

INSITE HERITAGE
295 DOBELL DRIVES
WANGI WANGI NSW 2267

ARCHAEOLOGY
ASSESSMENT OF PART
LOT 358 DP755242 PART
LOT 9 DP244002
MORISSET PARK

PREPARED FOR

DE WITT CONSULTING PTY LTD

PO BOX 5134 KAHIBAH 2290

Date

10 June 2008

Table Of Contents

Summary	2
Proposed Development.....	3
Environmental Context.....	5
Archaeological Context	7
<i>Regional Context</i>	<i>7</i>
<i>Ethnography.....</i>	<i>7</i>
<i>Local Archaeological Context.....</i>	<i>9</i>
<i>Ahims Search Results</i>	<i>9</i>
<i>Model.....</i>	<i>11</i>
Survey Information	11
<i>Survey Strategy.....</i>	<i>11</i>
<i>Field Methods.....</i>	<i>12</i>
<i>Sites Located.....</i>	<i>12</i>
<i>Survey Coverage Data.....</i>	<i>14</i>
Analysis.....	19
Relevant Legislation	19
Significance Assessment	21
Management Recommendations	22
Bibliography.....	23

SUMMARY

The subject Aboriginal Heritage Assessment has been commissioned to support the rezoning application to the Lake Macquarie City Council to rezone lot 9 DP 244002 and lot 358 DP 755242 Morisset Park Road, Morisset Park from Zone 10 Investigation (Urban/Conservation) to Zone Residential 2(1). The proponent is Postfox P/L who is seeking to develop the land by residential subdivision.

This report has established that:

1. Aboriginal cultural sites either exist or have existed in the locality and are therefore tangible evidence of Aboriginal occupation of the locality; and
2. Given the environmental setting of the area and results of other excavations in the area there is a low to moderate potential for small artefact scatters to be concealed under topsoil on the subject site.

This report concludes that while there are generally no archaeological constraints to future residential development on the site there is a specific small proportion of the site which does have potential for artefacts and as a result two recommendations pertaining to future development and management of Aboriginal cultural material are made. They are:

1. In order to provide evidence of due diligence it is recommended a Section 87 permit be sought under the NPWS Act 1974. This permit would allow for the excavation of a test probe in the toe slope colluvium to determine the degree of use by Aboriginal people in the area.

2. The area of potential is specific and applies to a relatively small portion of the property. Future development subdivision layouts could account for the conservation in-situ of cultural material, if material of high significance is found. (Note: the excavation need not be extensive and should be confined to sampling the toe slope colluvium. This report should accompany the permit application.)

PROPOSED DEVELOPMENT

The subject property is Lot 9 DP 244002 and Lot 358 DP 755242 Morisset Park Road Morisset Park, located in Lake Macquarie City Council area (Figure 1).

The property is currently zoned 10 Investigation (Urban / conservation) under Lake Macquarie City Council LEP 2004 (Figure 2). The proponent Postfox Pty Ltd is seeking to have the land rezoned to allow urban development.

The application is to rezone the land to 2(1) residential and therefore no disturbance of the land will take place at this time. A concept subdivision plan can be seen in Figure 3. A future proposal could involve a total of 72 allotments including area for a detention basin. The impacts of a future development will include roads, services, construction and drainage excavations.

Figure 1 - Study Area Location



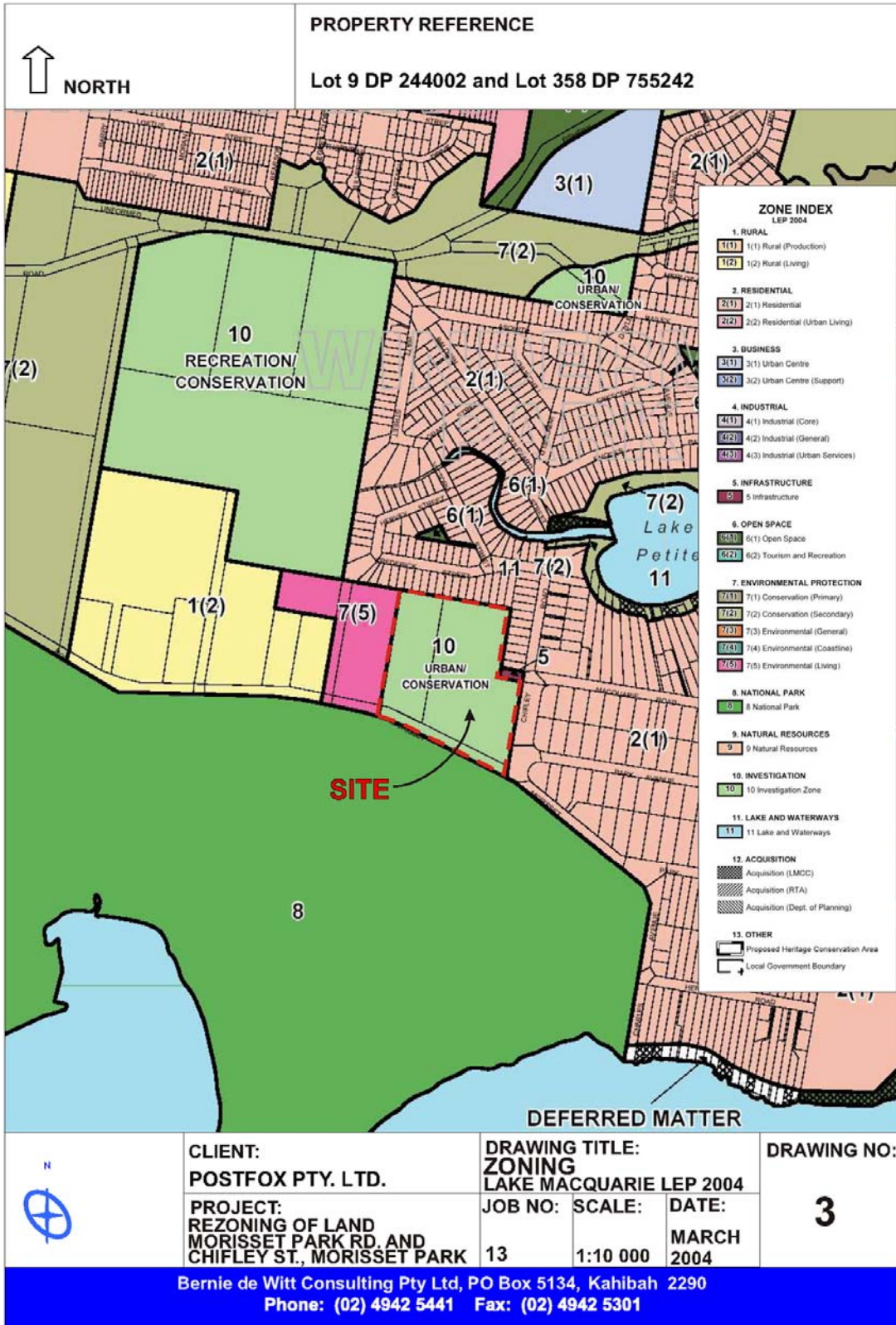
ENVIRONMENTAL CONTEXT

Morrisset Peninsula runs east- west extending some 5 kilometres into the western side of Lake Macquarie. The central ridgeline is approximately 30m in elevation, and drained by many ephemeral first and second order creek lines that are generally not incised. The study area comprises northern side slope of 2 to 5 degrees. The site drains to an unnamed second order creek line to Lake Petite, a small estuarine lake formed between the central ridgeline and a second smaller ridgeline that extends to Bluff Point. The western allotment is crossed by an ephemeral gully in the southeast corner

The soils on the site are Silty and Clayey Sands (Coffey, 2003) in the Doyalson soil landscape (Murphy 1993). The soils are duplex, Yellow Podzolic soils, with brown loose sand to loamy sand of coarse-grained texture and single-grained structure. The surface condition of the soil is loose or gravelly. Soil depths over the site range to 350mm (Coffey 2003).

The land has been cleared over the southwest portion of the site and two houses and associated out buildings. The eastern portion of the property has been cleared for grazing with scattered mature eucalypts remaining. An area of bushland remains on the northwestern portion of the property comprising Open Eucalypt Forest, of Scribbly Gum *Eucalyptus haemastoma*, and smooth barked apple *Angophora costata*, and Red Bloodwood *Corymbia gummifera*.

Figure 2



ARCHAEOLOGICAL CONTEXT

REGIONAL CONTEXT

The antiquity of occupation of Australia by Aboriginal peoples has been a contentious issue frequently debated within the field of archaeology. The majority of evidence dates to the Holocene (the last 10,000 years), although it is generally accepted that Aboriginal occupation could date to 60,000 or more years ago. Evidence from the very early periods is difficult to locate, as the Australian environment is not as conducive to the preservation of relics as other environments that are extremely dry or semi permanently frozen.

There are few dated sites in the Lake Macquarie area. Relic sandunes from the Pleistocene were the source of dates to 17,000 years, about 60 km, north of the study area at Moffats Swamp (Baker, 1994). At Swansea, midden material was dated to 7,850 and although this date has been disputed (Dallas et al.1993) there is no reason to doubt Aboriginal occupation of the area at the time of sea level stabilisation. Evidence of Pleistocene occupation may well be found below water level.

One method used to assign sites to a particular time period is the morphology of stone tools. A shift in the approach to tool technology occurred about 5,000 years ago with the introduction of microliths. These small, finely worked flakes often hafted to produce a functional tool. The change in manufacturing technique replaced the long cutting edges of the previous large flake with a composite tool comprised of small artefacts, resin, bindings and wood. Advantages of change may have been the use of raw material previously too small for this purpose (Moore, 2000). These microliths are frequently found in artefact scatters on the eastern coast of NSW.

ETHNOGRAPHY

The study area is a part of the country of the Pambalong peoples of the Awabakal Tribe and in general terms bounded by the south bank of the Hunter River, the Sugarloaf Mountains, Lake Macquarie and Newcastle West. The Pambalong peoples would have had access to a variety of environments including Lake Macquarie (salt water), the Hunter River (tidal zone), the mountains to the south west and the large Hexham Swamp (estuarine) adjacent to the study area.

L. E. Threkeld was a missionary who established a Mission initially on the eastern side of Lake Macquarie and subsequently to the western side of Lake Macquarie in 1824. Threkeld maintained

records of the Aboriginal peoples in this area, documenting 'observations' which serve as one of the few records of Aboriginal culture in this period. Threkeld was one of the 'new breed' of missionary trained in the period after 1815 when observation based information was espoused as the valid method of documenting unfamiliar cultures (Gunson, 1974). The documentation of Awabakal language, clan territories, kinship and mythology, by Threkeld, has produced some of the best ethno history in the early 19th Century (Gunson, 1974, Mulvaney 1992).

The study area would probably have been occupied by the Coorumbung clan based around Dora Creek a sub group of the Pambalong people. The Five Islands Clan, Pambalong Clan and Ash Island Clan combined to form the Awabakal-Sugarloaf Tribe.

The language recorded by Threkeld also tells, in part, how Aboriginal people viewed the landscape in which they lived. Lake Macquarie is Nikkinba, nikkin meaning coal and ba - place of. Pittoba is the place from where pipe clay was obtained (unfortunately Threkeld does not state the location). Pipeclay had an important cultural role in Aboriginal society as it was used, smeared over the head, to signify mourning. Kintirrabin was the name of a small volcano near Redhead about seven kilometres north of the entrance to Lake Macquarie. Threkeld also refers to Kopurraba another small volcano up the Hunter River, where Kopurra, a red earth was obtained. The red earth was rolled into balls and burnt in a hot fire, which changed the colour to a brilliant red. The earth was then mixed with kangaroo kidney fat and used for body paint. Konakonaba was the place name for a large mountain at the northern extremity of Lake Macquarie (possibly Munibung Hill). The stone known as Konakona, had veins of a yellow substance which was also used as body paint.

Threkeld noted that his Aboriginal adviser M'Gill whose traditional name was Biraban (Awabakal for sea eagle) might have been '*a knight of the ancient order of the holy Eagle-stones*'. Threkeld noted that high places were held as sacred, and on elevated ranges there were circular structures of stone, '*5 or 6 feet diameter, and two or three feet high, evidently built...*' (Ibid, p 66). Tradition held that the structures were built by the Eagle-Hawks, '*a bird of mysterious omen, and much reverence.*' (Miles in Gunson ed., p 78). Carved trees frequently demarcated areas of cultural importance such as burial areas and ceremonial sites.

LOCAL ARCHAEOLOGICAL CONTEXT

AHIMS SEARCH RESULTS

The Aboriginal Heritage Information Management System searched 135 square kilometres around the study area.

Site Type	Frequency	Landscape context
Middens	26/60.5%	Above the inter tidal zone or close to aquatic environment
Open camp sites*	7/16.3%	Upslope from permanent running water, northerly aspect, at vantage points
Isolated find*	4/9.3%	All landscapes but predominantly as defined in this table
Modified trees	2/4.7%	Any wooded area with old trees (pre 1860's) or old shade trees in open paddocks
Potential Archaeological Deposit (PAD)	1/2.3%	Ridge lines, rock shelves, near permanent water, above intertidal zones and at vantage points
Type unspecified	3/7%	
Total*	43	

*Sites with multiple attributes may appear in the breakdown more than once.

Laraine Nelson recorded a site 45-7-214 in 1995, in Sunshine Park about 50 metres from the proposed works area. At the time the site was recorded, a light scatter of fragmented shell was noted on vehicle and foot tracks in the park area, set back about 5m from the waterfront. The shell was predominately *Anadara trapezia*, highly fragmented, over an area of 5m x10m.

In 1993 Nelson and Ruig surveyed the site of the Henry Kendall Retirement Village at Bonnells Bay, north of the study area. An isolated artefact and disturbed midden were located on the lake foreshore. No further work was undertaken.

Dallas Navin and McConchie surveyed a large area of Morisset Peninsula in 1993 prior to the installation of a sewerage scheme. A total of 12 midden sites were recorded, some of which were considered to retain reasonable degrees of integrity.

A survey of a proposed tourist resort at Summerland Point (Brayshaw, 1989) located a large midden comprising 90% *Anadara trapezia* (Sydney cockle) shell. Shell densities were estimated in the order of 400 per m² and a small number of mud whelk and abalone were also noted. The site was to be retained in a foreshore reserve.

Six sites were recorded, all comprising middens in foreshore locations by Dallas (1991) prior to the Wangi sewerage scheme. A site previously recorded by Dyll in front of the RSL was found to have been destroyed.

Test excavations were undertaken at “The Hole” Mannering Bay. Artefacts were found in the course of channel constructions and further investigations indicated the maximum dimensions of the site were 180m x 100m. A total of 137 artefacts were recorded at the site, 95 of which occurred on the surface and a further 42 found in test pits. The distribution of surface artefacts was considered to indicate in-situ deposits, the surface artefacts exposed on a deflated surface. The surface artefacts occurred at densities of 5.2 per m², and the subsurface densities at between 20 and 32 per m². The shell associated with the site was found to be fragmented, exhibiting a wide range of size and growth stages, species included small and ‘non-edible’ species mixed within sandy silts. No associated charcoal, and the fact that many shell showed signs of natural predation indicated that the shell deposits were not of Aboriginal origin (Officer et al, 1996).

Test excavations at the St John of God site on the southeastern edges of Morisset Peninsula; found a total of 88 artefacts in an area in which no artefacts could be located by surface survey (Besant & Richardson, 2002). The artefacts included a core and several conjoined flakes indicated that knapping had probably occurred on the site. The dominant material was silcrete whereas volcanic tuff and rhyolite had dominated the Mannering Point site. Geometric microliths, indicative of the small tool tradition thus dating the site to the last 5,000 years were also present. The variation in material between the sites may indicate a pattern of broader landscape movement, securing stone resources in different locations.

Excavation at 1.5 km to the east has shown that artefact scatters are present on the Morisset Peninsula and where down slope movement has resulted in a build up of colluvium the artefacts tend

to lie in the A2 soil horizon above the B horizon in which dense gravel lenses tend to hamper downward movement by bioturbation (Besant work in progress). Artefact densities have averaged 13 per sq metre and have been as high as 35 per sq metre, which is of moderate significance in the general area. The St John of God site is located further from freshwater than the current subject area and whilst current topographic maps show ephemeral creek lines on the Peninsula and this forms the basis of the regional study (Umwelt 2003) the evidence from test excavation would tend to suggest that water may have been available in the past. Recently anecdotal information has suggested that a freshwater water hole was located at Morisset Park east of the study area.

The Lake Macquarie Aboriginal Heritage Study (Umwelt, 2003) has assessed the site integrity and context status of the Morisset Peninsula as generally poor. The landscape integrity of the central ridge is greater than that of the lake margins where partially disturbed sub surface midden material is probable in areas of public waterfront reserves. The central ridge slope in which the study area lies is considered likely to contain small artefact scatters, particularly on crests that may have formed travel routes. Sub surface deposits are considered unlikely on slopes due to the erosional soil landscape (Umwelt 2003, p4.14).

MODEL

The predicted archaeological resource that may occur on the site is small artefact scatters. These sites may be found where the very southern portion of the study area intercepts a small portion of ridge. The slope area is likely to be eroded and therefore provide opportunity to locate small scatters on the gentle slope to the north. Scared trees are not considered likely given the intensity of land use in the area and the probable age of the eucalypts on site. Stone outcrops are unlikely to occur eliminating potential for quarries or art. The most sensitive areas for subsurface deposits are likely to be the ridge and the toe slope where colluvium will have buried older deposits.

SURVEY INFORMATION

SURVEY STRATEGY

Koompahtoo LALC had previously surveyed the site for the client and their report can be seen overleaf. The survey aimed to gain sufficient field information to make an assessment of the

potential for artifactual material to remain on the property subject to the development proposal. The assessment then will determine if Aboriginal cultural sites either exist or have existed in the locality and are therefore tangible evidence of Aboriginal occupation of the locality and whether the existing development on the site is likely to have destroyed any sites of cultural heritage.

FIELD METHODS

The survey was divided into three landscape units on the basis of slope. The first and largest of these is slope between 2 and 5 degrees, comprising approximately 85% of the property. 10% of the property is described as toe slope as the slope is <2 degrees. The remaining 5% is ridge crest where the existing houses and outbuildings have been constructed. .

SITES LOCATED

No sites were located in the course of this survey however an area of potential deposit was noted and further testing will be required to determine if it is of significance.

Figure 3



SURVEY COVERAGE DATA

Table 1: Survey Coverage

Transect No.	Landform	Approx. area of landform	Exposure	Dimensions & sqm of exposure length x	Surface Visibility %	Archaeological Visibility %	Effective Survey Coverage	Sites	Notes
1	Slope	5 ha	Areas of slope wash	0.9ha	90%	100%	0.81 ha	0	Large areas of slope wash exposed A2 soil horizon with small to fine gravel cover as lag deposit. Carefully inspected all exposure and no artefacts found. Area covered by passes at 2m apart to inspect all areas of exposure.
2	Slope		Nil					0	Areas of gross disturbance / excavation to create level pad, grown over by fodder grasses
3	Slope		Dam wall	200 sq m	50%	100%	100 sqm	0	Mid slope well grassed evidence of possible septic tank. Exposure on old earth dam wall – cattle tracks
4	Slope		Nil					0	Well grassed mid slope
5	Slope		Nil					0	Mid slope section – well grassed some evidence of levelled pad at rear of house yard mid slope
6	Toe slope	1 ha	Areas of slope wash, bare earth	0.5 ha	90%	100%	0.45 ha	0	Areas of bare earth particularly under trees. Grass dies back and traffic wear at rear of properties abutting study area. Note low levels of gravel unlike slope area indicated a build up of colluvium from those exposed areas on the lower slope.
7	Toe slope		Nil					0	Remaining area that is grassed with no visibility
8	Crest	.5 ha	Areas of disturbance	0.1 ha	20%	50%	100 sq m	0	Gross disturbance, driveways, houses, outbuildings, introduced gravel over
9	Crest		Nil					0	Well covered with vegetation, trees and shrubs.



☒ Denotes disturbed areas

Toe Slope Grassed

Grassed Slope

Road Cut

Crest

Toe Slope Bare earth

Area of exposure gravely A2 Horizon Good visibility

Grassed Intermittent Areas



TREE NO.	TREE SPECIES/TITLE	COMMENTS
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50

BERRIE GO WITT CONSULTING PTY LTD
 14 KULLAROO ROAD CHARLESTOWN NSW 2290
 Ph: (02) 48 425 441 Fax: (02) 48 425 441
 Email Address: dewitb@hunterlink.net.au

DETAIL SURVEY OVER LOT 9 D.P. 244002 AND LOT 388 D.P. 755242 AT MORRISSET PARK
 CONTOUR LEVEL 0.0m
 ORIGIN OF LEVELS PAL/23868 RL 8.927 A.M.D.

SCALE 1:1000 (M)

JOB REF: MORRISSET PARK ROAD
 PLAN No: 1
 JOB REF: 013

CLIENT: MR CEDRIC WRIGHT
 DRAWN BY: A1
 SCALE: 1:1000 A1
 CHECKED BY: A
 DATE: 6-8-03
 APPROVED BY: A

DATE: 6-8-03
 DRAWING REF: 013DET1
 DRAWING REF: 013DET 6-6-03

1

Photograph 1 View west across mid slope area



Photograph 2 View east across mid slope area



Photograph 3 View south from mid slope



Photograph 4 View north from mid slope



Photograph 5 View north with part of the exposure inspected by area transects 1 &2. The exposure extends to the east for approximately 50m.



Photo 6 Example of the eastern side of the exposure area



ANALYSIS

Generally the opportunity to locate the predicted small artefact scatters was low on the upper slope area and mid slope due to grass cover. The lower slope area offered greater opportunity with erosion of the A1 soil horizon exposing large areas of sub soil and gravel. If small artefact scatters were present in the lower slope area they would have been located by surface indications.

Whilst this information would suggest that the potential for sub surface material on the Morisset Peninsula has been underestimated the survey of the current study area allowed for a reasonable opportunity to locate material with 5% of the study area offering good exposure. The southern portion of the site has been disturbed to a degree that the integrity of any subsurface material is highly likely to be low. The mid slope section of the site provided sufficient exposure to locate material if it were present in even relatively low quantities. The foot slope however is subject to the build up of colluvium and it is possible that material may be buried in sub surface deposits. Given the environmental setting of the subject area, its proximity to Lake Petite, its proximity to the unnamed creek line draining into Lake Petite and the results of other excavations in the area, there is a low to moderate potential for small artefact scatters to be concealed under topsoil.

RELEVANT LEGISLATION

The legislation relevant to the assessment of cultural heritage is outlined below.

The National Parks and Wildlife Act 1974

The NPW Act (section 90) provides statutory protection for all material evidence of Aboriginal occupation of NSW. Aboriginal places which are areas of cultural significance to the Aboriginal community, are also protected by the 1974 Act (section 84) that states:

The Minister may declare lands to be ‘protected archaeological areas’ to preserve Aboriginal places and relics; and

It is an offence to disturb or destroy an Aboriginal place or relic without first obtaining written consent from the Director of National Parks and Wildlife Service NSW.

The Environmental Planning and Assessment Act (1979)

The EP&A Act states that environmental impacts are to be considered in land use planning. The term 'environmental impacts' specifically relates to Aboriginal heritage in three parts.

Part III covers planning instruments such as State Environmental Planning Policies (SEPP), Regional Environmental Plans (REP) and Local Environmental Plans (LEP).

The guidelines on the preparation of planning instruments specifically state that Aboriginal heritage should be assessed as an integral part of these studies.

Part IV of the Act determines the way in which consent authorities make decisions regarding development applications. Section 79C (b) states that;

The impact of development on the natural or built environment should be considered before consent is granted; and

Part V of the EP&A Act points out that State government agencies which act as determining authorities must also conduct reviews of their own or other agencies activities in terms of impact on the environment. Where these impacts are deemed to be minimal a Review of Environmental Factors is required, although where impacts are greater an EIS would be generated. This part of the Act requires that;

'any impacts on a locality having aesthetic, anthropological, architectural, cultural, historic, scientific, recreational, scenic or

social significance or other special value for present or future generations' (DUAP 1995) is accounted for.

SIGNIFICANCE ASSESSMENT

The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance: The Burra Charter and its associated Guidelines outline the basic processes of assessing significance for items of heritage. Sites may be significant according to several criteria, including scientific or archaeological significance, significance to Aboriginal people, aesthetic value, the degree to which a site is representative of archaeological and/or cultural type, and value as an educational resource. The nature of significance relates to historic, aesthetic, social, scientific, cultural or educational. Sites are also assessed on the degree to which they are rare representative or characteristic, or whether they exhibit historic or cultural connections.

SCIENTIFIC SIGNIFICANCE

In order to determine scientific significance it is necessary to first place sites within a local and regional context. This process enables the assessment of any individual site in terms of merit against other sites of similar nature within similar contexts.

PUBLIC SIGNIFICANCE

The sites are assessed in terms of their educational value, to enhance community knowledge and appreciation of cultural heritage.

CULTURAL SIGNIFICANCE

Generally, all sites are of significance to the Aboriginal people. It has been recognised however that with the widespread nature of site distribution, sites will eventually be impacted upon by development. It is however necessary to conserve where possible sites which are of high significance to the community.

SCIENTIFIC SIGNIFICANCE

Site significance is rated low, medium and high. The significance of individual sites is determined by factors such as representativeness, rarity, and the sites potential to add scientific data to what is known about past human occupation of the Australian continent. Conservation outcomes are determined by comparison of a site's qualities with known sites in the region that have been protected.

MANAGEMENT RECOMMENDATIONS

Given the level of visibility on the site, the environmental context of the study area, the assessment by Koompahtoo LALC, the development plan and the relevant legislation the following management recommendations are made;

1. In order to provide evidence of due diligence it is recommended a Section 87 permit be sought under the NPW Act 1974. This permit would allow for the excavation of a test probe in the toe slope colluvium to determine the degree of use by Aboriginal people in the area.
2. The area of potential is specific and applies to a relatively small portion of the property. Future development layouts could account for the conservation in-situ of cultural material if material of high significance is found.

The excavation need not be extensive and should be confined to sampling the toe slope colluvium. This report should accompany the permit application.

BIBLIOGRAPHY

- | | | |
|--------------------------------------|------|---|
| Baker, N. | 1994 | Excavations at Moffats Swamp Dune. Report to RZM Pty Ltd |
| Besant, A. & Richardson, N | 2002 | Report on Test Excavations at St John of God site Morisset Peninsula. Report to Harper Somers Pty Ltd. |
| Gunson, N. | 1974 | <i>Australian Reminiscences & Papers of L.E. Threkeld.</i> Australian Institute of Aboriginal Study Canberra. |
| Lough, J. | 1981 | Archaeological survey of Freeway no. 3, Wallarah Creek to Wallsend. Report to NSW Department of Main Roads. |
| Dallas, M. Navin, K. & McConchie, D. | 1993 | Archaeological investigation of the Morisset peninsula sewerage scheme |
| Nelson, L. & Ruig, J. | 1993 | Report on an archaeological survey for a proposed retirement village Bonnells Bay |
| Officer, K. Navin, K & Saunders, P. | 1996 | Test excavations at 'the hole 1' Mannering Bay |
| Moore, M. | 2000 | Technology of Hunter Valley microlith assemblages, New South Wales. In <i>Australian Archaeology</i> No: 51, 2000. |
| Mulvaney, J. and Kamminga, J. | 1999 | <i>A Prehistory of Australia.</i> Allen and Unwin Sydney. |
| Mulvaney, J. and Green, N. | 1992 | <i>Commandant of Solitude. The journal of Captain Collet Barker 1829–31.</i> Melbourne University Press. |
| Umwelt | 2003 | Aboriginal Heritage Study, Stage 1B. Report to Lake Macquarie City Council (viewed with permission of Koombahtoo LALC). |