



CAMPBELL'S STORES, CAMPBELL'S COVE SYDNEY, NEW SOUTH WALES

Aboriginal and Historical Archaeological
Assessment, Statement of Heritage Impact
& Research Design



Prepared by
Austral Archaeology Pty Ltd
Archaeological & Cultural Heritage Consultants

For
Altus Page Kirkland,
On behalf of Tallowoladah Pty Ltd
1 September 2015
Job Number: 1507

EXECUTIVE SUMMARY

Altus Page Kirkland (Altus or the Proponent), acting on behalf of Tallowoladah Pty Ltd has commissioned Austral Archaeology Pty Ltd (Austral Archaeology) to undertake an Aboriginal and historical archaeological assessment and Statement of Heritage Impact (SOHI) for a proposed development at the site of Campbell's Stores, 9-27 Circular Quay West, The Rocks, NSW (the study area). The study area location is shown in Figure 1.1, Figure 1.2 and Figure 1.3 and consists of nine separate lots.

Campbell's Stores is currently listed on the State Heritage Register (SHR) and is the subject of an endorsed recent CMP (GML 2014).

The proposed works include various alterations to existing buildings, expansion of the existing outdoor dining area and the construction of a new, stand-alone structure to the north of the store building. These works, particularly the construction of the new structure, will impact on areas of known archaeological potential (GML 2014:180).

The intention of this Aboriginal and Historical archaeological assessment and SOHI is to provide an archaeological assessment which will examine the proposed development in light of the archaeological potential and significance of the study area, determine the nature and extent of any adverse impacts and provide suitable management recommendations,

Historical Background

Sydney Cove was originally inhabited by the indigenous people of the Port Jackson area, of the coastal Darug Language and in the boundary of the Gadigal.

From the initial years of the colonisation process, Sydney Cove was a fundamental part of the growth and evolution of the settlement. With the cove soon becoming a focus of maritime trade and industry, the study area was at the forefront of this development.

From 1799, with the arrival of Robert Campbell, the area became a centre of maritime shipping and handling. Campbell began the post Aboriginal history of the study area as a warehouse site. His first stores, along with Australia's first private wharf and a house for Campbell and his family, were completed by 1803. Soon after, more stores were constructed along the water line.

The site continued to be managed by the Campbell family, with ownership passing to Robert's sons. During their decades of control, the original stores were replaced in the 1850s by the first five bays of the still extant store building. Only ten years later, this building was extended to the full eleven bays. During the 19th century, land reclamation and wharf construction were ongoing.

Though the acquisition of the property by the Australasian Steam Navigation Company (ASNC) saw many buildings on the land demolished or replaced, the eleven bays of the Campbell's Stores buildings, now re-named the Metcalfe Stores, were extended to three storeys. The following decade saw various modifications made to the building to accommodate changes to technologies and changes to the surrounding area including the construction of roads and the overseas passenger terminal. Such modification included the demolition of the southernmost bay of the stores, leaving only the contemporary ten bays.

By the 1960s, Circular Quay had fully transformed from a maritime shipping centre to one of tourism and recreation and the function of the stores was no different. Rather than industrial warehouses for shipping and handling, the stores have been adapted to restaurants and become an iconic feature of the modern landscape of Sydney Cove.

Conclusions

A search of the Aboriginal Heritage Information Management System (AHIMS) Database returned no sites within a 50 metre boundary of the study area. This is expected, given the site's documented history of use, reclamation and continuous development since European settlement. It is therefore clear that this location qualifies as 'disturbed' land according to the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010b).

The assessment has identified that there is moderate potential for archaeological remains of early European land formation processes, such as reclamation, and perhaps indications of early occupation in deposits or artefacts.

There is moderate to high potential for evidence from the earliest stores built on the site, constructed by Robert Campbell, as well as associated structures, such as walls and indicators of smaller surrounding buildings, which are perhaps unmapped. Additionally, potential evidence may relate to the surrounding landscape and occupation.

While the 1850 stores are currently extant, there may be evidence which relates to their construction, modification, and over a century of occupation. Particularly in the area immediately to the north of the stores, there is high potential for remains of various structures constructed during the many decades the stores functioned as maritime warehouses.

This potential is lessened by various disturbances. Analysis of such disturbance combined with results from recent geotechnical investigations indicates that there is still moderate potential within the footprints of buildings, both demolished and extant. The area to the north is of particular interest, as it has been the site of numerous structures and their exact position, function and construction method is not entirely certain.

Recommendations

The following recommendations are derived from a detailed analysis of the site. The archaeological assessment has taken into consideration the historical development of the site and the results of the recent geo-technical investigations to arrive at a conclusion regarding its archaeological potential. The likely impacts of the proposed redevelopment works have been determined based on the preliminary design only which was available at the time of writing. These recommendations are made in conjunction with Figure 8.10 (copy below) and are in accordance with Archaeological Policies 25 to 27 in the CMP (GML 2014:178-180). It is recommended that:

- 1) Given that the site has been assessed to have areas of moderate and high archaeological potential that may be impacted during proposed works, an excavation permit is required under Section 60 of the NSW *Heritage Act 1977*. To fulfil recommendations 3, 4 and 5, and to comply with the *Heritage Act*, the client will need to apply for a Section 60 Excavation Permit for testing and salvage. This assessment report (which includes a research design) should be appended to the permit application. A suitably qualified archaeologist accredited and approved by the Heritage Council must be nominated on the application form to direct any necessary archaeological works.
- 2) In accordance with the recommendations made in the CMP, wherever possible, works to this site should avoid areas of high archaeological potential or significance.
- 3) If such works cannot be avoided, the area of high archaeological potential located to the north of Bay 11 should be archaeologically tested and if necessary, a salvage archaeological excavation undertaken.
- 4) Any ground works in areas of moderate potential, such as construction of elevator pits in Bays 3, 6 and 9, and column supports for the glazed canopy should be subject to archaeological monitoring.
- 5) The limited impact of the column supports for the glazed canopy in areas of high archaeological potential should be subject to archaeological monitoring.
- 6) The preliminary design does not show further significant proposed development in the area of high potential located to the south-east of the store buildings. Should any below ground works be planned in this area, it should be archaeologically tested and if necessary, a salvage archaeological excavation undertaken.
- 7) 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 SHFA be notified in accordance with Section 146 of the NSW *Heritage Act 1977*. A qualified archaeologist should be contacted to assess the situation and consult with SHFA regarding the most appropriate course of action.

- 8) 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.
- 9) Should the proposed development be altered from the proposed concept design, or when more details of ground penetrating works become available, then a reassessment of the heritage/archaeological impact may be required. This includes any impacts not explicitly stated in Section 10, and includes the installation of any subsurface services such as stormwater, electrical or communications.
- 10) Consideration should be given to interpreting any archaeological evidence that results from any archaeological investigation of the site. Interpretation should be in accordance with Policy 16 of the CMP (GML 2014:172).
- 11) Two copies of this report are to be forwarded to SHFA with the Section 60 application.
- 12) A copy of the final excavation report should be lodged in a local library.



Figure 8.10 Areas of archaeological potential within the study area in relation to Campbell's Stores.

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1 INTRODUCTION

1.1 Introduction

Altus Page Kirkland (Altus or the Proponent), acting on behalf of Tallowoladah Pty Ltd, has commissioned Austral Archaeology Pty Ltd (Austral Archaeology) to undertake an Aboriginal and historical archaeological assessment and Statement of Heritage Impact (SOHI), for a proposed development at the site of Campbell's Stores, 9-27 Circular Quay West, The Rocks, NSW (the study area). The study area location is shown in Figure 1.1, Figure 1.2 and Figure 1.3 and consists of the lots summarised in the table below.

Table 1.1 Lots and DPs within study area.

Lot	DP
6	84776
2	1172586
1	264534
11	1172592
4	26453
3	26453
12	26453
5	800881
2	1176806

Campbell's Stores is currently listed on the State Heritage Register (SHR) and is the subject of an endorsed recent CMP (GML 2014).

The proposed works include various alterations to existing buildings, expansion of the existing outdoor dining area and the construction of a new, stand-alone structure to the north of the store building. These works, particularly the construction of the new structure, will impact on areas of known archaeological potential (GML 2014:180).

This Aboriginal Due Diligence and Historical Archaeological Assessment, Statement of Heritage Impact and Research Design has been prepared to address any specific archaeological requirements which the City of Sydney Council may place in the Development Application (DA) conditions and to address the Secretary's Environmental Assessment Requirements (SEARS) archaeological requirements. These requirements are the preparation of:

- *An archaeological assessment of the likely impacts of the proposal on any Aboriginal cultural heritage, European cultural heritage and other archaeological items and outline proposed mitigation and conservation measures.*

The intention of this report is to provide an archaeological assessment which will examine the proposed development in light of the archaeological potential and significance of the study area, determine the nature and extent of any adverse impacts and provide suitable management recommendations.

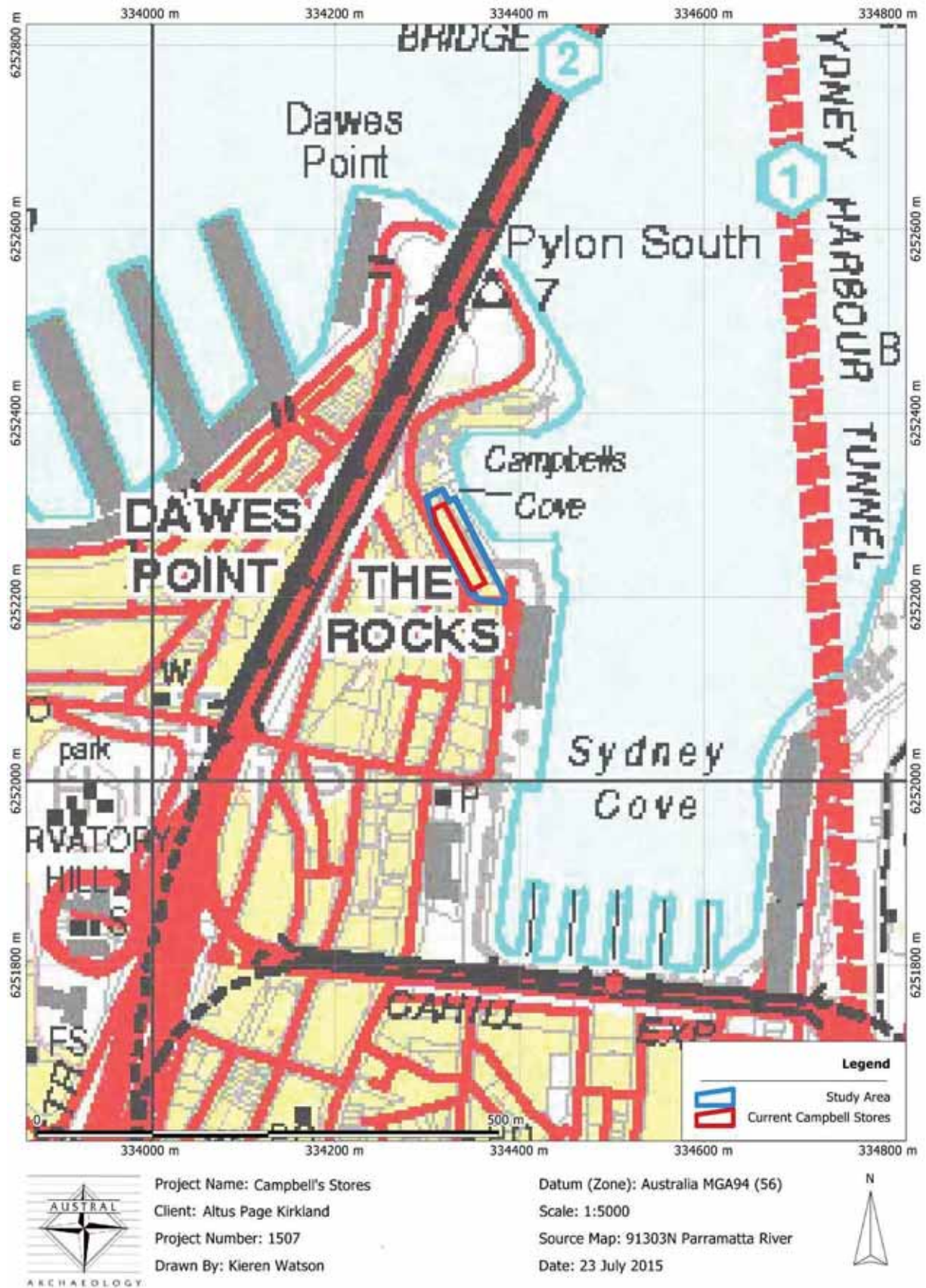


Figure 1.1 Topographic map showing study area in relation to the Sydney CBD.



Figure 1.2 Aerial photograph showing the location of the study area in relation to surrounding development.



Figure 1.3 Aerial photograph showing the location and details of the study area.

1.2 Proposed Works

The scope of works described in this section is taken from plans and information provided by Altus and is described in greater detail in Section 10.

The main components of the proposed works which are likely to impact on archaeological material have been identified as follows:

- Various alterations to existing buildings
- Expansion of the existing outdoor dining area
- Construction of a new, stand-alone structure to the north of the store building

1.3 Objectives

The objectives of this report are as follows:

- 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.

1.4 Project Team and Acknowledgements

This project was overseen by Justin McCarthy (Managing Director). The assessment was conducted by Kieren Watson (Archaeologist), who undertook all GIS mapping, with input from Emily Bennett (Archaeologist). David Marcus (Senior Archaeologist) proof-read the draft report. Justin McCarthy provided input into the management recommendations and a quality assurance review.

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

Nick Zajac and Nick Marston— Altus Page Kirkland

Brendan Murray and Christina Kim – Johnson Pilton Walker

1.5 Methodology

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 archaeological context and potential of the study area.

This report is underpinned by the philosophy of the ICOMOS *Burra Charter* and by the practices and guidelines of the New South Wales Heritage Division and the relevant guidelines of the Office of Environment and Heritage.

1.6 Limitations of the Report

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.

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.

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. As a result, public exhibition of this report in its present form would not be appropriate.

Should public exhibition of this document be required, it is advisable that Austral Archaeology be contacted in order to ascertain information which 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>
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

SHFA	Sydney Harbour Foreshore Authority
SEARS	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
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

2.1 Introduction

The following section summarises the relevant statutory context, including heritage listings, Acts, and environmental planning instruments which are relevant to the site and its cultural heritage.

2.2 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EP&BC Act) established the Australian Heritage Council (formerly the Australian Heritage Commission) and provides for the protection of cultural heritage at a national level and for items owned or managed by the Commonwealth. The EP&BC Act has established two heritage registers:

- **Commonwealth Heritage List:** for significant items owned or managed by Commonwealth Government agencies.
- **National Heritage List:** for items assessed as being of national cultural significance.

Australian Heritage Council approval is required for works to an item registered on either of these lists which would impact on its significance.

No part of the study area appears on either the Commonwealth Heritage List or the National Heritage List.

The Australian Heritage Council is also responsible for keeping the Register of the National Estate (RNE). In 2007 the RNE was frozen and no further sites were added to it. For Commonwealth properties, the Register was superseded by the Commonwealth and National Heritage Lists. The RNE is now retained as an archive of information about more than 13,000 places throughout Australia.

Campbell's Storehouse is listed on the Register of the National Estate.

2.3 New South Wales Heritage Act 1977

The Heritage Council is the approval authority under the *New South Wales Heritage Act 1977* (the Heritage Act) for works to an item on the State Heritage Register (SHR). Section 57(1) of the Heritage Act identifies the need for Heritage Council approval if the work involves the following tasks:

- demolishing the building or work,
- damaging or despoiling the place, precinct or land, or any part of the place, precinct or land,
- moving, damaging or destroying the relic or moveable object,
- excavating any land for the purpose of exposing or moving the relic,
- carrying out any development in relation to the land on which the building, work or relic is situated, the land that comprises the place, or land within the precinct,
- altering the building, work, relic or moveable object,
- displaying any notice or advertisement on the place, building, work, relic, moveable object or land, or in the precinct,
- damaging or destroy any tree or other vegetation on or remove any tree or other vegetation from the place, precinct or land

Demolition of an SHR item (in whole) is prohibited under the Heritage Act, unless the item constitutes a danger to its occupants or the public. A component of an SHR item may only be demolished if it does not contribute to the significance of the item.

Section 57(1) of the Heritage Act also applies to archaeological remains (relics) within an SHR site, and excavation can only proceed subject to approval of a Section 60 application by the Heritage Division. In this instance the delegation to SHFA to approve minor Section 60 applications extends to archaeological works. Archaeological remains on sites not listed on the SHR are addressed under Section 139 of the Heritage Act.

Campbell's Stores is listed on the State Heritage Register as item number 01536.

2.3.1 *Exemptions*

The process of a standard exemption, which applies to all SHR sites, was designed to streamline the approvals process, particularly where works are minor and/or have little impact on significance. For full details of the standard exemptions, refer to the Heritage Division website:

<http://www.environment.nsw.gov.au/heritage/publications/permitapps.htm>

Prior to conducting any work which may be exempt, an Exemption Notification Form must be completed and submitted to the Heritage Council or its delegate, State Water, with sufficient information to determine whether the works meet the standard exemption guidelines. Sufficient information normally takes the form of a short report clearly stating the scope of the work and how it meets the guidelines. The Exemption Notification Form must be approved prior to work commencing.

Site specific exemptions relate to individual SHR items and can only be employed for works which have no potential to materially affect the item (Standard Exemption 6). Furthermore, site specific exemptions must be specifically identified as exemptions in a Cultural Management Plan endorsed by the Heritage Council or its delegate and using wording agreed upon prior to Heritage Council endorsement.

2.3.2 *Excavation Permits*

Under Section 139 of the Heritage Act, "a person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit".

Relics are defined by the Heritage Act to be:

any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
- (b) is of State or local heritage significance.

An excavation permit is also required if a relic has been discovered in the course of excavation without a permit (Section 139(2) of the Heritage Act). Section 139 of the Heritage Act applies to all relics which are not listed on the SHR or protected by an Interim Heritage Order (IHO). Relics protected by an SHR listing or an IHO are subject to approval required by Section 57(1) of the Heritage Act and require a Section 60 Application.

If an excavation permit is required by Section 139 of the Heritage Act, an application is made under Section 140 of the Act. To obtain an excavation permit, the Section 140 application must include an archaeological assessment and Research Design. The archaeological assessment establishes the archaeological sensitivity of the site, its significance and the likely impact of the proposed development. The Research Design outlines the method proposed to mitigate the impact of the development (such as monitoring, test excavation, sampling, or open area excavation). The Research Design also provides research questions which the archaeological resource has the potential to answer. An archaeological assessment and Research Design need to be prepared in accordance with the Heritage Council's relevant guidelines, including Historical Archaeological Sites and the Historical Archaeology Code of Practice. For further details of these guidelines, refer to the Heritage Division website:

<http://www.environment.nsw.gov.au/heritage/publications/index.htm>

The Heritage Act also contains provisions for the unintentional disturbance of archaeological relics. Under Section 146 of the Act, the Heritage Council must be immediately notified in the event of relics being unintentionally located or disturbed. Works may be required to cease, pending consultation and further research.

2.3.3 *Heritage and Conservation Register (Section 170 Register)*

Under Section 170 of the Heritage Act, government instrumentalities must keep a Heritage and Conservation Register (a Section 170 Register) which contains items under the control or ownership of the agency and which are, or could, be listed as heritage items (of State or local significance). Road reserves within the study area are owned by the Department of Roads and Maritime Services.

Campbell's Stores is listed on the Sydney Harbour Foreshore Authority Section 170 Heritage and Conservation Register.

The area in which Campbell's Stores is located is also within The Rocks Conservation Area, also listed on the Sydney Harbour Foreshore Authority Section 170 Heritage and Conservation Register.

2.4 Sydney Harbour Foreshore Authority Act

The site is subject to the controls within the *Sydney Harbour Foreshore Authority Act 1998* (SHFA Act), designed to:

- protect and enhance the natural and cultural heritage of the foreshore area;
- promote, co-ordinate, manage, undertake and secure the orderly and economic development and use of the foreshore area, including the provision of infrastructure;
- promote, co-ordinate, organise, manage, undertake, secure, provide and conduct cultural, educational, commercial, tourist, recreational, entertainment and transport activities and facilities.

Campbell's Stores is identified by SHFA's Statutory Planning Scheme as a 'historic' building complex which may not be demolished.

2.5 The National Parks and Wildlife Act 1974

Aboriginal cultural heritage in New South Wales is protected under the *National Parks and Wildlife Act 1974* (NP&W Act), with additional clarification provided by the *National Parks and Wildlife Regulations 2009* (NP&W Regulations).

All Aboriginal objects and places are provided blanket protection under Section 86 of the NP&W Act, which makes the harming of any Aboriginal object an offence, irrespective of intent. Several defences against prosecution are provided by Section 87 of the NP&W Act, including having undertaken a due diligence assessment which has "reasonably determined that no Aboriginal object would be harmed" by the proposed offence. The minimum standards for such a due diligence assessment are detailed in Section 80A of the NP&W Regulations and in the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW 2010), which forms the basis of this Aboriginal due diligence assessment.

2.6 Environmental Planning Instruments

An Environmental Planning Instrument (EPI) is made under the *Environmental Protection and Assessment Act 1979* (EP&A Act). An EPI can be a Local Environmental Plan (LEP) or a State Environmental Planning Policy (SEPP).

2.6.1 Sydney LEP

The applicable LEP for the study area is the *Sydney Local Environmental Plan 2012* (the Sydney LEP). Part 5.10 of the Sydney LEP deals with Heritage Conservation, and subsection (2) and (3) determine whether development consent needs to be granted by the City of Sydney Council prior to any activities occurring which may impact cultural heritage. Heritage Items are listed under Schedule 5, Part 1 of the Sydney LEP.

The study area is not listed as a heritage item in the Sydney LEP.

2.6.2 State Environmental Planning Policy No. 56 (SEPP 56)

This policy establishes the Minister for Planning as the authority for development consent, including works to heritage buildings. The NSW Department of Infrastructure Planning and Natural Resources is the consent authority of Campbell's Stores, with the authority delegated by Minister to SHFA for minor works.

The Rocks and Campbell's Stores, are covered by State Environmental Planning Policy No 56.

2.7 Non-Statutory Heritage Listings

A number of organisations maintain registers of buildings or sites which they have assessed and believe to be of cultural heritage significance. These registers have no statutory authority. However, the inclusion of a place on a non-statutory register suggests a certain degree of community esteem

and appreciation. Non-statutory registers include the National Trust Register, the Royal Australian Institute of Architects (RAIA) 20th Century Register of Significant Buildings, and the Art Deco Society of New South Wales Art Deco Building Register.

Campbell's Stores is listed on the National Trust Register.

No parts of the study area are listed on either the RAIA or Art Deco Society registers.

2.8 Section Summary

Table 2.1 lists the relevant statutory and non-statutory registers, listings and orders, and identifies those in which any part of the site is listed.

Table 2.1 Summary of heritage register listings for the subject study area.

Register/Listing	Inclusion	Statutory implications
National Heritage List	No	No
Commonwealth Heritage List	No	No
Register of the National Estate	Yes	No
State Heritage Register	Yes	Yes
<i>Sydney Harbour Foreshore Authority Act 1998</i>	Yes	Yes
Section 170 Heritage & Conservation Registers	Yes	Yes
<i>Sydney Local Environmental Plan 2012</i>	No	No
<i>State Environmental Planning Policy No. 56 (SEPP 56)</i>	Yes	Yes
Register of the National Trust (NSW)	Yes	No
The RAIA 20th Century Register	No	No
The Art Deco Society's Art Deco Building Register	No	No

3 LANDSCAPE CONTEXT

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 Aboriginal site potential of the current study area.

3.1 Geological Context and Soil Landscapes

The study area lies within the Harbour Foreshore of the Sydney Basin region. The Harbour Foreshore area is typically characterised by GyMEA (**gy**) and Hawkesbury Sandstone (**ha**) soil landscapes, with Lucas Heights (**lh**) and Blacktown (**bt**) soils occurring in occasional expanses. The study area is located in the GyMEA (**gy**) soil profile (Chapman & Murphy 1989:64).

The underlying geology of the GyMEA (**gy**) soil landscape is described as being Hawkesbury Sandstone, a medium to coarse-grained quartz sandstone with minor shale and laminate lenses (Chapman and Murphy 1989:64). The topography is of undulating to rolling low hills, with local relief generally between 20 to 80 metres, and slopes of 10 to 25%. There are often sideslopes with narrow to wide (10 to 100 metres) outcrops of sandstone benches which often form broken scarps of less than 5 metres.

The GyMEA (**gy**) topsoil consists of loose, coarse sandy loam (**gy1**) that can contain small sandstone and platy ironstone fragments as well as charcoal fragments and roots. This overlies in turn a yellowish-brown clayey sand (**gy2**) and yellowish-brown sandy clay loam (**gy3**). Below, a moderately to strongly pedal yellowish-brown clay (**gy4**) overlies the bedrock (Chapman & Murphy 1989:65-66).

Much of the Sydney Cove foreshore has been significantly changed over time, with almost none of the original shoreline remaining and most of the current public area, including the Campbell's Stores site, situated upon reclaimed land (SHFA:9, GML:13).

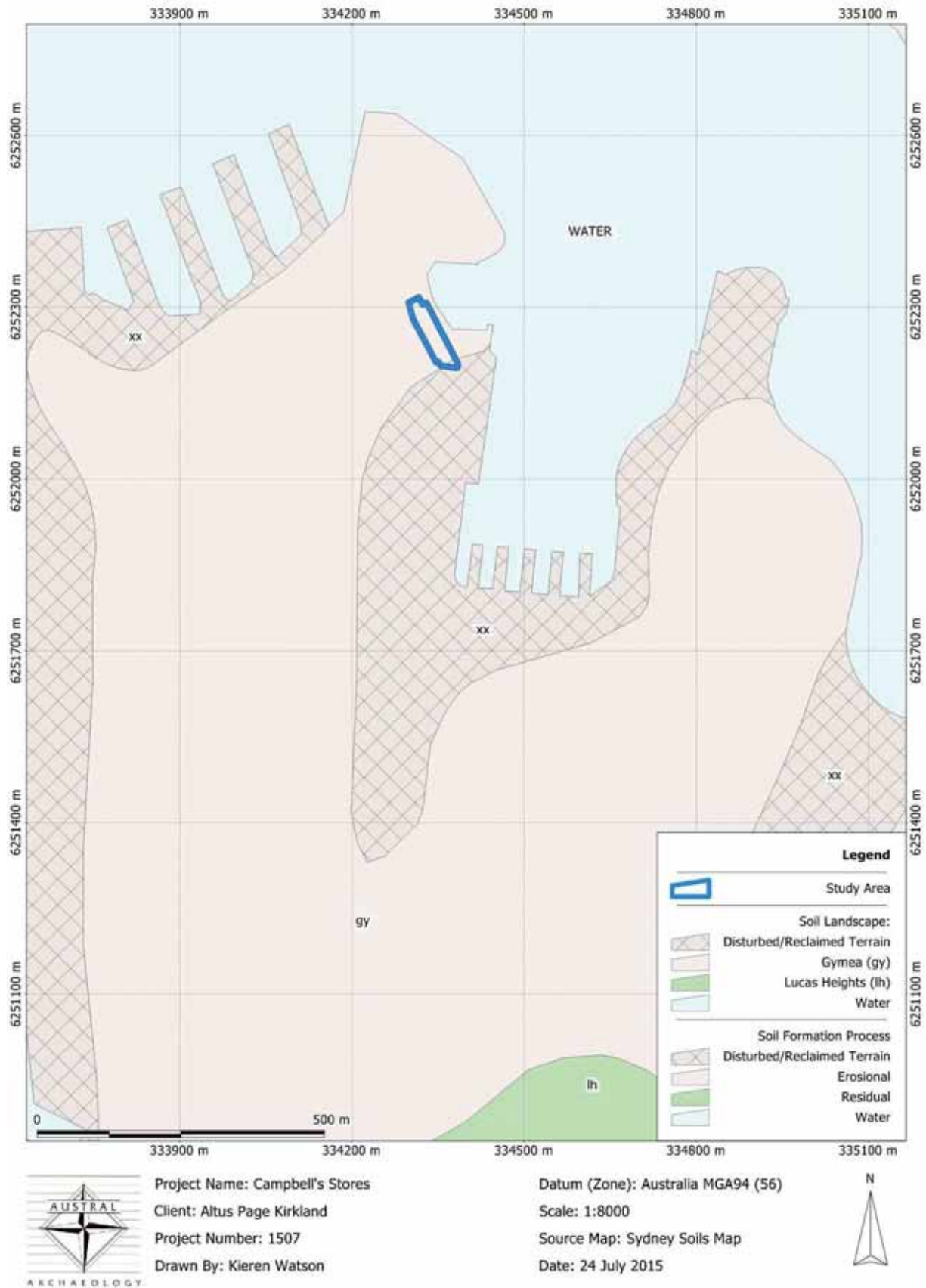


Figure 3.1 Soil landscape of the study area and surrounding area.

3.2 Hydrology

There are no major rivers or tributaries directly within the study area.

The study area lies both adjacent to the original shoreline of Sydney Cove and is built over reclaimed land. The original shoreline was likely sandstone ledges, with fresh water available from the Tank Stream, the mouth of which was at the south of Sydney Cove (Benson & Howell 1990:42).

These catchment areas would have provided numerous semi-permanent sources of fresh water to the local Aboriginal people. Areas with reliable water sources were often popular for campsite locations as were the elevated landforms and areas around such water sources (Steele 2009:22-23).

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 8.0°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). Sydney City is situated within the coastal range of 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

The vegetation of the study area historically would have most likely been open woodland with *Eucalyptus racemosa* (Scribbly Gums), with an understorey of *Leptospermum flavesceus*, *Banksia oblongifolia*, and *Callistemon citrinus*. In shallow sandy soils of the slopes, created by the Hawkesbury Sandstone between the gully of the Tank Stream and the mudflats on the edge of the cove, were woodlands of *Eucalyptus pilularis* (Blackbutt), *Eucalyptus piperita* and *Angophora costata*. The upper ridges and slopes would have had *Eucalyptus pilularis*, and *Angophora costata* with a shrubby understorey (Benson and Howell 1990:42). The lower slopes were woodland of up to 10 metre high trees of *Eucalyptus racemosa* (Scribbly Gums), with a shrubby understorey (Benson and Howell 1990:44).

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 2002a:42). 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 crustacea in abundance within saltwater estuaries and beaches, 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 rarer dugongs may have been present within the region (Attenbrow 2002a: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 residential, commercial and maritime use. The implications of these factors for the archaeological potential of the study area are discussed in Section 4.

4 ABORIGINAL ARCHAEOLOGICAL CONTEXT

4.1 The Sydney Area Archaeological Context

4.1.1 *Population and Contact History*

The present study area lies close to the earliest site of European occupation in Australia. 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 Tindale in 1974 as belonging to the Gadigal (Attenbrow 2002a:23), also referred to in academic literature as the Cadi, who spoke a dialect of the Darug Language (Attenbrow 2002a:24, Comber Consultants 2012:6). The Cadi language boundary extends roughly from the northern shore of the Georges River in the south to Port Jackson in the north (Attenbrow 2002a:23), and from South Head in the east to Darling Harbour in the west (Comber Consultants 2012:6). 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 throughout the Sydney Basin were stretched considerably (Attenbrow 2002a: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 2002a:83).

The effect this had on the Indigenous population was great. Attenbrow (2002) writes that in the early months of 1788, Indigenous people 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.

In the early days of European settlement, there are accounts of the British offering shark and sting-ray to the Aboriginal population, but being refused (Vinnicombe 1980). As food became increasingly scarce, instances of local Aboriginals accepting shark and sting-ray increased as did attacks by Aboriginal people on European settlers, 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 2002a).

This ethno-history 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 were 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 2002a:117, 119; Turbet 2001:42). Fish were also caught by means of shell or bird talon fish hooks (Attenbrow 2002a:117, Turbet 2001:45).

Bark of various types were used for making such diverse items as wrappings for new-born babies, shelters, canoes, paddles, shields and torches (Attenbrow 2002a:Table 10.1). Resin from the grasstree was used as an adhesive for tool and weapon making (Attenbrow 2002a: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 2002a: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 2002a: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). In coastal areas, and possibly throughout the Sydney Basin, both the use of quartz and of the bipolar flaking technique increased through time, although this tendency is less marked on the western Cumberland Plain (Corkill 1999:135, Attenbrow 2002:153-159).

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 coast 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 2002a:63-70). Low lying lagoons (such as the swampland around Darling Harbour) would have offered fresh water eels and crayfish and attracted birds and terrestrial wildlife (Steele 2009:44).

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 coastal woodland environs (Attenbrow 2002a:69-70).

In summer, spring and autumn there would have been a large variety of plant foods available to the coastal communities of the Waverley area due to the diversity of coastal and woodland vegetation. 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.

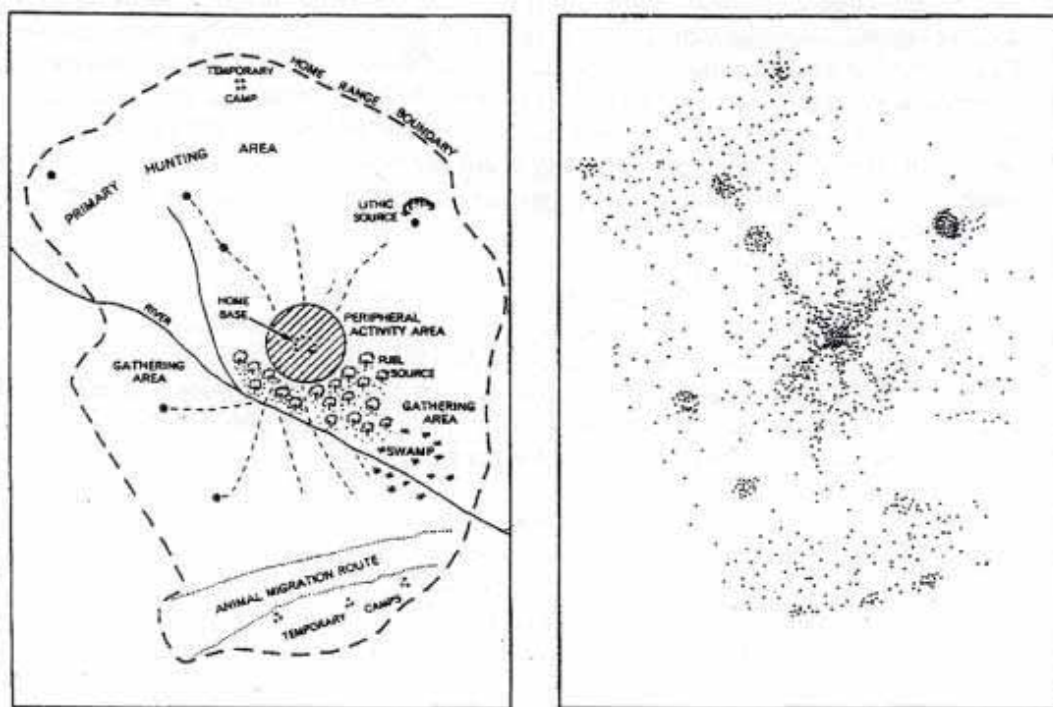


Figure 4.1 Foraging Model (Foley 1981)

Subsequent models were specifically developed to predict Aboriginal occupation in the Port Jackson catchment across a range of aquatic and geographic zones (Attenbrow 2002a:51). It was found that Aboriginal site location and typology was influenced by a number of factors, mainly proximity to water, the local geology and the accessibility to 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 2002a:52).

Similarly, studies in the Georges River area situated approximately 20 kilometres to the south 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 6 August 2015, AHIMS client number 184401. The results from the AHIMS search identified no previously recorded Aboriginal cultural heritage present within a 50 metre buffer zone 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 until 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 wider Sydney area. These collections are now housed in the Australian Museum (Attenbrow 2002a:17).

Archaeological sites are frequently recorded across the Sydney region, with over 4000 sites registered on AHIMS for the Sydney region alone (Attenbrow 2002b:15). Most commonly, these sites consist of midden scatters located in close proximity to the original shorelines, artefact scatters located on shorelines and ridges, and rock engraving and art sites located on sandstone outcrops and rock shelters.

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. Table 4.1 below outlines the details and results of some of the many relevant archaeological consultants' reports from the region:

Table 4.1 A summary of professional Archaeological investigations in the Local Region (adapted from GML 2013:21 and Artefact 2012:37-38).

Reference	Study area location/ description	Results	Site distribution / Conclusion
AECOM 2014	Overseas Passenger Terminal Upgrade Indigenous & Historic Heritage Assessment	No likelihood of <i>in situ</i> pre-Contact Aboriginal archaeological subsurface deposits	Majority of the project area is situated on reclaimed land. The original coastline is also unlikely to contain <i>in situ</i> Aboriginal archaeological sites owing to the past 200 years of intensive occupation and development within the Rocks area.
Attenbrow 1989	Cumberland Street shell midden	Identification of partially intact shell midden below 600 millimetres of fill, truncated by later construction of 1830s terraced houses.	Remains of a midden containing various shellfish and fish bones, radiocarbon dated to approximately 565 years ago.
Attenbrow 1991 (quoted in Attenbrow 2002a)	Port Jackson Archaeological Project	Comprehensive study of previously recorded sites in the Port Jackson catchment area.	The survey identified 22 shell middens within the Sydney Harbour to South Heads sub-catchment area and no areas of archaeological potential (Attenbrow 2002a:51). Of the midden sites, 98% were located on Hawkesbury Sandstone, with a preference for catchments which included estuary mouths. Over half of the midden sites were located immediately outside of tidal zones, less than 10 metres from the high water level (Attenbrow 2002a:50-53).
Artefact Heritage 2012	AMP Circular Quay Precinct	An assessment of Aboriginal and historical archaeological potential for the AMP Circular Quay Precinct.	This assessment determined there to be no potential for either Aboriginal or historical archaeological resources across the majority of the subject site.
Baker 2004	Archaeological Salvage of an Aboriginal Site at William Street	Archaeological excavation at AHIMS site # 45-6-2629	Salvage of an intact sandy deposit and a number of stone artefacts including quartz, grey tuff, silcrete and mudstone.
Godden Mackay 1997	Angel Place	Salvage excavation at AHIMS site # 45-6-2581	54 stone artefacts were uncovered and Godden Mackay concluded that the banks of the stream were likely the site of repetitive Aboriginal occupation.

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 account of the study area. This work will provide a useful and concise summary of the history of Campbell's Stores and the archaeological potential of the study area.

This historical background is a summary from the Conservation Management Plan (CMP) prepared for the Campbell's Stores building (GML 2014), and provides a useful and concise account of the Campbell's Stores site, focussing on its physical development. As this historical background draws strongly upon the previous work of GML, the present assessment does not quote particular page references from the GML CMP, but instead provides an overview of previous research. Where additional sources have been referenced, these will appear in the text.

5.1 Sydney Historical Sketch

5.1.1 *Early Sydney Cove – Maritime Industries*

From the first days of colonisation, Sydney Cove was vital in establishing the colony, providing a base for administration and for expansion. As the cove was generally divided into areas, The Rocks were designated as the place in which convict settlement was to be focussed. The early wattle and daub huts, which have not yet been located in the many archaeological excavations throughout The Rocks, were soon replaced by those made of wood, then stone and brick. The earliest of these excavated is from 1795. Throughout the early decades of the occupation, populations swelled and thinned, as The Rocks became more densely settled, but also more spread out. From 1810, ownership in the area became formalised, as did the layout and the naming of the streets.

Sydney Cove quickly became a thriving port town, with The Rocks attracting mariners and becoming a hub of maritime commerce. From the early 19th century, wharves and warehouses were constructed throughout the cove. Sealing and whaling industries, as well as the expansion of the wool industries, lead to greater intensification of shipping from Sydney Cove.

With immigration growing from the 1820s, an increase further intensified by the gold rush in the 1850s, population density grew throughout The Rocks, leading to subdivision and the construction of tenements and terraces linked by narrow alleys and scrangleways; many property owners preferring erection of quick and cheap housing than more substantial and durable structures. By the end of the century, The Rocks was a bustling waterfront maritime area typified by high density of housing and the usual features of a waterfront suburban area including pubs, prostitutes and commerce.

5.1.2 *Redevelopment in the 20th Century*

By the end of the 19th century, exaggerated concerns of plague in the slums of The Rocks propelled the government to clean up the waterfront. The area was resumed and cleared, with demolitions of substandard buildings and wharves.

Throughout the 20th century, the waterfront areas of Sydney Cove were extensively redeveloped. In the pre-war period at the beginning of the 1900s, the State Government Housing Board built workers' housing throughout the area, to be occupied by workers and their families, with shops, pubs and other commercial buildings predominately occupying the remainder of The Rocks.

Aside from some government offices, factories and pubs, there was little construction in the war and interwar period. The most notable exception is that between 1923 and 1932, the Sydney Harbour Bridge was constructed, a project which necessitated demolition throughout Sydney Cove. Construction of the Maritime Services Board (MSB) offices, now the Museum of Contemporary Art, was initiated before World War II and not completed until 1953, with construction interrupted during the war. From the completion of the Sydney Harbour Bridge until 1970 there was very little development in The Rocks aside from the construction of the Overseas Passenger Terminal between 1959 to 1962 and the completion of the MSB building.

While in the 1960s there were significant plans for demolition throughout The Rocks, leaving the area open for high-rise development, mass community resistance led to the 1973 'Green Ban' placed over any demolition in The Rocks, though restoration was allowed. Despite this, the area south of the Cahill Expressway was redeveloped with high-rise structures from 1979.

5.2 Site Specific Historical Sketch

5.2.1 *Robert Campbell and Colonial Establishment- 1799 -1830s*

The first formative phase of development on the Campbell's Stores site was during the ownership of Robert Campbell. In this period, the first wharves and stores were constructed, with some minimal reclamation and dredging.

After forming 'Campbell and Co' in Calcutta and sending a cargo ship to Sydney in 1796, Robert Campbell arrived in Sydney in July of 1799 and bought land overlooking Dawes Point in Sydney Cove. In 1800, he married Sophia Palmer, sister to the future Commissary of NSW, and by 1801 the first store houses were constructed. Additionally, a stone wall and a small wharf were completed, the wharf supposedly the first privately owned wharf in Australia.

By 1802 Robert Campbell and Sophia had moved into the then incomplete wharf house, which had vaults excavated into the underlying sandstone bedrock. John Lewin's watercolour of 1808, shows a jetty running out from the vaults, the two storey storehouse, and an access road to the wharf house running behind this jetty (Figure 5.1).

Following the beginning of the governorship of Lachlan Macquarie and his formalisation of ownership in The Rocks, Robert Campbell was officially granted this land in 1814. From 1822 to 1825, Robert Campbell constructed further warehouses along the edge of the water and in the Magistrates Returns of Manufactories, and Mill etc, the site is listed as having one hydraulic pump at the wharf in 1831, and possessing one crane in 1838.



Figure 5.1 1808 Sydney Cove John Lewin with the original Campbell's Stores to the right.

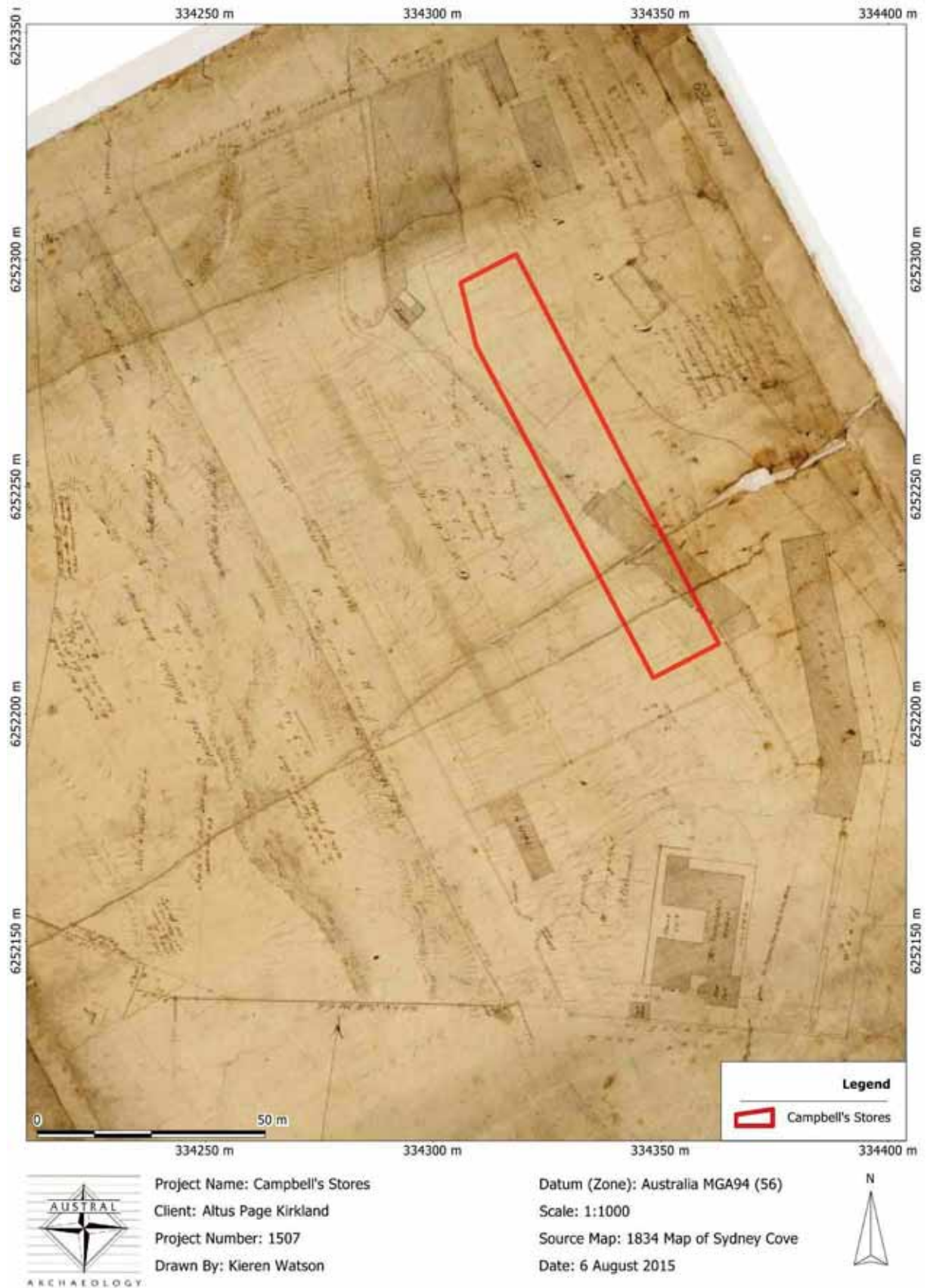


Figure 5.2 1834 City Survey Plan with the current Campbell's Stores marked in red. (SL Maps/0280)

5.2.2 *Campbell Descendants, 1830s-1875*

As ownership moved from Robert Campbell to his sons, there were increased financial problems matched by increased expansion and consolidation.

From 1830 Jon Campbell, the son of Robert Campbell, had begun to take over management of the firm, officially assuming ownership and control in 1836. Ownership however, remained in the name of Robert Campbell. It was Robert who, on 21 January 1841, made an application to the Colonial Secretary for permission to enlarge part of his wharf; an application which was met with no objection. Additionally, the land of Campbell's cove expanded through increased reclamation with much of the modern stores being built on reclaimed land.

In 1843, Jon Campbell mortgaged the wharf for the first of several times over the subsequent decades, a decision which would later cause contention over ownership. Following the death of Robert Campbell in 1846, the property was divided amongst his five sons, his daughter Sophia and the husband of his daughter Sarah.

From 1851 to 1852, the current store buildings were first constructed. As recorded in the Sydney City Council Rate Assessment Book, the early store building initially consisted of only five bays. These were built of stone with slate roofs, and three operated as warehouses while two were combined warehouse and offices, each with four rooms.

Between 1856 and 1860, as evidenced by the photograph below (Figure 5.3), ten bays were completed, with the eleventh still incomplete. This expansion is present by the time of the 1861 Rate Assessment Book, which describes Campbell's Stores as comprising eleven, two storey bays with two rooms each. The Sands Directory records various commercial tenants within the stores such as the Colonial Sugar Refining Company Stores, Peruvian guano stores, Lloyd, George, & Co.'s stores and Eldred, W. H., broker and general agent (Sands 1861: 29).



Figure 5.3 Photograph showing construction of the eleventh Campbell's Stores bay, c.1860s (SHR, Campbell's Stores Listing)

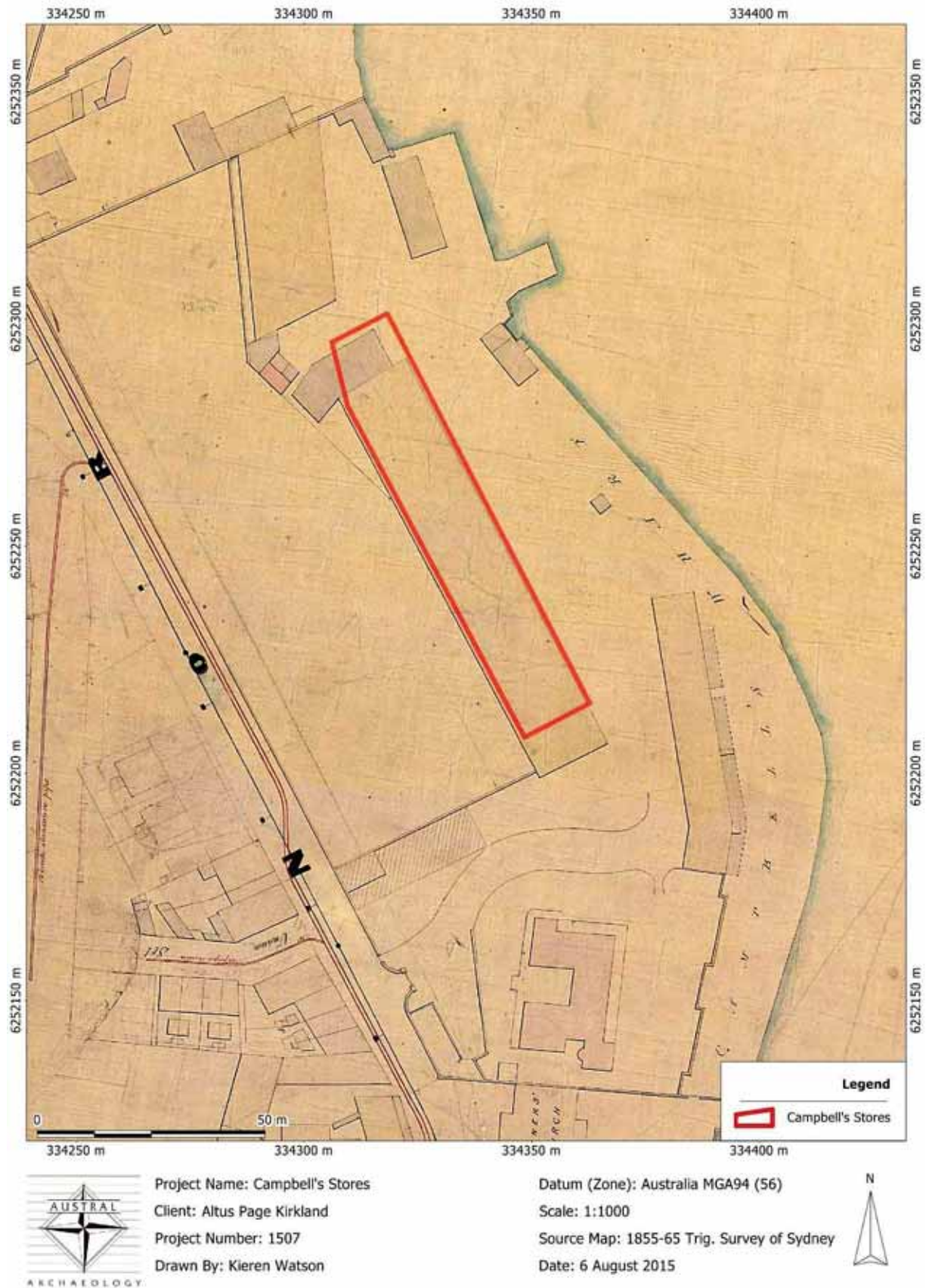


Figure 5.4 1855-1865 Trigonometrical Survey of Sydney with the current Campbell's Stores marked in red (City of Sydney Archives - Historical Atlas of Sydney).

5.2.3 *Australasian Steam Navigation Company, 1875-1887*

Negotiations for the sale of Campbell's Wharf to the Australasian Steam Navigation Company (ASNC) were ongoing from 1875. In February of 1876, the ASNC had an application approved to extend the wharf. However, it was not until May of that year that the ASNC was recorded as having bought the wharf. The sale however, could not be finalised due to complications regarding the outstanding mortgages, and was not finalised until 1879 with the formal transfer of the title. At this point the land surrounding Campbell's Stores was sold off, and the stores themselves rented out.

In 1877, the name of the stores was changed to the Metcalfe Stores and a new wharf was built. In 1884 Campbell's house was sold and soon demolished and replaced, although conversely, by 1882 Campbell's Stores had been enlarged rather than demolished. As seen in Dove's 1882 plan (Figure 5.5), the stores are shown as a series of two storey stone or brick buildings.

5.2.4 *NSW Government/Sydney Harbour Trust/MSB, 1887-1972*

The extensions to Campbell's Stores were certainly completed before the wharf's ownership was once again changed. Following increased difficulties in the management of the shipping firm, the ASNC merged with the Queensland Steam Navigation Company, forming the Australasian United Steam Ship Co Ltd. This new company's adequate wharfage made the Campbell's wharf property redundant, and was sold to the government in 1887.

The government soon demolished all of the buildings save Campbell's Stores, now the Metcalfe Bond stores, which were leased out. An 1895 version of the Detail Survey shows the outline of the stores shown with "Branch Office, Government Printing Office" at the northern end of the stores.

The Sydney Harbour Trust assumed control of the stores in 1901, and they survived the extensive demolition of buildings that the construction of the Norddeutscher Lloyd wharf necessitated. Instead, the stores were repaired in 1902. However, in order to complete the construction of Hickson Road, approximately 1.2 metres had to be removed from the northern end of the stores in 1915.

The 20th century saw many modifications made to the stores. Following a fire which broke out in the northern addition of the store in 1932, damaged brickwork had to be rebuilt. A result of the construction of the overseas passenger terminal in 1958 was the removal of the southern bay of the stores, leaving the ten bays still currently extant.

As Circular Quay developed from an area of primarily commercial maritime industry to one of tourism, the western side of the cove in which the stores are located became increasingly devoted to recreational activities and traffic. During the 1950s, the area was modified to accommodate this change despite the continuation of commercial activity throughout the decade and into the 1960s. However, with the construction of the Overseas Passenger Terminal in the 1960s, commercial shipping relocated to Darling Harbour and Pyrmont.

5.2.5 *SCRA – SCA – SHFA, 1972 to Present*

In the 1970s, control of Campbell's Stores shifted from the Maritime Services Board (successor to the Sydney Harbour Trust) to the Sydney Cove Redevelopment Authority (later Sydney Cove Authority or SCA) in the 1970s. The SCA's subsequent redevelopment of the stores lead to their current use as restaurants. The 1980s saw substantial development surrounding the stores as part of the Bicentenary. SHFA gained control over the stores in 1998, as it took over management of the surrounding area.



Figure 5.5 1880s Doves Plan of Sydney with the current Campbell's Stores marked in red (City of Sydney Archives - Historical Atlas of Sydney).

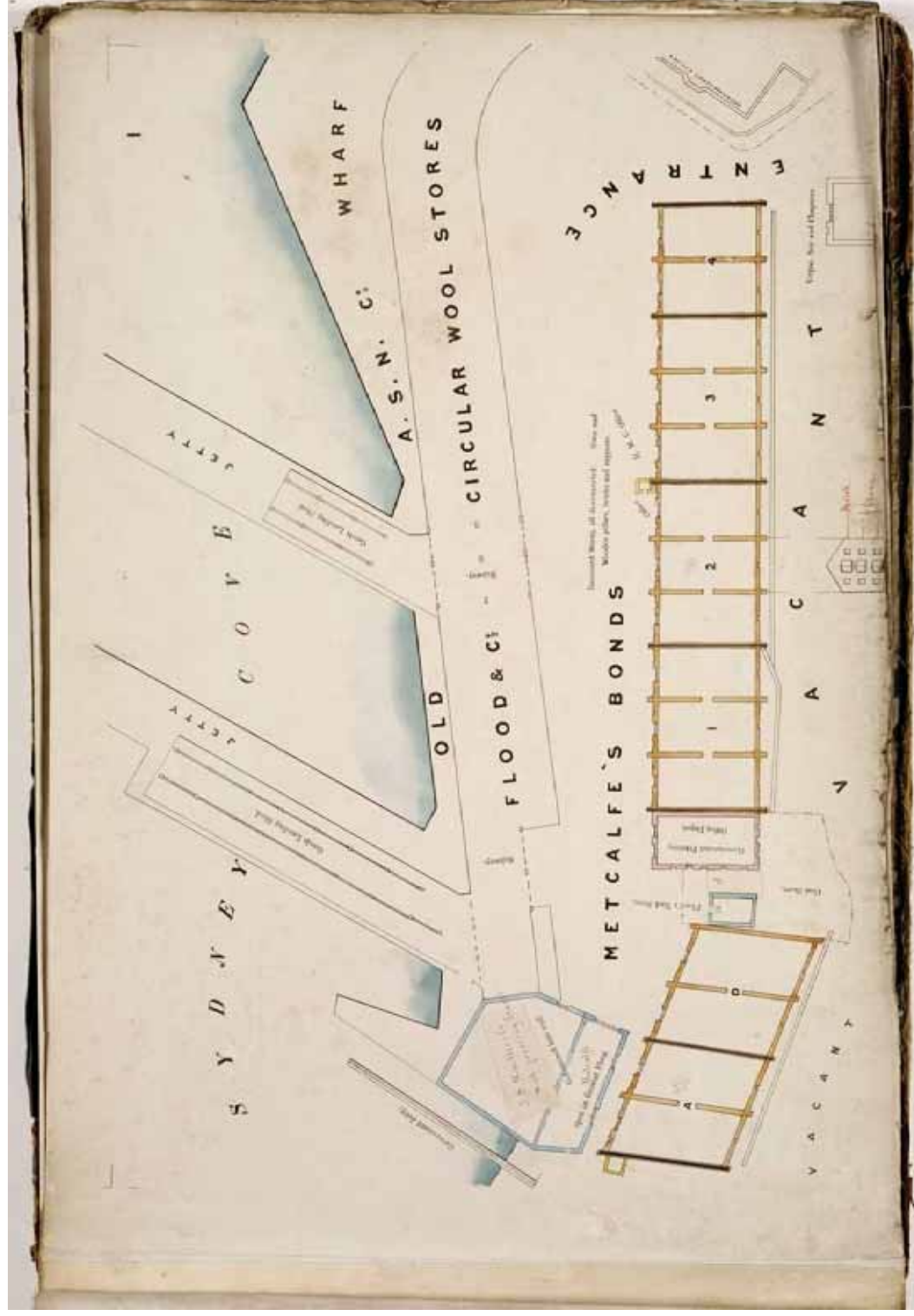


Figure 5.6 1894 Sydney bonded & free store plans by G. Mahlstedt. (ML X/36)

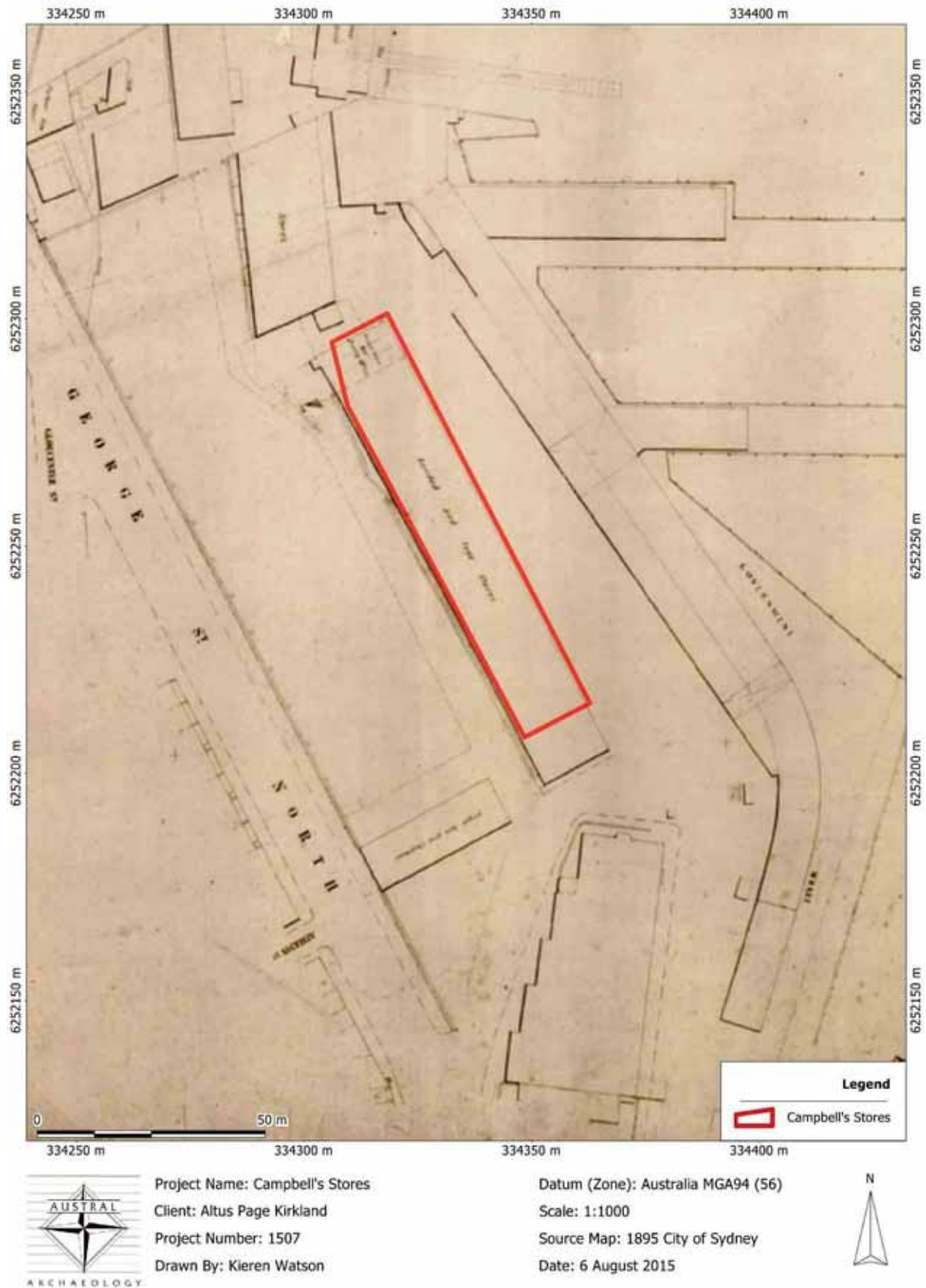


Figure 5.7 1895 additions, City of Sydney, Sheet Q4, the current Campbell's Stores marked in red. (ML Z/M Ser 4 811.17/1)

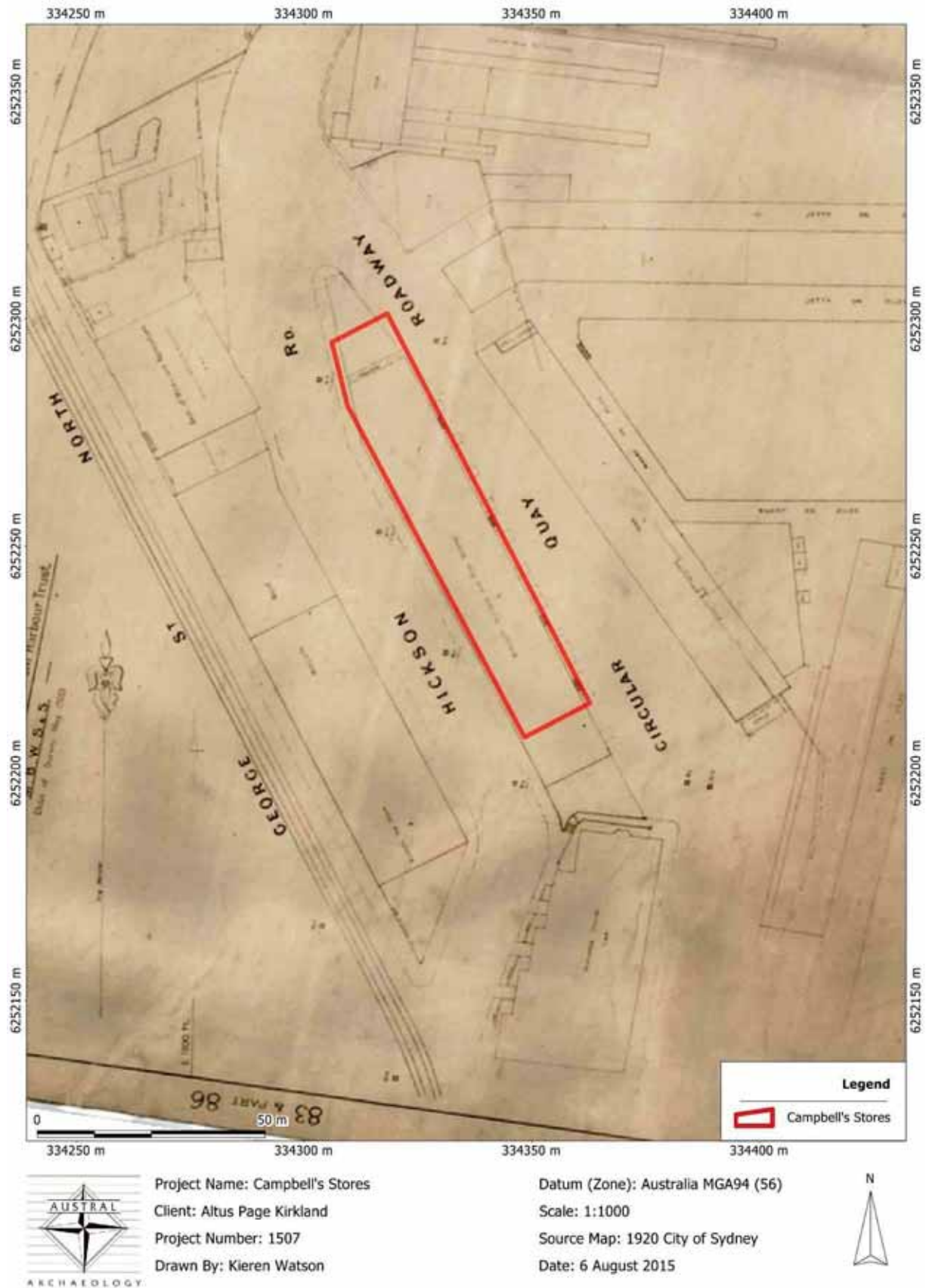


Figure 5.8 1920 additions, City of Sydney, Sheet Q4, the current Campbell's Stores marked in red. (M L Z/M Ser 4 811.17/1)

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 Sydney area 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 coastline. Habitats associated with the marine environment would have supported a wide range of animals, fish, birds and mammals.

In summary, the main trends broadly seen across the Sydney CBD 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 are only likely to still be present in areas where remnant old growth vegetation exists.
- Shell middens are likely and 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 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 subsequent disturbance history of the study area .

- Open camp sites or isolated finds of flaked or ground stone are unlikely to be present, as the study area is unlikely to have been a suitable campsite due to the distance from a fresh water source, the original gradient of the study area and the subsequent historical disturbances.
- PADs are unlikely to be present due to the high levels of historical disturbance known to have occurred within the study area.
- Burials are highly unlikely to be present, due to the high levels of historical disturbance present within the study area.
- Ceremonial grounds are highly unlikely to be present due to their general rarity within New South Wales.
- Stone arrangements are highly unlikely to be present due to their general rarity within New South Wales.
- Scarred trees are highly unlikely to be present due to the lack of preservation of older vegetation within the study area.
- Grinding Grooves are highly unlikely 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

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 have been redeveloped or disturbed by modern developments. Based on the detailed background history, the following general predictive statements can be made:

- There is high potential for remnants of structures related to the earliest phases of Campbell construction including the original stores, walls and smaller structures, as identified from the 1834 plan (Figure 5.2 and Figure 8.1).
- There is high potential for structures constructed throughout the 19th century including demolished elements of the current Campbell's Stores, and smaller associated structures, particularly to the north of the main stores (Figure 8.2).

The potential for such structures is highest in the areas outside of the footprint of the current Campbell's Stores building, and lowest to the west of the building in the area excavated for the service tunnel.

7 SITE INSPECTION

7.1 Introduction

Emily Bennett and Kieren Watson (Austral Archaeology) conducted a brief site inspection on 2 July 2015 in order to familiarise themselves with the site, note any modern disturbances or landform changes any try to identify any areas of archaeological potential. The inspection examined all parts of the study area.

The inspection identified that the study area has been subject to moderate localised impact from modifications made to the stores in their conversion to restaurant facilities. Higher levels of impact have resulted from the construction of Hickson Road and the service tunnel behind the western face of the stores.

It was also apparent that there was minor impact from landscaping activities surrounding the stores. The upper levels adjacent to the seating area for the Campbell's Stores restaurants appeared to be built up for the paved promenade. There may be, however, localised areas of moderate to high impacts from landscaping in association with the demolished southern-most bay of the stores and construction of the current stairs in that footprint. Moderate subsurface impacts were also identified through installation of ground services such as a storm water pipes and trenches.

7.2 Areas of Inspection

7.2.1 *Eastern External Surroundings*



7.2.2

Figure 7.1 North facing view showing the eastern external area of Campbell's Stores and the area of the promenade which is likely to have been built up.



Figure 7.2 North facing view showing the eating area to the east of Campbell's Stores, with the top retaining wall at the right of the photo demonstrating relative height of the promenade.



Figure 7.3 East facing view showing the southern extent of Campbell's Stores and new brick addition, with the stairs situated in the former location of the stores' southern bay.

7.2.3 *Western Service Tunnel*



Figure 7.4 South facing view showing asphalted path, which forms the ceiling of the western service tunnel below, in relation to the back of the stores and Hickson Road.



Figure 7.5 South facing view within the western service tunnel showing the western sandstone wall of Campbell's Stores abutting the brick retaining wall addition.



Figure 7.6 East facing view showing the northern face of the Campbell's Stores and the attached superficial structural elements which mark the end of the service tunnel.

7.2.4 *Bay 11 and Glass Pavilion*



Figure 7.7 South facing view showing the enclosed seating area to the east of Bay 11.



Figure 7.8 North facing view showing the relative level of the Bay 11 seating area.



Figure 7.9 South facing view showing the western retaining wall between Hickson Road and the lower area to the north of the stores.



Figure 7.10 South facing view showing the relative height between Hickson Road and the area to the north of the stores, below the retaining wall to the left of the photo.



Figure 7.11 South east facing view showing the structures in the area to the north of the stores.

7.3 Summary

The site inspection identified no Aboriginal sites or areas of PADs within the study area.

The inspection identified that the study area has been subject to moderate localised impacts such as construction of a service tunnel behind the western face of the stores, and minor impact from landscaping surrounding the stores. The surrounding areas appeared to be built up. There may be moderate subsurface impacts from the installation of below ground services.

8 HISTORICAL LAND USE AND SENSITIVITY MAPPING

8.1 Historical Land Use

The land of Sydney Cove was immediately set up as a base of settlement, with the region divided amongst the various necessities of colonisation. The area of The Rocks became the settlement region for the convicts, with associated housing and land modification. The Rocks grew and developed, and few structures are first recorded within the study area before the 1800s.

In 1801, the first storehouses were constructed by Robert Campbell, who shortly after also constructed a house adjacent to the study area. Robert Campbell constructed the first private wharf in conjunction with the store houses, and this began a century and a half of use of the area as a site for warehousing utilised in maritime trade and commerce.

The site is predominately situated on reclaimed land, which was created slowly over the decades of use. By 1825 more warehouses had been constructed along the water's edge, and the 1834 plan (Figure 5.2) shows the extent of the structures built around the study area by this time.

Following continuing land reclamation and wharf expansion, the early stores within the study area were replaced with the first five bays of what would become the current Campbell's Stores in the 1850s. Shortly after this phase of construction, the shoreline was formalised and a seawall constructed, large portions of which are still extant within the cove.

As noted in the SHFA assessment (2012: 25), the maps of the area do not record smaller temporary or insubstantial structures which may have been located across the site.

By the 1860s, Campbell's Stores had been extended to eleven bays. In 1865 (SHFA 2012:28) the first ground services were added by the City of Sydney, but as depicted in the 1855-65 trigonometric survey which also shows the location of smaller surrounding buildings (Figure 5.4), none were yet in the study area.

Following the construction of the new ASNC buildings in 1867, Campbell's old house and the waterfront stores were demolished.

In 1958, the southernmost bay of Campbell's Store, by this time called the Metcalfe Stores, was removed to allow construction of the Overseas Passenger Terminal. Furthermore, following this construction, additional underground services were installed in the area.

During the 1980s the entire area was redeveloped and its primary use changed from commercial shipping to leisure and recreation. All of the remaining stores and associated sheds were removed from the site.

The various historical structures, as seen in the historic plans, are outlined in the figures below in relation to the current Campbell's Stores and study area.



Figure 8.1 Approximate location of 1834 structures in relation to the current stores and study area.

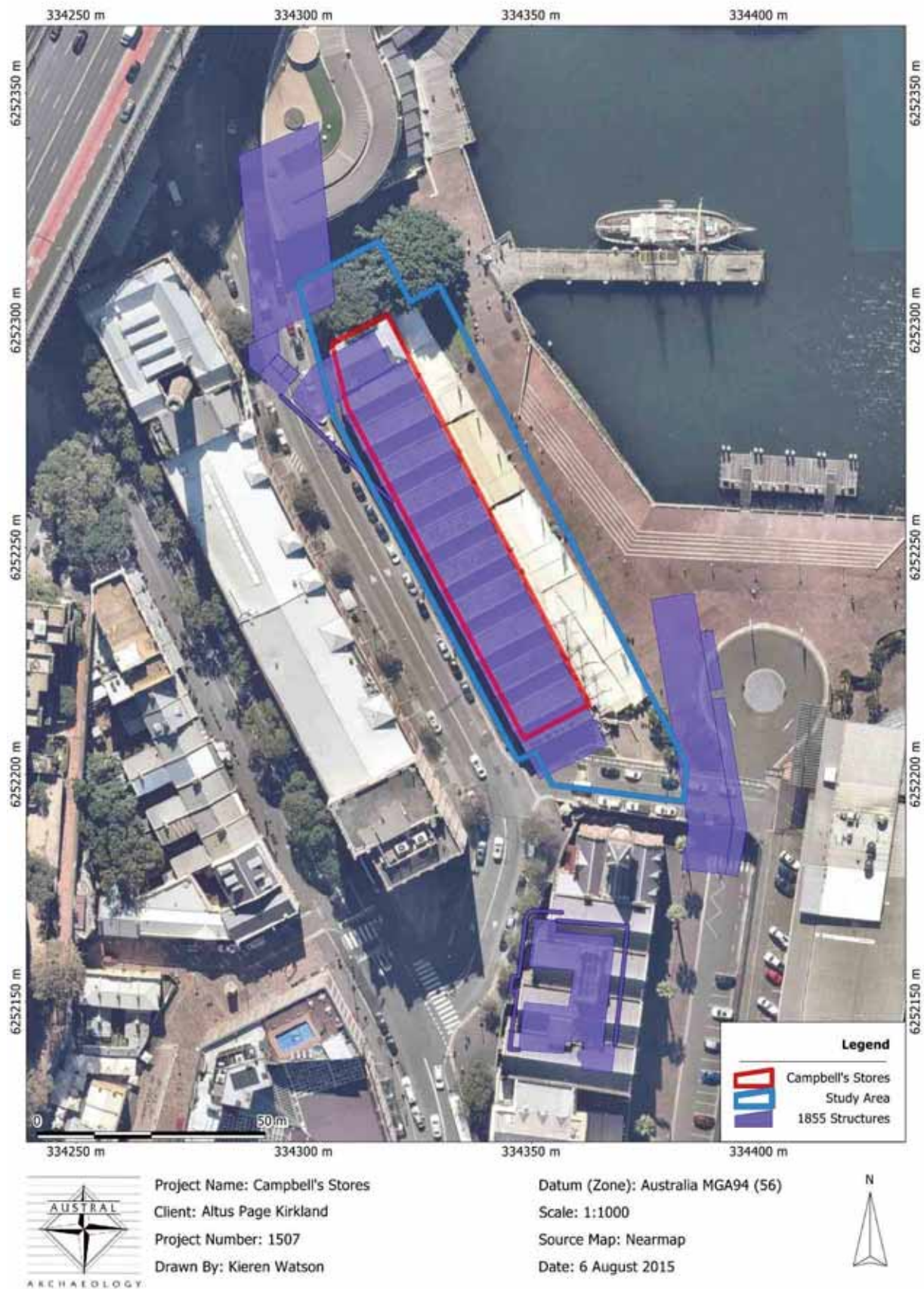


Figure 8.2 Approximate location of 1855-65 structures in relation to the current stores and study area.



Figure 8.3 Approximate location of 1880s structures in relation to the current stores and study area.



Figure 8.4 Approximate location of 1895 structures in relation to the current stores and study area.



Figure 8.5 Approximate location of 1920 structures in relation to the current stores and study area.

8.2 Degree of Historical Disturbance and Impacts

The survival and visibility of Aboriginal and historical sites within the study is likely to be greatly affected by the subsequent decades of building development, landscaping and introduction of below ground services. 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 widespread landscaping for construction of the buildings, further landscaping to accommodate the developing high traffic recreational nature of Circular Quay, as well as the addition of ground services and infrastructure.

Since the construction of the Campbell's Stores during the 1850s, the buildings have undergone various modifications and extensions. During the 1970s the flagstones were lifted within the main building. As noted in the CMP (GML 2014: 84) it is unlikely that any substantial subfloor deposits from the occupation of current Campbell's Store are still extant below the current floors. A series of photos held by the current architects show this work, in addition to the laying of at least some ground services within the stores. Additionally, these photos show details of the other major disturbance at the site, the construction of the service tunnel. The geotechnical bore holing conducted in July of 2015 within this tunnel corroborated the comparatively minimal amounts of deposits in this area.

The area at the northern end of the stores, on which a glass pavilion is currently situated, has been extensively changed, with numerous structures existing in this location over time. The mapping provides inconclusive evidence as to the location of many of these structures, as well as their specific functions.

The southernmost bay was demolished and a new brick end wall constructed. Additionally, in the 1970s, a western channel was dug out behind the stores, level with the current seating area to the east, and beneath the current Hickson Road level. This was then roofed over to form the service tunnel.

In summary, the study area has been subject to a high level of post-Aboriginal disturbance which is likely to have destroyed all Aboriginal cultural heritage within the study area. However, the historic disturbance itself can be of interest to archaeologists. Despite the various landscaping and construction phases across the area, it is likely that at least part of the site has preserved archaeological deposits relating to the European occupation of the study area.



Figure 8.6 Excavation for the western service tunnel in the 1970s (SHFA in GML 2014: 91)



Figure 8.7 Excavation for the western service tunnel in the 1970s (SHFA in GML 2014: 91)



Figure 8.8 Example of underfloor disturbance during refurbishment in c.1970s-80s (Photo collection of Johnson Pilton Walker).

8.3 Geo-Technical Testing



Figure 8.9 Approximate locations of recent test pits and boreholes.

Results of archaeological monitoring of the recent geo-technical test trenches and boreholes (Figure 8.9) undertaken at Campbell Stores on the 13 to 15 July 2015 revealed that the eastern side of the building predominantly contains a deep stratigraphy that is likely to yield archaeological deposits relating to occupation of the area prior to the construction of the current Campbell Stores buildings.

In particular, the eastern test pit in Bay 6, Test Pit 1, contained a deep stratigraphy of crushed sandstone fill and large amounts of fragmented roofing slate. This stratigraphy is likely to contain demolition fill associated with the earlier store structures built on the location of the current Campbell's Stores.

The western test pit in Bay 6, Test Pit 2, revealed bedrock less than a metre from the surface, and the stratigraphy revealed a highly disturbed levelling fill which most likely related to the construction of the current Campbell Stores buildings. While the stratigraphy within the western baulk appeared undisturbed and contained charcoal, the eastern baulk contained a displaced concrete slab.

Test Pit 3 was located in the west of Bay 9. The fill below the modern floor consisted of a brown crushed sandstone with inclusions of sandstone rubble. A stepped foundation for a wall was located at a depth of 1.1 metres below the surface. It is likely there was another stepped footing course at greater depth. A probe was used to identify bedrock at 2.8 metres.

The south-western borehole in the courtyard of the glass pavilion, Borehole 4, contained an unusually thick concrete slab to a depth of almost 3 metres. There was a void in the concrete which the geotechnical supervisor said may have had water running through it, as water-affected bluestone was captured in the bore. Between the base of the concrete and bedrock there was a sandy deposit, but it seems unlikely that there is any archaeological potential for this area.

The north-eastern borehole in the courtyard to the north of the glass pavilion, Borehole 5, yielded the most archaeological potential, with early brick and soft granite building materials being revealed by the bore. Rachael from JK Geotechs informed the archaeologist that the soils present in this area were too friable to be collected by the bore holing technique. Bedrock wasn't encountered until 2.91 metres.

The presence of such deposits combined with archaeological overlay mapping suggests it is highly likely archaeological features and deposits will be extant in this area.

Borehole 6 contained modern brick at approximately 300 millimetres below the surface and bedrock shortly after. This area is unlikely to contain any archaeological potential.

Borehole 7 revealed bedrock almost directly below the surface, at 120 millimetres, and demonstrated no archaeological potential.

8.4 Sensitivity Mapping

The results of Section 6 Predictive Modelling and Section 8.2 Degree of Historical Disturbance and Impacts are depicted in an archaeological sensitivity map below (Figure 8.10). 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 14.

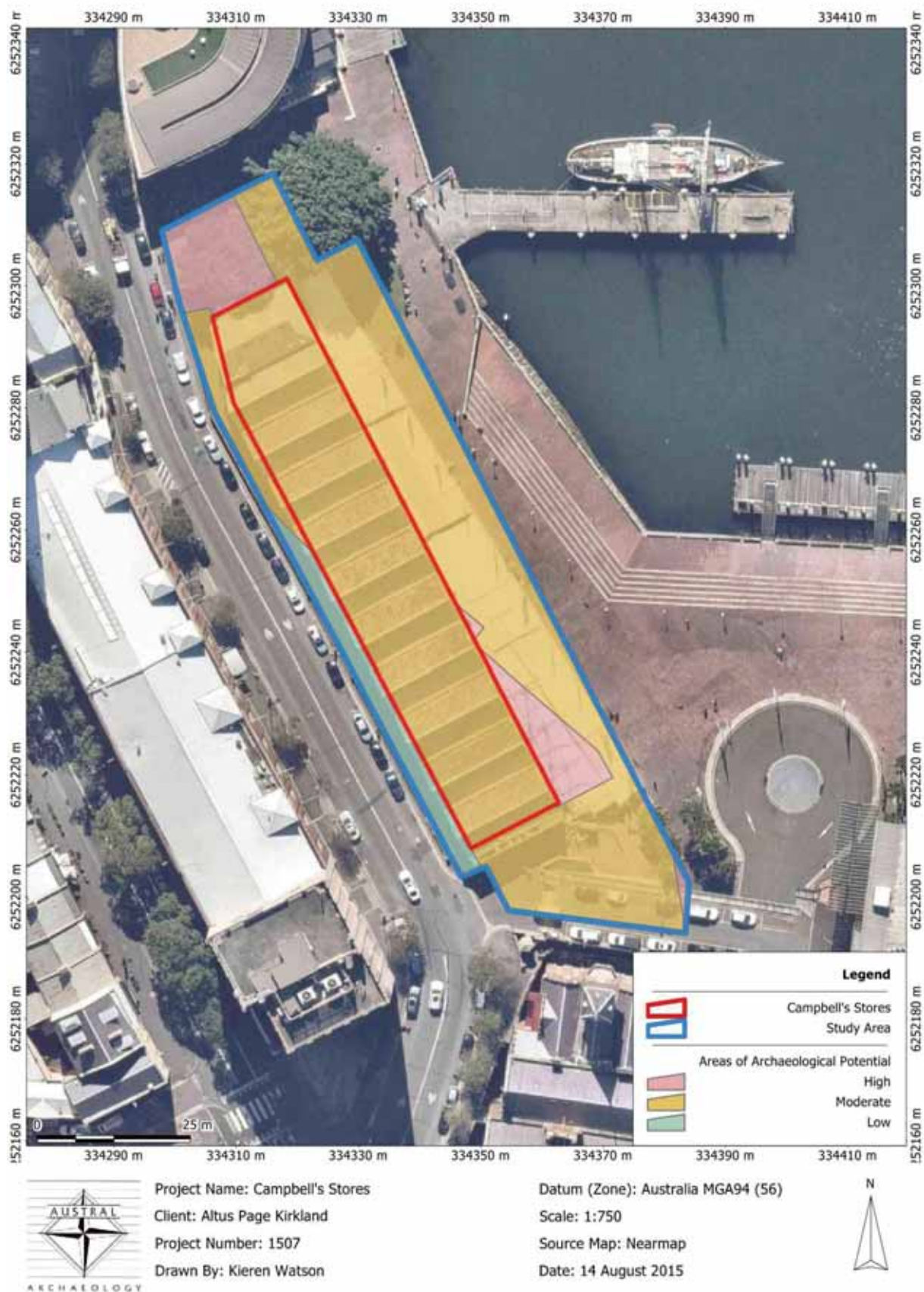


Figure 8.10 Areas of archaeological potential within the study area in relation to Campbell's Stores.

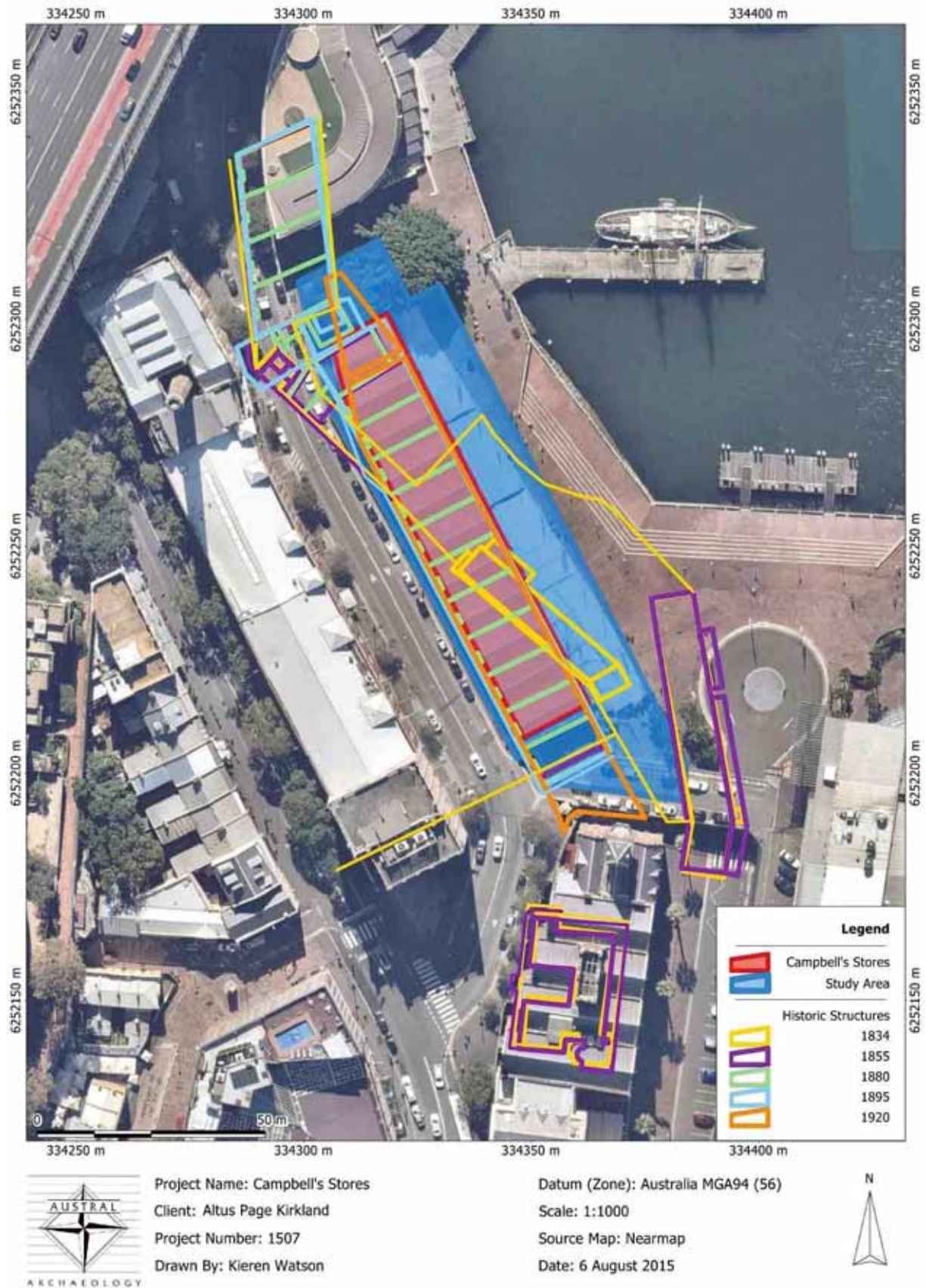


Figure 8.11 Combined overlay of all historic structures in relation to the current stores and study area.

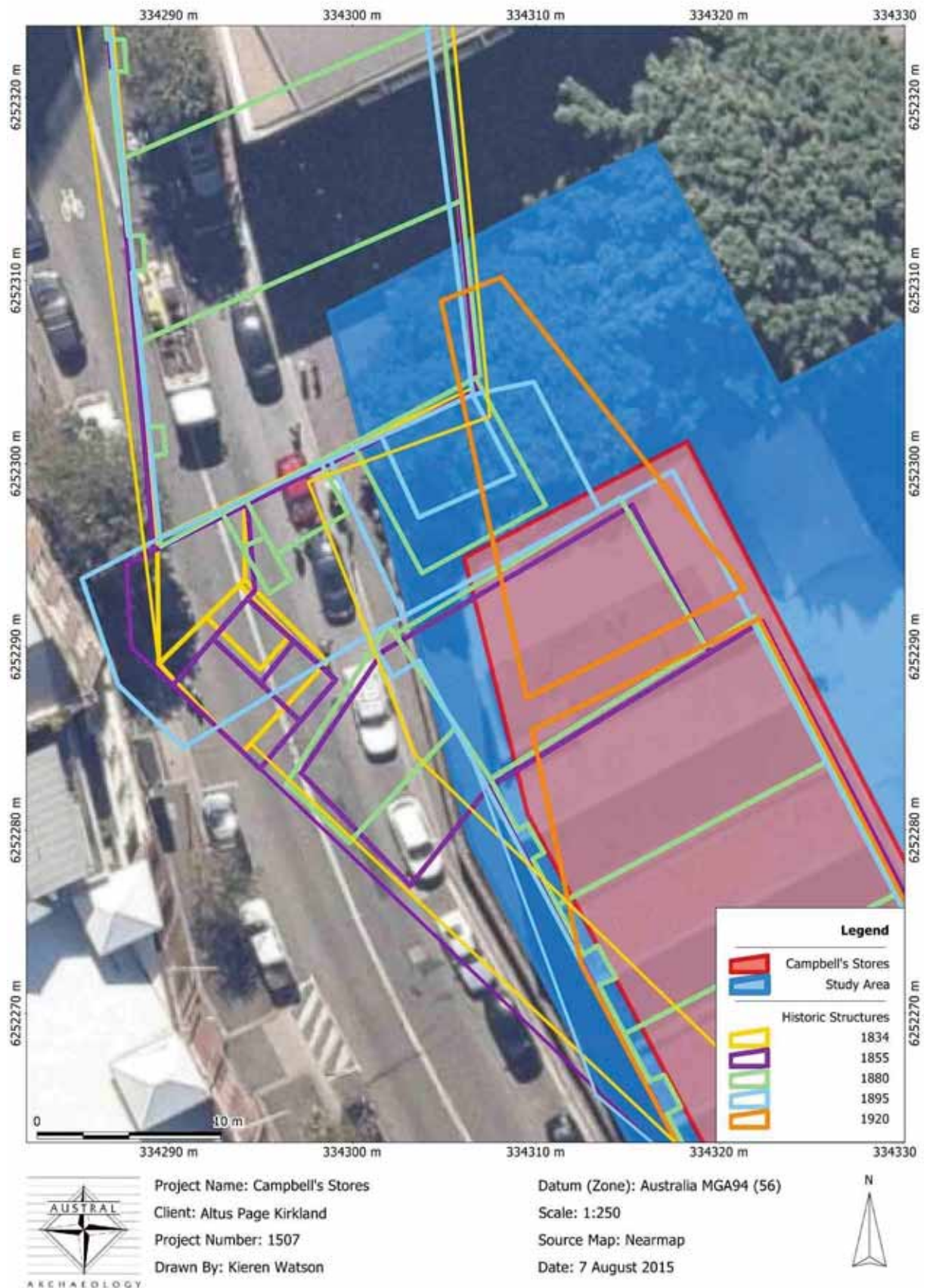


Figure 8.12 Combined overlay of all historic structures in relation to the current stores and study area focused on the area north of the stores.

9 ASSESSMENT OF SIGNIFICANCE

9.1 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.

9.2 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 Division 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.

9.3 Significance Assessment

9.3.1 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?***

It is anticipated that the site may yield information that relates to historical (i.e. the occupation history of the site), archaeological (i.e. function and location of buildings and structures) and research-based contexts (i.e. artefactual material which can be analysed).

- ***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?***

The site has been occupied from the earliest days of colonial settlement, with recorded structures from 1801. The site may contain remains from the original store buildings constructed by Campbell, the subsequent replacement stores, which are the current extant building, and less substantial buildings, both those recorded on the plans and photographs and perhaps those which are not recorded in the historic record.

- ***Is the site rare or representative in terms of the extent, nature, integrity and preservation of the deposits (if known)?***

The Campbell's Stores building itself is a rare example of mid 19th century warehousing in Sydney, and the only structure of its type remaining on the foreshore of Sydney Cove. However, the archaeological deposits are likely to have been disturbed by later alterations to the site. Despite this, any remaining deposits will be rare in their relationship to the stores, and the extensive history of the site.

- ***Are there a large number of similar sites?***

Campbell's Stores is a rare Sydney example of mid 19th century warehouses. However, in their 2014 CMP (115-118), GML places the Campbell's Stores in a context of comparative sites. Such sites include the similar-named Metcalfe Bond Stores, not constructed until the early 20th century, and the Raphael A Mackeller Stores, also built in the mid-19th century but of a considerably smaller scale. In reviewing their analysis of warehouses and historic building construction in Sydney, the CMP (GML: 115) places Campbell's Stores as significant within a small selection of similar sites.

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

The construction and evolution of such sites is documented in the historic record, as are elements of the technology utilised and activities located within the site. However there are gaps relating to the ongoing use of spaces and structures, and the nature of daily activity.

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

Archaeological excavation has the potential to enhance our understanding of maritime industry of early Sydney, its growth and expansion, and changing use of technology within this industry and others which operated within the warehouses. Furthermore, the archaeological record may reveal details about the daily activity of known and unknown operations working from the stores.

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?

The site has been an area of commercial industry since the earliest years of the 19th century, and has the potential to contain deposits which relate to various phases across this substantial period of occupation.

Archaeological excavation has the potential to contribute not only to the information regarding the development of maritime industry in Sydney Cove and the operation of mid-19th century warehouses, its accompanying technology and its evolution over time, but also to the specifics of the Campbell's Stores site, the daily activity and operations being carried out there, and the functions of space and buildings.

Despite disturbance from later modifications, it is considered that this site meets NSW Heritage Criterion (e) at the State level in regard to the potential to contribute unique information about the occupation of the Campbell's Stores site over a long period of time.

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

- ***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 site at Campbell's Stores are listed below in Table 9.1.

Table 9.1 Historical Themes

Australian Theme	New South Wales Theme	Local Themes
3. Developing local, regional and national economies	Commerce	Activities relating to buying, selling and exchanging goods and services
	Industry	Private railway or wharf
	Transport	Activities associated with the manufacture, production and distribution of goods
9. Marking the phases of life	Persons	Activities of, and associations with, identifiable individuals, families and communal groups

- ***Is the site widely recognised?***

Campbell's Stores is widely recognised as a visually distinct structure in the high traffic tourist area of Circular Quay. In terms of archaeological importance, the site is not widely recognised

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

As a recognisable and distinctive structure within The Rocks, Campbell's Stores has symbolic value as an iconic representation of mid-19th century Sydney.

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

While the contemporary community may have an association with and value the site due to its prominence within a busy tourist and recreational area of Sydney, this association is unlikely to extend to a strong connection to the stores.

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

The site may provide material culture relating to the development of maritime industry and the particular cultural identity of the workers of both maritime industries and mid-19th century warehouse workers. Although evidence of the late 20th century fire in the northern end of the building may be visible, no specific events are likely to 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)***

The Campbell's Stores are associated with the Campbell family, one of the earliest free immigrant families in Australia, and one who played an important and influential part in the history of New South Wales and the development of maritime industry and commerce. The stores represent the strengthening of the Campbell's shipping firm started by Robert Campbell.

The history of the site, and potential archaeological remains, are associated with Robert Campbell, who established construction and management of the Campbell's Stores and the first privately owned wharf in 1801.

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

The site was owned by Robert Campbell, and subsequently his descendants, from his arrival in the colony in 1799. The site was officially granted to Robert Campbell in 1814, and members of the family owned, and often lived, on the site until its sale to the Australasian Steam Navigation Company in 1875. While briefly renamed the Metcalfe Stores, currently the site is still named for its association with Robert Campbell and the Campbell family and business.

- ***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?***

The study area is that immediately surrounding the stores, and this is the site which Robert Campbell and later his descendants owned and managed. The Campbell house in which Robert and his wife resided was adjacent to the study area, in the location now occupied by the ASNC building. It is unlikely that evidence relating directly to Robert Campbell or his descendants will be evident in the archaeological or physical record of the site.

- ***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?***

While a number of technologies were utilised during the site's occupation, no significant event or discovery is likely to be evident in the archaeological record.

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?

While the Campbell's Stores building is a recognisable and iconic feature of the Circular Quay, the archaeological potential of the site is not widely recognised. If archaeological remains are present, they are likely to have an association with the era of Robert Campbell or his descents, important figures in the development and growth of Sydney's maritime industry. However, except for the structural remains of the earlier and present warehouses, it is unlikely that any archaeological remains are likely to be directly linked to the Campbell family.

Later remains will not only further provide information on the everyday activities and operations performed within the stores, but may also be associated with Australasian Steam Navigation Company, a highly important commercial shipping firm.

It is considered that this site meets NSW Heritage Criteria (a), (b) and (d) at the local level in regard to the association between the Robert Campbell, and his family, and the study area.

Aesthetic or Technical Significance (NSW Heritage Criterion c)

- ***Does the site/is the site likely to have aesthetic value?***

While the built heritage embodies significant aesthetic value, the site is unlikely to contain any significant archaeological fabric containing such, although individual artefacts elements may exist which contain aesthetic values.

- ***Does the site/is the site likely to embody a distinctive architectural or engineering style or pattern/layout?***

The built heritage elements of Campbell's Stores certainly embody the distinctive architectural and engineering style related to mid-19th century warehouses, a type of which it is both an excellent and rare example. Archaeological remains are likely to reflect this style and layout, contributing to the overall picture of the site. They may also reflect earlier styles of architecture and engineering.

- ***Does the site demonstrate a technology which is the first or last of its kind?***

There is a range of technology evident in this building, such as the hydraulic hoisting equipment, which displays evidence of technical innovation. Archaeological excavation may reveal further examples or provide more detailed information of such technology.

- ***Does the site demonstrate a range of, or change in, technology?***

The site demonstrates a range of and change in technology. There are several examples, such as hydraulic hoisting equipment and winches, which demonstrate the change from manual to hydraulic and mechanical goods handling during the 19th and 20th centuries. Furthermore, the warehouses were adapted over several decades to transition from older style warehouses to those with more modern layouts, functioning and technology.

While such change is demonstrated in the built elements of the site, the archaeological record may provide further information on the nature and changes of such technology.

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?

The Campbell's Stores has the potential to yield substantial new archaeological information in the form of intact and legible remains in the form of aesthetically attractive artefacts, aged and worn fabric and remnant structures. Such material may further enrich the history of the site, which has demonstrated distinctive architectural and technological value, and allow a greater connection with the past through tangible physical evidence

It is considered that this site meets NSW Heritage Criterion (c) at a local level in regard to its potential to reveal aesthetically attractive artefacts, worn fabric or remnant structures.

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?***

Campbell's Stores is a rare example of mid-19th century warehousing in Sydney and the associated collection of late-19th century equipment is a rare assemblage of such technologies and infrastructure.

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

Occupation was long term, continuing from at least 1800 to the current day with changing use throughout this period.

- ***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 is likely to reflect occupation over a long period. There is only likely to be evidence of changing technologies and various phases of function across the occupation period.

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

The site demonstrates change not only in the structures and technologies utilised in the construction and operation of harbour-side warehouses, the earliest of which were replaced by the current Campbell's Stores which themselves have undergone extensions, modifications and adaptation, but in a change of purpose from an industrial maritime space to one of recreation.

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

The level of archaeological preservation within the study area is unknown. As demonstrated in Section 8, the site is considered to have archaeological potential (Figure 8.1).

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.

The archaeological remains have the potential to reveal further information on how Campbell's Stores and associated buildings and spaces were used, what processes occurred, how work was undertaken and the scale of industrial practice.

Furthermore the archaeology has the ability to inform on historical maritime operations within Sydney Cove, as well as the operations of mid-19th century warehouse buildings, and changes in technology that occurred over time alongside the earlier use and development of the site.

The Campbell's Stores site has potential archaeological, scientific and research significance relevant to earlier uses and the development of the site. The archaeological significance may have been reduced due to disturbance from later alterations and refurbishment works to the site.

It is considered that the study area does meet NSW Heritage Criteria (a), (c), (f) and (g) at the state level in this regard.

9.4 Statement of Significance

The Campbell's Stores is a significant site listed on the State Heritage Register and has the potential to yield substantial new archaeological information. Such material may further enrich the history of the site and provide further evidence on the specific history and development of the study area itself and the development of Sydney Cove, and Sydney's maritime history, particularly in terms of the shipping and handling of goods.

It is considered that this site meets NSW Heritage Criterion (c) at a local level in regard to its potential to reveal aesthetically attractive artefacts, worn fabric or remnant structures.

It is considered that this site meets NSW Heritage Criteria (a), (b) and (d) at the local level in regard to the association between the Robert Campbell, and his family, and the study area.

Despite disturbance from later modifications, it is considered that this site meets NSW Heritage Criterion (e) at the State level in regard to the potential to contribute unique information about the occupation of the Campbell's Stores site over a long period of time.

The archaeological remains have the potential to reveal further information on how Campbell's Stores and associated buildings and spaces were used, what processes occurred, how work was undertaken and the scale of industrial practice.

It is considered that the study area does meet NSW Heritage Criteria (a), (c), (f) and (g) at the state level as it has potential archaeological, scientific and research significance relevant to earlier uses and the development of the site.

10 STATEMENT OF HERITAGE IMPACT

10.1 Proposed Works

The proposed works are in the preliminary phases of design.

Key features of the proposal are:

- Construction of a standalone structure to the north of the stores, where a glass pavilion is currently located. At this stage the construction of this building involves (see Figure 10.1):
 - o 12 piles, 750 millimetres diameter and 5 metres deep (Type P1)
 - These piles are grouped in pairs and capped with a pile cap of 1.8 metres long and 950 millimetres wide, with a depth of 600 millimetres (Type PC1).
 - These piles will be the primary supports for the new structure and its associated elevator shaft.
 - o 13 piles, 500 millimetres diameter of 3 metres deep (Type P2)
 - Three of the southern P2s will be capped with a pile cap of 800 millimetres long by 800 millimetres wide and 600 millimetres deep (Type PC2)
 - These piles will be used to support a set of stairs on the eastern side, a retaining wall and a concrete slab
 - o Construction of a retaining wall around the western and northern boundary of the site, with a 1500 millimetres wide footing of unknown depth
 - o Extension of the western service tunnel to the north.
 - o Construction of a set of stairs along the eastern edge of the new structure
 - o Construction of a concrete slab of 120 millimetres thickness, approximately 11 metres by 15 metres
- Modifications to the existing structure
 - o Excavation of lift pits with 1000mm of ground disturbance
 - o Cutting of the wall footing in Bay 9 for the lift shaft
 - o Removal of ground floor slabs and excavation of sub-floor deposits for ventilation
- Modification of the outdoor seating area to run parallel with the eastern elevation of the building, and the creation of landscape beds to clearly delineate between leased areas and the public domain.
 - o The lowering of the raised promenade area to be level with the forecourt dining area
 - o Construction of glazed canopy area with supporting steel columns
- Replacement of the access stairs to the Hickson Road level at the south of the stores (but there will be no subsurface works).

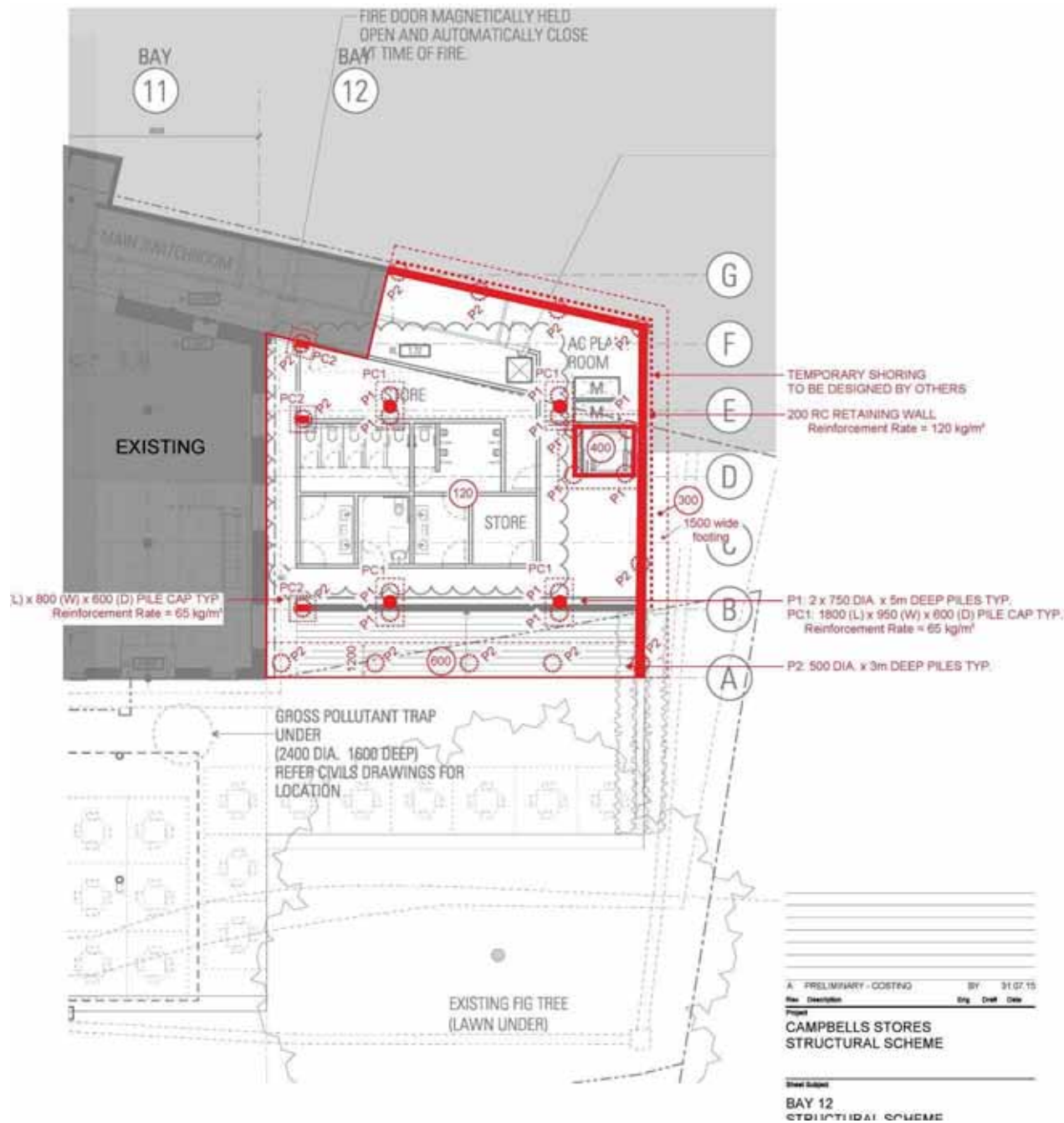


Figure 10.1 Campbell's Stores structural scheme.

10.2 Predicted Impact on the Potential Archaeological Resource

The following section provides an assessment of each element of the proposed works and whether the task has potential to impact on the identified archaeological resource (Figure 10.2). At present, the design is only in the preliminary planning stage and thus actual impacts are difficult to assess or predict.

10.2.1 Predicted Impacts with Potential to Significantly Harm the Archaeological Resource

- **Construction of a standalone structure**

The construction of this structure will constitute the primary impact of this stage of works. These works include piling, construction of a foundation wall, and concrete slab. The piles will create the greatest impact. While they, including the pile caps, only cover approximately 5% of the footprint, they are widespread over the area with a deep and destructive impact. The area covered by each pile, and to a lesser extent, the pile cap, is small enough to create difficulty in interpreting any archaeological remains (see Figure 8.12) that might be located there. In addition, the other works involved in this construction will affect the overall area of high potential.

10.2.2 Predicted Impacts with Limited Effect on the Archaeological Resource

- **Modifications to the existing structure.**

The proposed construction of lifts, with pits of 1000mm in Bays 3, 6 and 9, will impact localised areas of moderate archaeological potential. The archaeological deposits appear the deepest and most intact along the eastern side of the building and will be impacted by the proposed lift pit in Bay 6.

The proposed lifting of the current ground floor slab and excavation of the sub-floor deposits to provide ventilation will impact any remaining upper areas of underfloor deposits. The upper levels of these deposits have been disturbed through various modifications to the structures, particularly the 1970s refurbishments. As noted in the CMP (GML 2014:84), the resurfacing of floors, and removal of the original sandstone flagging, as well as the addition of various ground services, has made it unlikely that any large areas of underfloor deposits will be intact.

The works concerned with the built heritage will have no effect on the potential archaeological resource.

- **Modification of the outdoor seating area**

These works will likely involve filling in certain areas, and cutting back into built up areas of the promenade to the east. Accordingly, this work is unlikely to impact heavily on any potential archaeology.

The construction of the glazed canopy, with supporting steel columns in the forecourt eating area, will have minimal localised impacts in areas of moderate and high archaeological potential.

- **Replacement of the access stairs to the Hickson Road level at the south end of the stores.**

The area beneath the existing stairs had been cleared during their construction. The new stairs appear to utilise this previously excavated space, and therefore, any subsurface works for further stabilisation of the new stairs should minimally impact the archaeological resource, or impact already disturbed deposits.

The following questions are taken from the Heritage Division's guidelines to preparing statements of heritage impact.

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

The overall proposal is aimed at conserving and enhancing the heritage features of the Campbell's Stores to match their original built state, and preserving the history of the Campbell's Stores for future generations of locals and tourists.

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

Some aspects of the preliminary design of the proposed development may adversely impact on any archaeological material which may be present below the existing structures.

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 an opportunity to provide input into other design options which might be more sympathetic to both the built and archaeological heritage. However, given that the design is at a preliminary stage, there may be scope for it to be altered to take account of the findings of this report.



Figure 10.2 Area of high impact (shown as pink stippling) in relation to predicted locations of historic structures, the current Campbell's Stores and the study area.

11 ARCHAEOLOGICAL RESEARCH DESIGN

11.1 The Role of Research Designs in Australian Historical Archaeology

The research design presented here builds on the understanding already gained of the study area through the historical research documented above. The objective of the currently proposed archaeological investigation is to record any archaeological features or deposits in detail, gain a full understanding of the site and produce meaningful and new information that enhances the understanding of Sydney's past.

The formulation of a focused Research Design is a fundamental element in the process of archaeological investigation and is a necessity for guiding research in the direction of whichever questions are considered most worthy of attention. In a heritage management context, such as that for the proposed construction work at Campbell's Stores, this process will primarily be concerned with the salvage of historical and archaeological information from the site prior to its destruction due to the proposed development. However, the mere retrieval of information is not a professionally or ethically sufficient outcome for society in terms of the mitigation of the impact of such development (Murray & Mayne 2002:3). Instead, current philosophies regarding the retrieval of data through archaeological investigation demand that such recovery be further justified by the provision of a meaningful contribution to understanding the past.

Accordingly, it is vital that a solid research framework is established from the outset of a project; one that includes a variety of questions and problems to focus investigation in a way that is both theoretically relevant and at the same time realistic and achievable. Such questions should encompass the full spectrum of human activity, ranging from local to regional questions, and further up the scale to the national and international perspectives (Murray & Mayne 2002:4).

In *The Archaeologists Field Handbook*, Burke & Smith (2006:3) define the initial movement of constructing a research design as defining a problem and determining its relevance. They state:

"The most important first step in designing research is to outline the problem. This is essentially why you think your research is important, and how you think it will contribute to the discipline of archaeology. Some research problems might contribute new light on theories of human behaviour in the past, while others might contribute new methods for how we go about collecting or analysing archaeological data."

The study area presents, therefore, two key avenues to define the research problems that can then form the basis of subsequent research questions. What can the material culture in the study area tell us about past human behaviour? And how can the material culture in the study area be used to develop more rigorous and insightful methodologies of use to the discipline of archaeology?

Recently Schacht (2010:61) has identified a 'preliminary thematic framework for Australian historical archaeology' as part of a broad review of themes in historical archaeological publications in Australia. As part of her work, Schacht identified several thematic groupings which are relevant to the current study area including the development of the urban rural fringe, the development of the built environment, and questions relating to status and class (Schacht 2010:71-73). The study area presents numerous opportunities for exploring these arenas of investigation in a meaningful way.

11.2 Research Problems Regarding Past Human Behaviour

The chief areas that shape the research problem of the study area relate to the occupation and use of the various commercial structures that have been located at Campbell's Stores and their associated outbuildings, and how these possible remains epitomise the potential of archaeological investigation to produce substantial new information about the past. The exact date of construction and functions associated with many of the smaller buildings are largely unknown for the entire occupation period. Who constructed them? When were they constructed? How? What function did they serve? These are all basic questions that can be used as an entry point into the investigation of these items. These questions form the basis for broader problems relating to the nature of occupation at Campbell's Stores.

The study area represents greater Sydney Cove, the base of colonial settlement and where much of Sydney's early maritime trade history was initiated. Distinguishing between the many decades of use of the Campbell's Stores, how the use of the space and structures evolved and were adapted over the century of use is of significant interest in archaeological excavation. Furthermore, behaviour of

individual workers and commercial enterprises operating within the stores is of paramount interest in the archaeological investigation of that area, providing an enriched view of Sydney's maritime past, and the evolution of its harbour side and industrial cultural identities.

11.3 Research Problems Regarding Archaeological Theory and Method

The central methodological issue at stake in this study area is the correlation between the historical and archaeological records and the reconciliation of any discrepancies that might arise. Early buildings are depicted on historic plans and later, in photographs, yet written descriptions of the many elements of the site, particularly the smaller structures made of wood and iron, are few and unspecific. Furthermore, as seen in Figure 8.12, areas of the site, particularly the space to the north of Campbell's Stores, are not clearly understood from the historical mapping alone. This leads to a requirement to consider how historical archaeology can supplement the visual depiction of an item in the historical record?

The dimensions of structures and outbuildings within the study area, their overall manner of construction and broad area of use have all been conveyed by the historical record. This leaves open the question regarding what the archaeological investigation can tell us that will give us more insight regarding the past.

12 RESEARCH QUESTIONS

12.1 Introduction

These research questions are presented in four parts, reflecting general themes, built heritage, social themes and the comparison of historical and archaeological sources. Many of these research questions build on the framework developed by Schacht (2010).

12.2 General Themes

- Is there any evidence of the pre-European landscape, including the location of the original shoreline, evidence of the shells that were present in the area or preserved timbers or vegetation?
- Is there evidence of landscape alteration associated with the earliest phases of post-European occupation within the study area?
- What is the earliest evidence for post-European material on the study area? Does it relate to the first Campbell's Stores buildings, or early occupation?
- Does the archaeological material present in the study area reflect the commercial focus of occupation at Campbell's Stores? Can different commercial industries be discerned from the archaeological evidence?
- The study area was known to be occupied for almost 200 years; what evidence of changing use over time can be discerned for the structural elements and artefactual deposits of the site?

12.3 Built Heritage

- What can the archaeological remains tell us about the structure and layout of former built structures?
- What evidence of changing use can be discerned from the structural elements of buildings within the study area and artefactual deposits within individual buildings or outside areas?
- What is the manner of construction of former buildings, and is a change visible over time?
- Is there any clear artefactual evidence for a particular function being carried out within specific locales or buildings?

12.4 Social Themes

- Is it possible to determine social class of the occupants of the study area through the archaeological material?
- Does the archaeological record indicate a social hierarchy which is unchanging, or is archaeological material present which indicates a desire for improvement in individual circumstances?
- Do remnant building materials serve as an economic indicator? Can we differentiate occupants of different parts of the site based on construction techniques of buildings?
- Can we undertake an analysis of space within the Campbell's Stores site from a gender perspective?

12.5 Historical Images and Archaeology

- There are some clear historical depictions of structures within the study area in historic plans. What elements of information should the archaeological investigation focus on in order to best supplement the clear spatial depictions of buildings while they were still standing?
- In what way does evidence of structures differ from those displayed in the historical record?
- What particular structural features are unrepresented or misrepresented in the historical depictions? Are there patterns in the types of features which are unrepresented or misrepresented?

- Does the archaeological evidence provide details of the interior of structures, such as structural divisions or divisions into activity areas that cannot be arrived at by the examination of the extant historical images?
- What different roles might archaeology play in the investigation of a site with primarily written historical evidence as opposed to a site with primarily graphic historical evidence?
- How do clear visual depictions and planned drawings of the structure influence the excavation process and how can this assisted form of excavation be made to produce more useful information and better conservation results?

13 METHODOLOGY

The aim of the proposed archaeological investigation at Campbell's Stores is to carry out comprehensive recording of the archaeological resource prior to its removal and destruction by the proposed development. Recording of the site includes written description, drawings, photographs, measured plans, collection and analysis of artefacts and a response to the research questions (see Section 12 for details).

Investigation will be consistent with following documents and guidelines;

- *NSW Heritage Manual*, Heritage Office and Department of Urban Affairs & Planning 1996
- *The Burra Charter*, Australia ICOMOS 1999
- *Archaeological Assessment Guidelines*, Heritage Office and Department of Urban Affairs & Planning 1996.
- *Historical Archaeological Sites: Investigation and Conservation Guidelines*, NSW Department of Planning, Heritage Council of NSW 1993
- *Historical Archaeological Excavations: Code of Practice*, NSW Department of Planning, Heritage Council of NSW 2006.
- *Photographic Recording of Heritage Items Using Film and Digital Capture*, Heritage Branch Department of Planning 2006.
- *How to prepare archival records of heritage items*, Heritage Office and Department of Urban Affairs & Planning 1998.

13.1 Archaeological Monitoring Methodology

All initial ground disturbance works in the areas marked on Figure 8.10 which have moderate potential to contain archaeological material of local significance are to be monitored by a suitably qualified archaeologist. As such, work will proceed under the supervision of an archaeologist who will record any discovered features.

The archaeological monitoring aims to achieve two things; it will record any deposits and features located in these areas to mitigate the impact and may provide new information that would guide any works in the area that are to occur in any possible future development. It will also answer a series of questions and clarify what impacts have occurred throughout the study area as a result of the major changes that took place at the beginning of the 20th century.

A Safe Work Method Statement will be prepared for the work. All Austral Archaeology staff hold general Construction Industry Training Induction cards.

Provenance data and fabric descriptions will be recorded on numbered context recording sheets and the vertical and horizontal positions of all significant deposits and features will be recorded with reference to a permanent site datum.

Artefacts will be collected but will not be processed during this phase of works. All artefacts will be retained for later analysis.

If historic remains of State significance are uncovered during the monitoring works, further archaeological investigation may be required. Additional research questions must first be developed and appended to this archaeological research design to guide such work and an appropriate methodology developed.

13.2 Archaeological Testing and Salvage Methodology

13.2.1 Excavation Area Location

The location of the proposed standalone structure will involve a high impact activity in an area of high archaeological potential and is therefore proposed to be subject to archaeological testing and salvage (Figure 8.10).

13.2.2 General Excavation Methodology

A Safe Work Method Statement will be prepared for the work. All Austral Archaeology staff hold general Construction Industry Training Induction cards.

Mechanical excavation will proceed via a series of shallow scrapes so that the exposed surface in the pit or trench is progressively reduced in a controlled manner. This process will continue in this area, until the extent of the structural remains have been identified.

Concurrent with this, targeted manual excavation will occur where required by qualified archaeologists. Small hand tools such as picks, shovels, pointing trowels, brushes and pans will be used in manual excavation, either for cleaning up excavated areas or revealing exposed features or deposits. Where an *in situ* historic feature that is the target of the excavation is located, mechanical excavation will cease. The feature will then be cleaned up by hand and recorded. The archaeologist will endeavour to expose and identify all significant historic features and deposits.

In the event that structural fabric is not located, excavation will stop when culturally sterile or natural deposits have been reached. This is expected to be between 0.5 and 1 metre in depth in most instances.

Provenance data and fabric descriptions will be recorded on numbered context recording sheets and the vertical and horizontal positions of all significant deposits and features will be recorded with reference to a permanent site datum. This survey information will be transferred to scaled site plans showing the spatial relationships between features revealed during the course of the investigation. Documentary records of the excavation will be supplemented by the preparation of Context Schedules and a Harris Matrix for the excavation area (where significant stratigraphic relationships are identified).

All significant elements will be photographed with a scale bar. Digital media will be used for general photographic recording.

Artefacts will be collected but will not be processed during this phase of works. All artefacts will be retained for later analysis.

Artefacts will be bagged in suitable polyethylene or paper bags, double tagged with Tyvek (or similar) labels and put in temporary secure storage on Austral Archaeology's premises. The labels will be annotated with the trench or pit number as well as the context or layer number using permanent ink pens. At the conclusion of the project they will be handed over to the client for retention and/or lodgement in an appropriate storage facility. Where possible the artefacts will be subjected to a detailed statistical analysis in order to fully answer the research questions outlined above. There are a number of statistical and analytical tools, such as a Ceramic Variation Index for determining the social standing of the users of a ceramic assemblage, available to archaeologists in order to make far reaching statements relating to class, gender and social customs and these can be employed to further enhance the understanding of the site.

In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all work within a 50 metre radius must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist would consult with the Office of Environment and Heritage and the relevant Aboriginal stakeholders, regarding the Aboriginal cultural material.

13.3 Retention and Interpretation Strategy

13.3.1 Retention

If archaeological remains of State significance that can be used to help interpret the archaeological record are uncovered, consideration must be given to retaining them *in situ*. Discussions will be held with the Client and SHFA over possible interpretation of the material. A suitably qualified materials conservator may be required to assess them in order to determine the likelihood of their capacity to be retained.

If the retention of these items and any associated artefacts is feasible within the context of the proposed development, then the conservator or specialist will prepare a monitoring and maintenance plan for their management. This plan will follow the *Historical Archaeological Sites: Investigation and Conservation Guidelines* produced by the Department of Planning & Heritage Council of NSW (1993).

13.3.2 Public Interpretation

It is important that the history of the site and information from archaeological programs be disseminated to the public both during and after archaeological investigations. It may be possible for an interpretation of archaeological results to be displayed within the commercial level of the proposed development. As the archaeological resource is likely to be of local significance, the general public

should be given the opportunity to learn about the remains where possible. To this end it is recommended that a copy of the subsequent excavation report be lodged in a local library.

13.4 Post-Excavation Analysis and Reporting

At the completion of the archaeological program the results of the excavation and analysis of the artefacts will need to be completed. The final report will require a synthesis of the plans, field notes and descriptions of the archaeological features and deposits for each trench and overview of the site as a whole. Interpretation of the results will be used to respond to the research questions to produce a meaningful outcome.

Specialists will analyse the artefacts and produce a catalogue consistent with, or comparable to, current data systems and according to best practice methodologies. The artefacts will be catalogued according to location, context number, catalogue number, and stored in zip lock polypropylene bags (or paper bags as appropriate) in labelled archive boxes. Lodgement of the collection in a repository with appropriate accompanying documentation will be required. The Client will be responsible for the storage of artefacts.

Further historical research will be conducted as necessary to complete and enhance the archaeological findings. The research would focus on site specific features and the economic background of 19th century Sydney. It is anticipated that the majority of this research can be carried out with the use of secondary sources gained from desktop investigation.

14 CONCLUSIONS AND RECOMMENDATIONS

14.1 Conclusions

A search of the Aboriginal Heritage Information Management System (AHIMS) Database returned no sites within a 50 metre boundary of the study area. This is expected, given the site's documented history of use, reclamation and continuous development since European settlement. It is therefore clear that this location qualifies as 'disturbed' land according to the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW 2010b).

The assessment has identified that there is potential for archaeological remains of evidence of early European land formation or reclamation processes and perhaps indications of early occupation in deposits or artefacts.

There is the potential for evidence from the earliest stores built on the site, constructed by Robert Campbell, as well as associated structures, such as walls and indicators of smaller surrounding buildings, which are perhaps unmapped. Additionally, potential evidence may relate to the surrounding landscape and occupation.

While the 1850 stores are currently extant, there may be evidence which relates to their construction, modification, and over a century of occupation. Particularly in the area immediately to the north of the stores, there is high potential for remains of various structures constructed during the many decades the stores functioned as maritime warehouses.

This potential is lessened by various disturbances. Analysis of such disturbance combined with results from recent geotechnical investigations indicates that there is still potential within the footprints of buildings, both demolished and extant. The area to the north is of particular interest, as it has been the site of numerous structures and their exact position, function and construction method is not entirely certain.

14.2 Recommendations

The following recommendations are derived from a detailed analysis of the site. The archaeological assessment has taken into consideration the historical development of the site and the results of the recent geo-technical investigations to arrive at a conclusion regarding its archaeological potential. The likely impacts of the proposed redevelopment works have been determined based on the preliminary design only which was available at the time of writing. These recommendations are made in conjunction with Figure 8.10 (copy below) and are in accordance with Archaeological Policies 25 to 27 in the CMP (GML 2014:178-180). It is recommended that:

- 1) Given that the site has been assessed to have areas of moderate and high archaeological potential that may be impacted during proposed works, an excavation permit is required under Section 60 of the NSW *Heritage Act 1977*. To fulfil recommendations 3, 4 and 5, and to comply with the *Heritage Act*, the client will need to apply for a Section 60 Excavation Permit for testing and salvage. This assessment report (which includes a research design) should be appended to the permit application. A suitably qualified archaeologist accredited and approved by the Heritage Council must be nominated on the application form to direct any necessary archaeological works.
- 2) In accordance with the recommendations made in the CMP, wherever possible, works to this site should avoid areas of high archaeological potential or significance.
- 3) If such works cannot be avoided, the area of high archaeological potential located to the north of Bay 11 should be archaeologically tested and if necessary, a salvage archaeological excavation undertaken.
- 4) Any ground works in areas of moderate potential, such as construction of elevator pits in Bays 3, 6 and 9, and column supports for the glazed canopy should be subject to archaeological monitoring.
- 5) The limited impact of the column supports for the glazed canopy in areas of high archaeological potential should be subject to archaeological monitoring.
- 6) The preliminary design does not show further significant proposed development in the area of high potential located to the south-east of the store buildings. Should any below ground works

be planned in this area, it should be archaeologically tested and if necessary, a salvage archaeological excavation undertaken.

- 7) 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 SHFA be notified in accordance with Section 146 of the NSW Heritage Act 1977. A qualified archaeologist should be contacted to assess the situation and consult with SHFA regarding the most appropriate course of action.
- 8) 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.
- 9) Should the proposed development be altered from the proposed concept design, or when more details of ground penetrating works become available, then a reassessment of the heritage/archaeological impact may be required. This includes any impacts not explicitly stated in Section 10, and includes the installation of any subsurface services such as stormwater, electrical or communications.
- 10) Consideration should be given to interpreting any archaeological evidence that results from any archaeological investigation of the site. Interpretation should be in accordance with Policy 16 of the CMP (GML 2014:172).
- 11) Two copies of this report are to be forwarded to SHFA with the Section 60 application.
- 12) A copy of the final excavation report should be lodged in a local library.



Figure 8.10 Areas of archaeological potential within the study area in relation to Campbell's Stores.

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