

ARCHAEOLOGY - HERITAGE - MEDIATION - ARBITRATION

THE ALBION HOTEL 135 GEORGE ST, PARRAMATTA

Aboriginal Archaeological Assessment

PREPARED BY
REPORT TO
VERSION NO
DATE

TORY STENING
CASEY & LOWE ON BEHALF OF THE ALBION HOTEL
B.2015
MARCH 2015

DOCUMENT CONTROL

STATUS DRAFT

REV	DATE	PREPARED	EDITED	APPROVED
A	09/02/2015	Tory Stening	Jillian Comber	Jillian Comber
B	18/03/2015	Tory Stening	Jillian Comber	Jillian Comber

Comber Consultants has a certified integrated management system to the requirements of ISO 9001:2008 (quality), ISO 14001:2004 (environmental), OHSAS 18001:2007 (health and safety) and AS/NZS 4801:2001 (health and safety). This is your assurance that Comber Consultants is committed to excellence, quality and best practice and that we are regularly subjected to rigorous, independent assessments to ensure that we comply with stringent Management System Standards.



EXECUTIVE SUMMARY

The Albion Hotel propose to demolish the existing Albion Hotel, Parramatta and construct a new 35 storey apartment building. Casey & Lowe have been engaged by The Albion Hotel to manage archaeological and heritage issues.

To ensure that the Aboriginal archaeological and cultural heritage significance of the study area is not adversely impacted upon by the proposal, Casey & Lowe on behalf of The Albion Hotel, have commissioned this Aboriginal archaeological assessment. This assessment has been prepared in accordance with the Office of Environment & Heritage's *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*.

The study area has the potential to contain subsurface evidence of Aboriginal occupation including stone artefacts and/or contact artefacts of worked glass. Therefore prior to the commencement of the demolition of the existing building and construction of the new buildings it will be necessary to:

- Undertake Aboriginal community consultation in accordance with OEH's *Aboriginal cultural heritage consultation requirements for proponents 2010*.
- Apply for an Aboriginal Heritage Impact Permit (AHIP) with salvage in accordance with Part 6 of the *National Parks & Wildlife Act 1974*.
- Once the AHIP has been received undertake a two phase salvage program. Phase 1 will be to determine the nature and extent of the deposit. Phase 2 will be to salvage that deposit.



CONTENTS

1.0	INTRODUCTION	2
1.1	BACKGROUND	2
1.2	LOCATION	2
1.3	PROPOSAL	4
2.0	METHODOLOGY	6
3.0	ABORIGINAL HISTORY	8
3.1	DARUG	8
3.2	THE BURRAMATTA CLAN	8
3.3	FOOD AND SUBSISTENCE	9
3.4	EUROPEAN OCCUPATION	10
4.0	ENVIRONMENTAL CONTEXT	14
4.1	TOPOGRAPHY	14
4.2	STREAM ORDER MODELLING	14
4.3	GEOLOGY	14
4.4	PARRAMATTA TERRACE SAND	15
4.5	VEGETATION	16
4.6	CURRENT LAND USE AND DISTURBANCE	16
5.0	ARCHAEOLOGICAL CONTEXT	20
5.1	SYDNEY REGION	20
5.2	PARRAMATTA	21
5.3	THE STUDY AREA	23
5.4	SITE PREDICTION	23
6.0	RESULTS AND IMPACT	25
7.1	RESULTS	25
7.2	IMPACT	25
7.0	LEGISLATION	27
8.0	RECOMMENDATIONS	29
	REFERENCES	31
	PHOTOGRAPHS	35
	APPENDIX A: PLANS	39

1.0 INTRODUCTION

BACKGROUND

LOCATION

PROPOSAL



1.0 INTRODUCTION

1.1 Background

The Albion Hotel propose to demolish the Albion Hotel, Parramatta and construct a new 35 storey apartment building. Casey & Lowe have been engaged by The Albion Hotel to manage archaeological and heritage issues.

To ensure that the Aboriginal cultural heritage significance of the study area is not adversely impacted upon by the proposal, Casey & Lowe on behalf of The Albion Hotel, have commissioned this Aboriginal archaeological assessment. This assessment has been undertaken in accordance with the Office of Environment & Heritage's *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*.

1.2 Location

The Albion Hotel is located at 135 George Street, Parramatta, on the eastern edge of the Parramatta Central Business District (CBD). Parramatta is located approximately 25km west of the Sydney CBD within the Parramatta Local Government Area. The Albion Hotel is bound on the north by George Street, on the east by Harris Street, on the south and west by the carparks at the located at 142–154 Macquarie Street.

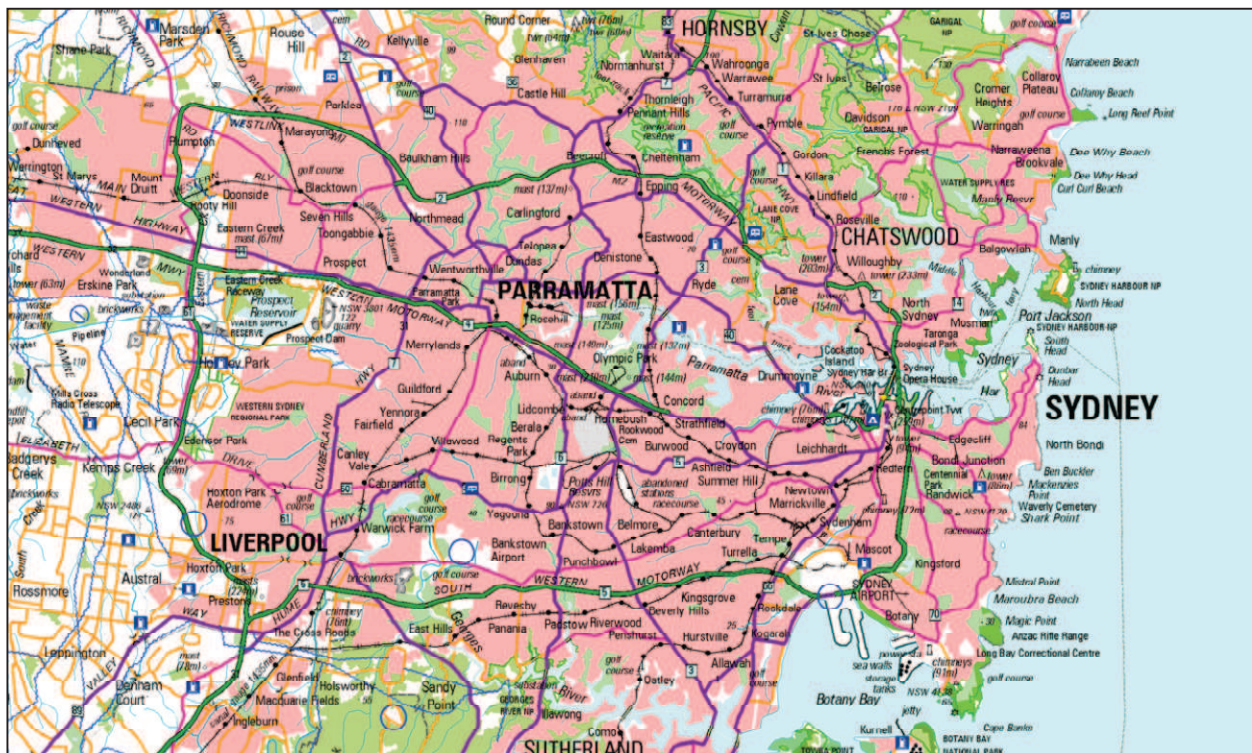


Figure 1: Showing the location of Parramatta (map courtesy of Memory Maps)



Figure 2: The location of the Albion Hotel indicated by the arrow (Parramatta River 9130-3N 1:25 000 topographic map).



Figure 3: Showing the boundaries of the Albion Hotel outlined in red (map courtesy of www.maps.six.nsw.gov.au)



1.3 Proposal

The proposed works include the demolition of the existing building and the redevelopment of the entire study area. The proposal includes the construction of a 35 storey building in the northern portion of the study area, a second building in the southern portion of the study area and a through-site link running east to west between Harris Street and Argus Lane. Five levels of underground basement carpark are proposed across the entire site. The ground floor is proposed to be food and beverage and the remaining 34 storeys will be apartments. Plans of the proposal are shown at Appendix A.

3.0 METHODOLOGY



2.0 METHODOLOGY

This project was conducted in three stages, being background research, field survey and report preparation, as detailed below.

Stage 1: Background Research

Prior to the field component of this project, the Aboriginal Heritage Information Management System of the Department of Environment, Climate Change & Water was consulted on 8 December 2014. Site data, associated documents and archaeological survey reports held in this database were reviewed. Environmental information relating to Aboriginal land use was also researched. Such research facilitated the understanding of the potential nature of the sites and site patterning in the region, which enabled the predictive statement to be made. It also provided an archaeological and environmental context within which a significance assessment could be made if any Aboriginal sites were located during the field survey.

Stage 2: Site Inspection

The archaeological inspection was undertaken on 10 December 2014 by Ms Tory Stening, Archaeologist, Comber Consultants.

The entire study area was inspected on foot.

Stage 3: Report Preparation

Further archaeological research was conducted where necessary to clarify the results of the survey.

This report was then compiled and a draft copy provided to Casey & Lowe on behalf of The Albion Hotel for their comment. Once all comments are received this report will be finalised.

4.0 ABORIGINAL HISTORY

DARUG

THE BURRAMATTA CLAN

FOOD AND SUBSISTENCE

EUROPEAN OCCUPATION



3.0 ABORIGINAL HISTORY

3.1 Darug

The Darug people are the traditional owners of the main east-west ridge of the Blue Mountains, the northern Blue Mountains and the Cumberland Plain in which the study area is located (Tindale 1974; Attenbrow 2003).

Research by R.H. Mathews, a pioneer linguist and anthropologist, in the early twentieth-century revealed that the Darug (or 'Dharuk' people as he referred to them) inhabited an area adjoining the 'Thurawal' (Dharawal) to the south and Gundungurra and Wiradjuri to the west. Their territory extended along the coast to the Hawkesbury River and inland to Windsor, Penrith and Campbelltown; then from the mouth of the Hawkesbury River to Mount Victoria (Mathews 1901a:140; Mathews 1901b:155). Archaeological and historical records examined in *Sydney's Aboriginal Past* identify three distinct groups – the coastal, hinterland and mountain Darug (Attenbrow 2003:23). The Darug of the Parramatta area were from the hinterland group.

3.2 The Burramatta clan

Aboriginal people have occupied the valley extending from Prospect to the coastline for at least twenty thousand years. The surrounding area was reasonably fertile and, with the resources of the river, was able to support their living needs. Anthropological studies indicate that clan sizes varied widely, consisting of between thirty to sixty people who moved through their territory using seasonal routes to access food, shelter and other resources necessary for survival as well as ceremonial sites. Generally people camped, travelled, foraged, fished and hunted in smaller, extended family groups, coming together at times with the larger group for ceremonies and ritual combats (Attenbrow 2003: 29).

The people living at the head of the Parramatta River were a clan of the Darug, known as the *Burramatta*, *Burramattagal* (sometimes written as *Boromedegal*) or *Burramattagalleon* clan. The word *burra* means eel whilst the word *matta* means creek or river with *Burramatta* describing the name of the country. The suffix “-gal” (man) or “-galleon” (woman) was added to describe a man or woman from Burramatta. (Phillip 13 Feb 1790 in HRA 1(1) cited in Attenbrow 2003; Attenbrow 2003:22-24; Kass et al. 1996:6). The Parramatta River formed the core of the territory of the Burramatta clan of the Darug.

Initially Parramatta was named Rose Hill, with the name “Parramatta” being formally adopted in 1792. It was a derivation of *Burramatta*. (Attenbrow 2003: 24; Phillip 13 Feb 1790 in HRA I (I): 155-61; Kass 1996: 6). The Parramatta district is thought to be a linguistic and economic boundary between the coastal and inland Darug people. Although opinions differ, linguists believe that a dialect of the Darug coastal language was spoken from the Sydney peninsula as far west as Parramatta, while a hinterland dialect was spoken from Parramatta to the north, west and south (Arthur Capell 1970 cited in Attenbrow 2003: 33). The Burramatta clan could communicate with their neighbours in both dialects.

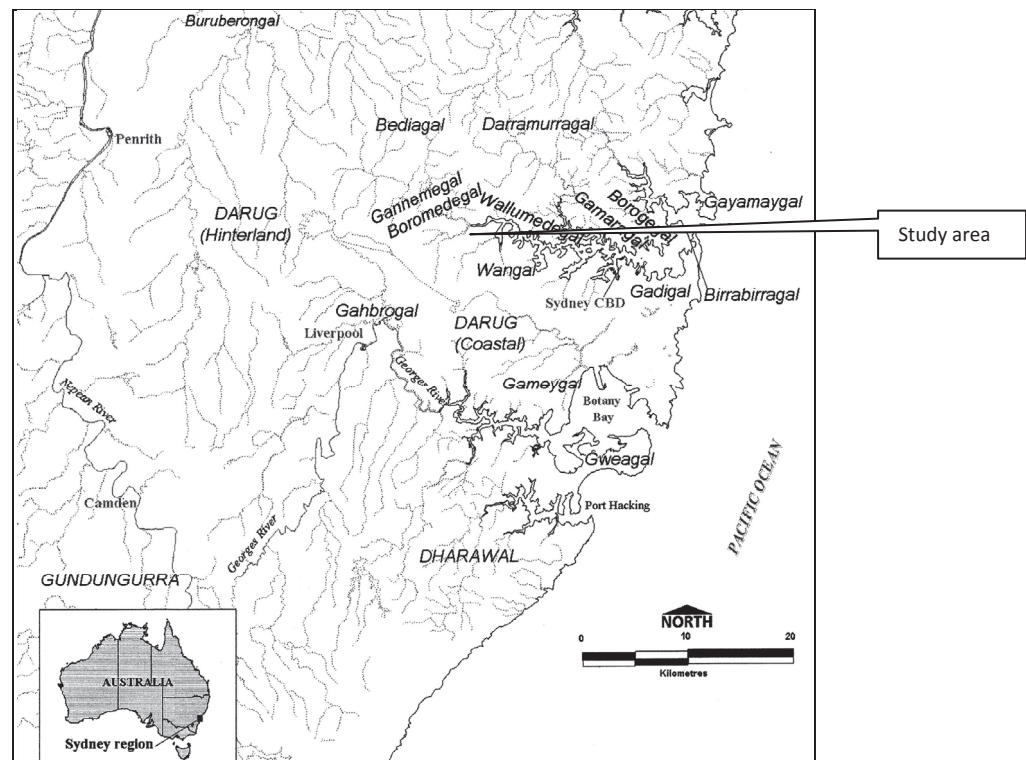


Figure 4: Map showing the territory associated with the Darug people. Parramatta is thought to be the western extremity of the territory of the Coastal Darug and is the traditional land of the Boromedegal/Burramatta clan of the Darug. (Attenbrow 2003: 23)

3.3 Food and Subsistence

The land around the head of the river provided the Burramatta clan with diverse plant and animal resources. The saltwater river and fresh water streams provided a rich environment where fish, turtles, crays, shellfish and molluscs could be caught or collected. Like other clans living along the river, the Burramatta people made canoes from which to fish or for transport (Kass *et al* 1996: 6). The shallow-draught, water craft made of bark and two to three metres in length were skilfully manoeuvred around the river. Bangalay (*Eucalyptus botryoides*) and species of Stringybark (*Eucalyptus agglomerata*) are thought to have been used for canoe construction (Turbet 1989:50). Colonial observers noted that coastal Aboriginal people obtained bark for canoes during excursions to Parramatta (Collins 1798: Vol 1 App 6). The large River Oak or *C. cunninghamiana* growing on the freshwater reaches of the rivers might have been used on both the coast and inland (Attenbrow 2003:112). Trees in Parramatta Park bear scars where bark was removed for making canoes, shields or coolamons (bark shaped like a dish for carrying food or other items).

The ample fresh water sources attracted native animals which were hunted or trapped. The hunting of tree-dwellers such as possums, gliders and flying foxes is thought to have been a common activity. Kangaroo and wallaby were hunted less often and most likely when several clans came together for ceremonies (Brook & Kohen 1991:3-4). Aboriginal people of the district used traps and snares to catch animals to eat. In 1789 on a journey between Rose Hill and the Nepean, observations were made that traps were used to catch ducks which were plentiful and snares were used to catch “opossums” and other tree and small ground dwelling animals (Bradley c.1802, SLNSW Manuscripts, Electronic transcript, p.166). Eels, which were (and still are) plentiful in the Parramatta River and shellfish were an important component of the diet of the Burramatta clan. Collins (1975 (1802):462) recorded that people “resort at a certain season of the year to the lagoons where they subsist on eels which they procure by laying hollow pieces of timber into the water into which the eels creep, and are easily taken”. The billabong or lagoon which existed within the area presently occupied by playing fields at Robin Thomas Reserve would have been an ideal location to catch eels. Fish such as bass and mullet, freshwater tortoises and yabbies could have been caught in creeks, such as Clay Cliff Creek, or above the tidal limit of the Parramatta River (Kohen *et al*. 1999:10). Collins (1975 (1802):232) also records that platypus were hunted whilst Tench records the consumption of bats which were “very fat, and are reckoned by the natives excellent food” (Kohen *et al* 1999:10)



Other food resources included bull ants and the eggs and larvae of the longicorn beetle or witchetty grub (Kass et al 1996:6). Seasonal plant foods including fruits, tubers, shoots, flowers, berries, seeds and nectar of local trees, and grasses were also prominent in the diet. Food collection required a detailed knowledge of each plant's properties as well as of the local environment, seasonal variations and preparation methods. Macrozamia for example is poisonous unless prepared in a particular way. Plants also provided ingredients for medicinal preparations (Brook & Kohen 1991:5). Observations made by Francis Barrallier (1773-1853) during exploration in 1802 revealed that the Parramatta people's customs relating to food and hunting were similar to those of those practised between Nattai and the lower Wollondilly. The local environment was also the source of raw materials for tool and weapon-making, clothing and shelter (Attenbrow 2003:71).

Aboriginal people relied on an extensive knowledge of their land and its resources and the acquisition of diverse skills essential to their survival in an environment that could be unpredictable. By 1814 it was increasingly difficult for Aboriginal people to catch or procure food using traditional methods. Similarly food-gathering patterns were altered by the lack of access to their traditional lands, which were now farmed by the new settlers. Limited opportunities were offered by Europeans willing to barter spirits and tobacco, and even food, for fish (Barratt 1981:71-2).

A report in the *Sydney Gazette* outlined the problems facing Aboriginal communities who tried to maintain a traditional way-of life in the face of rapidly expanding settlements.

... when the weather is cold, the woods afford them little or no food, and they become a prey to many loathsome diseases which poverty entails upon the human frame. The kangaroo has almost disappeared about the Settlements; the opossum, long substituted as their chief dependence, has at length become as scarce; the roots of the earth are by nature too sparingly administered to constitute anything like a dependence to them; and the tribes of each district dare not incroach (sic) upon any other, In the summer those of the coast subsist by fishing; but in the winter, only for the occasional aid they derive from us, their situation would be equally miserable: -And whence have those evils originated, but in the clearing of the immense forests which formerly abounded in the wild animals they lived upon? This admission certainly gives them a claim upon the consideration of the British Settler; and we cannot imagine for a moment, that any one who bears that character will withhold any means that may fall within his power of forwarding the benevolent views of the Native Institution (Sydney Gazette 31 Dec 1814: 2).

3.4 European Occupation

After British settlement Aboriginal communities were dislocated with experiences varying widely. It was not long after settlement at Port Jackson in January 1788 that Governor Phillip began to search for arable land. An expedition led by Governor Phillip set out on 22 April 1788 venturing up the harbour to Duck River. They then continued on foot following the upper part of the Parramatta River on its south bank. On the 24 April the party continued along the river through land that was 'fine open country, having very little timber, and being perfectly free from underwood' (Kass et al 1996: 11-12; HRA I (I):74, 97). The party reached a point at which the 'tide ceased to flow' and where they were 'stopped by large broad stones over which a fresh water stream ran'. A little to the west they reached a billabong skirted by a raised area of land that Phillip named "The Crescent". From this vantage point thousands of acres of what appeared to be arable land could be seen. The party continued on to Prospect Hill or Bellevue as Phillip named it. They did not encounter Aboriginal people, however traces of Aboriginal campsites, hearths and traps were observed and their presence in the surrounding bush was felt (Kass et al 1996:11-12).

Plans for a new settlement at the head of the river were made and, as recorded by Watkin Tench, 'named by the Governor Rose Hill, 16 miles inland, (it) was established on the 3rd November (1788), the soil here being judged better than that around Sydney'. Fears of retaliation from the Aboriginal inhabitants were expressed and "a small redoubt was thrown up, and a captain's detachment posted in it (within the Old Government House and Gardens Precinct within Parramatta Park) to protect the convicts who were employed to cultivate the ground" (Tench cited in Flannery 1996:92). However, attacks did not occur.

The settlement's establishment is well-documented and focuses mainly on what must have appeared to the traditional owners as the reckless destruction of their homeland, history and, most critically, their means of survival. In February 1790 Despatches record that the Captain's guard at Rose Hill was reduced and that 'there is nothing to be apprehended from the natives' (HRA I/I: 143). The clearing and development of the area was swift with cultivation commencing in The Crescent. By 16 November 1790, Tench estimated that 200 acres (80.94 ha) had been cleared and some cultivated. Seeing the landscape through European eyes he described the gently rolling 'hill and dale' as 'grand and capacious' (Tench 1793 in Fitzhardinge 1979:193, 195) and the field nearby was soon to be the location of a planned township for the agricultural settlement. By March of the following year the area of land cleared had doubled and whatever was not cultivated was thinned of trees to be used for



grazing (Bradley c.1802:232; Collins 1798:Vol 1, Ch 15).

Watkin Tench is one of few diarists who recorded the reaction of the Burramatta clan to the colonist's occupation of their territory. On the 14 September 1790 while travelling in Port Jackson or on the Parramatta River he reported meeting 'two Indians' in a boat. After discussing the wounding of the Governor 'they said they are inhabitants of Rose Hill, and expressed great dissatisfaction at the number of white men who had settled in their former territories. In consequence of which declaration, the detachment at that post was reinforced on the following day' (Tench 1799:181).

On 2 June 1791 by order of the Governor the settlement at Rose Hill was named 'Par-ra-mà-ta' after the name used by the traditional owners (Tench 1793:132 in Fitzhardinge 1979:239). At this time Aboriginal communities living at the 'head of the harbour' were encouraged to supply the surplus from their fishing expeditions to the Parramatta settlement. This developed into trade of fish and other game. Aboriginal skills and knowledge of plants were valued and acquired by convict ropemakers and botanist George Caley. Caley lived in a small hut within present day Parramatta Park and developed a close friendship with the Burramatta clan (Kohen et al 1999:3-4).

During Governor Macquarie's period of occupation Aboriginal visitors to Government House were frequent and Macquarie established the Parramatta Native Institution and Annual Conference (Comber & Stening 2013).

However, the dispossession of land and inevitable clashes of culture led to mistrust between the settlers and the Burramatta clan. A number of contemporary observers including David Collins and John Hunter recounted (although somewhat differently) an incident involving members of the Burramatta clan and convicts at this time. Collins' account suggested a generally friendly and mutually beneficial relationship existed with the traditional owners at this time (Collins 1798: Vol 1 Ch 13).

Since the establishment of that familiar intercourse which now subsisted between us and the natives, several of them had found it their interest to sell or exchange fish among the people at Parramatta; they being contented to receive a small quantity of either bread or salt meat in barter for mullet, bream, and other fish. To the officers who resided there this proved a great convenience, and they encouraged the natives to visit them as often as they could bring the fish. There were, however, among the convicts some who were so unthinking, or so depraved, as wantonly to destroy a canoe belonging to a fine young man, a native, who had left it at some little distance from the settlement, and as he hoped out of the way of observation, while he went with some fish to the huts. His rage at finding his canoe destroyed was inconceivable; and he threatened to take his own revenge, and in his own way, upon all white people. Three of the six people who had done him the injury, however, were so well described by someone who had seen them, that, being closely followed, they were taken and punished, as were the remainder in a few days after.

The instant effect of all this was, that the natives discontinued to bring up fish; and Bal-loo-der-ry, whose canoe had been destroyed, although he had been taught to believe that one of the six convicts had been hanged for the offence, meeting a few days afterwards with a poor wretch who had strayed from Parramatta as far as the Flats, he wounded him in two places with a spear. This act of Ballooderry's was followed by the governor's strictly forbidding him to appear again at any of the settlements; the other natives, his friends, being alarmed, Parramatta was seldom visited by any of them, and all commerce with them was destroyed. How much greater claim to the appellation of savages had the wretches who were the cause of this, than the native who was the sufferer? (Collins 1798: Vol 1 Ch 13).

Although Aboriginal law was not accepted under British law, it was observed by colonists that revenge for an injustice was permitted under Aboriginal law (Collins 1798: Vol 1 Ch 13), generally in the form of a non-fatal spearing. Problems arose between colonists and Aboriginal people when resolutions could not be reached resulting in offence or to physical conflict. What seemed an equitable solution to one party was not necessarily considered fair or reasonable to the other, ultimately leading to the escalation of conflict and acts of retribution.

Some individuals or families began living within settlements, adopting aspects of European culture. There were still intermittent outbreaks of hostilities as the Cumberland Plain became more densely settled and expanded westward. An outbreak of hostility in 1816 led to the imposition of new and tighter restrictions on the movement of Aboriginal people in and around settlements such as Parramatta. Despite expressions of sympathy with their plight, Governor Macquarie ordered the mobilisation of military detachments to 'drive away these hostile Tribes from the British Settlements'. As 'a counter balance for the restrictions', natives were offered land on which to establish themselves as settlers, as well as the necessary tools and stores for six months. General Orders were that Aboriginal people found in the vicinity of Parramatta were to be detained (Sydney Gazette 11 May 1816:1; HRA I/9:139-145, 365; Brook & Kohen 1991: 21, 23, 32). At the same time Land Grants



previously given to Aboriginal people were rescinded.

Given the effect of dispossession, dislocation and dispersal from traditional land it is likely that new family groups or mixed communities formed, taking up residence in remnant pockets of bushland on the outskirts of settlements and homesteads. Forced movement of people resulted in the loss of many aspects of Aboriginal culture and the emergence of new groups incorporating people from diverse areas. Reorganisation ensured the preservation of some of the core cultural practices and knowledge in Aboriginal communities (Hinkson 2001: xxiv-xxv).

It is clear that the lives of people who had lived according to traditional ways in this area were catastrophically altered by European occupation and settlement over a century. Through perseverance and showing great resilience Aboriginal Australians including Darug descendants retained some of their core traditions, customs and beliefs, passing them onto future generations despite the significant changes imposed on their lives. In 2006 Aboriginal people represented 0.9% of a population of 154,158 in the Parramatta Local Government Area (2006 Census Stats www.abs.gov.au).

5.0 ENVIRONMENTAL CONTEXT

TOPOGRAPHY

STREAM ORDER MODELLING

GEOLOGY

PARRAMATTA TERRACE SAND

VEGETATION

CURRENT LAND USE AND DISTURBANCE



4.0 ENVIRONMENTAL CONTEXT

4.1 Topography

The study area is in the Cumberland Plain which is characterised by low, gently undulating slopes. The Cumberland Plain covers an area of approximately 600 square kilometres. It is bordered on the west by the Blue Mountains and on the east by the Georges River and the headwaters of the Parramatta rivers. The north of the Cumberland Plain is bordered by the Hornsby Plateau and to the south is the Woronora Plateau (Smith 1989a:8). The study area is located approximately 250m south of the Parramatta River and is on level ground on a sandy alluvial terrace which is approximately 5-6m above the river channel and active floodplain (McDonald 2005:8). The confluence of Duck River and the Parramatta River is located approximately three kilometres to the east. A'Becketts Creek and Duck Creek are approximately 500m to the south.

The sandy alluvial river terrace upon which the study area is located extends west to just beyond Parramatta Park, south to Clay Cliff Creek and east to the confluence of Duck Creek and the Parramatta River. This river terrace, located above the River, creeks and floodplain would have provided an ideal location for camping and travel. The present study area and Robin Thomas Reserve, on the opposite side of Harris Street, sat on top of the levee crest of the river terrace (Mitchell 2010). The proposed development area is within the Parramatta CBD, which encompasses commercial and residential development and associated infrastructure.

Historically a lagoon was present within the area now occupied by the playing fields within Robin Thomas Reserve. Clay Cliff Creek was located just to the north of Robin Thomas Reserve within James Ruse Reserve. The creek has been confined to a concrete channel and the creekline realigned.

The proposed development area is within the Parramatta CBD, which encompasses commercial and residential development and associated infrastructure.

4.2 Stream Order Modelling

Stream order can be used to predict Aboriginal land use patterns. Parramatta River would be classified as a fourth order stream, while Clay Cliff Creek would be classified as a first order stream.

A first order stream is the smallest and is a small tributary that flows into and feeds larger streams but does not normally have any water flowing into it. The joining of two first order streams creates a second order stream and when two second order streams join they form a third order stream. In addition, first and second order streams generally form on steep slopes and flow quickly until they slow down and meet the next order waterway. First order streams are intermittent.

Modelling undertaken by McDonald and Mitchell (1994) on the Cumberland Plain indicates that stream order can be used to predict areas of archaeological potential. The model hypothesis is that in any particular climate and landscape, a threshold catchment area is necessary to allow permanent stream flow or the establishment of waterholes with extended longevity (i.e. months to years). The critical point where these conditions are met appears to be at the junction of two second or third order streams. Such a location is likely to contain more complex sites with a high density of artefacts, whilst second and third order streams are also likely to contain large sites within 100 metres of the watercourse.

Therefore, the landscape in the vicinity of the confluence of a first and fourth order stream could be predicted to contain high archaeological potential.

4.3 Geology

The Cumberland Plain overlies the Wianamatta Group of Shales. Within the study area, the Wianamatta Group of Shales overlies Hawkesbury Sandstone (sandstone with some quartz) (Sydney 1:250,000 Geological Map). The Hawkesbury Sandstone is probably the source material for the sandy alluvial terrace located on the southern banks of the Parramatta River, within which the study area is located. Hawkesbury Sandstone provides materials suitable for the manufacture of ground edge axes and weathers to provide rock shelters suitable for habitation or rock art.

Surrounding the study area is the Liverpool subgroup which includes Bringelly Shales, Ashfield Shales, and Minchinbury Sandstone (Sydney 1:250,000 Geological Map). This subgroup is comprised of shales, carbonaceous claystone, claystone laminate, fine to medium grained lithic sandstone and some coal (Smith 1989a:8).

Several locations on the Cumberland Plain within the vicinity of the study area contain material suitable for small stone tool manufacture, such as silcrete. The nearest known source of silcrete is located approximately 5km to the east of the study area in the vicinity of Homebush Bay (Corkhill 1999:72ff). Other silcrete outcrops are located at Luddenham, approximately 15km to the south west, St Clair approximately 15km to the north west, and a Erskine Park approximately 10km to the north west. Other materials used to manufacture small stone stools within the Cumberland Plain include chert, tuff, quartz, basalt and quartzite. These can be found in the Rickaby's Creek formation approximately 25km to the north west of the study area (Clarke & Jones 1988, Smith 1989a:9-11; 1989b:6-7).

4.4 Parramatta Terrace Sand

A fluvial sand terrace (Parramatta Terrace Sand) has been recorded along the banks of the Parramatta River and throughout much of Parramatta (Mitchell 2008; Comber 2010a; Comber & Stening in prep; Casey & Lowe 2009). Culturally, this terrace sand would have been a valuable environmental asset for Aboriginal people. Mitchell (2008:16) suggests that the Parramatta terrace sand would have contained a number of important resources for Aboriginal people to utilise. These resources would have included waterholes with fresh fish, areas for shelter, fuel, food and shell resources. Sandy soils are also suitable for burials and provide a good location for campsites. Excavations in the sand terrace (McDonald 2005; Comber 2010a; Comber & Stening in prep) have confirmed the importance of the terrace sand to the Darug people. Artefacts and other evidence of occupation have been recorded with dates indicating possible Pleistocene occupation (McDonald 2005 & Comber 2010; Comber & Stening in prep)

The present study area falls just outside of Mitchell's mapping of the Terrace Sand, shown in Figure 8 below. However Mitchell has undertaken testing throughout Robin Thomas Reserve, on the opposite side of Harris Street, and confirmed that the Parramatta Terrace Sand is present throughout the Robin Thomas Reserve (Mitchell 2010) and excavations directly to the east and west of the study area have confirmed that the Terrace Sand is present on either side of the present study area (Comber & Stening 2010, in prep).

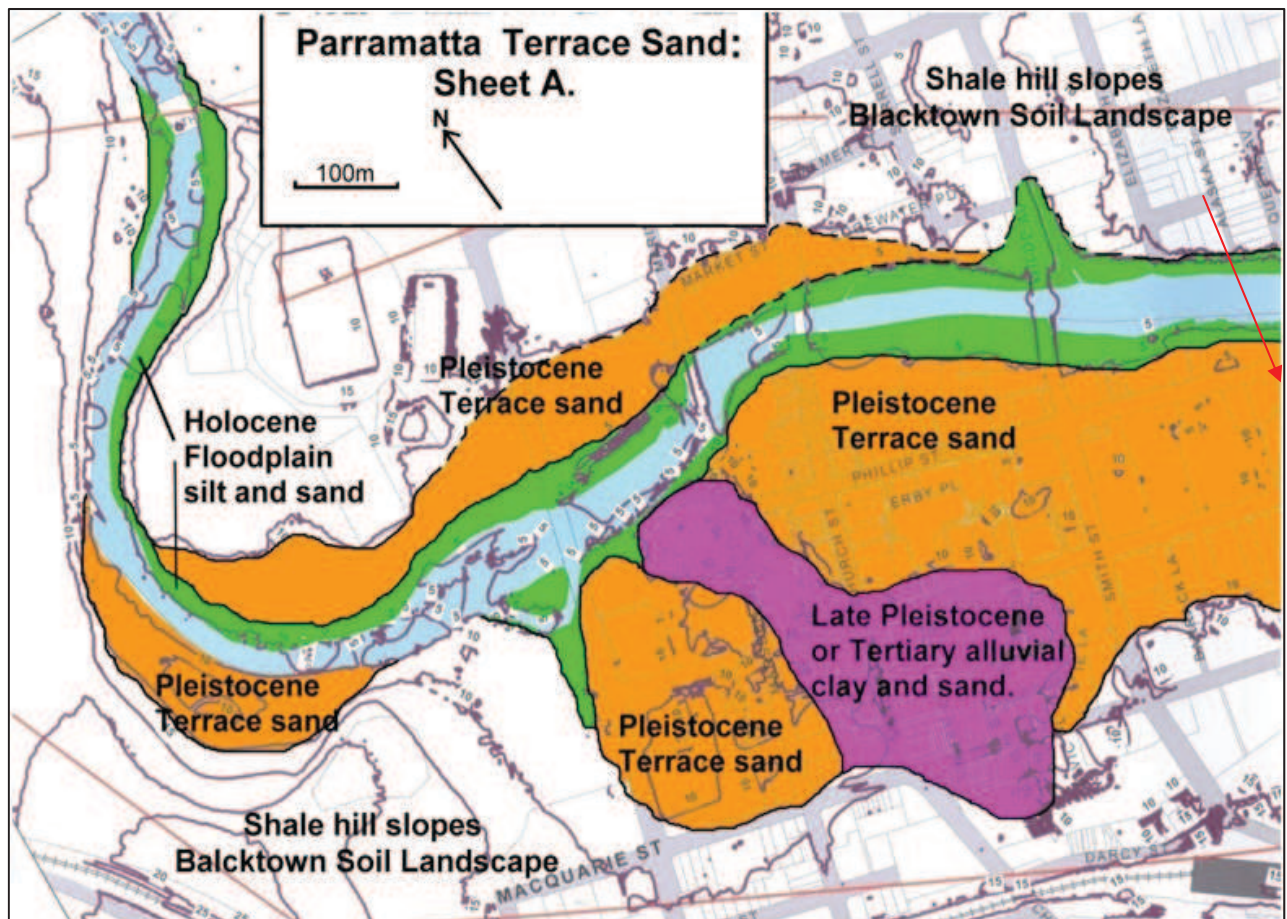


Figure 5: Showing the Indicative distribution of the Parramatta Terrace Sand at the time of European settlement. The location of the present study area is just off the edge of the plan indicated by the arrow. (Plan courtesy Mitchell 2008: 7)



4.5 Vegetation

The vegetation of the Cumberland Plain was mapped by Benson (1979 & 2002) and the NSW National Parks & Wildlife Service (2002). Historically, the undulating slopes of Western Sydney would have supported a tall open forest of Cumberland Plain Woodland.

The area was mapped by Benson (1981) as being woodland of *Eucalyptus moluccana* (Grey Box) in association with *Eucalyptus tereticornis* (Forest Red Gum). The understory included *Acacia parramattensis*, *Acacia floribunda* and other acacia species, *Casuarina cunninghamiana* (River Oak), *Bursaria spinosa* (Sweet Bursaria, Blackthorn) and *Hardenbergia violacea* (False Sarsparilla) with grasses of *Themeda australis* (Kangaroo Grass) and *Lomandra longifolia*.

Such a vegetation community would have provided a variety of edible plant species and plants suitable for artefact manufacture. For example, the tall Grey Box and Red Gums would have provided bark to make coolamons, shields or canoes, whilst the long *Lomandra* leaves would have been used for basket weaving (Baker et al. 1986: 136). Acacia gum was a sweet nutritious food source and the acacia seeds were a valuable source of protein. The dried seeds were ground between stones and baked as a bread/damper and the green seeds eaten like peas (Low 1992: 86). In addition Cumberland Plain vegetation provided habitat for a variety of marsupials and birds, whilst the rivers and creeks would have provided fish.

4.6 Current Land Use and Disturbance

Between 1789 and 1823 the study area formed a portion of the Soldiers' District. It appears that no buildings were constructed within the study area at this time, but that it may have been used as a parade ground or gardens.

Between 1823 and 1912 a brick house is recorded as being within the western portion of the study area and during this period a well was sunk on the property (Casey & Lowe 2015:11).

Prior to 1882, the corner of George and Harris Streets was occupied by one or two small dwellings. In 1882 the Albion Hotel was constructed on the corner. A newspaper article in 1924 indicates that the original Albion Hotel was demolished and a new hotel building erected at this time (Casey & Lowe 2014:24).

The area which presently houses the carpark at the rear of the Albion Hotel was occupied by a single dwelling with a well prior to 1842. By 1844 a row of five terraces had been erected in this portion of the study area (Casey & Lowe 2014: 33). Some of these terraces sat outside of the present study area and three of the terraces can be seen in the 1943 aerial (Figure 8 below).

The existing Albion Hotel has a small basement approximately 8.6m long and 2.2m to 4m wide which is located on the eastern edge of the main hotel building (the Harris Street side of the hotel). The location of this basement is shown in Figure 9 below.

A series of stormwater drains running north to south are present within the beer garden and carpark at the rear of the hotel.



Figure 6: 1943 aerial showing the present study area outlined in red (photo courtesy of www.maps.six.nsw.gov.au).

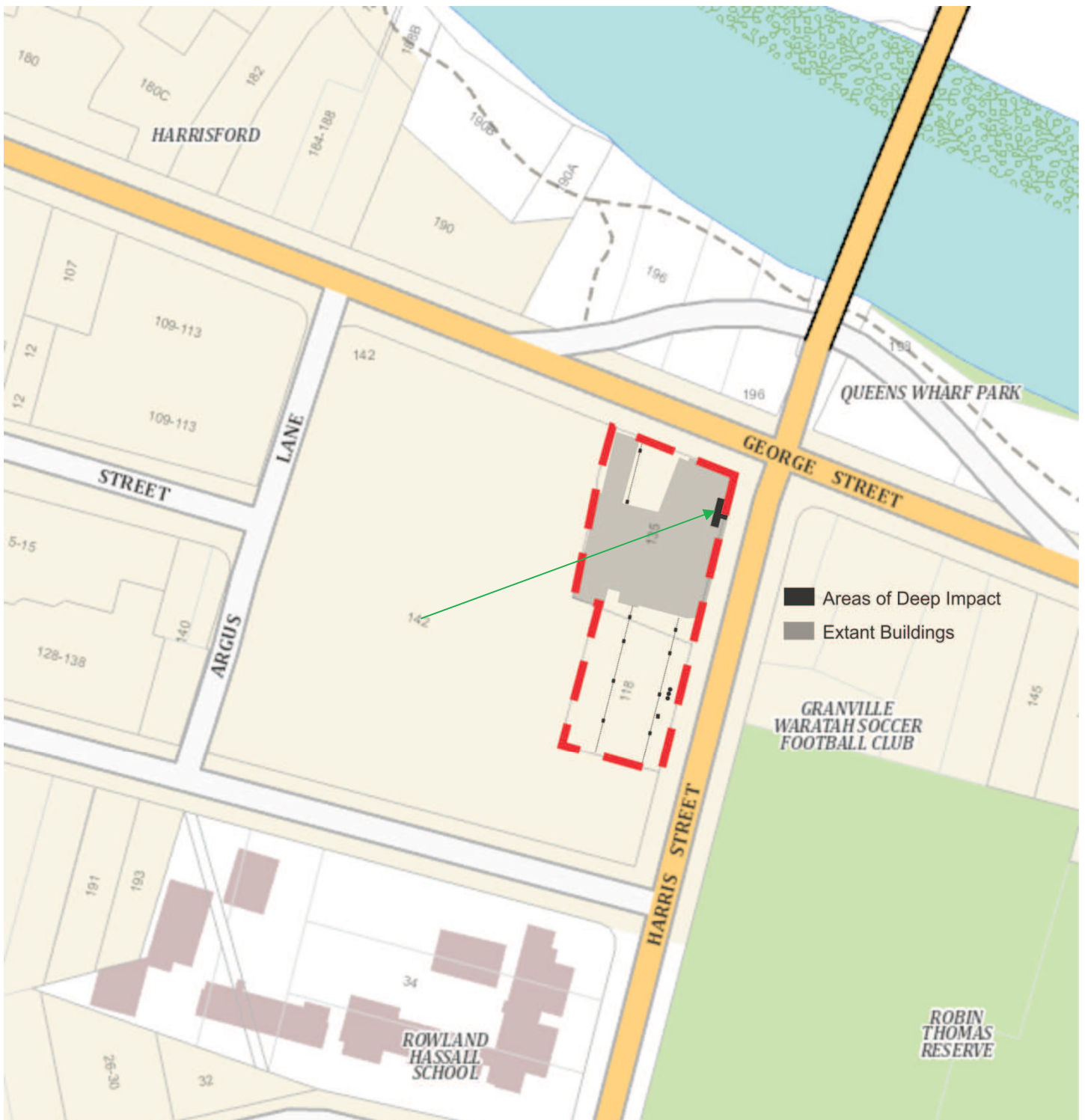


Figure 7: Showing the location of the existing basement indicated by the green arrow. The location of the stormwater drains is indicated by the dots (plan courtesy of Casey & Lowe).

4.0 ARCHAEOLOGICAL CONTEXT

SYDNEY REGION
PARRAMATTA
THE STUDY AREA
SITE PREDICTION



5.0 ARCHAEOLOGICAL CONTEXT

5.1 Sydney Region

Many surveys have been undertaken in the Sydney region which indicate the richness of the archaeological resources and which provide information about Aboriginal occupation within the region. In particular, Attenbrow (2003) has excavated a range of sites within the Sydney Basin. The aim of her study was to identify local geographic variation and temporal changes in the subsistence patterns and material culture of the people of this area. She excavated sites at Balmoral Beach, Cammeray, Castle Cove, Sugarloaf Point (Lane Cove River), Darling Mills State Forest, Winston Hills, Vacluse and Cumberland Street in the Rocks. Dates for initial occupation range from approximately 10,000 years BP at Darling Mills to approximately 450 years BP at Cumberland Street, the Rocks.

One of the oldest dated occupation for the Sydney region is 15,000 years BP from the Shaws Creek K2 rockshelter on the Nepean River (Kohen 1984; Nanson et al. 1987). However these dates must be considered in association with environmental data related to sea level rises. The Sydney region that we know today was vastly different to the landscape of 15,000 years ago. However, excavations within the Parramatta Terrace Sand at the RTA site in Parramatta by McDonald (2005) revealed a date of 30,000 years BP, which provides the oldest date for the Sydney Basin (2005: 4).

The period of maximum glaciation was 15,000 – 18,000 years BP. Therefore the date of the K2 rockshelter and Attenbrow's Darling Mills site indicate that Aboriginal people lived throughout a period of extreme environmental change. During this period, sea levels were up to 130m below current sea levels (Nutley 2006: 1). About 10,000 years ago, as temperatures began rising at the end of the last ice age, the polar ice started melting and sea levels rose. The rising sea levels forced people to abandon coastal sites and move inland, with the result that the oldest coastal sites were inundated.

By about 6,000 years ago, rising water levels had flooded the coastal plain forming the Sydney landscape that we know today. The vast majority of sites in the Sydney region date to around 5,000 years BP, after sea levels had stabilised. Whilst research into submerged indigenous sites is now being undertaken (Nutley 2006), there are few sites in the Sydney area that are known to date beyond 10,000 years BP. Therefore research undertaken to date has focused on subsistence patterns and cultural change, e.g. Attenbrow (2003).

However, many archaeological surveys have been conducted within the Sydney region, particularly on the Cumberland Plain, in relation to Environmental Impact Statements. As a result of those studies, which were occasioned by the burgeoning urban expansion extending into the Cumberland Plain, the NPWS recognised the need for a coherent study of the area to fully assess the impact of urbanisation on the natural and cultural heritage of the Cumberland Plain. Smith (1989a) was commissioned by the NPWS to undertake an Aboriginal Site Planning Study to be utilised in the management of Aboriginal sites on the Cumberland Plain. Prior to her study, 307 sites had been recorded on the Cumberland Plain, mainly open artefact scatters (297) with four scarred trees, one carved tree, four axe-grinding grooves and a Mission site (the Blacktown Institute). Smith (1989a:2) added 79 open sites and 29 isolated finds from field surveys related to her study.

Smith's (1989a:3) analysis indicated that site location and site densities were influenced by the availability of water and raw materials. She concluded that other factors such as topography, natural vegetation and soil types did not influence site location.

She also identified that the majority of sites recorded have been in the northern sector of the Cumberland Plain, during site surveys of areas threatened by development (Smith 1989a:21). Her field studies (1989a & 1989b:10) confirmed that site densities in the southern Cumberland Plain appear to be lower overall to site densities on the northern Plain.

Since Smith's study, there has been a dramatic increase in development in Western Sydney, resulting in a great deal more archaeological survey and excavation (Comber 1990, 1991, 2006; McDonald 1997, 2002 & 2005). This further work has indicated the complexity in the archaeological record of the area that was not previously recognised. For example, sites on permanent water are more complex than sites on ephemeral drainage lines with major confluences being prime site locations. However, McDonald (2005a) reports that archaeological sites are found in a range of landscapes and that their condition is dependent on the amount of impact from European land practices.

McDonald's 2005a report demonstrates the dynamic nature of stone tool technologies on the Cumberland Plain. She reviewed previous work within a theoretical framework to identify intra and inter-regional variation. She not only identified change over time in the stone tool technology, but the manner in which "stone technologies were organised in relation to landscape"



(McDonald 2005a: np). Her report provides a framework to tentatively date sites through technological analyses and to identify cultural changes.

Her study also indicated that the surface representation of a site on the Cumberland Plain does not necessarily reflect the actuality of that site. Of the excavations conducted by her, sub-surface deposits were present even when there was no surface indication of a site. According to McDonald (2005a: 5), “despite artefacts being rare or completely absent on the surface at each of the sites investigated, all six sites were found to contain intact archaeological deposit. Almost 500 square metres were excavated during this Project and almost 35,000 artefacts retrieved.”

Kohen recorded over 50 sites in the Penrith area which included open artefact scatters, axe grinding grooves and rock shelters. Kohen (1997:7) indicates that sites occurring throughout the Penrith area “are particularly likely to occur adjacent to the rivers and creeks. The distribution of raw materials associated with the manufacture of stone tools suggests that chert and basalt were carried or traded east from the river gravels and that silcrete was traded or carried from sources near South Creek and Eastern Creek, west towards the Nepean flood plain”.

Comber (2006a; 2010b) also recorded open artefact scatters and scarred trees within the Cumberland Plain. She undertook excavation at two sites at Penrith Lakes known as Camenzulis (2006a) and PL9 (2010b). At PL9 she retrieved more than 1,500 artefacts, including backed blades and an edge ground axe. Her work confirms Kohen’s predictive model that sites are more likely to occur adjacent to the rivers and creeks.

Comber (2010d&e) also recorded open artefact scatters and scarred trees within the Cumberland Plain. She undertook excavation at two sites at Penrith Lakes known as Camenzulis (2010e) and PL9 (2010d). At PL9 she retrieved more than 1,500 artefacts, including backed blades and an edge ground axe. Her work confirms McDonald’s (2005) and Kohen’s predictive model that sites are more likely to occur adjacent to the rivers and high order creeks. These excavations (Comber 2010 d&e) at Penrith Lakes further indicates the possibility that sub-surface archaeological deposits will remain despite disturbance by non-Aboriginal activities and the complexity of such sites. Surveys (2006c & d) undertaken prior to the excavations recorded the areas as being disturbed by agricultural activities. They had been grazed, ploughed, planted with crops and a dam constructed. Only a small number of artefacts were recorded on the surface but over 2,500 artefacts retrieved during excavation.

A survey undertaken by Comber (2008) and subsequent excavations undertaken by Stening (2011) at Doonside demonstrated that although no surface artefacts were recorded (Comber 2008) substantial subsurface deposits did exist on the site with over 1,000 artefacts being recovered from a highly disturbed context (Stening 2011). This site was located beside Eastern Creek an important 4th or 5th order creek. It is an important watershed with extensive evidence of Aboriginal occupation

5.2 Parramatta

In the broader Parramatta region the previously oldest dated site is a rock shelter on Toongabbie Creek, which has been dated to around 5,500 years BP (Attenbrow 1992:4 – 5). Other sites within a 10km radius of the Parramatta LGA date to within 10,000 years BP with the majority within the last 3-5,000 years (Dallas 2003:27).

Excavations undertaken at Parramatta by Haglund (2005) indicate that Aboriginal artefacts were located despite the impact of later development. Artefacts were located in a disturbed context at the Parramatta Children’s Court site on the corner of George and O’Connell Streets, approximately 1km to the north-west of the present study area, (AHIMS 45-6-2679). This excavation identified the artefacts within a portion of the Parramatta Terrace Sand, a significant alluvial terrace which contains significant Aboriginal archaeological deposits (see section 4.2). Haglund (2005:16-17) suggested that people camped or moved across the Parramatta area in small family groups with no evidence of extensive or repeated visits.

Haglund (2006 & 2007) also undertook testing at the Parramatta Old Hospital Site bounded by George and Marsden Streets, approximately 750m from the present study area. This site (AHIMS 45-6-2746) is also located on the Parramatta Terrace Sand. Haglund (2005) concluded that this area was a more preferred site to the Children’s Court site and that there may have been some difference in activities. However she concludes that this area was never a major campsite, but was visited sporadically by groups who manufactured artefacts at this site (Haglund 2007:36).

McDonald undertook excavations on the Parramatta Terrace Sand on the north-eastern corner of George and Charles Streets, Parramatta (2005a & b) at site CG1, approximately 750m to the north west of the present study area. Aboriginal artefacts were initially uncovered during historical archaeological investigations. Subsequent excavations for evidence of Aboriginal occupation uncovered numerous stone artefacts within the alluvial sand deposits at the site.