history *	Such wall styles seldom found elsewhere in NSW	
G. Intactness	As a percentage	Varies between 90% and 30% at parts of its southern end	

Property	955.496	WALL NO. 211	Milne property
Lot	1		
D.P.	986836		
SIGNIFICANCE	High/Medium/Low		
Heritage values	Assessment attributes	Comment	
A. Historical values	Likely date of construction * Land use Builder * Purpose of wall Commissioning owner *	C.1860-70 Dairying Unknown - possibly Newing Property boundary Milne family since 1908	
B. Aesthetic values	Visual and / or sensory appeal Landmark qualities Creative / technical qualities Aesthetically distinctive Exemplifier of a style	Present deteriorated state and weed cover detracts from maximum visual appeal of wall The wall is exposed on a highly prominent ridge directly to the west of the highway Basic consistency in length of wall suggests good structural knowledge of wall geometry Distinctive in its length and geographical association with the town and highway The original form would have complied with the standards set out by Newing for stone walls	
C. Technical values	Good proportions ? Type of foundation stones ? Face stones well interlocked ? Good coping stones ?	Correct base widths and height for stability Standardly large and deeply set Exceptional in only the most intact segment No identifiable coping layer remains	
D. Social values	Identified with partic. group * Signif. to contemp. community *	Land owner and other original farming families who have had associations with the property If rebuilt, the wall would be visible from the Kiama by-pass as a main ridge-line feature	
E. Representative	Has characteristics of a class A seminal or optimal example * Esteemed for its integrity	Yes - typical dry stone wall of the region Excellent representative example of type No structural attention has been provided	
F. Rarity value	Rare Endangered Unusual aspect of our history *	Only in its length and siting above the town By deterioration of wall without maintenance Such wall styles have rarely been found elsewhere in NSW	
G. Intactness	As a percentage	Southern end - 65%; Middle sections - 50-70% Northern end - 15-40%	

Property	955.507.9	WALL NO. 210	Milne property
Lot	2		
D.P.	797732		
SIGNIFICANCE	High/Medium/Low		
Heritage values	Assessment attributes	Comment	
A. Historical values	Likely date of construction * Land use Builder * Purpose of wall Commissioning owner *	c.1870-80 Dairying Unknown Property boundary Milne family since 1908	
B. Aesthetic values	Visual and / or sensory appeal Landmark qualities Creative / technical qualities Aesthetically distinctive Exemplifier of a style	Due to severe weed coverage, appeal is limited to a suggestion of an original form As the wall straddles a ridge, it has high visual significance from roads and other highpoints Unskilled labour appears to have been used in construction, due to deteriorated condition If cleared, it is presumed that the it would have all the major characteristics of local walls Remains suggest compliance in original form with those principles layed out by Newing Where visible, correct prop. for stability exist Inconsistent in size and internal positioning To deteriorated to assess whole wall length No evident coping layer remains to assess	
C. Technical values	Good proportions ? Type of foundation stones ? Face stones well interlocked ? Good coping stones ?	Land owner and other original farming families who have had associations with the property As the first main wall precinct and homestead visible when travelling west from the town Yes - would have been typical for region Not in its present concealed state No Form standard across the Shire By continual damage from hedge overgrowth Such wall types seldom found elsewhere in NSW	
D. Social values	Identified with partic. group * Signif. to contemp. community *		
E. Representative	Has characteristics of a class A seminal or optimal example * Esteemed for its integrity		
F. Rarity value	Rare Endangered Unusual aspect of our history *		
G. Intactness	As a percentage	Average uncertain - where visible it is approx. 60-65% intact	

Appendix B

Letter from Illawarra Local Aboriginal Land Council



3 Ellen Street WOLLONGONG NSW 2500

Ph: 42263338 Fax: 42263360

SURVEY AIM

Conduct an Aboriginal Archaeological due diligence Assessment to identify Aboriginal Artefacts and cultural sites at lots 1,2,3 & 4 Section 67, DP 758563 and lots 1 & 2 DP 797732 Jamberoo Road Kiama.

SURVEY EXAMINATION

Margaret Mongta- 27 March 2012

Today I attended site work with Tim Owens from Trevor Unicom and Angela So from Godden Mackay & Logan at Jamberoo Rd, Banksia St then onto Lillypilly way.

LOT 1: Walked over and surveyed area grass was long, visibility was good. This area in the past has been used for cattle farming.

LOT 2: As Above

LOT 3: As above

OUTCOME

No artefacts were identified during the survey

There are old stone walls on the property and they are still in good condition.

RECOMMENDATION

- Any excavation work carried out on this site will require Aboriginal site monitoring.
- Any Aboriginal artefacts identified during construction should remain in their place; if this is not possible then a care and control process should be discussed with the relevant Aboriginal stakeholders.
- The Developer should enter into discussion with the Aboriginal community regarding employment opportunities created throughout this project.
- The Developer should enter into discussion with community, giving consideration to promote Aboriginal Heritage and artwork through Signage.
- The Stone Walls should be inspected on a regular basis and maintained to preserve history and heritage.



Illawarra Local Aboriginal Land Council

3 Ellen Street WOLLONGONG NSW 2500

Ph: 42263338 Fax: 42263360

If you require any further information regarding this report, please don't hesitate to contact me on the numbers listed below.

Yours in UNITY

Sharralyn Robinson
Illawarra Local Aboriginal Land Council
CEO
Ph: 42 26 3338
Fax: 42 26 3360
M: 0410 125 463