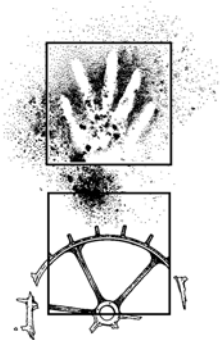




Minto Renewal Project

Cultural Heritage Assessment

October 2005



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A Report to Housing Finance Investment Group

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1. SUMMARY

- The Department of Housing proposes to redevelop its estate at Minto. A Master Plan is currently being prepared for a study that includes the public housing estate and some adjoining land owned by Campbelltown City Council and Planning NSW.
- The study area comprises approximately 160 hectares divided into fourteen precincts, four of which will not be subject to redevelopment.
- A cultural heritage assessment of the study area was conducted in early April 2003. The assessment included literature review, field inspection and Aboriginal consultation.
- No previously recorded Aboriginal sites were known to exist in the study area prior to the survey.
- The nearest known Aboriginal sites are located over two kilometres to the east of the study area. They include grinding grooves and rock art sites.
- One historic site, *Campbellfield* (Redfern's Cottage) is known to occur in the Schools precinct, an area not subject to redevelopment.
- Comprehensive survey within the study area concentrated on remnant landscape surfaces in the eastern part of the study area. Vehicular reconnaissance and 'spot' survey was undertaken in the urbanised areas.
- No Aboriginal sites were identified in the study area during the survey.
- No sites or features of European historic significance were identified in areas subject to redevelopment.
- It is recommended that:
 - There are no archaeological constraints on the proposed redevelopment project in the subject precincts.
 - A detailed heritage assessment of potential impacts to *Campbellfield* homestead should be undertaken if any redevelopment activity is anticipated in or around the homestead curtilage.



2. INTRODUCTION

2.1 The Proposed Development and Study Area

The Department of Housing proposes to redevelop its estate at Minto. A Master Plan is currently being prepared for a study that includes the public housing estate and some adjoining land owned by Campbelltown City Council and Planning NSW.

The study area comprises approximately 160 hectares at Minto, northeast of Campbelltown (Figure 1). For planning purposes, the study area has been divided into 14 precincts: Schools, Darcy, Caroline, Erskine, Sarah, Fenton, Piggott, Commercial, Campbellfield, Eagleview, Luttrell, Goodwin, Dunlop and Friendship (Figure 2).

The proposed redevelopment will involve demolition of public housing, site re-subdivision, reconstruction of new housing, and re-configuration of some existing open space. It is anticipated that no development will take place within Schools, Commercial, Campbellfield and Fenton precincts.

2.2 Report Outline

This report:

- documents consultation with local Aboriginal groups;
- provides an Aboriginal and historical background for the study area; and
- provides a series of recommendations based on the results of this assessment.

2.3 Project Personnel

This study was conducted by Tom Knight. Field assistance was provided by Kerry Navin and Daniel Powell. Aboriginal community representatives included Glenda Chalker and Lance Syme.

3. ABORIGINAL PARTICIPATION

The proposed Minto redevelopment area is located within the boundaries of the Tharawal Local Aboriginal Land Council and the area of custodial interest of the Cubbitch Barta Native Title Claimants Corporation.

Mr Lance Syme, representing the TLALC, assisted in the field inspection of the study site.

Rebecca Chalker, representing the Cubbitch Barta Native Title Claimants Corporation assisted in the field inspection of the study site

Records of Aboriginal Participation and a letter from the Cubbitch Barta Native Title Claimants Corporation are provided in Appendix 1.

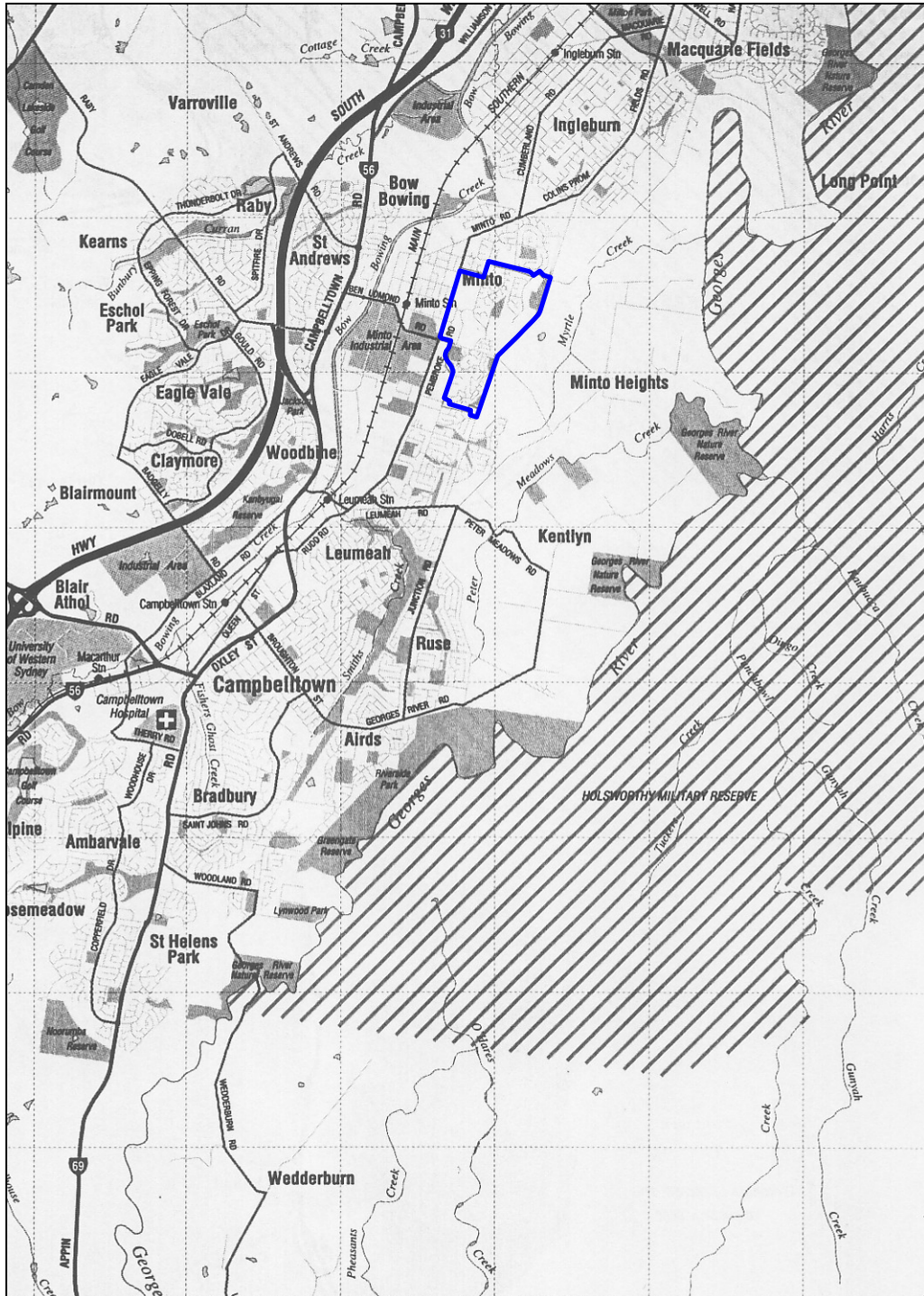


Figure 1 Location of the Minto Renewal Project Area

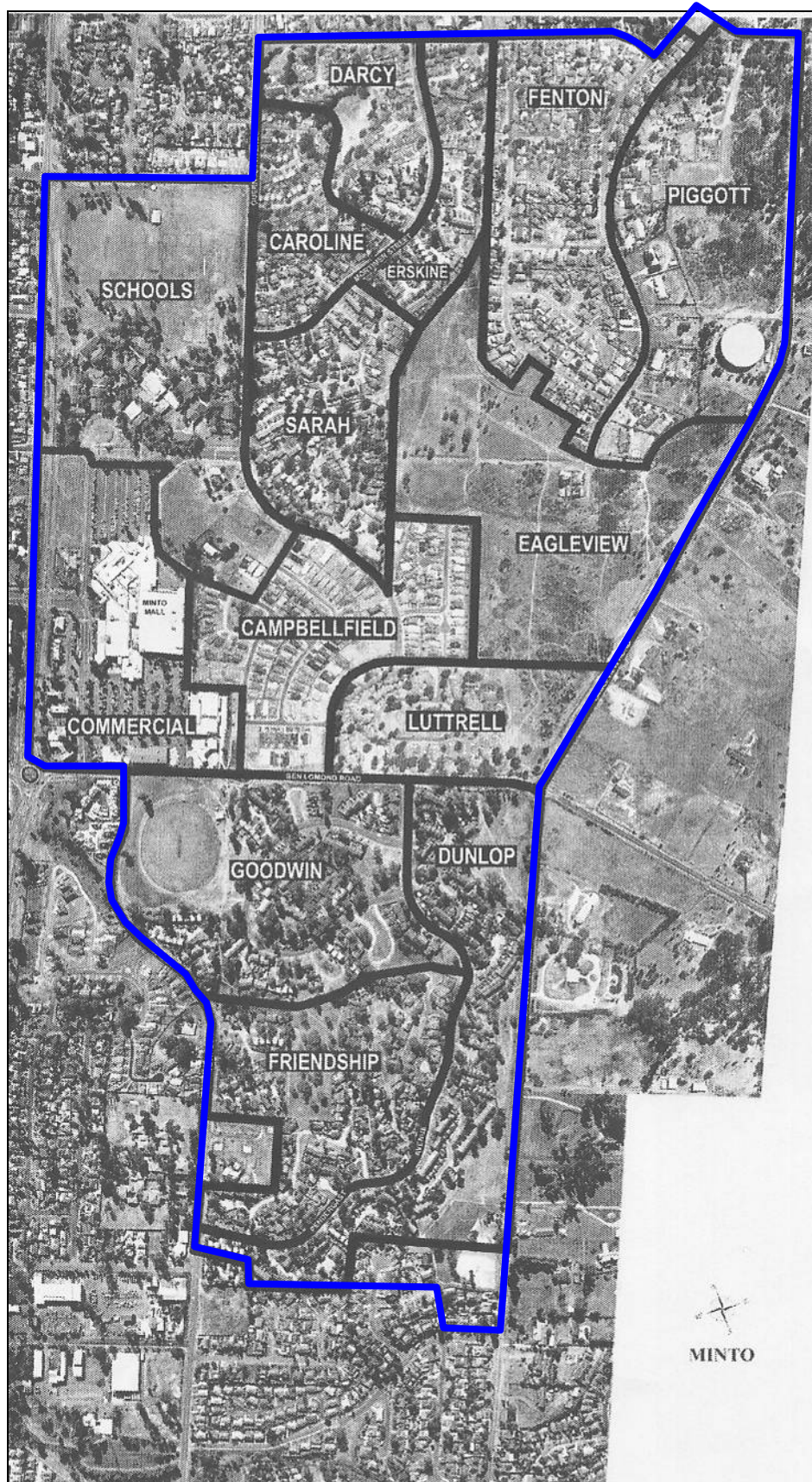


Figure 2 Minto Study Area Precincts



4. STUDY METHODOLOGY

4.1 Study Components

A range of documentation was used in assessing the state of archaeological knowledge for the Minto area and the surrounding region. Literature sources included the NSW National Parks and Wildlife Service Register of Aboriginal Sites, associated files and catalogue of archaeological reports, historical and management documents and registers held by Campbelltown City Council, and a range of published material.

This background research was used to determine if known Aboriginal and historic sites were located within the area under investigation, to facilitate site prediction on the basis of known regional and local site patterns, and to place the area within an archaeological and research management context.

4.2 Field Survey

Primary field survey was conducted in early April 2003. The survey methodology had the following objectives:

- to attain as comprehensive ground coverage as possible within comparatively undisturbed parts of the redevelopment precincts;
- to conduct vehicular survey of urbanised areas in order to identify any remnant landscape surfaces with archaeological potential; and
- to identify any Aboriginal sites, archaeologically sensitive areas, and historical features within the subject areas.

Survey involved a combination of comprehensive foot transects in open space areas and/or zones of remnant landscape, and vehicular inspection in heavily urbanised areas. In the latter case, any remnant surfaces identified were later examined on foot.

An additional small area on the southern boundary of the study area was surveyed by archaeologists Kerry Navin and Kelvin Officer in October 2005.

4.3 Report Preparation

This report was prepared in 2003. It was amended in 2005 to include the additional area on the southern boundary of the study area.

The environmental background and archaeological and historical context sections were not re-written in 2005.



5. ENVIRONMENTAL CONTEXT

The study area is situated within a transition zone between two major land systems: the Cumberland Plain in the west and the Woronora Ramp in the east. It comprises a series of slope and crest features on the western side of a major local ridgeline that divides the catchments of Bow Bowing Creek and Myrtle Creek. Local terrain is generally gentle/moderate sloping to level.

No major creek lines occur within the study area boundaries. Existing watercourses include a number of minor drainage lines that drain westward toward Bow Bowing Creek. Bow Bowing Creek joins with Bunbury Curran Creek approximately two kilometres north of the study area.

Local soils include shallow podsolics and massive earthy clays underlain by Wianamatta Group shales (Hazelton and Tille 1990: 70).

Native vegetation comprises open dry sclerophyll forest, now mostly cleared to make way for grazing and urbanisation.

5.1 Current land use and degree of landscape alteration

The study area has a long history of European occupation and has been subject to a range of uses since the period of early settlement. Many of these practices will have involved high levels of modification to the original landscape and subsequently may be expected to have impacted significantly upon local Aboriginal sites and archaeological deposits.

Forms of land use evident that have high potential to have impacted upon both Aboriginal and early European archaeological sites include:

- original clearance of native vegetation and subsequent intensive pastoral and agricultural practices;
- removal of pre-existing historical structures and subsequent construction of urban infrastructure including roads, pipelines and medium to high density housing;
- straightening of drainage lines and/or their conversion into stormwater drains;
- large-scale grading and landscaping of parkland and areas of 'open space'.



6. ARCHAEOLOGICAL CONTEXT

6.1 Previous Archaeological Studies

No archaeological surveys have been undertaken within the current study area. Most assessments in the general area have focused upon proposed development areas in comparable surrounding locations.

In the early 1980s, Koettig and Hughes (1983) and Haglund (1984) undertook surveys along the proposed route of the East Hills-Glenfield railway and at Glenfield respectively. While no Aboriginal sites were recorded in these areas, it was acknowledged that surface visibility was very low and may have played a role in obscuring surface evidence.

Hanrahan (1982) located nine open artefact scatters and two isolated finds during a survey at Menangle Park. The majority of finds were located in close proximity to a series of shallow ponds. One site (site N2) containing hundreds of artefacts, including flakes, scrapers, backed blades, a hammerstone and a ground edge hatchet, was found on a bench overlooking a minor creek line (Hanrahan 1982).

Site N2 was excavated some years later by Haglund (1989). Excavation of nineteen test pits and surface collection resulted in the recovery of 259 artefacts. As a range of hunter-gatherer activities was indicated by the assemblage, and artefact densities were reasonably high, at an average of 80 per square metre. Haglund (1989) suggested that the location had been the site of repeated Aboriginal visitation over the last 3000 years.

Navin conducted a survey of a water pipeline extending between Appin and Narellan/Campbelltown in 1991. A small artefact scatter containing nine artefacts was recorded on a tributary to Ousedale Creek and two isolated finds were found on a ridge top south of Appin (Navin 1991: 13-14).

To the north of Minto, archaeological test pitting of deposits within the (then) proposed M5 corridor at Prestons resulted in the discovery of no sub-surface Aboriginal artefacts, despite the presence of previously recorded artefact scatters in the general area (Saunders 1993). The negative result was attributed to high levels of landscape disturbance from European land use and regular flooding of the local creek (Saunders 1993: 13).

Survey just south of The Crossroads resulted in the identification of an area of potential archaeological deposit along a section of Maxwells Creek (Officer and Navin 1997). Subsequent subsurface testing was carried out within an area of approximately 480 x 80 metres along both sides of the identified section of the creek (Navin Officer 1998). Excavation of twenty one 2.2 x 0.9 metre test pits resulted in the discovery of a total of 92 artefacts manufactured from silcrete, rhyolitic tuff, chert, quartz, chalcedony and quartzite (Navin Officer 1998: 17-18). While the results confirmed the presence of prehistoric Aboriginal activity along the subject section of the Maxwells Creek corridor, uniformly low sub-surface artefact densities were seen to be indicative of long-term, small-scale revisitation of the area rather than major 'base camp' activity (Navin Officer 1998: 24).

An archaeological survey of Airds, approximately five kilometres south of the Minto Study Area, was undertaken by AMBS in 2001. The study was conducted in order to assess Aboriginal heritage in the Airds neighbourhood as part of a local housing redevelopment plan. The study area comprised a suburban zone, approximately 1200 metres long and 150 metres wide, paralleling the eastern side of Smiths Creek south of Georges River Road.

Two Aboriginal sites, a scarred tree and a scatter of eleven silcrete artefacts, were recorded. Both of the sites were located in close proximity to Smiths Creek. A sandstone quarry of indeterminate historical significance was also found beside Smiths Creek.

An area of potential archaeological deposit deemed highly likely to contain relatively intact subsurface cultural deposits was identified within an area of Cumberland Plain regrowth flanking



Smiths Creek. Identification of this PAD was made on the basis of Aboriginal site occurrence in the area and the potential for local forest regrowth to retain intact soil (AMBS 2001: 11-12).

6.2 Previously Recorded Aboriginal Sites

No previously recorded Aboriginal sites are known to occur within the boundaries of the study area. The nearest known sites include grinding grooves and shelters with rock art. They occur in the steep sandstone terrain two to three kilometres to the east of Minto.

6.3 Predictive Model for Aboriginal Sites

The study area is situated within a transition zone between the Cumberland Plain and the Woronora Ramp. Little analysis has been undertaken of Aboriginal site type and location patterns relative to the particular landform variables of this zone. Although the area retains many ecological and geographical characteristics comparable with the Cumberland Plain, it is possible that the transition zone may have attracted its own form of Aboriginal occupation in step with local environmental peculiarities, particularly outcropping stone and topographic networks (Navin Officer 2002: 31). Future resolution of this question will be contingent upon more detailed and specific archaeological work conducted in the area.

In general terms, the topography and drainage characteristics of the study area are akin to the adjacent Cumberland Plain, a broad area which exhibits a characteristic suite of Aboriginal site types. The majority of these sites are open artefact scatters, sometimes referred to as open campsites. Isolated finds are also commonly recorded. Other site types include scarred trees, stone procurement sites, archaeological deposits and rarely, grinding grooves on sandstone isolates.

Based on the local and regional site database, Aboriginal settlement models, and the results of studies elsewhere on the Cumberland Plain the following predictive statements regarding site location and trends can be made for the Minto study area:

- sites will occur in all major landform types within the study area, except where destroyed by historic land use, urbanisation, erosion processes or flooding;
- stone artefact material types are likely to be dominated by silcretes, cherts and fine-grained rocks derived from fluvial gravels;
- most sites identified during surface survey will be located in close proximity (within 50 metres) to water sources (sources present prior to agricultural development, including minor and major creeklines and soaks);
- most sites, and sites with higher site densities, will occur near permanent water sources and utilised stone exposures;
- major streamline confluences are prime site locations;
- sites located near permanent water sources are more likely to be large (in area and number of artefacts), to have higher artefact densities, and be more complex in terms of spatial arrangement and technology, than sites on ephemeral drainage lines;
- relatively few sites will occur on ridgetops and crests;
- most sites which include stone artefacts will occur in landscape contexts which are well-drained, often on a locally elevated landform adjacent to a water source;
- most sites which include stone artefacts will be located on low gradients or mostly level ground, however large sites may extend onto higher gradients towards the edge of the artefact scatter;
- sites identified from surface survey may not accurately reflect the distribution or density of artefacts present below the surface; and



- site location may also be influenced by proximity to resources such as rock exposures suitable for tool manufacture, and areas where a diverse range of foods and materials can be procured such as ecotones (the boundaries of different vegetation and habitat types), and wetlands.
- Aboriginal scarred trees may occur wherever old-growth trees survive.

Potential Archaeological Deposits and Subsurface Material

- Potential archaeological deposits are likely to occur in basal slope and valley floor contexts on well-drained and aggrading landforms;
- a high proportion of Potential archaeological deposits (around 80% or more) are likely to contain subsurface artefacts;
- depositional and aggrading sedimentary environments contain the best potential for *in situ* artefactual material, particularly on relatively level landforms although some hill slope contexts also have potential;
- undisturbed artefactual material may occur below the plough zone which is generally around 25 cm in depth;
- the actual spatial extent of an artefact occurrence is unlikely to be accurately reflected by surface survey recordings which are dependent on existing ground exposures. Many sites will be larger, and have higher artefact densities than surface indications suggest;
- stone artefacts are likely to occur subsurface throughout the whole study area at varying and often very low densities, according to the intensity of Aboriginal occupation and subsequent processes of sedimentation and erosion; and
- Subsurface densities of up to 10 artefacts per square surface metre may be indicative of a 'background' rate of artefact discard and may occur anywhere outside of specific Aboriginal activity areas (McDonald and Rich 1993).

6.4 General Study Area Archaeological Sensitivity

According to broad-scale landscape sensitivity assessments undertaken in the *Campbelltown Local Government Area Aboriginal Heritage Study* (Navin Officer 2002), the majority of the Minto redevelopment study area falls within Zone 2, 'Urban/Industrialised'. A comparatively restricted belt along the eastern extent of study area is included as Zone 6, 'Mid to basal valley slopes' (Navin Officer 2002: 51). The archaeological sensitivity of these zones is summarised in Table 1.

This information suggests that the highest archaeological potential of the study area is for open artefact scatters and areas of potential archaeological deposit, particularly in relatively undisturbed valley floor contexts near water sources. Given the absence of any locally significant creek lines and the study area's high degree of urban and commercial development, it may be expected that the study area's archaeological potential is relatively low.



Table 1 Zones of archaeological sensitivity in the Minto Redevelopment Study Area (adapted from Navin Officer 2002: 90-91).

Zone Description	Archaeologically Sensitive Landforms	open artefact scatters	rock shelter sites & PADs	grinding grooves	burials	scarred trees	PADs in open context
'Built-up' urban/industrial landscape	<ul style="list-style-type: none"> • old growth trees in areas of remnant vegetation, • remnant natural land surfaces and deposits • rock shelters, rock platforms • locally elevated, well drained ground adjacent to water sources 	mod.	mod.	mod	low-mod	low-mod	mod
mid and basal valley slopes and spurlines on Wianamatta Group rocks and Transition Zone topographies	<ul style="list-style-type: none"> • locally elevated, well drained and level ground landforms situated adjacent to water sources • low lying spur crests adjacent to the valley floor • alluvial terrace edges 	mod-high	nil	low	low	low	mod-high



7. HISTORICAL CONTEXT

7.1 Outline of European Nineteenth Century Land Settlement

The Campbelltown area has a history of European exploration and occupation dating back to the 1790s. The area was first surveyed and settled by Europeans in 1809 following extensive flooding of the plains along the Hawkesbury River. The earliest grants were made along Bunbury Curran Creek including some sizeable parcels of up to 1240 acres (Campbelltown City Council 1998: 7-8). Subsequent land use focused upon the production of a variety of cereal crops, sheep and cattle, and the country around Campbelltown is known to have been under extensive cultivation by the 1820s (Rosen 1995: 54-55). The importance of cereal crops was greatly diminished with the collapse of the wheat industry in the 1860s and following years saw the rise of the local dairy industry in parallel with the advent of refrigerated transport (Benson and Howell 1990: 75; Rosen 1995: 89).

European settlement of the Minto area commenced in 1811 when Dr William Redfern was granted 800 acres fronting the eastern bank of Bow Bowing Creek. Known as 'Campbellfield', Redfern's property rapidly expanded to include country between Leumeah and Ingleburn. In the early 1820s, Redfern imported vines and fruit trees from Europe and Campbellfield became an important producer of grapes and wool (McGill et al 1995).

Sizeable grants to the south of Campbellfield, at the current location of the precincts Friendship and Dunlop, were owned by Thomas Rose, an ex-convict who established the 'Mount Gilead' property at Gilead (Campbelltown City Council 1998: 11).

Campbelltown was linked to Sydney by rail in 1858 (Birmingham et al 1979: 115; Rosen 1995: 74). The railway platform at Minto was built in 1874 to service the local farming community that revolved around the production of wool, grapes, fruit and dairying. A period of subdivision commenced from this time onward and by 1883 Campbellfield estate in the vicinity of the homestead became the setting for the township of Minto (Campbelltown City Council 1998: 13). Construction of street networks and residential sites on both sides of the railway line was undertaken through the late 1800s and early 1900s. By the 1950s Minto is known to have had a population of over 500 (McGill et al 1995).

Although farming of local paddocks continued, the NSW Housing Commission acquired sizeable areas of Minto in the 1960s. Subsequent residential expansion in the township concentrated upon the creation of higher density townhouse developments rather than blocks with free-standing houses.

The study area straddles the parishes of Minto and St Peter, County of Cumberland. Pre-1900s parish maps show the study area to be divided into three large grants under William Redfern (Minto) and Thomas Rose (St Peter) (Figure 3). Two smaller blocks straddling McBarron Creek near its confluence with Bow Bowing Creek are apparent under the names R. Knight (40 acres) and J. Welch (53 acres) to the south west of current study area boundaries in St Peter.

Progressive subdivision of blocks in the area through the 1900s is apparent on the post 1930s Minto parish map (Figure 4). This document shows both planned high density housing throughout the west of Campbellfield Estate and proposed government purchase of a series of small blocks in the eastern part of the study area, in the current precincts of Piggott and Eagleview (Figure 5). This provides an interesting reflection of the historical process of urbanisation in the area that continues through to current times.

7.2 Previously Recorded Historic Sites

Five identified historical sites occur in Minto:

- 1) 'Campbellfield' ('Redfern's Cottage'), off Guernsey Avenue.
- 2) 'Eagleview House', on Eagleview Road.



- 3) The site of 'Merryvale', on Merryvale Road.
- 4) St James Anglican Church, Redfern Street.
- 5) House site, on Memphis Street.

Of these sites, only one, Campbellfield, is situated within the study area, directly to the northeast of Minto Mall in Schools precinct.

Campbellfield dates back to the early phase of European settlement in the Campbelltown area and is associated with Dr William Redfern's grant at Minto. The homestead was built in 1820 and originally comprised a brick house with a stone-flagged verandah and a deep cellar (Proudfoot 1977:18; Campbelltown City Council 1998:10).

Although the homestead was significantly altered in the 1960s, original features including the verandah, one chimney and the stone walled cellar remain intact (Proudfoot 1977:18). Campbellfield is listed as a Heritage item (Local Significance) under Schedule 1 of the *Campbelltown (Urban Area) Local Environmental Plan 2002*.

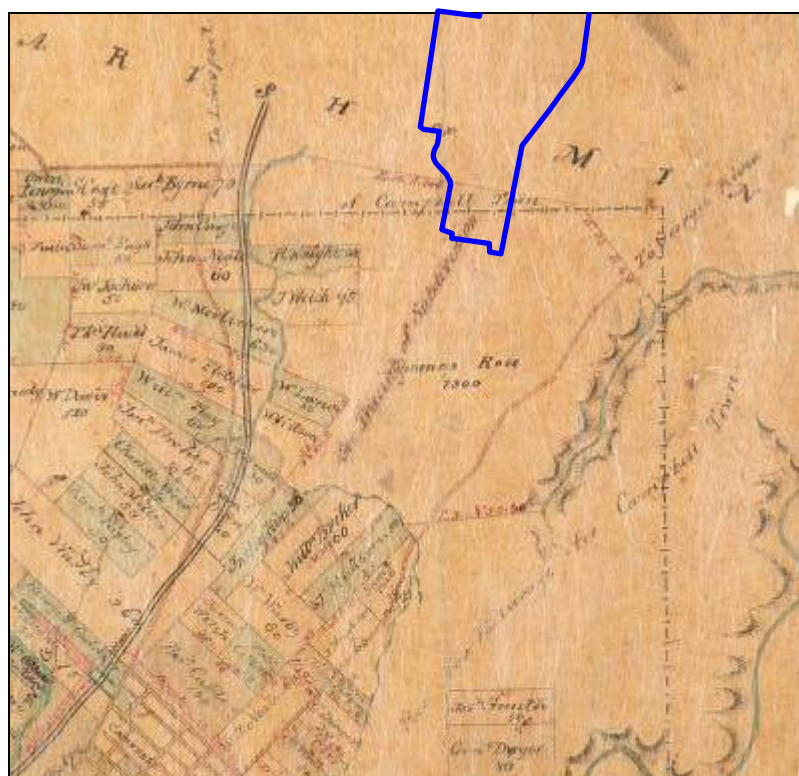
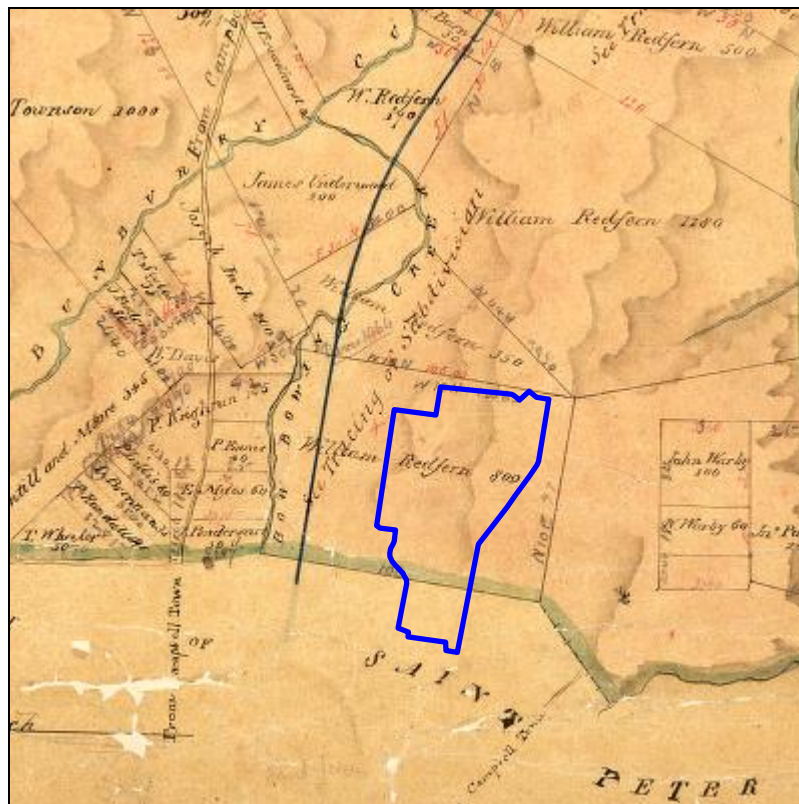


Figure 3 Pre 1900s land tenure in the study area (Parishes of Minto (above) and St Peter (below)).
Study area shown by blue boundary.

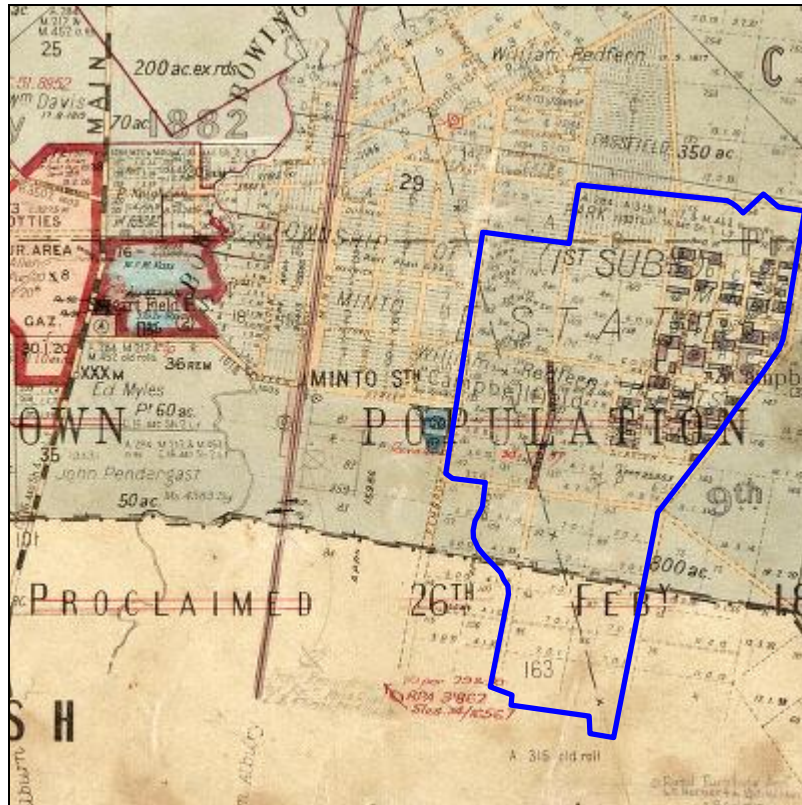


Figure 4 Parish of Minto post-1930s, with present study area indicated by blue boundary.



Figure 5 Detail of post-1930s Minto Parish Map with present study area indicated by blue boundary. Note blocks marked '32' intended for government acquisition in the eastern part of the study area.



8. SURVEY RESULTS

8.1 Aboriginal Sites

No Aboriginal sites were identified in the course of the field inspection of the study area.

No Aboriginal sites were identified in the course of the field inspection of additional area in 2005.

8.2 Historical Sites

No sites or features of European historic significance were encountered in the precincts earmarked for redevelopment.

The *Campbellfield* homestead is located within the southern end of Schools precinct (AMG reference: 301600.6232500), an area where no development is anticipated (Figure 6).

8.3 Survey Coverage and Visibility Variables

The effectiveness of archaeological field survey is to a large degree related to the obtrusiveness of the sites being looked for and the incidence and quality of ground surface visibility. Visibility variables were estimated for all areas of comprehensive survey within the study area. These estimates provide a measure with which to gauge the effectiveness of the survey and level of sampling conducted. They can also be used to gauge the number and type of sites that may not have been detected by the survey.

Ground surface visibility is a measure of the bare ground visible to the archaeologist during the survey. There are two main variables used to assess ground surface visibility, the frequency of exposure encountered by the surveyor and the quality of visibility within those exposures. The predominant factors affecting the quality of ground surface visibility within an exposure are the extent of vegetation and ground litter, the depth and origin of exposure, the extent of recent sedimentary deposition, and the level of visual interference from surface gravels. Two variables of ground surface visibility were estimated during the survey:

- a percentage estimate of the total area of ground inspected which contained useable exposures of bare ground
- a percentage estimate of the average levels of ground surface visibility within those exposures. This is a net estimate and accounts for all impacting visual and physical variables including the archaeological potential of the sediment or rock exposed.

The obtrusiveness of different site types is also an important factor in assessing the impact of visibility levels. Sites based on rock exposures, such as rock shelters, open engravings and grinding grooves are more likely to be encountered than sites with no surface relief located on, or within, sedimentary matrices. For example, artefacts made from locally occurring rock such as quartz may be more difficult to detect under usual field survey conditions than rock types that are foreign to the area. The impact of natural gravels on artefact detection was taken into account in the visibility variables estimates outlined above.

The natural incidence of sandstone platforms suitable for grinding grooves or engraving, together with the incidence of old growth trees, are important considerations in identifying both survey effectiveness and site location patterns outside of environmentally determined factors.

The following table summarises estimates for the degree to which separate landforms within the study area were examined and also indicates the exposure incidence and average ground visibility present in each case. A total of 100% of the remnant landscape ground area in the study area was inspected during the survey, with 32% providing useable archaeological exposures. This high level of archaeological exposure is due primarily to extensive levels of surface disturbance evident in the



area, including widespread burnt surfaces, grading activity, and subsequent erosion. A graphic approximation of the surface survey coverage achieved within the study area is shown in Figure 7.

Taking into account survey coverage, archaeologically useable exposures, and visibility variables, the effective survey coverage (ESC) was 17.8% of remnant landscape in subject precincts of the study area. The ESC attempts to provide an estimate of the proportion of the total study area that provided a net 100% level of ground surface visibility to archaeological surveyors.

The ESC calculation is defined and required by the NPWS and stated to be of use in assessing and cross comparing the adequacy of archaeological surface surveys. The actual utility of the ESC calculation however is challenged by many archaeologists. The limitations of the ESC calculation are emphasised by differences in the subjective assessment of exposure and visibility levels, variations in how survey units are defined and measured, and differences in how and which variables are estimated and combined. In reality, ESC results tend only to be meaningful when compared across surveys conducted by the same surveyors and ESC measurers.

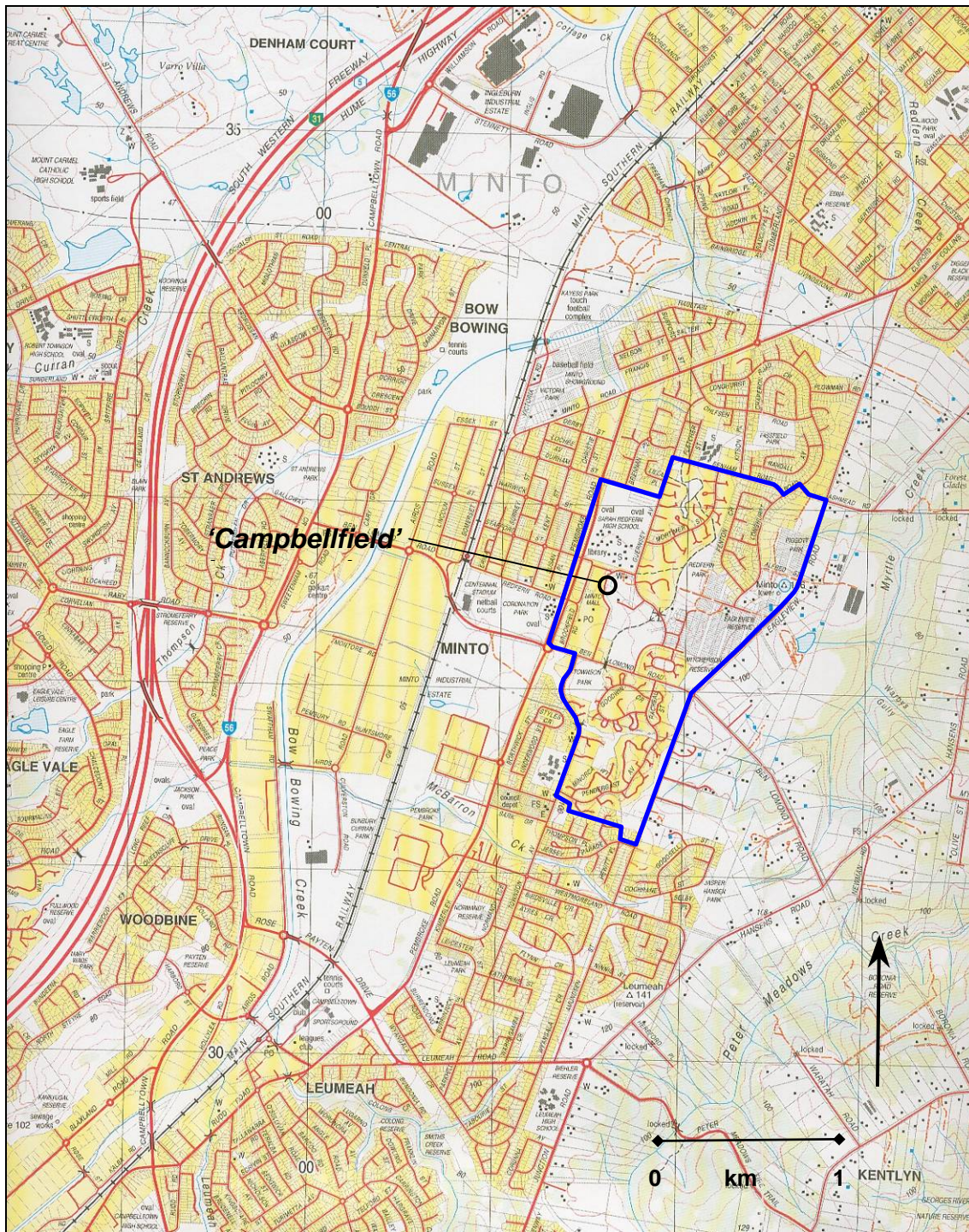
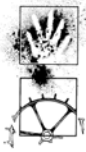


Figure 6 Location of Campbellfields homestead
(3rd Edition Campbelltown 1:25,000 topo map)

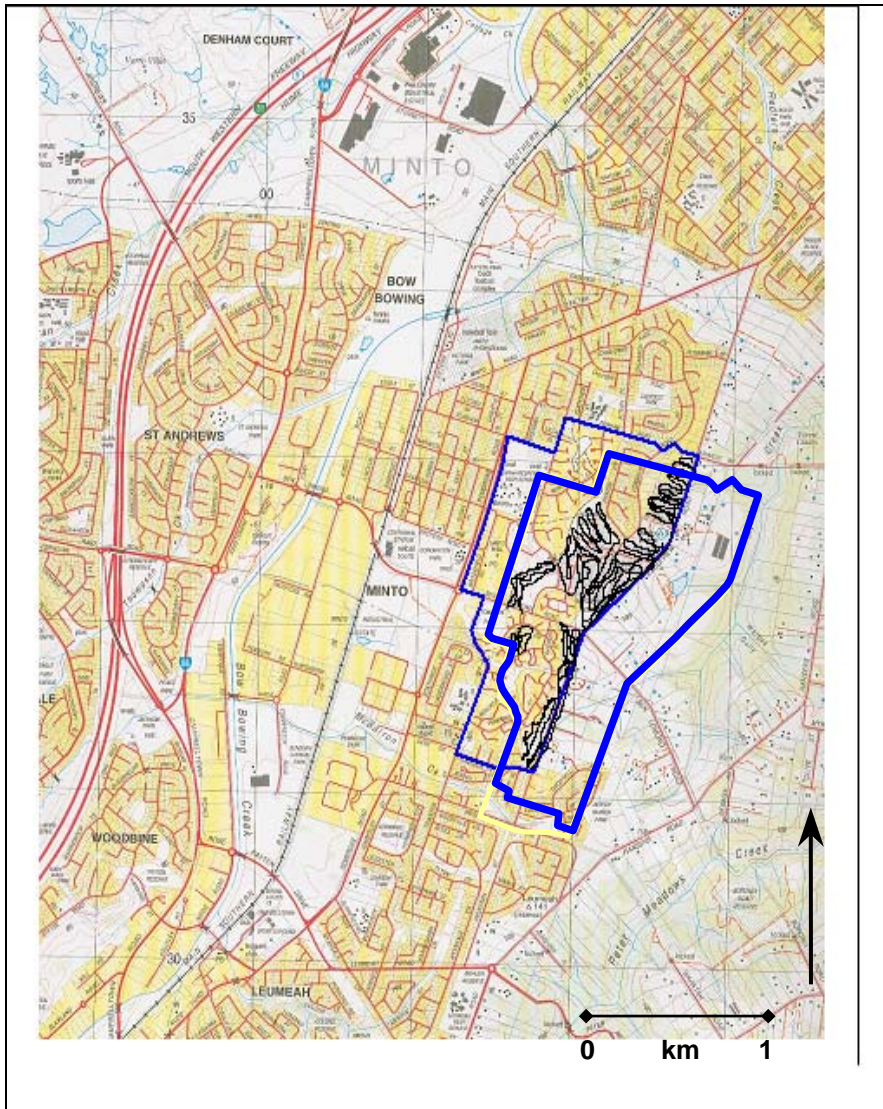
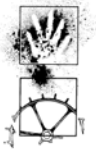
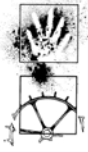


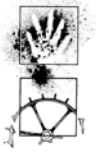
Figure 7 A graphic approximation of comprehensive surface survey coverage achieved within the Minto Study Area (3rd Edition Campbelltown 1:25,000 topo map)



Survey division	Survey unit	Landform	Survey mode	Main exposure types	Unit area (ha)	Exposure incidence %	Average exposure visibility %	Net effective exposure (ha)	Effective survey coverage of survey unit %	Archaeological recordings
Piggot Park	A	ridge crest	Foot	recently burnt surfaces, 4wd tracks, graded surfaces	4	40	60	0.96	24	
	B	low gradient upper slope	Foot	recently burnt surfaces, 4wd tracks, graded surfaces	8.5	50	60	2.55	30	
Eagleview Reserve	A	ridge crest	Foot	recently burnt surfaces, 4wd tracks, graded surfaces, foot tracks	5	30	60	0.9	18	
	C	low gradient upper slope	Foot	recently burnt surfaces, 4wd tracks	10	50	60	3	30	
	D	drainage lines	Foot	eroded patches, foot tracks, burnt areas	1	30	75	0.225	22.5	
Redfern Park	A	low gradient middle slope	Foot	dirt tracks, graded surfaces	5	15	40	0.3	6	
Mitcherson Reserve	A	ridge crest	Foot	eroded areas, foot tracks	11	20	40	0.88	8	
Urbanised areas	A	low gradient slope features	Vehicle and foot	road corridors, eroded patches, foot tracks.	3	10	30	0.09	3	



Survey division	Survey unit	Landform	Survey mode	Main exposure types	Unit area (ha)	Exposure incidence %	Average exposure visibility %	Net effective exposure (ha)	Effective survey coverage of survey unit %	Archaeological recordings
	B	crests	vehicle and foot	road corridors, eroded patches, foot tracks.	2	10	30	0.06	3	
	C	minor drainage lines	vehicle and foot	road corridors, eroded patches, foot tracks.	1	10	30	0.03	3	
Totals	10				50.5 ha			9 ha	ESC = 17.8%	nil



9. CONCLUSIONS & RECOMMENDATIONS

The following conclusions and recommendations are provided based on the results of historical and archaeological research and consultation, and archaeological surface surveys for historic and Aboriginal sites and features within the Minto Renewal Area.

9.1 Conclusions

It is concluded that the Minto Renewal Area represents an area of low archaeological and cultural heritage sensitivity. This assessment is based on the levels of landscape disturbance evident in the area and the predominantly upper catchment nature of the terrain that comprises the subject area. There are no obvious foci for Aboriginal activity in the past (reliable water, stone material sources etc) and no historic sites or features were identified in the area.

Consequently there are no Aboriginal or historic archaeological constraints to the proposed development within the precincts identified for redevelopment at Minto.

9.2 Recommendations

It is recommended that:

1. No further archaeological or heritage assessment is required in relation to the proposed development within the precincts identified for redevelopment at Minto.
2. Any potential direct or indirect impacts to the *Campbellfield* homestead within its existing curtilage should be avoided.

It should be noted that Campbellfield is an identified Heritage item (Local Significance) under Schedule 1 of the *Campbelltown (Urban Area) Local Environmental Plan 2002*. Should any proposed works and/or associated activities be anticipated in close proximity to the homestead, a detailed assessment of the potential impacts of the works upon the homestead site should be carried out in accordance with Clause 49 of the Plan.

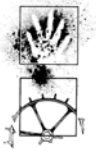
3. A copy of this report should be forwarded to:

Lance Syme
Tharawal Local Aboriginal Land Council
PO Box 440
PICTON NSW 2571

Glenda Chalker
Cubbitch Barta Native Title Claimants Aboriginal Corporation
55 Nightingale Rd
PHEASANTS NEST NSW 2574

4. Three copies of this report should be sent to:

Sydney Zone Archaeologist
Aboriginal Cultural Heritage Division
NSW National Parks and Wildlife Service
PO Box 1967
HURSTVILLE NSW 2220



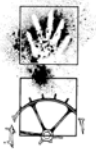
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APPENDIX 1

RECORDS OF ABORIGINAL PARTICIPATION & CORRESPONDENCE



Record of Aboriginal Representative Participation*

Name(s) of Aboriginal Representative: Lance Syme

Name of Aboriginal Organisation: Tharawal Local Aboriginal Land Council

Archaeologist(s): name & address: Tom Knight
Navin Officer Heritage Consultants
102 Jensen St Deakin ACT

Project Name: Minto Renewal


Client: name & address: Mr Cameron Lamb
(please send your invoice to this address) Housing Finance Investment Group
PO Box 515 Ashfield NSW 1500

- Type of participation:
- Guided inspection of study area and sites
 - Accompanied/participated in archaeological survey
 - Separate inspection or survey
 - Accompanied/participated in excavation program

Period of participation:

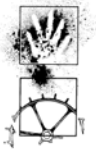
Date(s)	Start	Finish
<u>3 April 2003</u>	<u>9am</u>	<u>5pm</u>

Issues raised: No issues -

Signed (archaeologist): 

Signed (Aboriginal representative(s)): 

* please note this form is not an invoice. For payment, please send an invoice from your organisation to the client name and address provided above.



Record of Aboriginal Representative Participation*

Name(s) of Aboriginal Representative: Glenda Chalke

Name of Aboriginal Organisation: Cultural Banta Native

Title Clanments Aboriginal Corp.

Archaeologist(s): name & address Tom Knight

Navin Officer Heritage Consultants

102 Jarvis St. Deakin VIC 2600

Project Name: Minto Renewal

Client: name & address Mr Cameron Lamb

(please send your invoice Housing Finance Investment Group

to this address) PO Box 515 Ashfield NSW 1500

- Type of participation:
- Guided inspection of study area and sites
 - Accompanied/participated in archaeological survey
 - Separate inspection or survey
 - Accompanied/participated in excavation program

Period of participation:

Date(s)	Start	Finish
<u>3 April 2003</u>	<u>9am</u>	<u>5pm</u>

Issues raised: No issues

Signed (archaeologist): [Signature]

Signed (Aboriginal representative(s)): G. Chalke

* please note this form is not an invoice. For payment, please send an invoice from your organisation to the client name and address provided above.



Cubbitch Barta Native Title Claimants
Aboriginal Corporation,
55 Nightingale Road,
PHEASANTS NEST. N.S.W. 2574.
7th April, 2003.

Navin Officer Heritage Consultants,
102 Jervois Street,
DEAKIN. ACT. 2600

Dear Kerry,

RE MINTO RENEWAL

On Thursday 3rd April, 2003 I assisted with an Archaeological survey for the Minto Renewal Project.

During the survey there were no Aboriginal sites located, therefore there are no restrictions placed upon this project.

Yours faithfully,

G. Chalker

Glenda Chalker
02 46 841129