



SCECGS REDLANDS, CREMORNE CONCEPT PROPOSAL & STAGE 1 DEVELOPMENT APPLICATION

Aboriginal and Historical Archaeological Assessment,
Statement of Heritage Impact

FINAL REPORT



Prepared by
Austral Archaeology Pty Ltd
Archaeological & Cultural Heritage Consultants
For
SCECGS Redlands, Cremorne
23 April 2015
Job Number: 1427

EXECUTIVE SUMMARY

Austral Archaeology Pty Ltd (Austral Archaeology) has been commissioned by SCECGS Redlands, Cremorne, to assist with the preparation of an Environmental Impact Statement (EIS) to accompany a State Significant Development Application (DA) for SCECGS Redlands, which is located at 272 Military Road, Cremorne (the study area). The study area is bordered by Military Road on the south, Winnie Street on the east, Gerard Street on the north and Waters Road on the west. The study area location is shown in Figures 1.1 to 1.3. The DA seeks concept approval for the overall Campus Master Plan and detailed design approval for the proposed Stage 1 works, which comprise the creation of the New Learning Hub.

This report has been prepared to address Key Issues No. 8 Heritage and No. 9 Aboriginal Heritage as stated in the Director General's Environmental Assessment Requirements (DGEARs) issued on 23 April 2014 (SSD 6454).

The DGEARs which are relevant to heritage are:

8. Heritage

Where relevant, the EIS shall include a statement of significance and an assessment of the impact on the heritage significance of any heritage items (including 7 Cranbrook Avenue and 11 Cranbrook Avenue) and/or conservation areas in accordance with the guidelines in the NSW Heritage Manual.

Where relevant, the assessment shall address any archaeological potential and significance on the site and the impacts the development may have on this significance.

9. Aboriginal Heritage

Where relevant, the EIS shall address Aboriginal Heritage in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation 2005 and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.

This Aboriginal and Historical Assessment and Statement of Heritage Impact addresses these criteria of the DGEARs and the specific archaeological requirements of the Heritage Council of NSW. The objectives of this report are to provide an archaeological assessment of the whole study area and a statement of heritage impact specifically for Stage 1 only of the proposed development in light of the archaeological potential and significance of the study area, and to provide suitable management recommendations.

Conclusions

A search of the Aboriginal Heritage Information Management System (AHIMS) database regarding the study area returned a result of no sites within at least a 200 metre radius of the study area. Given the documented history of use and continuous development since the mid to late 19th century within the study area, it is clear that the study area qualifies as 'disturbed' land under the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010b).

In regard to the proposed development in Stage 1 for the New Learning Hub, one small part of the study area has been identified as being archaeologically sensitive and it is considered to have low potential to contain *in situ* historical archaeological material relating to the remains of a wooden structure built *circa* 1863, identified as being a toilet or shed (see Figure 11.1). There is a very low potential for *in situ* Aboriginal remains and/or deposits in this area. It is therefore considered that the proposed Learning Hub has minimal potential to harm any archaeological resources.

It is concluded generally that some parts of the remainder of the study area (outside the Stage 1 development area) have very low to low archaeological potential and any possible features would be of local significance with low research potential (see Figure 11.1). The assessment of potential impacts on any archaeological resources from future development activities under later stages of the campus master plan was outside the scope of this study.

It is considered that the recommendations in this report provide adequate mitigative strategies for management of the archaeological values of the Stage 1 development area of the site.

Recommendations

The following recommendations are made in conjunction with Figure 12.1. It is recommended that:

- 1) No further investigative work need be undertaken in regards to the Aboriginal cultural heritage at SCECGS Redlands, Cremorne. This report documents the results of a site inspection in November 2014 that resulted in no Aboriginal sites being located within the study area. The survey and background research also confirmed the disturbed nature of the study area.
- 2) The area to be developed under Stage 1 of the campus master plan has been investigated in detail in this Statement of Heritage Impact. No further archaeological investigation needs to be undertaken in this area as it has been assessed to contain very low or nil archaeological potential; works in these areas can proceed with caution.
- 3) As future stages of the campus master plan are developed, the locations of all impacts should be checked in the zoning plan (Figure 12.1). Any impacts in areas of designated low archaeological potential will require the creation of an individual Statement of Heritage Impact.
- 4) Should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required.
- 5) In the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works in the immediate vicinity are to cease immediately and a qualified archaeologist be contacted to assess the situation and consult with the Heritage Branch of the OEH regarding the most appropriate course of action.
- 6) In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works affecting that material or deposits must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Office of Environment and Heritage (OEH) and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the NPW Act 1974 requires that the OEH must be notified of any Aboriginal objects discovered within a reasonable time.
- 7) One copy of this report should be lodged by the proponent with the local studies collection of the local library, a copy should be lodged with AHIMS, and an additional copy should be lodged with the New South Wales Heritage Branch library at:

Heritage Branch
3 Marist Place
Parramatta NSW 2150

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1 INTRODUCTION

This archaeological assessment and statement of heritage impact has been prepared on behalf of SCECGS Redlands Ltd ("the Proponent"). It accompanies an environmental impact statement (EIS) prepared in support of State Significant Development Application SSD14_6454 for the staged development of the SCECGS Redlands Senior Campus ("Redlands").

This application seeks a staged development approval comprising a concept proposal for the school over five stages and consent for a detailed proposal for the first stage development referred to as "Stage 1". Details of the project are described below:

- (1) Concept Proposal:** A Concept Proposal has been prepared for the site to guide its future redevelopment and is intended to provide a statutory framework for the long term planning of the site.

The Concept Proposal will be delivered in five stages and will generally involve the following buildings and works:

Stage 1 – New Learning Hub:

- Demolition of existing buildings and structures
- Construction of a new multi-purpose education building with basement car park and associated vehicular entry off Gerard St
- Temporary fitout of a portion of the basement carpark shell for music and general education uses
- Construction of landscaped podium over new basement carpark and music facilities
- Creation of a new internal vehicular link between Waters Rd and Military Rd

Stage 2 - Sports and Performing Arts Centre:

- Demolition of existing buildings and structures
- Construction of a new sports and performing arts centre

Stage 3 - Redlands Hall, Roseby Building and Liggins Building Refurbishment:

- Internal alterations and additions of existing buildings

Stage 4 - Humphery Learning Hub and Resource Centre:

- Construction of a new multi-purpose education building with swimming pool and associated facilities at roof top level
- Decanting of temporary music facilities upon completion of the new Humphery Learning Hub providing additional carparking

Stage 5 - Adams Centre Extension:

- Alterations and additions to the Adams Centre at 219 Military Road

(2) Detailed Proposal for "Stage 1" development – New Learning Hub:

- Demolition of existing buildings and structures (Mowll Building, 1, 3, 7, 9 and 11 Gerard Street, 7 and 8 Monford Place, staff offices, multi-purpose building and Design and Technology buildings on the western boundary).
- Fit-out of 7 and 8 Monford Pl for temporary use as an educational facility
- Construction of a new purpose built education building generally comprising a four storey building with basement car park and outdoor learning area at roof level.
- Temporary fitout of a portion of the basement carpark shell for music and general education uses
- Construction of landscaped podium over new basement carpark and music facilities
- Creation of new vehicular access road off Gerard Street for the new basement car park.

- Creation of new internal vehicular access link facilitating ingress from Waters Rd and egress onto Military Rd
- Associated landscaping improvements.
- New services infrastructure.
- New servicing area including loading dock and waste enclosure
- Erection of temporary demountable classrooms

The purpose of this archaeological assessment and statement of heritage impact is to provide an assessment of the proposal as described above and detailed within the EIS.



Figure 1.1 Site Plan (provided by Proponent).



Figure 1.2 Building identification Plan (provided by Proponent).

Table 1.1: Reference table for building numbers in Figure 1.2.

Ref	Building Details
1	Adams Centre
2	Staff offices
3	Main reception and administration (2 Monford Place)
4	Hattersley Sports Centre
5	Multi-purpose building accommodating medical room, meeting rooms, staff rooms and classroom
6	Liggins Building
7	Roseby Building (drama studio and science)
8	Residential flat building (8 Monford Place)
9	Residential flat building (7 Monford Place)
10	Residential flat building (5 Monford Place)
11	Dwelling house (6 Winnie Street)
12	Design and technology
13	Canteen & assembly hall

Ref	Building Details
14	Mowll Building
15	Design and technology (21 Waters Road)
16	Humphery Building (Humanities / library) (23 Waters Road)
17	Lang Gymnasium (52-27 Waters Road)
18	Facilities / ICT (1 Gerard Street)
19	Music tuition (3 Gerard Street)
20	Performing arts (7 Gerard Street)
21	Music (9 Gerard Street)
22	Visual arts (11 Gerard Street)

Table 1.2: Terms of reference.

Applicant	SCECGS Redlands Ltd (the applicant)
Site Address	SCECGS Redlands School at 272 Military Road, Cremorne and adjoining land (Redlands)
Property Description	Refer to Site Plan above (Figure 1.1)
Site Area	Approximately 15,500sqm
Application Format	Staged State Significant Development Application (SSDA) for (1) Concept Proposal and (2) detailed plans for Stage 1 development. A single application will be provided.
Approval Authority	The SSDA (concept proposal and detailed plans for Stage 1 development combined) will be lodged with and assessed by the NSW Department of Planning and Environment and determined by the Minister for Planning or her delegate, the Planning Assessment Commission (PAC).
Resort Type	Environmental Impact Statement (EIS)
Application Reference	SSD 14_6454
Development Description	Staged redevelopment of the SCECGS Redlands School Senior Campus
Overview of proposed works (refer to building identification plan)	

Stage 1 New Learning Hub	• Erection of temporary demountable classrooms. • Demolition of existing buildings and structures (Mowll Building (14), 1, 3, 7, 9 and 11 Gerard Street (18-22), 7 and 8 Monford Place (9 and 8), staff offices (2), multi-purpose building (5) and Design and Technology buildings (12 and 15) on the western boundary). • Construction of four storey multi-purpose education building with accessible roof top, basement car park, outdoor learning area at roof level • Creation of new vehicular access road off Gerard Street for the new basement car park. • Creation of new internal vehicular access link facilitating ingress from Waters Rd and egress onto Military Rd • Associated landscaping improvements. • New services infrastructure • New servicing area including loading dock and waste enclosure
Stage 2 Sports and Performing Arts Centre	• Demolition of the main reception and administration building (2 Monford Place) (3). • Construction of four storey sports and performing arts centre generally accommodating rooftop tennis courts, sports courts, fitness centre, studios and changing facilities, spectator seating, lecture theatre, teaching and learning spaces, meeting rooms. • Associated landscaping • Services upgrades
Stage 3 Roseby Building, Redlands Hall and Liggins Building Refurbishment	• Erection of demountable classrooms adjacent to the Adams Centre (1) (to be removed at completion of Stage 4) • External alterations to Liggins Building (6) including the creation of a verandah (associated with student café) • Internal alterations to Liggins Building (6) to create a new canteen and student café at ground floor level and relocated library and resources facility at first floor level • Alterations and additions to Roseby building (7) including minor demolition works Associated landscaping • Services upgrades

Stage 4 Humphery Learning Hub and Resource Centre	• Internal refurbishment of Lang Gymnasium (17) to create classrooms • Demolition of existing buildings and structures including Humphery building (16) and existing canteen / assembly building (13). • Construction of new four storey education building accommodating rooftop swimming pool and accessible rooftop, reception and administration offices, staff rooms, library, meeting rooms, classrooms and teaching spaces and amenities with roof top swimming pool and associated facilities. • Covered outdoor learning area • Associated landscaping • Decant interim Music Faculty into new Humphery Learning Hub and create additional car spaces in basement • Visitor parking area (up to 6 spaces) • Services upgrades • Removal of the Stage 3 temporary demountables adjacent to the Adams Centre (1)
Stage 5 Adams Centre Extension	• Alterations and additions to Adams Centre (1) including some minor demolition works and construction of a three storey extension to the western elevation to accommodate dance studios. • Associated landscaping • Services upgrades
Development Timeframe	20 years
Local Government Area	North Sydney
Local Planning Instruments	<i>North Sydney Local Environmental Plan 2013 (NSLEP 2013)</i> <i>North Sydney Development Control Plan 2013 (NSDCP 2013)</i>

1.1 Project Summary

Austral Archaeology Pty Ltd (Austral Archaeology) has been commissioned by SCECGS Redlands, Cremorne, to assist with the preparation of an Environmental Impact Statement (EIS) to accompany a State Significant Development Application (DA) for the school which is located at 272 Military Road Cremorne (the study area). SCECGS Redlands occupies land bordered by Military Road on the south, Winnie Street on the east, Gerard Street on the north and Waters Road on the west. The study area location is shown in Figures 1.1 to 1.3.

The DA seeks concept approval for the overall campus master plan, and detailed design approval of the proposed Stage 1 works, which includes the demolition of several built structures, the construction of a four-storey, multi-purpose building with a basement car park area, creation of new vehicular access links, and the landscaping and installation of various services.

This report has been prepared to address Key Issue No. 8 Heritage and No. 9 Aboriginal Heritage as stated in the Director General's Environmental Assessment Requirements (DGEARs) issued on 23 April 2014 (SSD 14-6454).

The DGEAR's relevant to heritage are:

8. Heritage

Where relevant, the EIS shall include a statement of significance and an assessment of the impact on the heritage significance of any heritage items (including 7 Cranbrook Avenue and 11 Cranbrook Avenue) and/or conservation areas in accordance with the guidelines in the NSW Heritage Manual.

Where relevant, the assessment shall address any archaeological potential and significance on the site and the impacts the development may have on this significance.

9. Aboriginal Heritage

Where relevant, the EIS shall address Aboriginal Heritage in accordance with the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation 2005 and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010.

This Aboriginal and Historical Assessment and Statement of Heritage Impact addresses Section 8 and Section 9 of the DGEAR's and the specific archaeological requirements of the Heritage Council of NSW. The objectives of this report are to provide an archaeological assessment of the whole study area and a statement of heritage impact specifically for Stage 1 only of the proposed development in light of the archaeological potential and significance of the study area, and to provide suitable management recommendations.

Table 1.3: Summary of Lot numbers and DP or SP numbers within the project area.

Lot Number	DP or SP Number
Lot A	DP107138
Lot 22A	DP152693
Lot 6	DP19282
Lot 1	DP222013
Lot 2	DP222013
Lot 1	DP343811
Lot 1	DP713405
Lot 4	DP783663
Lot 1	DP783663
Lot 3	DP783663
Lot 2	DP783663
Lot 1	DP783664
Lot 2	DP783664
Lot 1	DP80618
Lot 1	DP81061
Lot 1	DP83047
Lot 21A	DP83152
Lot 11	DP877879
Lot 21	DP88932
-/-	SP10384
-/-	SP13814
-/-	SP15886
-/-	SP22268
-/-	120107805
Lot 11	DP877844

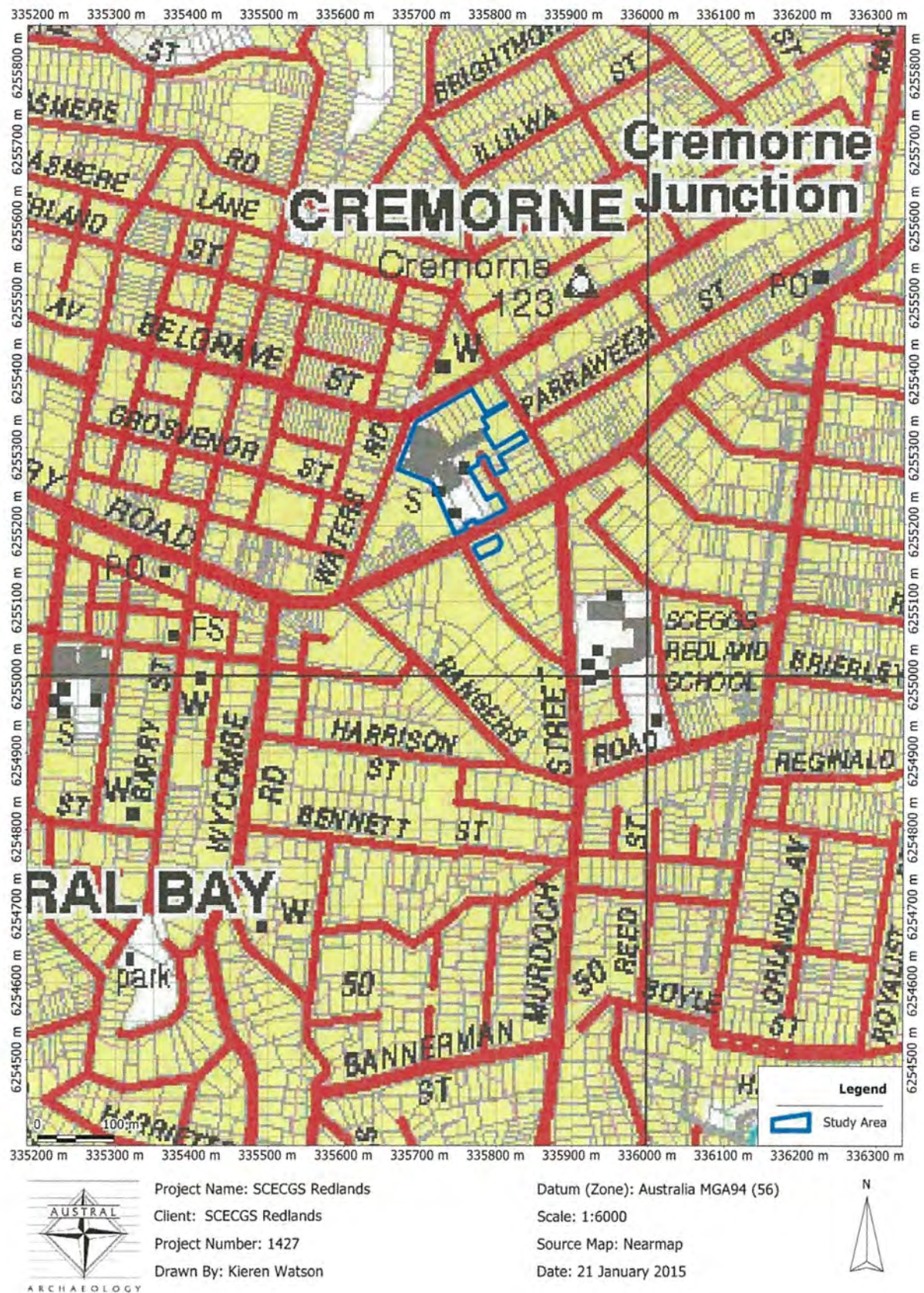


Figure 1.3 Topographic map showing study area in relation to major Sydney suburbs.

SCECGS REDLANDS, CREMORNE, CONCEPT PROPOSAL AND STAGE 1 DEVELOPMENT APPLICATION,
ARCHAEOLOGICAL ASSESSMENT AND STATEMENT OF HERITAGE IMPACT



Figure 1.4 Aerial photograph showing the location of the study area in relation to the surrounding area.

SCECGS REDLANDS, CREMORNE, CONCEPT PROPOSAL AND STAGE 1 DEVELOPMENT APPLICATION,
ARCHAEOLOGICAL ASSESSMENT AND STATEMENT OF HERITAGE IMPACT



Figure 1.5 Aerial photograph showing details of the study area.

1.2 Objectives

The objectives of this report are as follow:

- Undertake a due diligence process to identify whether or not Aboriginal objects are, or likely to be, present in the area.
- Determine whether or not development activities are likely to harm Aboriginal objects (if present).
- Identify any potential historical archaeological resources, values or constraints present within the study area.
- Produce an archaeological predictive model and sensitivity map to guide any management decisions regarding the study area.
- Make a statement of significance regarding any archaeological heritage present within the study area.
- Assess the impact of the proposed works on any identified heritage resources.
- Make appropriate management and mitigation recommendations.

1.3 Proposed Works

The scope of works are outlined in Table 1.2.

1.4 Project Team and Acknowledgements

This project was overseen by Justin McCarthy (Managing Director). The assessment was coordinated by David Marcus (Senior Archaeologist) and authored by Emily Bennett (Archaeologist) with assistance from David Marcus. Kieren Watson (Archaeologist) undertook the GIS mapping in this report, with additional mapping undertaken by David Marcus as required. Justin McCarthy provided input into the management recommendations and undertook the quality assurance reviews.

Austral Archaeology would like to acknowledge the participation of the following people and organisations that have contributed to the preparation of this report:

Adam Martinez – Sandrick Project Directions

Aaron Boyd – Chief Operating Officer, SCECGS Redlands

1.5 Methodology

This report draws on material contained in the following report:

- *Planning Proposal Heritage: Redlands Senior School, Redlands Masterplan Heritage Review, 272 Military Road Cremorne, NSW, 2090* (NBRS & Partners Pty Ltd 2014)

The methodology supporting this report involved a period of research to locate additional background material and a synthesis of the historical research to better reflect and understand the archaeo-historical context and potential of the study area.

This report is underpinned by the philosophy of the ICOMOS *Burra Charter* and guidelines of the New South Wales Heritage Branch.

1.6 Limitations of the Report

The statement of archaeological potential only applies to subsurface features or deposits associated with the Aboriginal and European occupation of the site and not to any built heritage items currently on the site.

The results, assessments and judgements contained in this report are constrained by the standard limitations of historical research and by the unpredictability inherent in archaeological zoning from the desktop. Whilst every effort has been made to gain insight to the historical archaeological profile of the subject site, Austral Archaeology Pty Ltd cannot be held accountable for errors or omissions arising from such constraining factors.

In order to accurately plot a map or aerial image onto a known geographic coordinate system, a GIS program must perform the act of "georeferencing". For the purpose of this project, the GIS operator took previously georeferenced aerial photos and topographic maps to use as a base for the projection. Known reference points, or "control points", are marked on both the base map and the subject map. The GIS program then predicts the spatial location of each control point on the subject map based on their location on the base map, with a residual error.

Additional errors are also present in early plans due to inherent inaccuracy in early survey plans and recordings. While these inaccuracies may be minor, GIS mapping can compound these errors when comparing different maps, as earlier maps inherently contain less structures and features which can be compared to later maps.

As a result of a combination between the residual error in georeferencing of historical plans and the inherent inaccuracy, many of the figures included in this document show the approximate location of features rather than exact representations of the potential sub-surface archaeology. However, it should be noted that the maximum error is only expected to be up to 5 metres.

1.7 Data Restrictions

This report may contain descriptions and locational data relating to Aboriginal archaeological and cultural material and sites. This information is considered sensitive and of great importance to the Aboriginal community. Should public exhibition of this document be required, it is advisable that Austral Archaeology be contacted in order to ascertain whether any information should be removed prior to public release.

1.8 Abbreviations

The following abbreviations are used within this report:

AHC	Australian Heritage Council
<i>Burra Charter</i>	The Australia ICOMOS Charter for Places of Cultural Significance
CHL	Commonwealth Heritage List
CMP	Conservation Management Plan
DoP	NSW Department of Planning
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&BC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
Heritage Act	<i>New South Wales Heritage Act 1977</i>
ICOMOS	International Council on Monuments and Sites
LEP	Local Environmental Plan
LGA	Local Government Area
NHL	National Heritage List
NP&W Act	<i>National Parks and Wildlife Act 1974</i>
NSHS	North Shore Historical Society
NSW HC	New South Wales Heritage Council
NT Register	Register of the National Trust (NSW)
OEH	Office of Environment and Heritage
RAIA	Royal Australian Institute of Architects
RMS	Roads and Maritime Services
RNE	Register of the National Estate
SEPP	State Environmental Planning Policy
SCECGS	Sydney Church of England Co-Educational Grammar School
SCEGGS	Sydney Church of England Girls Grammar School
SHI	State Heritage Inventory
SHR	State Heritage Register
SOHI	Statement of Heritage Impact

Refer also to the document Heritage Terms and Abbreviations, published by the Heritage Office and available on the website: <http://www.environment.nsw.gov.au/heritage/index.htm>.

2 STATUTORY CONTEXT

The SCECGS Redlands project is being assessed as a State Significant Development under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The planning instrument relevant to this project is the *North Sydney Local Environment Plan 2013* (North Sydney LEP).

Division 4.1 (State Significant Development) replaces the approval processes that would usually be required under other parts of the EP&A Act and the Minister for Planning becomes the consent authority for the project.

In relation to historical archaeological requirements, the State Significant Development approval effectively 'turns off' the provisions of the *Heritage Act 1977*. While specific approval under the Heritage Act (e.g. excavation permit) is not required for this project, the DGEARs provide specific terms of the Approval which still require appropriate management of the site's historical archaeological resources.

With respect to Aboriginal cultural heritage management, the only requirement of the approvals issued is that the assessment addresses Aboriginal archaeology.

2.1 North Sydney Local Environment Plan 2013

2.1.1 Heritage Listings

Four buildings located within the study area and one other building located nearby are identified as local heritage Items in the North Sydney LEP. It should be noted that all four listings on the LEP relate to built heritage rather than archaeological features or potential. No heritage items are to be impacted by the proposed Stage 1 development.

Table 2.1 Heritage Items

Item	Description	Location	Significance
S.C.E.C.G.S Redlands	A group of buildings that form an elite private school. The Liggins Building, Federation style dwellings and the Gymnasium.	274 Military Road, Cremorne, NSW 2090, forming part of the study area.	Local
Former Cremorne Post Office/Telephone Exchange	Federation style with Free Classical porch	219 Military Road, Cremorne, NSW 2090, forming part of the study area.	Local
St Peter's Anglican Church	Federation Gothic architecture	29 Waters Road, Cremorne, NSW 2090, immediately outside the study area.	Local

Note that the North Sydney LEP actually contains the wrong address for SCECGS Redlands, and the correct address is 272 Military Road, Cremorne, NSW 2090.

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Figure 2.1 Excerpt from the North Sydney LEP 2013 showing the extent of the SCECGS Redlands Listing.

3 LANDSCAPE CONTEXT

The natural environment of an area influences not only the availability of local resources, such as food or raw materials for artefacts, but also determines the likely presence and/or absence of various archaeological site types which may be encountered during a field investigation.

Resource distribution and availability is strongly influenced by the environment. The location of different site-types (such as rock-shelters, middens, open camp-sites, axe grinding grooves, engravings etc.) are strongly influenced by the nature of soils, the composition of vegetation cover and the climatic characteristics of a region, along with a range of other associated characteristics that are specific to different land systems and bedrock geology. In turn this affects resource availability of e.g. fresh drinking water, plant and animal foods, raw materials for stone tools, wood and vegetable fibre used for tool production and maintenance.

Therefore examining the environmental context of a study area is essential in accurately assessing potential past Aboriginal land-use practices and/or predicting site types and distribution patterns within any given landscape, cultural or not. The information that is outlined below is applicable for the assessment of site potential of the current study area.

3.1 Geological Context and Soil Landscapes

The study area lies within the Hornsby Plateau, which is contained within the Sydney Basin. The Hornsby Plateau consists of a broad, dissected plateau capped in places with Wianamatta Group shale. The study area is situated directly above GyMEA (**gy**) and Lambert (**la**) soil profiles (Chapman & Murphy 1989).

The GyMEA (**gy**) soil landscape is described by Chapman and Murphy (1989) as a medium to coarse-grained quartz sandstone with minor lenses of shale and laminate, typical of the Hawkesbury Sandstone. The topography is that of undulating to low rolling hills with local relief of between 20 to 80 metres and slopes of between 10 to 25%. Sideslopes with narrow to wide outcropping sandstone rock benches often form broken scarps of less than 5% within the landscape. Stabilising vegetative cover is damaged by severe sheet erosion after bushfires and gully erosion occurs in areas of poorly maintained roads and tracks.

The GyMEA (**gy**) soil landscape topsoil consists of loose, coarse sandy loam (**gy1**) that contains a water-repellent apedal structure and porous sandy fabric. This overlies an earthy, yellowish-brown clayey sand (**gy2**) with a porous earthy fabric and an apedal massive structure that commonly occurs as subsoil over sandstone bedrock. Below, an earthy yellowish-brown sandy clay loam (**gy3**) overlies a moderately to strong pedal yellowish-brown clay (**gy4**), which occurs as subsoil on shale bedrock (Chapman & Murphy 1989:65)

The Lambert (**la**) soil profile is characterised by medium to coarse-grained quartz sandstone with minor shale and laminate lenses. The topography is undulating to rolling hills with a local relief of between 20 to 120 metres and slopes of less than 20%. Mildly to moderately inclined sideslopes, often associated with small hanging valleys occur in conjunction with broad convex crests and plateau surfaces. Sandstone bedrock which outcrops in wide benches with 1 to 4 metre broken scarps is a common characteristic and small, poorly drained seepage areas are common. Poorly maintained roads and tracks are susceptible to severe sheet erosion after bushfires and during heavy rainfall (Chapman & Murphy 1989:59-60).

The Lambert (**la**) soil landscape topsoil consists of a loose, stony, yellowish-brown sandy loam (**la1**) containing single grained structure and porous sandy fabric. This overlies an earthy, yellow-brown, light sandy clay loam (**la2**) with an apedal, massive to weakly pedal structure that has a texture which ranges from clayey sand to clayey loam. Sandstone and ironstone fragments are often present but charcoal and roots are not. An angular blocky "puggy" clay (**la3**) lies beneath and is a fine sandy clay loam with angular blocky to occasionally prismatic structures present. Platy, ironstone fragments are common. This overlies an earthy, mottled, pale clayey sand (**la5**) that generally occurs as subsoil in wet areas and generally does not contain sandstone fragments, charcoal fragments or roots. Finally a soft, friable, deeply weathered sandstone with a coarse sugary appearance (**la6**) is present with bands of dark red associated with platy ironstone fragments occasionally present (Chapman & Murphy 1989:59-60).

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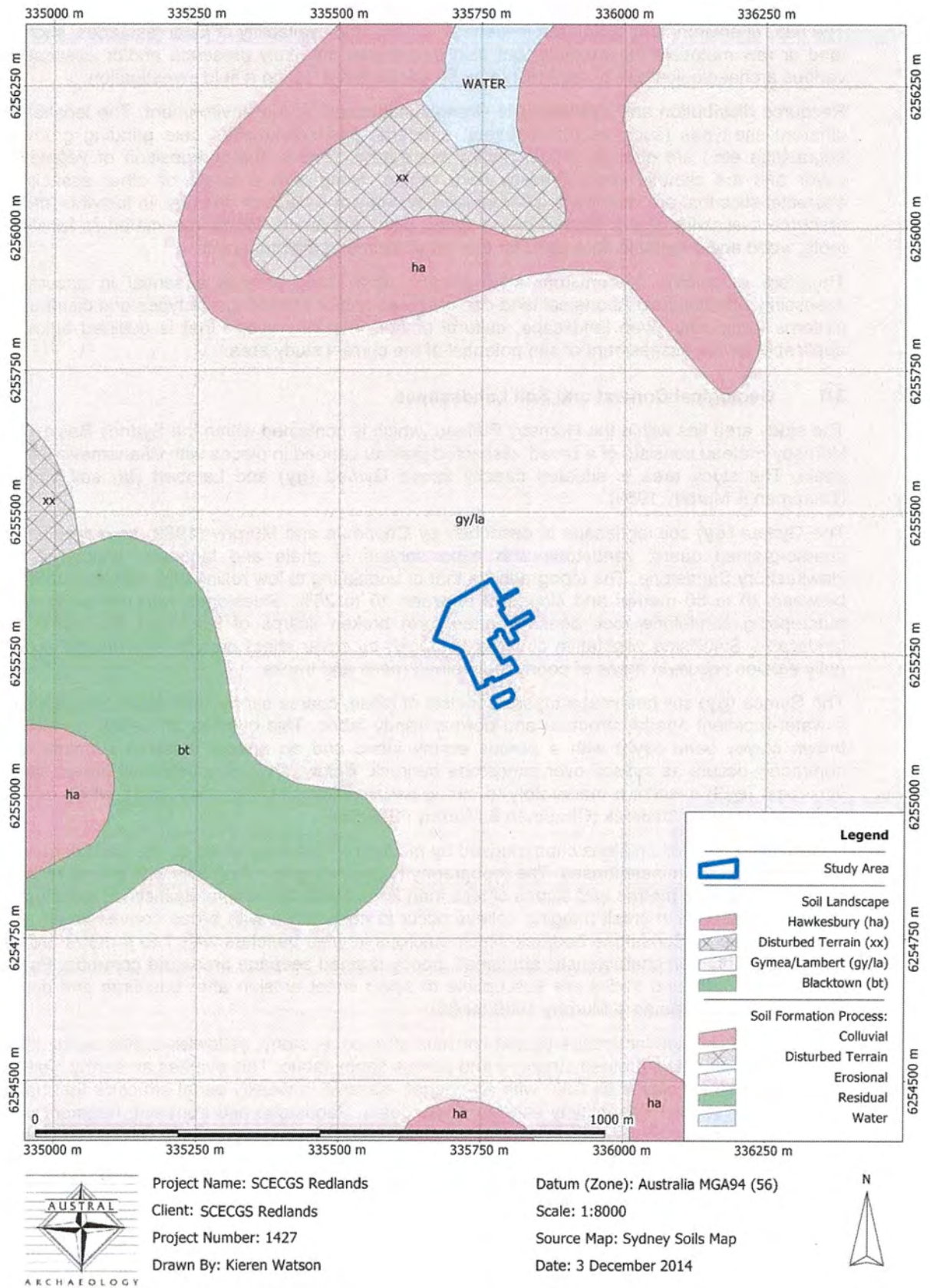


Figure 3.1 Soil landscape of the study area and surrounding area.

3.2 Hydrology

The site is located within the designated hydrological catchment of Sydney Harbour and is subject to the provisions of the *Sydney Regional Environmental Plan (SREP) (Sydney Harbour Catchment) 2005*. The Willoughby Waterfall was once located approximately 4 kilometres north of the study area, and flowed into Long Bay. Despite this, the study area is not located within close proximity to a waterway or foreshore. There are no major rivers or tributaries within the study area or within the surrounding area. The hydrology of the study area is predominantly defined by the underlying geological formation of North Sydney, with higher ground being represented by sandstone bedrock and lower areas consisting of sandy substrates (Chapman & Murphy 1989:59-60).

3.3 Climate

The climate of the study area is temperate with cool winters and warm to hot summers. As recorded at nearby Observatory Hill, July is the coolest month with average daily temperatures ranging from 8.1°C to 16.3°C while January is the warmest month with average daily temperatures ranging from 18.7°C to 25.9°C (Bureau of Meteorology 2014). The study area is situated within the Hornsby Plateau which receives moderate to high average rainfall that decreases westward towards Parramatta (Chapman & Murphy 1989:2). Average annual rainfall is 1,213.9 millimetres with the highest rainfall occurring in the late summer into autumn months and the lowest during winter (Bureau of Meteorology 2014). The area receives an average of 143.6 days of rain per year.

3.4 Flora and Fauna

Vegetation around the study area has been almost completely cleared. Historically, the Wianamatta Shales of the Hornsby Plateau nurtured tall open-forest in high rainfall areas with species such as blackbutt (*Eucalyptus pilularis*), Sydney blue gum (*E. saligna*) and turpentine (*Syncarpia glomulifera*) dominating. The Lambert (la) soil profile supports open-heathlands, closed-heathlands and scrublands, with patches of eucalypt woodland. Species include shrub she-oak (*Allocasuarina distyla*) and heath banksia (*Banksia ericifolia*). The Gynea (gy) soil profile typically contains low, dry sclerophyll open-woodlands on the ridges and upper slopes with common species including red bloodwood (*E. gummifera*), yellow bloodwood (*E. eximia*), scribbly gum (*E. haemastoma*) and shrubs including *Epacridaceae*, *Myrtaceae*, *Fabaceae* and *Proteaceae* (Benson & Howell 1990:121-123; Chapman & Murphy 1989:58-59, 64-65.).

Attenbrow notes that the pre-contact fauna of the Sydney Region was typical of that of wider eastern New South Wales, consisting of vast communities of land and marine animals (Attenbrow 2002:42). Techniques of burning the low-lying grasslands to capture native rats and other small mammals were common (Benson & Howell 1990:121). In the cooler months of the year when fish stocks were seasonally lower, numerous land species were hunted (Currie 2008:55). Most land species would have been widespread across the New South Wales coast; these included kangaroos, wallabies, possums, echidnas, bandicoots, gliders, emus, native rats and mice and goannas. Marine fauna would have varied across a diversity of water sources; the region surrounding the study area would have accommodated shellfish, fish and crustacean in abundance within saltwater estuaries to the north and west and beaches surrounding the headland, while larger marine animals such as sharks, turtles, dolphins and seals would have been present within the deeper water off the coastline. Occasional whales and rare dugongs may have been present within the region (Attenbrow 2002:43).

3.5 Section Summary

The current flora and fauna inhabiting the study area is not indicative of the range and quality present prior to European settlement. Available plant and animal resources would have been sufficient for the needs of Aboriginal people and allowed for trade with neighbouring groups. Some of the same characteristics which made the area of use to past Aboriginal people also would have made it attractive to European settlers, leading to extensive clearing for agricultural, pastoral and rural residential use. The implications of these factors for the archaeological potential of the study area are discussed in Section 9.

4 ABORIGINAL ARCHAEOLOGICAL CONTEXT

4.1 The Sydney Area Archaeological Context

4.1.1 *Population and Contact History*

The present study area lies relatively close to Botany Bay and the landing place of Captain Cook's ships and later, the initial landing point for the First Fleet. First-hand accounts of the Aboriginal occupation of the surrounding area made by Joseph Banks and other members of the fleet are well documented. Nevertheless, population estimates at the time of contact are notoriously problematic as Aboriginal groups avoided the early settlers and were highly mobile. Another factor, which complicates an accurate estimation, is the effect of European diseases such as influenza and smallpox, which decimated Aboriginal populations soon after contact.

The study area lies within the boundary of the region identified by Governor Phillip in 1790 as belonging to the Cammeraygal people of the Guringai language nation (Attenbrow 2002:23 & Hoskins 2007:6), which is also referred to in academic literature as the Gamaragal (Attenbrow 2002:24). Using Attenbrow's language map, the Gamaragal language boundary extends roughly from the northern shore of Port Jackson at Cremorne Point, westwards to the Lane Cove River (Attenbrow 2002:23). It is likely that this boundary was fluid, as Aboriginal people formed part of a dynamic culture which encouraged movement throughout the landscape in order to assist in the ceremonial and functional practicalities of daily life (Niche 2010:17). As such, defined borders for tribal groups need to be recognised as an artificial constraint designed by anthropologists (Organ 1990:xlili).

In 1788 when the First Fleet arrived carrying 1,200 people to feed and accommodate, the marine and land resources around Botany Bay and Port Jackson were stretched considerably (Attenbrow 2002:83). The British arrival coincided with the beginning of an El Nino weather cycle, which would have further contributed to the scarcity of natural resources and fresh water in the area (Attenbrow 2002:83).

The effect this had on the Indigenous population was great. Attenbrow (2002) writes that in the early months of 1788, Indigenous populations would often help European fishing ships unload in return for part of the catch. By late 1788 these interactions became hostile as each party became more desperate to survive and food resources dwindled.

As food became increasingly scarce, instances of attacks by Aboriginal people on European settlers increased if they refused to share resources. This led to retaliation from the European settlers. The combination of an outbreak of smallpox in 1789 and the removal of a large number of Aboriginal men following arrests and murders for various crimes led to a great upheaval within the Aboriginal communities of the Sydney Basin and the loss of cultural knowledge (Attenbrow 2002).

This ethnohistory should be employed with caution and Hiscock (2008:17) has recently argued that even very early historical accounts of Aboriginal people may not be a suitable basis for analogy. As Aboriginal groups had to change their economic, cultural and political practices in order to cope with the social impacts of disease in the historic period, he argues that it is likely that similar drastic changes happened in the past in response to "altered cultural and environmental circumstances" following the arrival of Europeans. Social disruption around settlement areas and coastal fringes caused by European settlers pushing Aboriginal people to the fringes of their traditional lands would have caused such drastic changes.

4.1.2 *Material Culture*

The material culture of the Aboriginal people of the Sydney region at the time of European contact was diverse, and utilised materials derived from a variety of plants, birds and animals as well as stone. Below is only a short summary of the types of material known to have been used by the Aboriginal people of the Sydney region.

Spears in the Sydney region were usually made of a grasstree spike (for the shaft) with a hardwood point. Stone, bone, shell or wood was sometimes used as barbs (Turbet 2001:40). Thin and straight spear-throwers were made from wattle (Turbet 2001:40). Fishing spears were usually tipped with four hardwood prongs with bone points (Attenbrow 2002:117, 119; Turbet 2001:42). Fish were also caught by means of shell or bird talon fish hooks (Attenbrow 2002:117, Turbet 2001:45).

Bark of various types was used for making such diverse items as wrappings for newborn babies, shelters, canoes, paddles, shields and torches (Attenbrow 2002:Table 10.1). Resin from the grasstree was used as an adhesive for tool and weapon making (Attenbrow 2002:116, Turbet 2001:36). Similarly, 'Boomerang' is believed to be a Darug word. Various kinds of boomerangs and clubs were made from hardwoods as were such items as digging sticks (Turbet 2001:37-39, 45, Attenbrow 2002:112).

Stone artefacts are often the only physical indication of Aboriginal use of an area. The knapping of stone artefacts can indicate one of two things, the use of stone to create tools and the discard of these tools once they have been used, or sometimes both. The knapping of stone creates a large amount of stone debris in very little time. Large knapping events tend to occur in proximity to sources of permanent water (McDonald 2000). This is probably because the availability of resources made these good places to camp for short periods of time. Small-scale knapping events can occur anywhere in the landscape and are associated with the manufacture or maintenance of stone tools as a direct result of a specific need. This implies that artefact densities at sites away from watercourses will be more diffuse.

Stone was commonly used for tools and, apart from discarded shell in middens, is the most common material found in archaeological sites of the Sydney region. Stone or stone tools were used for axe heads, spear barbs and as woodworking tools, amongst other things.

Archaeological investigation has resulted in the recognition of changes in the types of stone tools used by Aboriginal people in the Sydney region through time. A sequence of changes in stone tool types in eastern New South Wales was identified by archaeologist FD McCarthy who named it the 'Eastern Regional Sequence' (McCarthy 1976:96-98). McCarthy identified '*Capertian*,' '*Bondaian*' and '*Eloueran*' phases of the sequence, which together appear to span the last 15,000 years in the Sydney region.

McCarthy's sequence was the source of academic debate, with Stockton & Holland (1974:53-56) offering an alternative to McCarthy's theory by proposing four phases of the Eastern Regional Sequence. After *Capertian*, they separated the *Bondaian* phase into the *Early Bondaian* and *Middle Bondaian* phases, where Bondi points and other small tools become apparent in assemblages in Eastern New South Wales. *Late Bondaian* referred to McCarthy's *Eloueran* phase. Stockton & Holland's won the day and their terms are used in the Sydney region today (Attenbrow 2002:156).

Broadly speaking, *Capertian* assemblages contain tools which are generally larger in size than later assemblages, but also contain smaller tools, such as thumbnail scrapers and dentated saws. In the late Holocene (from approximately 5,000 years ago), backed artefacts such as Bondi points, Elouera and geometric microliths appear in archaeological assemblages in the Sydney region, and these tools are characteristically much smaller than those of earlier phases. Edge ground implements appear in regional assemblages for the first time at about 4,500 to 4,000 years ago.

From about 1,600 years ago, Bondi points and geometric microliths began to drop out of use in the coastal parts of the Sydney region, although the Elouera continued to be used. This corresponds to the *Late Bondaian* phase and is characterised by a marked increase in both the use of quartz and the use of the bipolar flaking technique (Attenbrow 2004:74-75).

4.1.3 Food

Prior to the removal of the natural vegetation, the ecological diversity of the area would have provided a wide range of resources available for exploitation. Aboriginal people frequenting the study area would have had access to resources from the rich coastal strip, as well as those available in the wider coastal woodlands and hinterland.

Marine foods from the foreshore would have been a major source of nourishment with fish and shellfish, crustaceans such as oysters, crabs and crayfish and larger marine animals such as seals and whales all being utilised (Attenbrow 2002:63-70).

Hunting of land animals by coastal groups is under-represented in historical accounts, although large animals such as kangaroos, wallabies, possums, fruit bats and other smaller mammals such as native rats and mice were available in the surrounding woodland environs (Attenbrow 2002:69-70).

In summer, spring and autumn there would have been a large variety of plant foods available to the coastal communities of the North Sydney area due to the diversity of coastal and woodland vegetation. Edible rhizomes such as Bracken Fern (*Pteridium*), roots such as wild parsnip (*Pastinaca sativa*) and yam (*Dioscorea*), flour from seeds plants such as Lomandra (*Lomandra longifolia*), wattle (*Acacia pycnantha*) and certain Eucalypt varieties were abundant (Currie 2008:54). However, it is not specifically known as to the exact contribution that different plant species made to the Aboriginal peoples diet in differing areas of the Sydney region (Gay 1998:12).

4.1.4 Early Archaeological Models

Many of the earliest archaeological models were either developed for the entirety of the southern New South Wales coastline, stretching from Sydney down to Batemans Bay, or concentrated on the Sydney region (Navin 1987:29). These settlement models focussed on seasonal mobility, with exploitation of inland resources in winter and coastal resources for the remainder of the year (i.e. Attenbrow 1983; Poiner 1971 & 1976).

Foley (1981) developed a general site distribution model for forager settlement patterns. The general principles described by Foley have been considered useful indicators of sites location across the Australian landscape and has been used as the basis for many current settlement models.

The model splits hunter-gatherer sites into two main categories; 'residential base camps' and 'activities areas' (Foley 1981). People reside in one general location or locations, probably in proximity to a good source of permanent water with shelter from the elements, and travel throughout the local landscape to gather resources at known locations. The right hand side of Figure 4.1 shows how this settlement pattern would look in terms of artefact discard. The majority of artefacts are deposited in proximity to the residential base camp, fewer at the various resource locations and a general low, random scatter amount throughout the rest of the landscape, mainly on travelling routes between activity areas and the base camp. The model, however, does not take into account the use of more than one base camp in an area, or changing preferences of camping areas over time; nor does it account for the movement of resources over time.

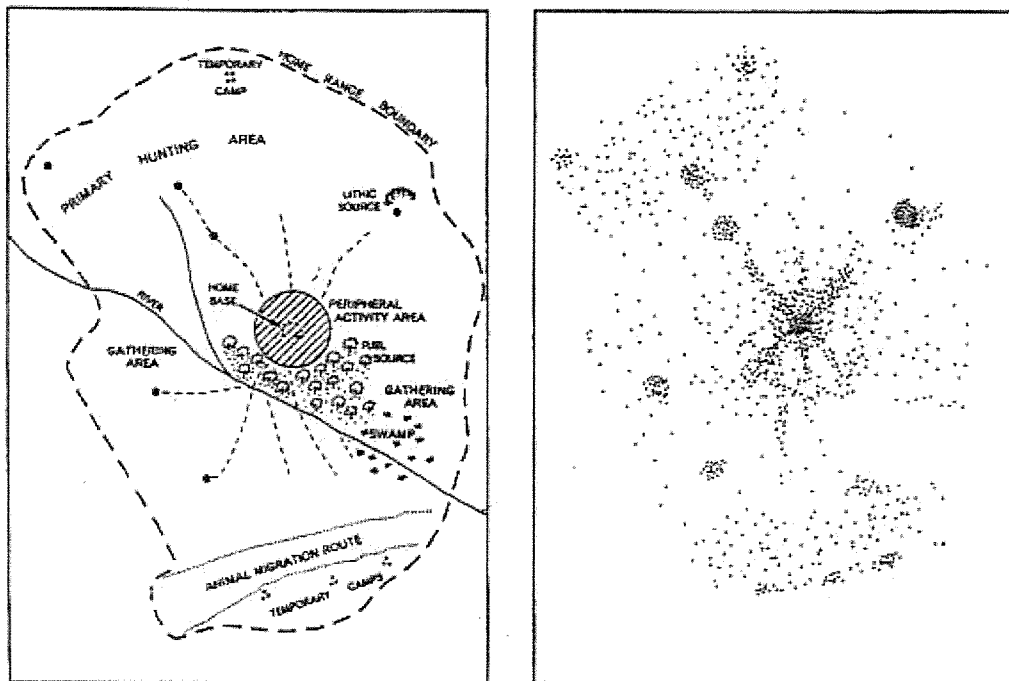


Figure 4.1 Foraging Model (Foley 1981)

Subsequent models were specifically developed to predict Aboriginal occupation in the Port Jackson catchment across a range of aquatic and geographic zones (Attenbrow 2002:51). It was found that Aboriginal site location and typology was influenced by a number of factors, primarily proximity to water, the local geology and the accessibility of resources. There was a general trend toward archaeological deposits associated with tool-making occurring close to estuarine and freshwater waterways and marine shorelines. Middens were generally noted in close proximity to estuarine and coastal zones and usually within areas of Hawkesbury Sandstone geology (Attenbrow 2002:52).

Similarly, studies in the Georges River area, situated approximately 20 kilometres to the south-west of the study area, identified geology as an important factor influencing the distribution of Aboriginal sites. The presence of Hawkesbury sandstone outcrops in the area, ranging between 10 and 100 metres in length, facilitates the abundance of rock shelters. Pigment, engraved art and grinding grooves are, by their very nature, reliant on the presence of these suitable sandstone outcrops (Therin 2006:13).

Based on the above statements, Therin made the following predictions for Aboriginal cultural heritage (Therin 2006:13):

- *Aboriginal Heritage Sites are most likely to occur along the coastal fringe, in areas of sandstone outcropping and in proximity to fresh water resources*
- *Middens may occur anywhere on the coastal zone. The presence of a midden will be directly influenced by the gradient and disturbance of the shoreline;*
- *Open artefact scatters may occur on in the study area. The level of ground visibility and exposure will greatly influence the identification of stone artefacts;*
- *Rock shelters with art (pigment) or containing a deposit may occur if suitable sandstone overhangs are present;*
- *Rock engravings as art or grinding grooves may occur if suitable sandstone shelves are present;*
- *Scarred trees are unlikely due to substantial historical and modern vegetation clearance;*

- *The presence of burials is possible if middens are present or there is suitable sandy deposit.*

4.1.5 Later Work

The predominant tool used to create archaeological models elsewhere in New South Wales is that of stream order models based on the degree of water permanence, as developed by McDonald for use on the Cumberland Plain. McDonald (1997a, 1997b, 1999 & 2000) has drawn on stream order modelling in order to forecast the potential nature and complexity of sites. These models can also be used to predict site distribution and the possible range of activities carried out at a particular site as well as the frequency and/or duration of occupation.

It is therefore possible, McDonald concluded, to use stream order modelling to make general predictions about the location and nature of Aboriginal sites. Water permanence (i.e. stream order), landscape unit (i.e. hill top, creek flat) as well as the proximity to artefact raw materials can result in variations in the density and complexity of an Aboriginal archaeological feature (McDonald 1997a; 2000:19). Site location and duration of occupation predictions therefore relate to stream order in the following ways:

- *In the headwaters of upper tributaries (1st order creeks) archaeological evidence will be sparse and represent little more than a background scatter;*
- *In the middle reaches of minor tributaries (2nd order creeks) archaeological evidence will be sparse but indicate focussed activity (e.g. one-off camp locations, single episode knapping floors);*
- *In the lower reaches of tributary creeks (3rd order creeks) will be archaeological evidence for more frequent occupation. This will include repeated occupation by small groups, knapping floors (perhaps used and re-used), and evidence of more concentrated activities;*
- *On major creek lines and rivers (4th order), archaeological evidence will indicate more permanent or repeated occupation. Sites will be complex, with a range of lithic activities represented, and may even be stratified;*
- *Creek junctions may provide foci for site activity; the size of the confluence (in terms of stream ranking nodes) could be expected to influence the size of the site;*
- *Ridge top locations between drainage lines will usually contain limited archaeological evidence, although isolated knapping floors or other forms of one-off occupation may be in evidence in such a location (McDonald, 2000:19).*

The use of stream order modelling continue to exert influence over the creation of archaeological occupation models, and remains the most used type of predictive model for the Sydney Basin.

4.2 Heritage Database Search Results

4.2.1 Aboriginal Heritage Information Management System Search Results

A search of the Office of Environment and Heritage (OEH) Aboriginal Heritage Information Management System (AHIMS) was undertaken on 17 December 2014, AHIMS client number 158617. The results from the AHIMS search identified no previously recorded sites within a 200 metre radius of the study area.

4.3 Previous Archaeological Investigations in the Vicinity of the Subject Land

Although European observers recorded various aspects of the lifestyles of Aboriginal people around the Sydney area from the beginning of European settlement in the 19th century, archaeological investigations of Aboriginal sites were not properly undertaken till the 20th century. Even early in the 20th century a number of extensive stone artefact deposits were collected without proper archaeological recording from areas within the eastern Sydney peninsula. These collections are now housed in the Australian Museum (Attenbrow 2002:17).

Archaeological sites are frequently recorded across the Sydney region, with over 4,000 sites registered on AHIMS for the Sydney region alone. Almost 150 pre-colonial sites are registered across the eastern Sydney peninsula, consisting of engraved images (n=55) and grinding grooves (n=3) on rock platforms, pigment (n=11) and engraved (n=3) images in rockshelters, burials in both rockshelters (n=2) and open contexts (n=4), shell middens in both rockshelters (n=31) and open contexts (n=33), isolated stone artefacts (n=9) and other archaeological deposits in both rock shelters (n=3) and open contexts (n=11) (Attenbrow 2002b:15).

However, the recorded sites are predominantly within close proximity to the coastline, with only seven being recorded in locations more than 500 metres from the sea. Attenbrow (2002b:17) states that at least 19 sites have been partially or fully excavated within the eastern Sydney peninsula, including Yarra Point (Rich 1986), Frenchman's Bay (McIntyre 1985 in Rich 1986, Table 14), Mt Trefle and Hydrofoil in Vaucluse (Attenbrow & Steele 1995); Milk Beach IV (Rich 1984); and Prince of Wales Hospital, Randwick (Godden *et al.* 1997). However, none of these sites are close to the study area.

Whilst there are no recorded sites or published excavations located within a one-kilometre radius of the study area, radiometric dating from Cammeray (3 kilometres north-west of the study area) have confirmed Aboriginal occupation of up to 5,800 years ago (Hoskins 2007:5). Furthermore Attenbrow (1990) undertook a systematic approach to re-investigating and recording the archaeological potential of the Port Jackson area and found that multiple sites could be re-evaluated including six sites with excellent research potential, 48 with good potential and 151 with little to nil potential (Attenbrow 1990).

It can therefore be seen that relative to the wider Sydney region, few sites have been recorded within the Cremorne area. It is likely that this under-representation may be due to the early expansion and development of the area before Cultural Heritage Management procedures came into place in the 20th century rather than an avoidance of the area by Aboriginal people.

4.3.1 *Archaeological Investigations in the Local Region*

Much of the archaeological work in the local area has been undertaken as a result of development-driven management archaeology, or consultancies. Unfortunately, the intense development of the study area and surrounding suburbs at a time when the importance of recording Aboriginal heritage was not acknowledged has lead to an almost complete absence of previous Aboriginal archaeological assessments to draw information from. Some historical assessments have been completed for sites, although most of these pertain to built heritage and do not identify important stratigraphy or early European or Aboriginal use of the area. Table 4.1 below outlines the details and results of some of the known archaeological consultants' reports from the region.

Table 4.1 A summary of professional Archaeological investigations in the Local Region

Reference	Study area location/ description	Results	Site distribution / Conclusion
AMBS 1994	Balmoral Beach, Balmoral. Approximately 4 kilometres from the study area.	Aboriginal occupation deposits dating 1800 to 4000 years B.P.	
Godden Mackay 1994	64-66 Cremorne Road, Cremorne Point. 2 kilometres from study area.	Possible evidence of early 19 th century European settlement.	Distinct lack of evidence of archaeology to answer research questions.
Attenbrow 1990	The Port Jackson Archaeological Project.	Re-identified multiple sites with research potential. And clarified a number of sites without research potential.	

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Reference	Study area location/ description	Results	Site distribution / Conclusion
Godden Mackay 1990	Lavender Bay. Approximately 4 kilometres from study area.	Removal of modern slipway to lay sewer.	Uncovered remnant seawall.
Wendy Thorp 1999	North Sydney Olympic Pool, Milsons Point. Approximately 4 kilometres from study area.	Assessing archaeological potential of site	Site has little to no potential for surviving archaeological material.
Wendy Thorp 1997	Carlow Street Drill Hall, Crows Nest. Approximately 2 kilometres from the study area.	Historical analysis and archival recording of the feature	Only relates to built heritage and historical significance of the site and area.
Staas, Thorp, Wright 1998	Lady Hay Estate, Crows Nest Road. Approximately 2 kilometres from the study area.	Conservation Area Studies	Written as a specific addendum to pre-existing Conservation Areas. Primarily deals with built heritage.
Wendy Thorp 1997	39-41 Aubin Street, Neutral Bay. Approximately 1.5 kilometres from the study area.	Heritage Impact Assessment on the heritage values of the house.	Only relates to built heritage and historical significance of the site and area.

5 HISTORICAL BACKGROUND

The following historical background is designed to contextualise a site specific history which will aid understanding of the archaeological potential of the study area, and is comprised of two main sections; the first is a historical sketch of early settlement of the region while the second is a targeted historical background of the study area.

This current work will synthesise the results of previous assessments and investigations into a comprehensive document and provides a useful and concise summary of the history of Cremorne and the archaeological potential of the study area.

5.1 North Sydney Historical Sketch

5.1.1 *Early North Shore: 'Wallumetta' – The other side.*

The local Cammeraygal people called the northern shore of Port Jackson 'Wallumetta' meaning 'the other side'. However, the title 'North Shore' was adopted from the early days of European settlement (Hoskins 2007:19; Phillip 13 February 1790[1892:309]). Governor Phillip immediately understood the strategic importance of the deep bays of the North Shore for mooring ships and ordered the coast be officially surveyed (Mann 1938:52). This is recalled in Judge-Advocate David Collins' personal diary of April 1789 when he writes;

The Governor thinking it probable that foreign ships might again visit this coast, and perhaps run into this harbour for the purpose of procuring refreshments, directed Mr. Blackburn to survey a large bay on the north shore, contiguous to this cove; and a sufficient depth of water being found, his excellency inserted in the port orders, that all foreign ships coming into this harbour should anchor in this bay, which he named Neutral Bay (Collins 1808)

Whilst the numerous bays of the North Shore provided excellent mooring for ships, the dense native vegetation, steep foreshore and unsuitable soil profile for cultivating crops or grazing cattle meant land on the peninsular was not developed as quickly as other Crown grants in New South Wales. Development of residential properties was the most common use of the land and initially these properties were situated predominately on the foreshore, where access was obtained solely via private boat or ferry from the main settlement at Sydney Cove.

Various attempts at small industrial and recreational development were made over the years in the area. Governor Bourke originally granted Cremorne Point, consisting of 86 acres south of the study area, to James Robertson in 1833. Robertson, after improving on the property by clearing land and building a Georgian house, sold the estate to James Milson in 1853 (Park 2008). Leased to Charles Woolcott and Jacob Clarke in 1856, 22 acres of the Point was transformed into the Cremorne Gardens; an English style pleasure-garden complete with stages for acts, acrobats, themed walks and refreshment stands. Lasting only six years, the Cremorne Gardens closed and the land it was located on became the focus of a dispute between James Milson Jr. and the Crown, eventually being awarded to the Crown in 1891 (Park 2008).

In 1893 the New South Wales Department of Mines tried to build a colliery after successfully boring for coal in two locations on the headland. However, they faced fierce community and Council opposition to the industrialisation and pollution of the area and were therefore unsuccessful in their plight (Austin 1961:2; Mann 1938:50).

The headland from Middle Harbour to what is today known as Neutral Bay was described as 'thick bush...with only one narrow track through', which later became Ben Boyd Road (Mann 1938:53). The Franco-Prussian war of the 1870s prompted renovations to the fortifications at Middle Head and saw the construction of Military Road to facilitate easy access to St Leonards, and gradually businesses and shops followed (Wood 1961:4).

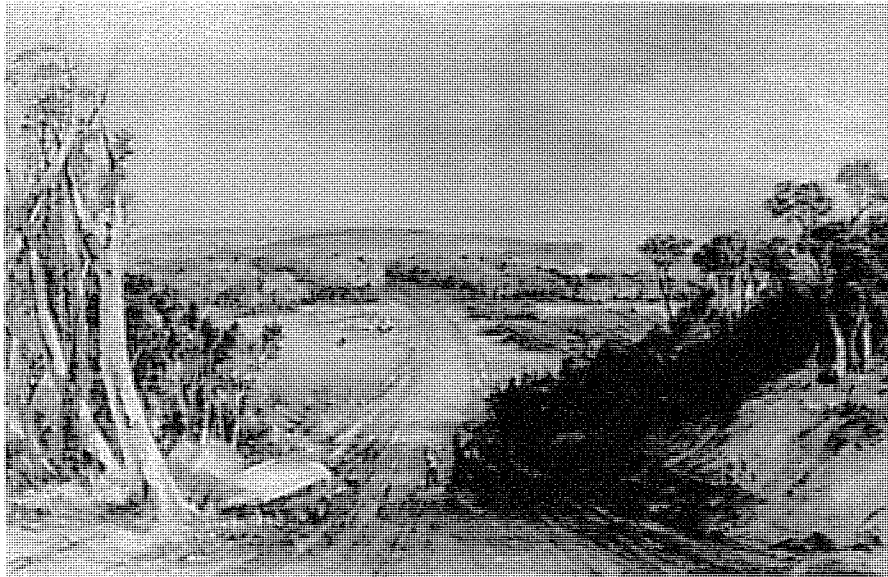


Figure 5.2 1874 watercolour by C. Martens of the newly constructed Military Road entitled *Miss Scott on the road to Middle Head* (State Library NSW:LH REF PF970).

By 1889, the North Shore Ferry Company, owned by and operated from James Milson Jr.'s property, was the main mode of transport for the area and connected with a cable tram operated from the terminus of the North Shore Railway at Milson's Point (Austin 1961:2).

Three suburbs originally occupied the surrounding study area. East St Leonards was established in 1860, St Leonards was established in 1868 and Victoria was established in 1871. For various reasons, the three separate municipalities decided to amalgamate in 1890 forming the Municipality of North Sydney (Mann 1938:95). The united Councils wasted no time in improving ferry services and buses to and from the wharfs, which greatly facilitated the subdivision and development of the area (Mann 1938:95).

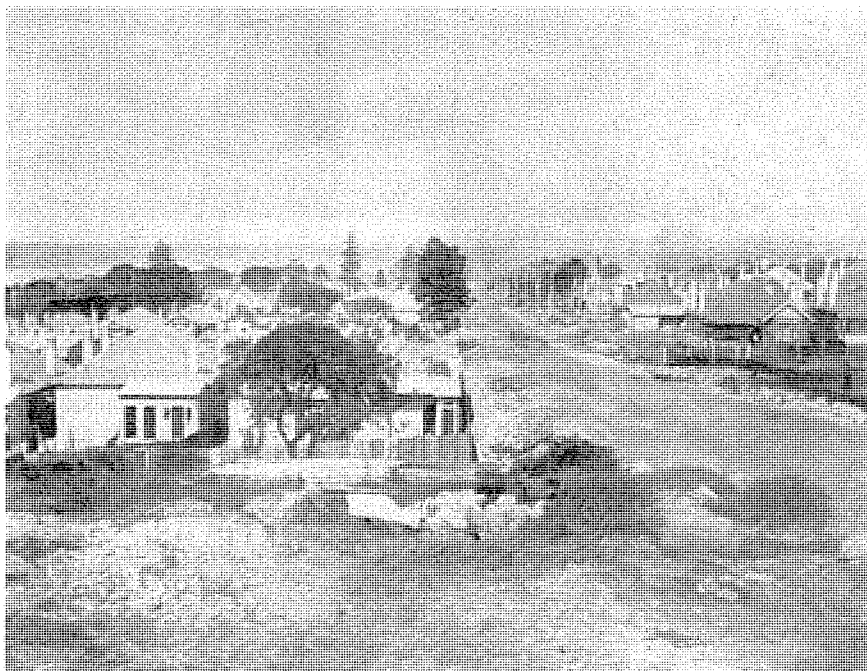


Figure 5.3 1911 photograph of Military Road showing considerable amount of development since 1874 (State Library NSW:LH REF PF2541).

Table 5.1 Information sourced from a private biography written by State Librarian B.W Wray in 1980, compiled from the third series of the *Historical Records of Australia* and stored in the Stanton Library; Local History Collection.

1817	Left Sydney Cove aboard the <i>Cochin</i> destined for 'Hobart Town, Van Diemen's Land.
1817	Occupied a farm at Restdown (Risdon), Tasmania.
1819	Appointed a member of the Lieutenant Governor's Court of Civil Judicature.
1819	Granted a licence for a grazing run in the Coal River district, Tasmania.
1821	Brought action in the Hobart Criminal Court for theft from his Restdown property.
1824	Applied and was refused a second land grant by Lieutenant-Governor Arthur.
1827	Appointed Chief District Constable of Tea Tree & Brighton (a position he held for 10 years)
1828	Appointed Pound Keeper.
1828	Appointed a Divisional Constable.
1828	Registered on the census as living at Tea Tree Brush with 6 children under the age of twelve.
1829	Appointed Parish Clerk and Sexton at Brighton in honorary capacity.
1842	Became Postmaster at Brighton.
1844	Appointed Deputy Registrar of Births, Deaths and Marriages for Brighton.
1861	Died Pontville, Tasmania aged 80.

An 1828 description of Thrupp's original grant issued by the Surveyor General stated the property contained eight cleared acres of land, including a small garden and the remnants of a cottage with a veranda destroyed by fire (Austin 1984:7).



Figure 5.5. Photograph claimed by GVF Mann to be Thrupp's original cottage, but no date or reference is given for the photograph (Mann 1938:52). However, if true, it must have been taken between 1826 and 1828 - well before the first daguerreotype photographs were commercially available. It is more likely to be *Craignathan*, a later structure built by tenant John McLaren.

The legal ownership of Thrupp's grant came into question in 1826 when Captain John Piper was encountering financial issues. Various correspondences were sent requesting the original grant be formalised so the property could be transferred on Piper's behalf to Messrs. Cooper and Levey (Austin 1984:7). In a letter to the Colonial secretary from Piper's agent Mr Norton:

In winding up the affairs of Captain Piper he has been compelled to convert the several estates he possessed and amongst others his interest in several hundred acres of land granted several years since to Mr Alfred Thrupp situate on the North Shore. The grant of this property has not yet issued and his arrangements are very much impeded for want of this instrument. Under these circumstances I beg you to request that the grant may be made out as early as the arrangements of your office will admit (Colonial Secretary re land. A.O Reel 1190 in Austin 1984:7).

Governor Darling did not formalise the deed until 22 July 1830 after requests were made by Piper to re-survey the land to ascertain whether a fresh water creek was included in the property, which it was determined to not be (*Alfred Thrupp 1985:3*). Whatever the arrangement between Thrupp and Piper, there is no recorded dispute and the land was acquired by Cooper and Levey for £100,000 in 1826.

5.1.3 Cooper & Levey

Shortly after Cooper and Levey obtained Thrupp's grant, Levey returned to England and died in 1833, passing sole ownership to Daniel Cooper and the land became known as the "Cooperville Estate". The property had been leased by Cooper to John McLaren, Robert Millard and Richard Lindley who each built houses on the foreshore. The incredibly dense bushland combined with the 1840s depression likely constrained further development of the property. It was only after Cooper's death in 1853 and the beginning of the St Leonards municipality in 1867 that the property began to be methodically subdivided into 99 year or less leases (NSHS 1988:2-3). The specific history of the leases is well documented in Mann (1938) and will not be described in great detail here.

The earliest subdivision to involve the study area was the 1896 auction of the northern portion of the Cooperville Estate, located on the southern side of Military road. The auction poster (Figure 5.6) shows the early roads and structures, which were developed as part of the auction. Lots 5 and 6 of the auction, fronting Military Road and Hampden Avenue, form the southern extension of the study area, containing the Adams Centre, while Figure 5.6 also shows part of the study area on the northern side of Military Road, labelled "The late Gerard Phillips' Residence 'Redlands'". Lots 5 and 6 of the Cooperville subdivision did not appear to sell as part of the auction and were re-advertised for sale in 1902 (NLA:Map Folder 115, LFSP 1720).

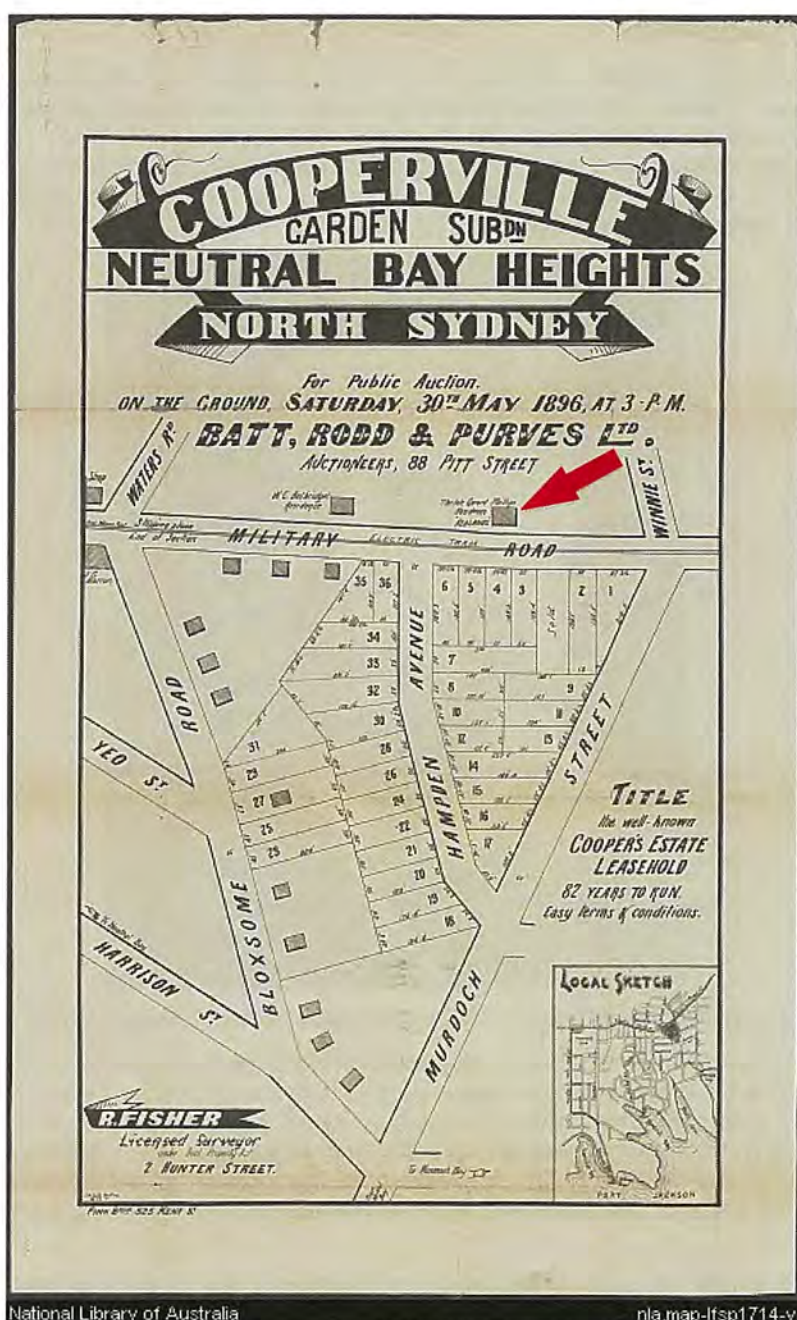


Figure 5.6 1896 auction poster for Cooperville Estate depicting a structure named Redlands within the northern part of the study area (shown with red arrow) (Source Batt, Rodd & Purves & Cantle 1896).

5.2 Site Specific Historical Sketch

The study area is situated to the east of the North Sydney commercial centre. Despite its close proximity to Sydney Cove and the early developing hub of Milson's Point, as noted above in Section 5.1.1, the study area remained predominantly undeveloped until the late 19th century.

The specific history of the school has been documented in depth in *Redlands in Retrospect: the Story of Redlands from its Founding in 1884 to the Retirement of Miss Roseby in 1945* (Gillham & Dunlop 1983) and *S.C.E.G.S. Redlands in retrospect: the story of Redlands from its founding in 1884 to 1965* (Gillham, Dunlop & Birki 1990). Consequently the following sections will concentrate mainly on the Redlands history prior to the establishment of SCECGS.

5.2.1 Gerard Phillips

Phillips, who was from the West of England arrived in Australia *circa* 1852. He was an earnest Catholic and was involved in the development of various movements such as the construction of St. Vincent's Hospital, at Darlinghurst, and St. Mary's Cathedral, in the Domain. He was involved in municipal affairs before becoming one of the first mayors of the combined municipalities of North Sydney in 1892. Phillips was also considered a successful entrepreneur and ran an extensive land agency business (Freeman's Journal 1892).



Figure 5.7. Photograph of Gerard Phillips in 1892 shortly before his death (Stanton Library LH REF PF73).

Not a great deal is known about Phillips' acquisition of his property *Redlands*. However, it is likely that he was a close friend or business acquaintances with Daniel Cooper as he was the manager of the entire Cooper estate from 1854 (Freeman's Journal 1892). Military Road was not cut until 1873 and *Redlands* is only first mentioned in the local news from 1883 (*Sydney Mail and NSW Advertiser* 1883) and as being "the only house in the vicinity" in a later newspaper article reflecting on the state of the Cremorne in 1890 (*Goulburn Evening Penny Post* 5 December, 1938, p. 4).

Phillips' house *Redlands* is described as "...a detached 2 storey brick residence containing veranda and balcony on three-sides, ball [sic], 12 rooms and numerous offices, detached ballroom, &c. The grounds are well and tastefully laid out, and embrace [sic] tennis lawn, paddocks, pavilion, stables [sic] &c" (*Sydney Morning Herald* 1893). The original block is thought to have been 5 acres in size (NSHS 1988:2).



Figure 5.8. Undated etching of the *Redlands* house showing cleared land, fences and outbuildings (Gillham, Dunlop & Birki 1990:140).

Phillips died suddenly in 1892 and his trustees promptly put his property up for sale. Whether the property successfully sold is not well documented, although the estate was subject to several subsequent subdivisions, one 1905 and a second in 1940. Figure 5.9 shows the division of the large corner block into uniform divisions, with properties *Brownrigg*, *Derrilee* and *Redlands* remaining on larger blocks, suggesting they were still finishing their ninety-nine year lease tenure. The addition of 'Redlands Avenue' is also observed, almost completing the modern layout of the corner block.

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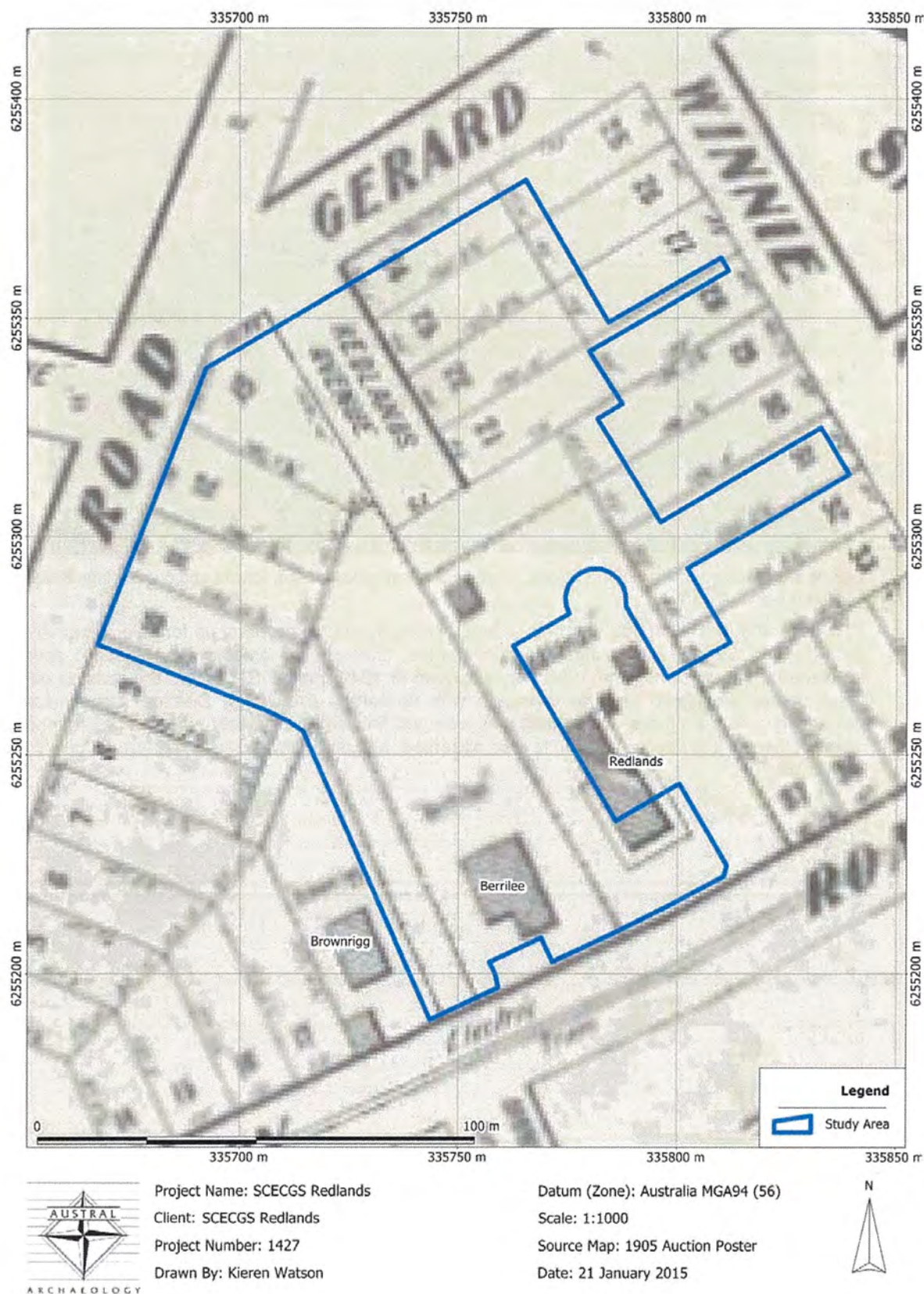


Figure 5.9 1905 auction poster for the subdivision of the 'Redlands Estate' clearly showing the *Redlands* property and associated buildings (source National Library of Australia: LFSP 1716).

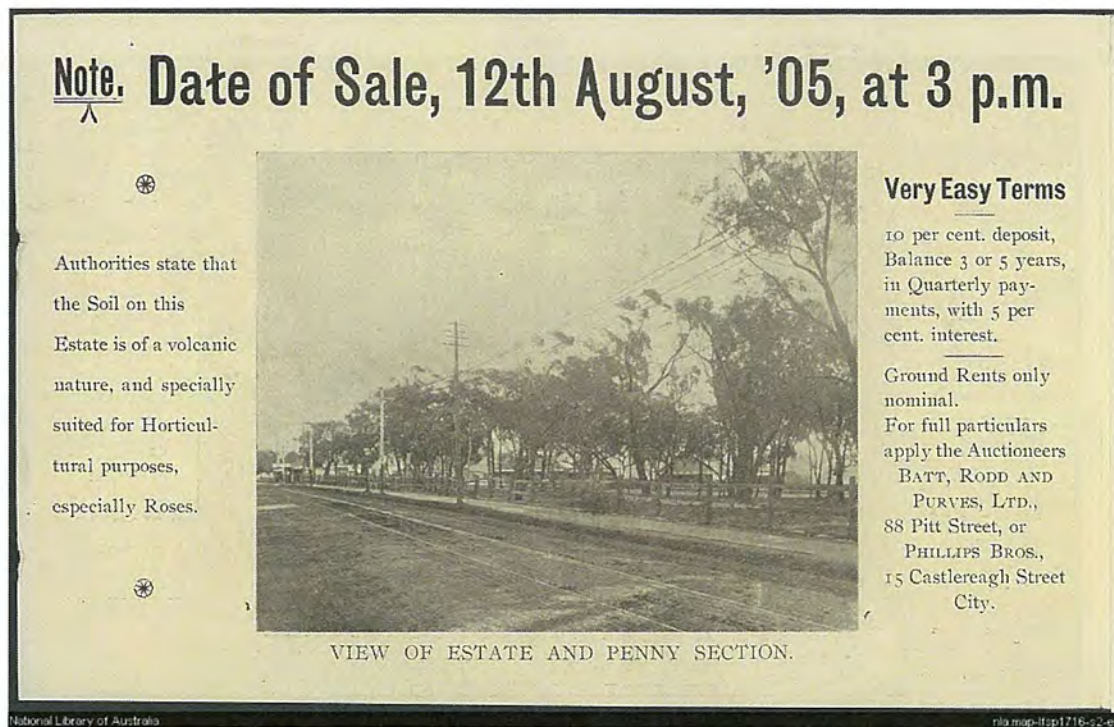


Figure 5.10 1905 Auction poster for the Redlands Estate, photograph possibly shows the property fronting Military Road (source National Library of Australia: LH 1716 S2E).

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5.2.2 *Berrilee*

A structure labeled *W.C Belbridge's Residence* appears on the 1896 auction poster for the Cooperville Estate (Figure 5.13). This structure was not present on the 1892 plan of the same area suggesting it was built sometime between these two dates (Figure 5.12). Labeled *Berrilee* (actually *Derrilee*), the same structure can be seen on the 1905 Redlands Estate auction poster (Figure 5.9). However, by 1930 it appears the property has been demolished and the land has been subdivided into numerous blocks (Figure 5.14).

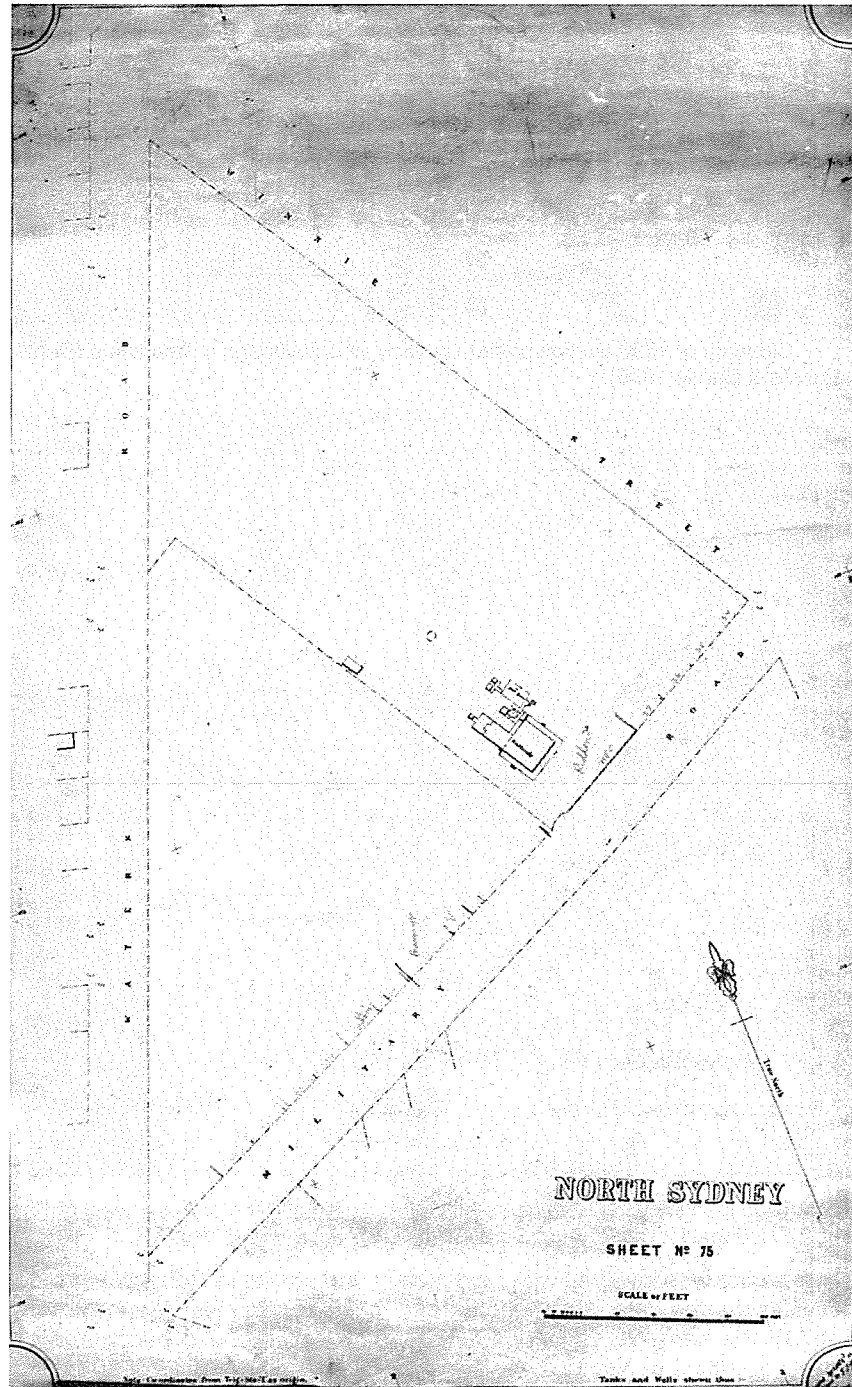


Figure 5.12 1892 plan of the study area, showing *Redlands* as the only structure on the block (source National Library of Australia: Z/SP/N11/23)

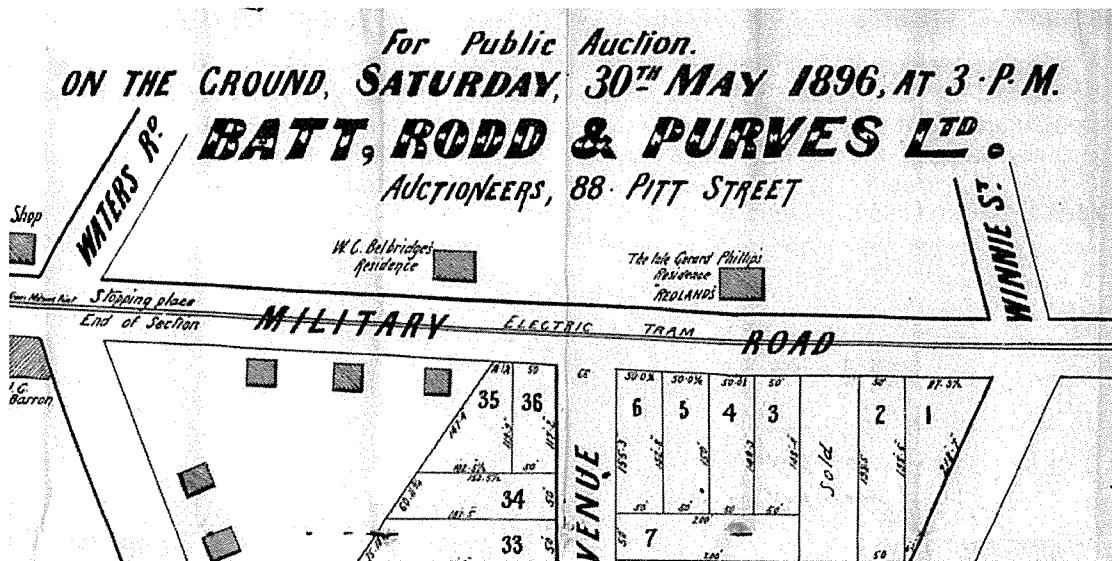


Figure 5.13 Close up of 1896 auction poster showing W.C. Belbridge's Residence (Derilee) (Source Batt, Rodd & Purves & Cantle 1896).

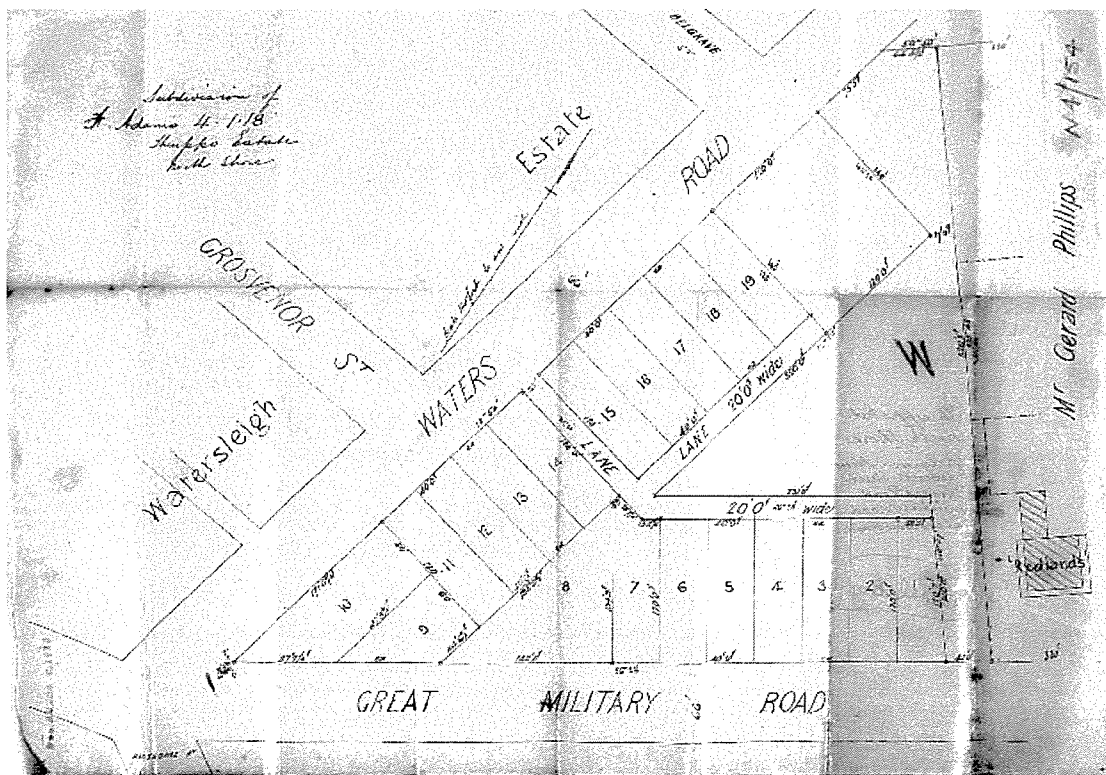


Figure 5.14 1930 plan showing Berrilee as no longer extant and the property west of Redlands as subdivided (source National Library of Australia:Z/SP/N4/25).

A WC Belbridge senior was involved with gold mining and stocks in Queensland before moving to New South Wales in the late 19th century and building *Derrilee* (*Sydney Morning Herald*, September 1873). His son, WC Belbridge junior was a solicitor who became involved with the early banking associations in New South Wales, before passing away in 1901 (*Sydney Morning Herald*, July 1901) while his nephew, or cousin, LJ Adams is recorded as living in *Derrilee* in 1910 when he passed away aged 66 (*Evening News*, October 1910).

No description of *Derrilee* has been located during the historical research. However, it is likely to have been a one or two storey brick structure with associated outbuildings.

5.2.3 *Miss Liggins & Miss Arnold's School for Girls*

In 1896, the *Miss Liggins & Miss Arnold's School for Girls*, which had been searching for new premises, moved into *Redlands* (Gillham & Dunlop 1983:15). By 1911 the school had 35 daygirls and 8 boarders, and Miss Gertrude Roseby had become the owner and headmistress, with her sister Mabel working as a teacher (Gillham & Dunlop 1983:18).

Under Miss Roseby's stewardship the school not only financially survived both World Wars and the Great Depression but also expanded significantly, including the construction of Liggins House, which still stands today (Gillham & Dunlop 1983:19).



Figure 5.15 1920s photograph of the old school gates with *Redlands* in the background (S.C.E.C.G.S Redlands 1984:3).



Figure 5.16 Photograph of SCECGS pupils stood in front of the *Redlands* building (Gillham & Dunlop 1983:20).

For unknown reasons, in 1935 the school moved out of the original *Redlands* house but continued to expand in buildings on the adjacent property to the west (Gillham & Dunlop 1983:21). The *Goulburn Evening Penny Post* (5 Dec 1938) reported that the *Redlands* building was demolished during 1938, and Figure 5.11 shows the 1940 subdivision plans for the property.



Figure 5.17 Photograph pre-1938 showing the original *Redlands* house on the left and a one of the many structures built during this time - the Garden Rooms for boarders (Gillham, Myrtle & Dunlop 1983:18).

5.2.4 *The Origins of Sydney Church of England Co-Educational School Redlands*

The school became affiliated with the Sydney Church of England Girls Grammar School after the retirement of Miss Roseby in 1946. An extensive building program was undertaken from 1956 that saw the construction of the Mowl and Roseby buildings and the acquisition and conversion by the school of numerous residential buildings bordering the school grounds. During this expansion, SCECGS also acquired 7 and 11 Cranbrook Avenue and the site of Cremorne High School, however these are not located within the current study area and will not be affected by the proposed Stage 1 development of the Redlands Master Plan (NBRS 2014).

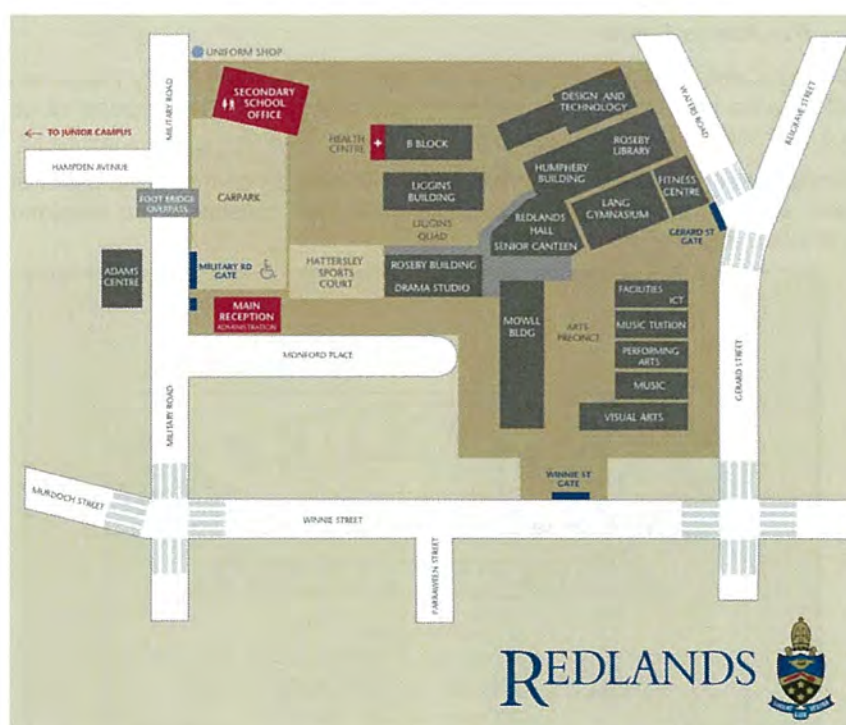


Figure 5.18 Senior campus map of SCECGS showing all current buildings within the Senior Campus (Redlands School Maps 2013).



Figure 5.19. Original Mowll Building with new bell tower c.1955. (Photograph by Max Dupain in Gillham, Myrtle & Dunlop 1990:223).



Figure 5.20. The newly completed Assembly Hall c. 1966. (Photograph by Max Dupain in Gillham, Myrtle & Dunlop 1990:222).

5.2.5 The Adams Centre

In 2007, the school acquired further land on the southern side of Military Road, which contains the former Cremorne post office and telephone exchange, with the purpose of converting the building into a new teaching centre, known as the Adams Centre.

As noted above, these lots were first offered for sale as part of the Cooperville subdivision of 1896 and were again offered in 1902. The study area itself consists of an amalgamation of the front halves of lots 5 and 6 (Figure 5.21).

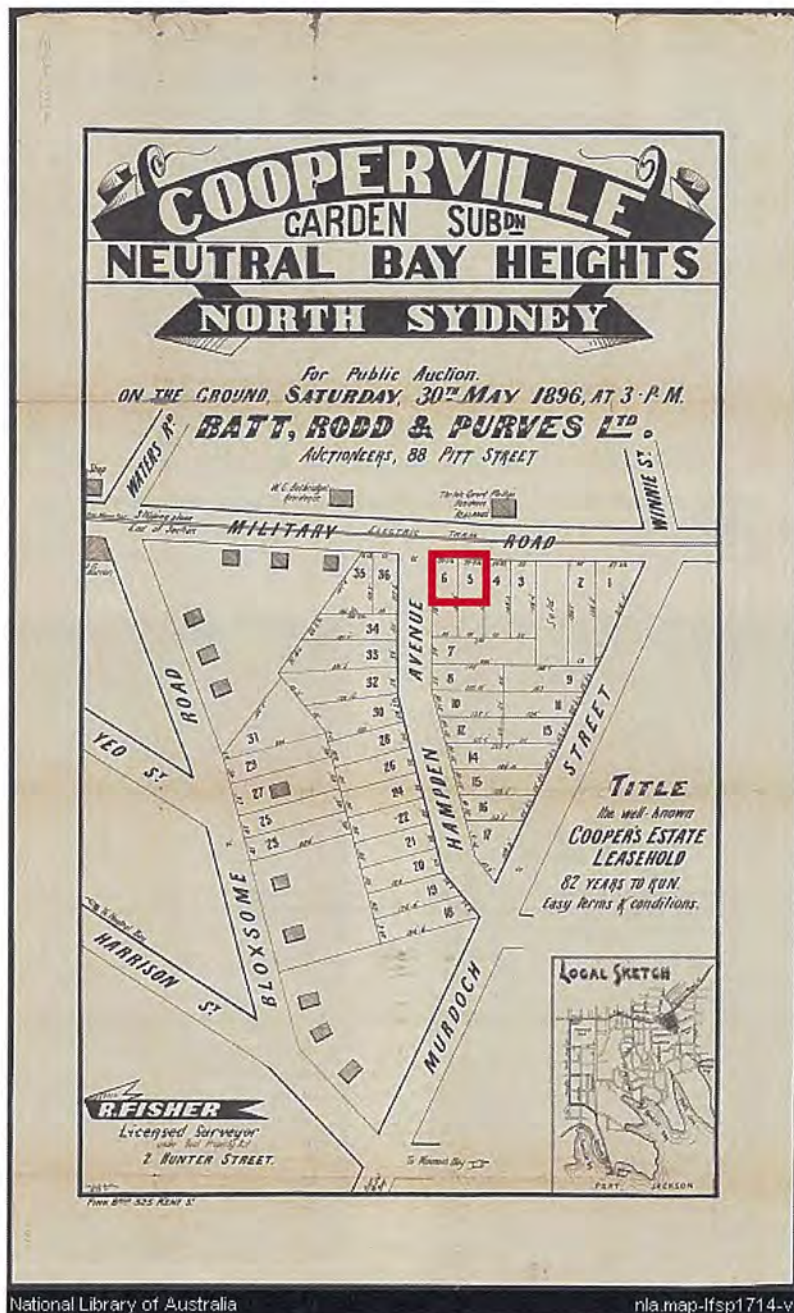


Figure 5.21 1896 auction poster for Cooperville Estate showing the southern portion of the study area (marked with a red square) in relation to the original lot boundaries (Source Batt, Rodd & Purves & Cantle 1896).

All the land between Hampden Avenue and Murdoch Street is listed undeveloped in the Sands business directory until at least 1910, although the subsequent phasing of the developments is unclear due to conflicting information in the historic record.

Land for the post office was first resumed in 1916 (State Library:M Ser 4 811.12/1), although construction did not appear to start immediately. A newspaper article from 6 October 1918 ridiculing the name of the post office:

"The new post-office in Neutral Bay is to be called the Watersleigh post-office. This, apparently is because everyone, naturally, knows that "Neutral Bay," in volapuk, means Watersleigh, just as "Wolloomooloo" means Thamesville. There's nothing like the logical simplicity of the Websterian department, which leaves absolutely no loopholes for letters to go astray." (*Sunday Times*)

However, the post office eventually did open with the name Watersleigh, and is listed in the Sands Directory of 1920 as being a post office, telegraph office and branch of the Commonwealth Savings Bank.

The history of the adjoining land to the west, between the post office and Hampden Avenue is more complex. In 1920, the land is listed as being occupied by Rev. JH Chaseling, while later issues (c.f. 1926) of Sands Directory refer to the building as being St. Peters Rectory, presumably associated with St. Peters Church, to the north-east of the study area. Prior to the construction of the post office, the 1915 to 1918 editions of Sands Directory also refer to this property as "Yengo", while it is also recorded under the name "Yango" (1914), "Yenco" (1913), "Yonco" (1912), and finally "Yenco" again between 1911 and 1909, the earliest recorded year and presumably the year of construction.

However, the issue is that between 1909 and 1913, the Yengo property is listed as being on the western side of Hampden Avenue, while the later editions of the Sands Directory place it to the east. To further complicate matters, the 1913 listing has a physician, JB Welsh, working out of a property to the east of both Hampden Avenue, Murdoch Street and the Yengo property, while the 1914 listing has shifted Welsh's business to the west of Hampden Avenue.

In conclusion, it is assumed that the earlier editions of Sands Directory are incorrect, and that the Yengo property was constructed between the post office and Hampden Avenue in 1909. Both Yengo and the post office are visible on the 1949 aerial image of the study area (Figure 5.23).



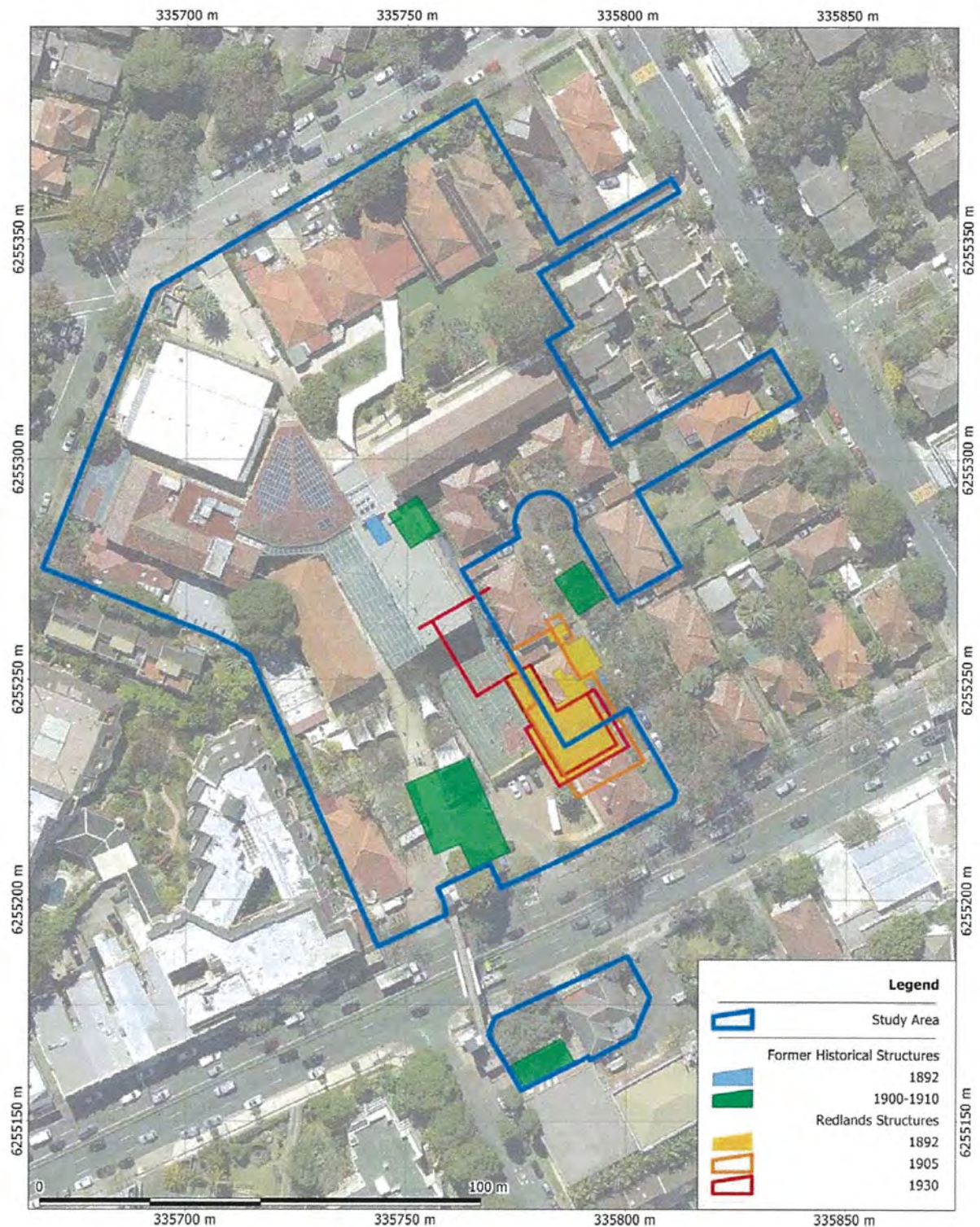
Figure 5.22 Southern part of the study area in relation to the 1949 aerial image (source:Department of Lands).

Of the two properties, Yengo was demolished at an unknown period in the last 20 years, while the post office remains extant.

Table 5.2: Summary of key construction and property acquisition events occurring within the study area. Gillham, Myrtle & Dunlop (1990:189-191) and Gillham & Myrtle (1883:21-24) are the main resource used for this table.

Date	Event
c.1883	<i>Redlands</i> built by Gerard Phillips
1905	Subdivision of original <i>Redlands</i> property.
1912	The Arnold Room built as an assembly hall.
1912	"The Vines" constructed.
1914	New tennis court built.
1917	"The Gables" acquired on other side of Military Road.
1918	"Lone Oak" acquired and another new tennis court built.
1919	"Nara" property next to "The Vines" acquired.
1920	Junior school moved to "Corsica" on the other side of Military Road.
1922	Announcement of new Junior School to be built.
1923	"Corsica" 'given up'.
1926	The "Garden Rooms" built facing the gardens beside the Redlands House. The Garden Rooms were constructed by closing in the veranda connecting the back veranda of the Redlands House and the classrooms between it and the Arnold Room.
1935/6	Separation of the school from Redlands House.
1938	Demolition of <i>Redlands</i>
1940s	Construction of apartments fronting Monford Place
1945	Acquisition of Redlands by SCEGGS Council
1947	Alterations and renovations to the Liggins Building, Establishment of Cowper, McDouall and Roseby Houses.
1950	Three new classrooms opened by Archbishop Mowll
1952	Second story added to the 'new classroom block' (Mowll?)
1953	New tennis courts completed
1955	Dedication of new block of classrooms, including library by Archbishop Mowll
1955	School bell erected
1956	Demolition of "the Vines" to provide outdoor space.
1957	Mother's canteen established.
1959	Acquisition of the Gerard Street cottage for classrooms.
1961	Students in tents while construction of additional three classrooms to Mowll Building, bringing the accommodation to 18 rooms as well as cloakrooms.
1961	Erection of front entrance gates donated by the Mother's Canteen
1965	Building commence on the new Assembly Hall
2007	Acquisition of the former Cremorne post office.
NB. This specific history of construction throughout the school is not known post-1965.	

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ARCHAEOLOGICAL ASSESSMENT AND STATEMENT OF HERITAGE IMPACT



Project Name: SCECGS Redlands
Client: SCECGS Redlands
Project Number: 1427
Drawn By: David Marcus

Datum (Zone): Australia MGA94 (56)
Scale: 1:1100
Source Map: Nearmap
Date: 23 April 2015



Figure 5.23 Location of known historical structures in relation to the study area

6 ARCHAEOLOGICAL PREDICTIVE MODELLING

An assessment of archaeological potential usually considers the historic sequence of occupation in comparison to the structures which are currently extant, as well as the impact that the more recent constructions and works would have had on the earlier occupation phases and, as such, the likely intactness of the archaeological resource. This, in turn, is tied in with the extent to which a site may contribute knowledge not available from other sources to current themes in historical archaeology and related disciplines.

In regard to the assessment of the study area, the archaeological potential depends upon the anticipated likelihood for the survival of buried structural fabric and cultural deposits as well as an estimation of archaeological integrity. Structural fabric refers to what is generally regarded as building or civil engineering remnants. Cultural deposits refer to archaeological deposits, i.e. deposited sediments containing artefacts etc.

Having analysed the historical evidence in the previous chapters, the following section presents a summary of the potential for a physical archaeological resource to be present in the study area, that is, its archaeological sensitivity/potential.

6.1 Aboriginal Predictive Modelling

The moderate climate of the North Sydney Municipality and its location within the wider Sydney Basin is believed to have been conducive to Aboriginal occupation in the past. The study area lies within a resource base associated primarily with the densely vegetated woodlands and the harbour foreshore. Habitats associated with the woodlands and marine environment would have supported a wide range of animals, fish, birds and mammals.

In summary, the main trends broadly seen across the North Sydney area are:

- Specific archaeological sites are most likely to appear on related landforms.
- Site frequency and density are dependent on their location in the landscape.
- Rock shelters and engraving sites can only be located in areas of exposed sandstone.
- Aboriginal scarred trees may still be present in areas where remnant old growth vegetation exists.
- Shell middens are unlikely but are most frequent along the foreshore.
- Artefact scatters are commonly located in close proximity to rock shelters and middens, permanent water sources along creek banks, alluvial flats and low slopes.
- The majority of sites occur on or just below ridgelines or on the shoreline.
- Artefact assemblages are the lowest frequency site type in the area, potentially due to low surface visibility and high levels of modern disturbance.
- While surface artefact scatters may indicate the presence of subsurface archaeological deposits, surface artefact distribution and density may not accurately reflect those of subsurface archaeological deposits.
- PADs are most likely to occur in close proximity to rock shelters or middens.
- Aboriginal occupation is focused around rock shelters and creeklines.
- The presence of alluvial soils aids identification of PADs while erosional soils are likely to not preserve archaeological material.

The general studies of the North Sydney area, the specific investigations surrounding the study area and the search of AHIMS have helped to predict what site types can be expected during the site inspection for this particular assessment and with what frequency. These are:

- Shell middens are unlikely to be present due to the distance from the shoreline.
- Open camp sites or isolated finds of flaked or ground stone are unlikely to be present due to the high levels of historical disturbance known to have occurred within the study area.

- PADs are unlikely to be present due to the high levels of historical disturbance known to have occurred within the study area.
- Burials are unlikely to be present, due to the high levels of historical disturbance present within the study area.
- Ceremonial grounds are unlikely to be present due to their general rarity within New South Wales.
- Stone arrangements are unlikely to be present due to their general rarity within New South Wales.
- Scarred trees are not likely to be present due to the lack of preservation of older vegetation within the study area.
- Grinding Grooves are not likely to be present due to a lack of suitable requirements (i.e. exposed bedrock near to a water source) existing within the study area.

6.2 Historical Predictive Modelling

The following predictive model draws on the areas of known archaeological sensitivity demarcated in Figure 5.23.

As a general rule of archaeology, sites first redeveloped in either the 19th or early 20th century can also retain evidence of occupation from earlier periods. It is also very common that such evidence can be recovered even when sites are redeveloped or disturbed by modern developments. Based on the detailed background history, the following general predictive statements can be made:

- There is no potential for archaeological material to be present within the study area which relates to the early usage of the original *Redlands* building, its outbuildings and yard areas. The original SCECGS Redlands building was demolished in 1938 and more recent structures have been developed in the same location since then.
- Buildings associated with SCECGS Redlands were present in the study area from the early to mid-1900s and are still currently in use.
- Any part of the study area which currently contains a building is considered to have nil archaeological potential, although this is dependent on construction techniques used during building of the post-1900s structures within the study area.
- There is a very low likelihood of archaeological material being present in the central part of the study area, in areas outside of the footprint of current buildings, due to no record of any historical buildings being present in these areas, and the high levels of historical ground disturbance. Any material identified here will relate to either early yard surfaces or undocumented shed or outbuilding structures.
- There is a very low likelihood of archaeological material being present in the locations of the *Derrilee* or *Brownrigg* residential properties as these areas have undergone high levels of ground disturbance. Any such material would relate to yard areas, unrecorded outbuildings or boundary fences associated with the original *Redlands* estate.
- There is a low likelihood of archaeological material being present to the south of Military Road relating to the Yengo rectory. Any such material would relate to gardens or to the northern part of the property itself.
- There is a moderate likelihood that deeper features such as cesspits or wells may exist within the study area, although it is not possible to predict the location of such features.

7 HISTORICAL LAND USE AND SENSITIVITY MAPPING

7.1 Historical Land Use

The extremely dense bushland once covering the area now known as the North Sydney LGA and the poor soil profile (as noted in Section 3.1) of the headland for farming, restricted the growth of the study area until residential developments flourished in the mid to late 19th and early 20th century.



Figure 7.1 1908 photograph of Kareela Road, Cremorne showing the thick bushland that covered the study area. Kareela Road is approximately 1.3 kilometres from the study area (source North Sydney Council 2014)

Parts of the land situated on the northern foreshore of Port Jackson were developed in the early 19th century, as access to such properties was easily gained by boat from Sydney Cove. The steep topography of the coast prevented substantial land clearing and most of these coastal buildings remained residential with a small acreage cleared for gardens or informal orchards.

The construction of Military Road in 1873, to allow better access to the barracks at Middle Head, was the first major development to the area. The amalgamation in 1890 of St. Leonards Municipality, Victoria Municipality and East St. Leonards Municipality into the North Sydney Municipality was the trigger for major residential development. The introduction of plumbed utilities from St. Leonards across Thrupp's grant also facilitated successful subdivision auctions with the study area being subdivided in 1896.

Apart from a few neighbouring properties built in the mid-1890s, no other large-scale development occurred across the study area until the 1896.

7.2 Degree of Historical Disturbance and Impacts

The survival and visibility of Aboriginal and historical sites within the study is greatly affected by the process of vegetation clearance and significant modern disturbance from building developments. These factors need to be considered when assessing the archaeological potential of the study area.

The impacts across the majority of the study area included vegetation clearance and introduction of non-native flora, widespread ground levelling and terracing for the construction of structures, sports grounds and landscaping.

In summary, the study area has been subject to widespread and extensive disturbance that has significantly affected the archaeological potential.

8 SITE INSPECTION

8.1 Introduction

Emily Bennett (Austral Archaeology) conducted a brief site inspection on 25 November 2014 in order to identify areas of archaeological potential within the study area. The inspection examined all parts of the study area but focused on locations which are to be impacted under Stage 1 of the proposed development.

The inspection identified that the entire study area has been subject to extensive and widespread impact from ground levelling and excavation, construction and landscaping. Such impacts have occurred quite consistently throughout SCECGS Redlands' 118 years history, with much of the major excavation works undertaken in the mid-20th and early 21st century.

8.2 Areas of Inspection

The key areas that were inspected are described in relation to proposed impacts due to occur in Stage 1 of the development in areas of archaeological potential. Each location was examined for any possible intact archaeological features or deposits.

8.2.1 *Mowll Building Redevelopment*

The Mowll Building, which was opened in 1950, is located between the end of Monford Place and Gerard Street. The building was originally freestanding but has been renovated over the years to connect with the Liggins Building; it also has undercover areas connecting it to the Roseby Building and to Redlands Hall. The building is surrounded on all sides by heavily landscaped and paved areas. To the south, the rear of residential apartments built in the 1930s dominate the area.



Plate 8.1 South-west facing view of the Mowll Building. The building has undergone multiple phases of additions, with the exposed brick at the far end of the structure representing one such expansion.



Plate 8.2 View of the walkway at rear (southern face) of the Mowll Building. The brick apartment buildings to the right are 7 and 8 Monford Place. Note the levelled area between structures.

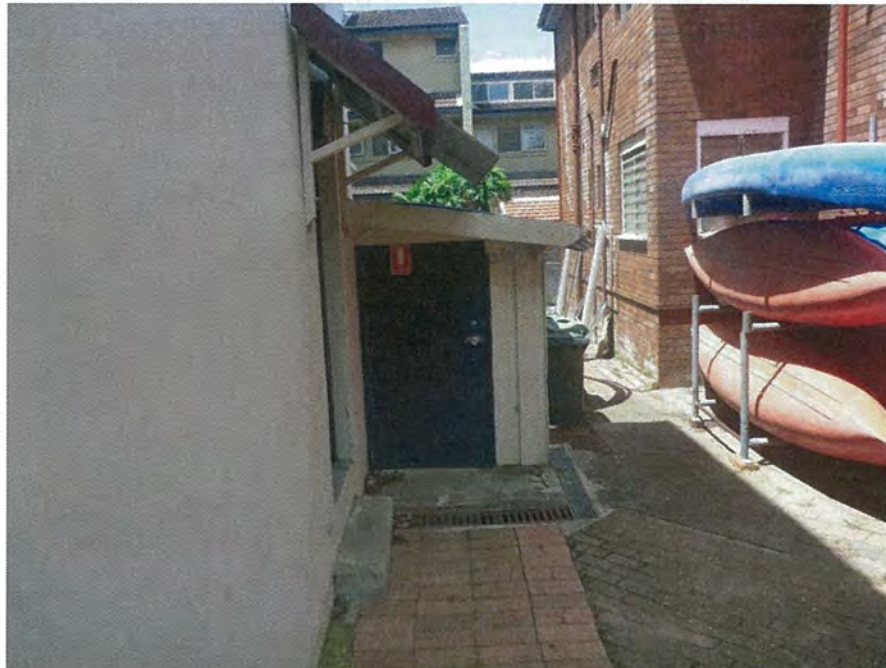


Plate 8.3 East facing view of the rear of 8 Monford Place (to right) and the eastern end of the Mowll Building. Outdoor areas have been heavily modified.



Plate 8.4 East facing view of the northern face of the Mowl Building. Highly landscaped outdoor areas are visible.

8.2.2 7 – 8 Monford Place

Stage 1 of the proposed development includes the demolition of two residential buildings located at 7 and 8 Monford Place, Cremorne.

The buildings located at 7 and 8 Monford Place were most likely built in the 1940s after the demolition of *Redlands* in 1938 and the subdivision of the remaining land. The apartments are mirrored two storeys, mock Tudor, redbrick blocks each containing four units. The blocks are situated at the end of a cul-de-sac (Monford Place) with their northern face backing onto the southern side of the current Mowl building. Each building has an original, single story free standing lock up garage associated with it and the area in front of each building has been paved to accommodate car parking. Stage 1 of the proposed development will demolish these buildings and replace them with the New Learning Hub.



Plate 8.5 View of 7 Monford Place and its associated lock up garage. The building behind the garages is the Roseby Building.



Plate 8.6 View of 8 Monford Place, also named *Redlands*, and its associated garage. The front garden has been heavily modified to accommodate car parking.



Plate 8.7 View north between 7 and 8 Monford place towards the Mowll Building. A brick-paved, fenced passageway leads between the flats to the Mowll Building; this is shown by the brown fence and maroon gate.



Plate 8.8 Rear of 8 Monford Place showing eastern end of Mowll Building and paved outdoor residential area.

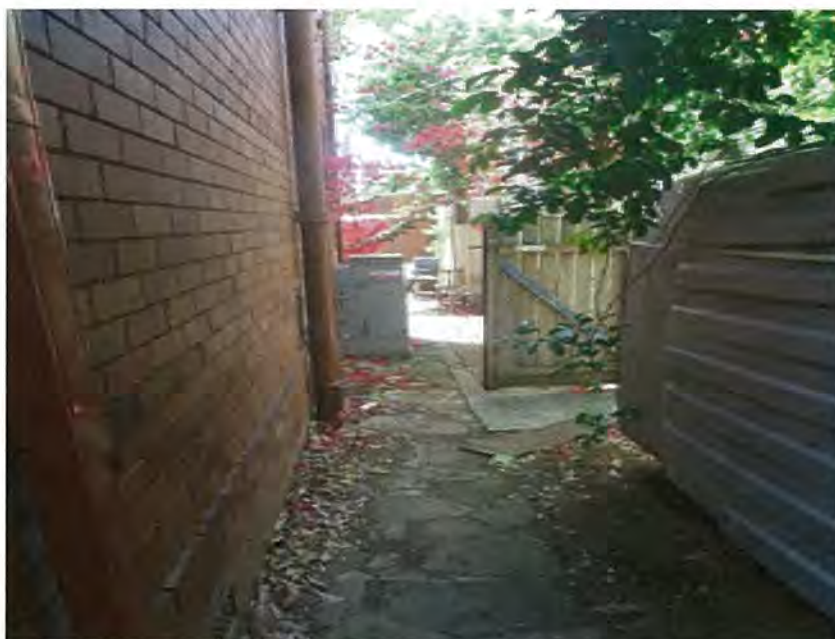


Plate 8.9 View north at the rear of 8 Monford Place showing the highly modified and disturbed surroundings of the building. The gate on the right leads to rear of 6 Winnie Street.

The 1892 and 1905 plans of *Redlands* depict a structure in the north-west corner of the block, most likely the same structure in each plan, with slight discrepancies in the location. Whilst it was known that the *Redlands* estate contained a number of less-permanent structures, there is a possibility that the building may have been used as an outdoor toilet before the suburb received sewerage facilities between 1891 and 1898. The structure lies within the study area, but just outside of the current proposed footprint of the New Learning Hub (see Figure 5.23).

8.2.3 *General Study Area*

The greater part of the study area has been subject to significant and widespread subsurface impacts. Much of the SCECGS Redlands grounds have been developed, with the remainder subject to landscaping or terracing and levelling for communal areas.



Plate 8.10 North-east view showing the highly modified outdoor area located to north of Mowll Building.



Plate 8.11 North-east view of landscaped driveway and terracing leading to Gerard Street. No original ground surface is extant.

8.3 Summary

The site inspection identified no Aboriginal sites or areas of PADs within the study area. The inspection revealed that the vast majority of the study area has been subject to extensive impact during SCECGS Redlands' 118 year history. Through construction, ground levelling and terracing, excavation and landscaping, the study area has sustained significant subsurface impact and is unlikely to contain either *in situ* Aboriginal or European historical archaeological deposits or structures.

9 HISTORICAL LAND USE AND SENSITIVITY MAPPING

9.1 Historical Land Use

The extremely dense bushland once covering the area now known as the North Sydney LGA and the poor soil profile (as noted in Section 3.1) of the headland for farming, restricted the growth of the study area until residential developments flourished in the mid to late 19th and early 20th century.



Figure 9.1 1908 photograph of Kareela Road, Cremorne showing the thick bushland that covered the study area. Kareela Road is approximately 1.3 kilometres from the study area (source North Sydney Council 2014)

Parts of the land situated on the northern foreshore of Port Jackson were developed in the early 19th century, as access to such properties was easily gained by boat from Sydney Cove. The steep topography of the coast prevented substantial land clearing and most of these coastal buildings remained residential with a small acreage cleared for gardens or informal orchards.

The construction of Military Road in 1873, to allow better access to the barracks at Middle Head, was the first major development to the area. The amalgamation in 1890 of St. Leonards Municipality, Victoria Municipality and East St. Leonards Municipality into the North Sydney Municipality was the trigger for major residential development. The introduction of plumbed utilities from St. Leonards across Thrupp's grant also facilitated successful subdivision auctions with the study area being subdivided in 1896.

Apart from a few neighbouring properties built in the mid-1890s, no other large-scale development occurred across the study area until the 1896.

9.2 Degree of Historical Disturbance and Impacts

The survival and visibility of Aboriginal and historical sites within the study is greatly affected by the process of vegetation clearance and significant modern disturbance from building developments. These factors need to be considered when assessing the archaeological potential of the study area.

The impacts across the majority of the study area included vegetation clearance and introduction of non-native flora, widespread ground levelling and terracing for the construction of structures, sports grounds and landscaping.

In summary, the study area has been subject to widespread and extensive disturbance that has significantly affected the archaeological potential.

9.3 Sensitivity Mapping

The results of the predictive modelling (Section 6) and the degree of historical disturbance and impacts (Section 9.2) are depicted in an archaeological sensitivity map below (Figure 9.2). This map shows the degree of archaeological potential within the study area following site development and widespread earthworks. The sensitivity map is applicable to Aboriginal and historical archaeological potential. The map forms the basis for the conclusions and management recommendations outlined in Section 12.

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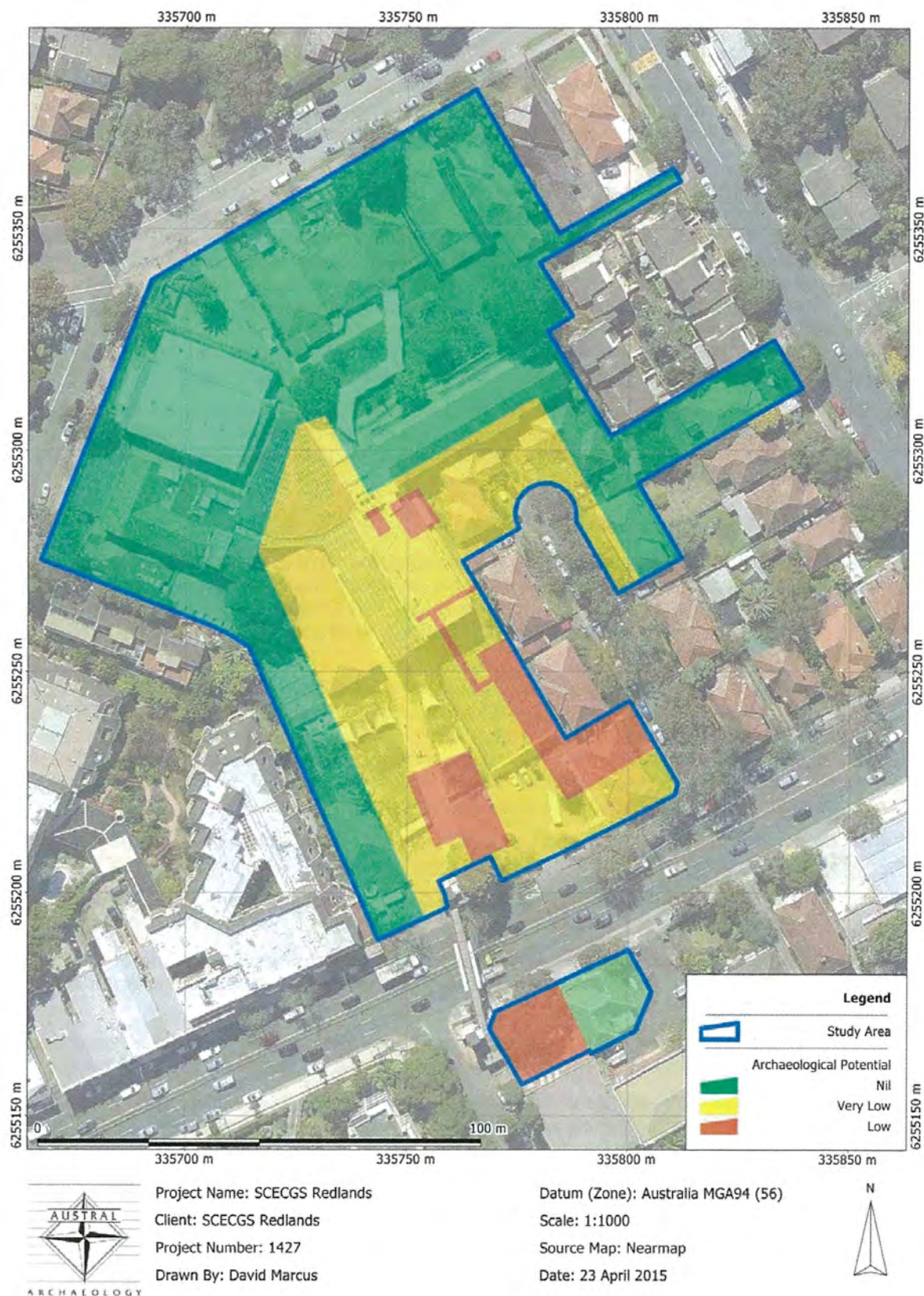


Figure 9.2 Archaeological sensitivity plan showing areas assessed to have archaeological potential within the study area.

10 ASSESSMENT OF SIGNIFICANCE

10.1 Introduction

An assessment of cultural significance seeks to establish the importance that a place has to the community. The concept of cultural significance is intrinsically tied to the fabric of the place, its history, setting and its relationship to other items in its surrounds and the response it evokes from the community.

The assessment of cultural significance with respect to archaeological sites can present difficulties because the nature and extent of the "relics" are often indeterminate and value judgements therefore need to be made on the basis of potential attributes. The element of judgement can be greatly reduced by historical or other research, as has been completed for the current study. Archaeological deposits and features provide important evidence of the history and settlement of New South Wales. These heritage items may include deposits containing material culture (artefacts) that can be analysed to yield information regarding early urban development that is unavailable from other sources. Archaeological investigations can reveal much about technology, industry, past economic and social conditions and people's lives.

Sites that contain these elements therefore have scientific value that may be of considerable significance when analysed in association with documentary evidence. It is through this potential to reveal information about the past use of a place that archaeological sites have heritage significance.

10.2 Basis for Assessment

The Burra Charter of Australia ICOMOS was formulated in 1979 (revised 1999), based largely on the Venice Charter (for International Heritage) of 1966. The Burra Charter is the standard adopted by most heritage practitioners in Australia. The Charter divides significance into four categories for the purpose of assessment. They are: Aesthetic, Historical, Scientific/Technical, and Social significance.

The Heritage Council of New South Wales has established a set of seven criteria to be used in assessing cultural heritage significance in New South Wales, and specific guidelines have been produced to assist archaeologists in assessing significance for subsurface deposits. These are published in the Heritage Council's *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009). The Heritage Council's criteria incorporate those of the Burra Charter, but are expanded to include rarity, representative value, and associative value.

In order to determine the significance of a historical site, the Heritage Council have determined that the following seven criteria are to be considered (Heritage Branch 2009:3):

- **Criterion (a): an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area);**
- **Criterion (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 (or the local area);**
- **Criterion (c): an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);**
- **Criterion (d): an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area);**
- **Criterion (e): an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the local area);**
- **Criterion (f): an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area); and**
- **Criterion (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 (or the local area).**

These criteria were designed for use on known or built heritage items, where above ground heritage is both tangible and easily identified. As the nature of archaeology is that it is invisible until disturbed, the presence and attributes of archaeological material must be assumed based on the recorded levels of disturbance, known site history and the creation of predictive statements. Ultimately, the actual presence of archaeological material can only ever be framed in terms of the potential for it to be present.

The Heritage Branch has assisted archaeologists by creating questions which are framed around the main NSW Heritage Criteria, and which can be used to assess the relative importance of any archaeology which is likely to be present. The questions to be asked of an archaeological deposit differ from the main criteria, but can be seen to be referential to them, in order to create a suitable framework for assessing archaeological sites.

Therefore, it should be noted that although the study area contains built heritage, the significance of the built heritage has already been assessed as being of Local significance and as such is listed on the North Sydney LEP. The following assessment deals solely with the significance of any potential archaeological material present within the study area.

10.3 Significance Assessment

10.3.1 Assessment Criteria

The following section addresses the significance of the potential archaeological resource in accordance with the criteria adopted in the Heritage Council's significance guidelines for archaeological deposits (Heritage Council 2009:11-13).

Archaeological Research Potential (current NSW Heritage Criterion e)

- ***To which contexts (historical, archaeological and research-based) is it anticipated that the site will yield important information?***
- ***Is the site likely to contain the mixed remains of several occupations and eras, or is it expected that the site has the remains of a single occupation or a short time-period?***
- ***Is the site rare or representative in terms of the extent, nature, integrity and preservation of the deposits (if known)?***
- ***Are there a large number of similar sites?***

Residential and suburban school sites are considered a common feature of both the greater Sydney region specifically and New South Wales generally. Countless examples of such sites are extant throughout the state.

- ***Is this type of site already well-documented in the historical record?***

Such residential and schoolyard sites are well represented in the historical record.

- ***Has this site type already been previously investigated with results available?***

Archaeological investigations of residential and schoolyard sites have been previously undertaken in NSW and elsewhere in Australia.

- ***Is the excavation of this site likely to enhance or duplicate the data set?***

While some information relating to specific site questions such as construction techniques may be answered through excavation of the archaeologically sensitive areas, this is unlikely to provide enhancement to the existing knowledge of SCECGS Redlands occupation and use.

What is the ability of the archaeological evidence to provide information about a site that could not be derived from any other source and which contributes to the archaeological significance of that site?

From examination of areas of archaeological potential within the study area, it has been concluded in this assessment that *in situ* archaeological remains are unlikely to survive. As such, it is anticipated that the site does not have archaeological research potential and therefore does not satisfy NSW Heritage Criterion (e).

Associations with individuals, events or groups of historical importance (NSW Heritage Criteria a, b and e)

- **Does the archaeological site link to any NSW Historic Themes? Will the site contain 'relics' and remains which may illustrate a significant pattern in State or local history?**

The relevant themes which may be applied solely to the archaeological potential of the study area are listed below in Table 10.1.

Table 10.1 Historical Themes

Australian Theme	New South Wales Theme	Local Themes
3. Developing local, regional and national economies	Environmental – cultural landscape	Construction of Military Road.
4. Building settlements, towns and cities	Towns, suburbs and villages	Subdivision pattern
4. Building settlements, towns and cities	Accommodation	Cottage and house site (archaeological).
6. Education	Education	School, kindergarten, playground.
8. Developing Australia's cultural life	Domestic Life	Domestic artefact scatter and arrangement of interior rooms.
9. Marking the phases of life	Persons	A family home and a place of residence.

- **Is the site widely recognised?**

The history of SCECGS Redlands post-1945 is very well documented. The individual history of specific structures within the overall study area, such as the former *Redlands* residence-turned-school, is also fairly well recorded in early histories of North Sydney.

- **Does the site have symbolic value?**

The site has symbolic value to the Church of England community through the generations of girls educated and instilled with Church of England values at SCECGS Redlands. The school also has symbolic value for the pupils who attended the school pre-1945.

- **Is there a community of interest (past or present) which identifies with, and values the specific site?**

The site has symbolic value as part of the SCECGS Redlands institution and as part of the Miss Liggins and Miss Arnold School for Girls. The current and former students of both institutions value the site, and an Old Girls' Association was formed in 1908 for students pre- and post SCECGS Redlands.

- **Is the site likely to provide material expression of a particular event or cultural identity?**

There is a very low likelihood that the site could provide material culture relating to either the middle to upper class of the late 19th century in the form of Gerard Phillip's residence *Redlands*, or the secular school run within the premises from between 1896 and 1945. No significant events are documented within the study area and it is highly unlikely unknown historical events will be identified through archaeological investigation.

- ***Is the site associated with an important person? (the role of the person in State or local history must be demonstrated/known)***

Gerard Phillips built *Redlands* circa 1863 and it remained the only house in the vicinity up until the 1890s. Phillips was the mayor of the newly established North Sydney Council in 1892 and, as a devout Catholic, was involved with the construction of St. Vincent's Hospital and St. Mary's Cathedral.

The first three headmistresses of the school, Miss Liggins, Miss Arnold and Miss Roseby played a role in setting up non-secular schooling for girls and women in the mid-19th century in New South Wales.

A number of students from both the Miss Liggins and Miss Arnold School for Girls and SCECGS Redlands have achieved notable status within local and state history. These include Olympic athletes, artists, musicians, lawyers and television presenters.

- ***What is the strength of association between the person and the site?***

Gerard Phillips played a major role in the development of North Sydney. His name is synonymous with the development of the study area as he built the first house in the area, was the property manager for Cooper & Levey's subdivisions and was also the main advocate for facilitating sewerage to the area before becoming the mayor of the North Sydney Municipal in 1892. Whilst the original *Redlands* building was demolished in 1938, Gerard Phillips association to the school lives on in its name.

The legacy of the headmistresses remains in the published fond memoirs of previous students and in the Liggins and Roseby Buildings within the school grounds.

- ***Did the person live or work at the site? During the phase of their career for which they are most recognised? Is that likely to be evident in the archaeology /physical evidence of the site?***

Redlands was Gerard Phillips' residence, however, it is not known whether he had an office in the house and it is unlikely that archaeological evidence would reflect his time in office as mayor.

Archaeological remains of the *Redlands* structure may be preserved sub-surface and archaeological deposits may reflect the history of Miss Liggins' and Miss Arnold's time operating a school from the building.

- ***Did a significant event or discovery take place at the site? Is that evident/or likely to be evident in the archaeology/physical evidence of the site?***

No significant events or discoveries are associated with the study area.

Do the archaeological remains have particular associations with individuals, groups and events which may transform mundane places or objects into significant items through the association with important historical occurrences?

The potential archaeological remains of *Redlands* do hold particular associations with Gerard Phillips, Miss Liggins and Miss Arnold.

It has been concluded in this assessment that *in situ* archaeological remains are unlikely to survive within the study area. As such it is anticipated that the site does not satisfy NSW Heritage Criteria (a), (b), (d) and (e).

Aesthetic or Technical Significance (NSW Heritage Criterion c)

Will an archaeological excavation reveal highly intact and legible remains in the form of aesthetically attractive artefacts, aged and worn fabric and remnant structures, which may allow both professionals and the community to connect with the past through tangible physical evidence?

It has been concluded in this assessment that *in situ* archaeological remains are unlikely to survive within the study area. It is therefore considered that the site would not provide material culture and does not meet NSW Heritage Criteria (c) in this regard.

Ability to demonstrate the past through archaeological remains (NSW Heritage Criteria a, c, f, and g)

- ***Does the site contain well-preserved or rare examples of technologies or occupations which are typical of particular historic periods or eras of particular significance?***

It is unlikely that any well-preserved or rare examples of technologies or occupations will be present in the study area.

- ***Was it a long-term or short-term use?***

The study area was utilised as a residence from around 1863 to 1893 and as a school from 1893 through to the present. The original *Redlands* building was demolished in 1938.

- ***Does the site demonstrate a short period of occupation and therefore represents only a limited phase of the operations of a site or technology or site? Or does the site reflect occupation over a long period?***

The site demonstrates long term occupation of the study area by consecutive incarnations of schools, documenting its evolution into a modern teaching establishment.

- ***Does the site demonstrate continuity or change?***

The site demonstrates a continuity of occupation of the SCECGS Redlands grounds, with a consistent attitude toward change and development into a modern teaching institute.

- ***Are the remains at the site highly intact, legible and readily able to be interpreted?***

Previous significant and widespread construction and earthworks across much of the SCECGS Redlands grounds are likely to have removed any intact archaeological remains associated with any archaeological evidence.

Do the archaeological remains have an ability to demonstrate how a site was used, what processes occurred, how work was undertaken and the scale of an industrial practice or other historic occupation.

It has been concluded in this assessment that *in situ* archaeological remains are unlikely to survive within the proposed Stage 1 study area. It is considered that the study area does not meet NSW Heritage Criteria (a), (c), (f) and (g) in this regard.

10.3.2 Statement of Significance

The study area has been listed as having general heritage significance in the North Sydney LEP. However this listing relates to built heritage rather than the archaeological potential associated with early occupation of the study area.

Previous substantial development and earthworks within the study area are likely to have removed all archaeological evidence of Aboriginal occupation and of the former *Redlands* building. The study area is therefore considered to have a low potential for *in situ* archaeological remains.

As such, the archaeological resource within the study area does not meet the Heritage Significance Criteria at any level.

11 STATEMENT OF HERITAGE IMPACT

11.1 Proposed Works

The proposed works described below are only associated with Stage 1 of the overall master plan. These works comprise various construction, demolition and renovation works to create educational precincts, circulation and wet weather networks, disabled access and modern learning spaces in order to create a new Senior Campus that supports high quality educational outcomes and facilitate collaborative learning. It is anticipated that these works will also facilitate the growth of the SCECGS Redlands population over the next 15 years (Figure 11.1 and Figure 10.2).

Key features of the proposal are:

- Demolition of existing buildings and structures
- Construction of a new multi-purpose education building with basement car park and associated vehicular entry off Gerard St
- Temporary fitout of a portion of the basement carpark shell for music and general education uses
- Construction of landscaped podium over new basement carpark and music facilities
- Creation of a new internal vehicular link between Waters Rd and Military Rd

11.2 Proposed Impact on the Potential Archaeological Resource

The following section provides an overview of predicted impacts of the proposed works associated with construction of the new learning hub as Stage 1 of the overall development. This section also includes consideration as to whether the proposed tasks have potential to impact on the identified archaeological resource.

11.2.1 Stage 1 – The Learning Hub

The main impacts associated with Stage 1 of the proposed development are:

- Demolition of existing buildings and structures (Mowll Building, 1, 3, 7, 9 and 11 Gerard Street, 7 and 8 Monford Place, staff offices, multi-purpose building and Design and Technology buildings on the western boundary).
- Fit-out of 7 and 8 Monford Pl for temporary use as an educational facility
- Construction of a new purpose built education building generally comprising a four storey building with basement car park and outdoor learning area at roof level.
- Temporary fitout of a portion of the basement carpark shell for music and general education uses
- Construction of landscaped podium over new basement carpark and music facilities
- Creation of new vehicular access road off Gerard Street for the new basement car park.
- Creation of new internal vehicular access link facilitating ingress from Waters Rd and egress onto Military Rd
- Associated landscaping improvements.
- New services infrastructure.
- New servicing area including loading dock and waste enclosure
- Erection of temporary demountable classrooms

Of these proposed impacts, many occur in areas assessed to contain no archaeological potential (Figure 11.1 and Figure 11.2) or are considered to be of low impact. However, the following impacts are considered to have potential to harm the archaeological resource:

- **Demolition of 7 and 8 Monford Place and demolition of the Mowll Building**

Demolition of several buildings within the study area has been identified as having the greatest potential impact to any potential archaeological resource. Construction of the New Learning Hub will require extensive ground disturbance across the entire building footprint, the demolition of 7 and 8 Monford Place and the demolition of the Mowll Building.

The New Learning Hub will be constructed in the location of the yard of the former *Redlands* estate which was created around 1863 and utilised as a yard through various phases of the site history until 1938. A small shed is depicted on early plans as being located just outside of the current proposed Learning Hub footprint.

The location of the proposed works has already been subject to significant impact during the construction of the Mowll building in 1950 and Monford Place in the 1940s. The surrounding area is likely to have been impacted during the ground disturbance, with evidence of terracing and levelling identified in the greater area.

There is a very low potential for *in situ* Aboriginal and historical archaeological remains and deposits in the area of the proposed Learning Hub so the potential to harm any resources is negligible.

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Figure 11.1 Location of proposed works during Stage 1 which are the subject of this Statement of Heritage Impact.

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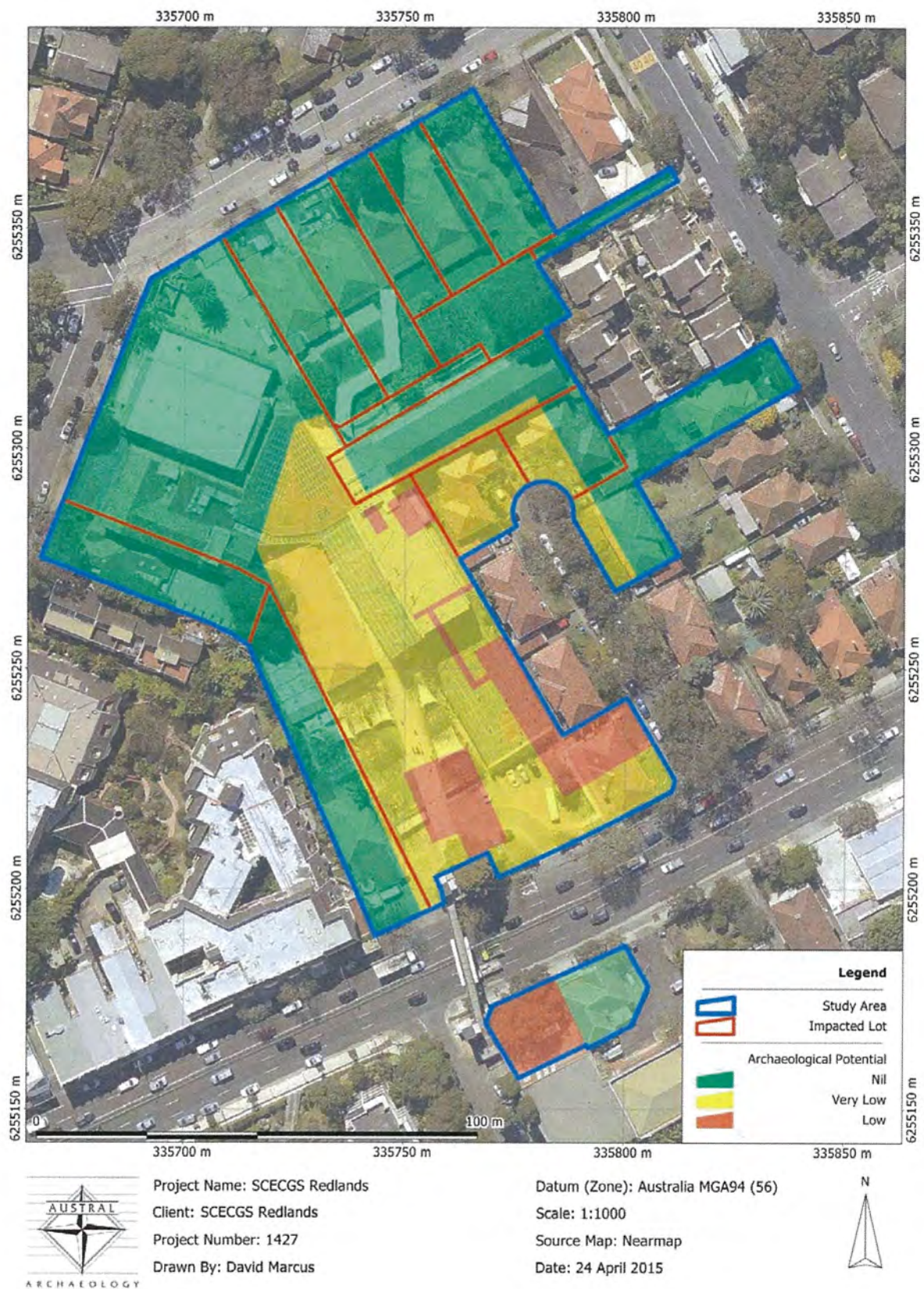


Figure 11.2 Archaeological sensitivity plan with potential impacts from proposed works in Stage 1 shown in red.

The potential heritage impact of the proposed development is considered below utilising the format recommended in the NSW Heritage Manual guidelines document 'Statements of Heritage Impact'.

What aspects of the proposal respect or enhance the heritage significance of the study area?

The majority of the study area is not considered to have heritage significance except for the areas of archaeological potential identified in Figure 11.2 and the locally heritage listed buildings listed in the North Sydney LEP.

The history and archaeology of the study area could be explained through interpretation within the buildings and grounds of the school. In the event that any unexpected archaeological discoveries are made in the future, there may also be potential for the publication of archaeological results as well as the display and interpretation of any objects or items recovered from the study area.

What aspects of the proposal could have a detrimental effect on the heritage significance of the study area?

The proposed development is very unlikely to impact on any archaeological material which may be present within the proposed Stage 1 development, namely the construction of the New Learning Hub. The location of an outbuilding possibly identified as a shed or toilet on the early plans lies just west of the boundary of the current proposed Stage 1 works.

It is considered that the recommendations in this report provide adequate mitigative strategies for management of the archaeological values of the site.

Have more sympathetic options been considered and discounted?

The archaeological consultant did not have input into other design options which are more sympathetic to both the built heritage and the archaeological heritage. As any potential archaeological deposits or features will be of local significance and low research potential, investigation of other options was not required. The current design is seen as being a viable perpetuation of SCECGS Redlands history of redevelopment and expansion.

12 CONCLUSIONS AND RECOMMENDATIONS

12.1 Conclusions

A search of the Aboriginal Heritage Information Management System (AHIMS) database regarding the study area returned a result of no sites within at least a 200 metre radius of the study area. Given the documented history of use and continuous development since the mid to late 19th century within the study area, it is clear that the study area qualifies as 'disturbed' land under the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010b).

In regard to the proposed development in Stage 1 for the New Learning Hub, one small part of the study area has been identified as being archaeologically sensitive and it is considered to have low potential to contain *in situ* historical archaeological material relating to the remains of a wooden structure built *circa* 1863, identified as being a toilet or shed. There is a very low potential for *in situ* Aboriginal remains and/or deposits in this area. It is therefore considered that the proposed Learning Hub has minimal potential to harm any archaeological resources.

It is concluded generally that some parts of the remainder of the study area (outside the Stage 1 development area) have very low to low archaeological potential and any possible features would be of local significance with low research potential. The assessment of potential impacts on any archaeological resources from future development activities under later stages of the campus master plan was outside the scope of this study.

It is considered that the recommendations in this report provide adequate mitigative strategies for management of the archaeological values of the Stage 1 development area of the site.

12.2 Recommendations

The following recommendations are made in conjunction with Figure 12.1. It is recommended that:

- 1) No further investigative work need be undertaken in regards to the Aboriginal cultural heritage at SCECGS Redlands, Cremorne. This report documents the results of a site inspection in November 2014 that resulted in no Aboriginal sites being located within the study area. The survey and background research also confirmed the disturbed nature of the study area.
- 2) The area to be developed under Stage 1 of the campus master plan has been investigated in detail in this Statement of Heritage Impact. No further archaeological investigation needs to be undertaken in this area as it has been assessed to contain very low or nil archaeological potential; works in these areas can proceed with caution.
- 3) As future stages of the campus master plan are developed, the locations of all impacts should be checked in the zoning plan (Figure 12.1). Any impacts in areas of designated low archaeological potential will require the creation of an individual Statement of Heritage Impact.
- 4) Should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required.
- 5) In the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works in the immediate vicinity are to cease immediately and a qualified archaeologist be contacted to assess the situation and consult with the Heritage Branch of the OEH regarding the most appropriate course of action.

- 6) In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works affecting that material or deposits must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Office of Environment and Heritage (OEH) and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the NPW Act 1974 requires that the OEH must be notified of any Aboriginal objects discovered within a reasonable time.
- 7) One copy of this report should be lodged by the proponent with the local studies collection of the local library, a copy should be lodged with AHIMS, and an additional copy should be lodged with the New South Wales Heritage Branch library at:

Heritage Branch
3 Marist Place
Parramatta NSW 2150

SCECGS REDLANDS, CREMORNE, CONCEPT PROPOSAL AND STAGE 1 DEVELOPMENT APPLICATION,
ARCHAEOLOGICAL ASSESSMENT AND STATEMENT OF HERITAGE IMPACT

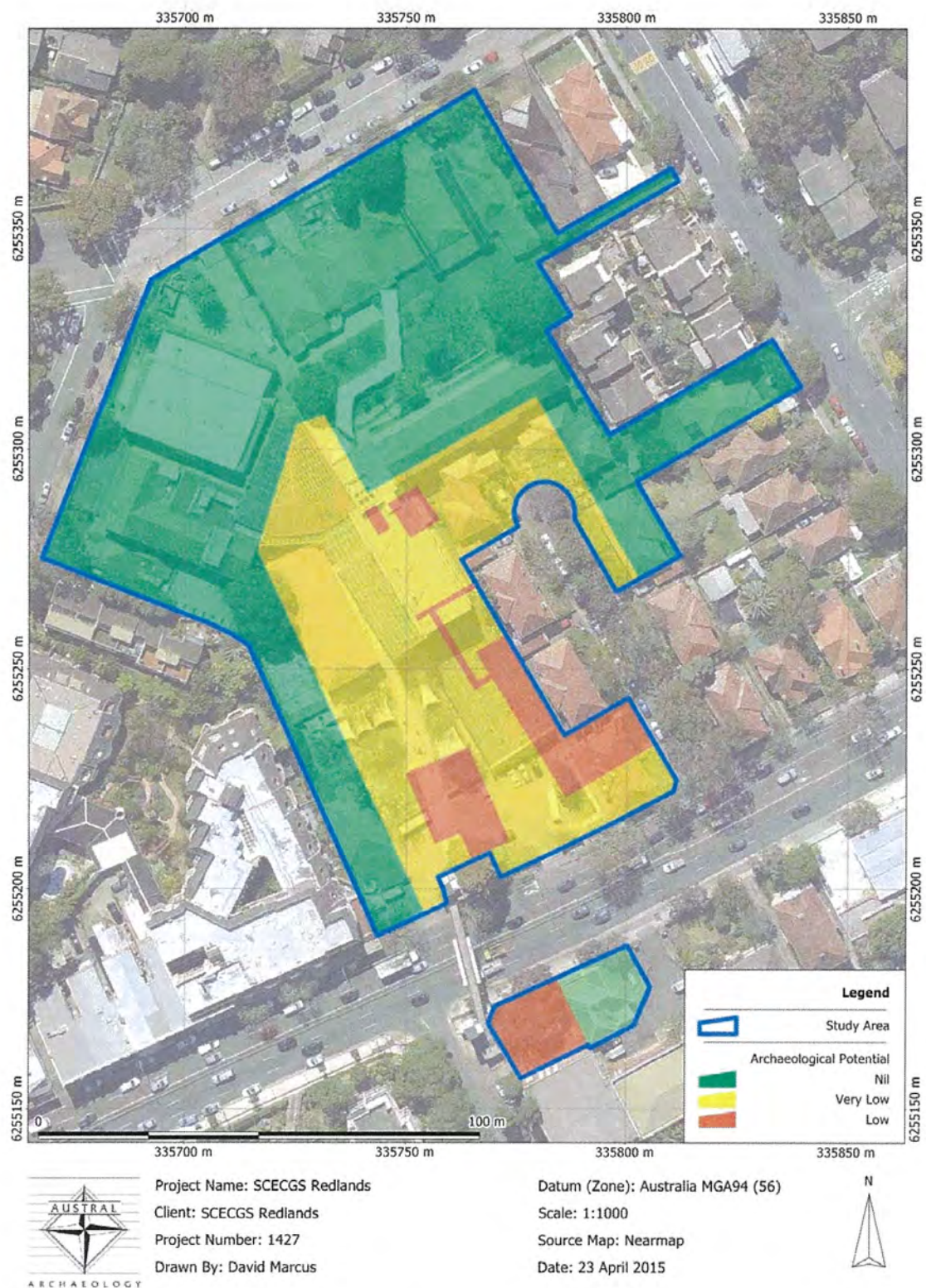


Figure 12.1 Areas of archaeological potential within the study area.

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