(Rich 1994:161). Bailey's basal date of 1,750 BP suggests that the modern resource-rich environment may not have been productive enough at an earlier time to support any more than small groups. In contrast, the Tweed River estuarine site was in use some 3,000 years earlier than this (Appleton 1993).

Beach foreshore sites investigated to date have been associated with more recent phases of occupation. Foredune sites typically take the form of narrow bands of pipi shell, or surface scatters of pipi and a few stone artefacts. Pipi horizons at South Ballina and Broadwater have dated to 260 years BP and 200 years BP respectively (McBryde 1982:77). A more substantial pipi midden (AHIMS: #4-6-61) investigated on the beach foreshore at Byron Bay had been used between approximately 1,000 and 400 years BP. The 80 cm deep midden deposit was overwhelmingly dominated by pipi shell, with minor inclusions of periwinkle, limpet, sand snail, oyster and cartrut. Bream was the most abundant vertebrate species. Although in lower quantities relative to bream, a broad range of fauna was represented in the midden, including other types of fish, tortoise, macropods, bandicoot, possums, rodents, birds and reptiles. The midden's stone assemblage was characterised by primary flaking debitage which reflected the poor knapping quality of the raw materials used. All of these materials are believed to have been collected from intertidal pebble beds adjacent to the site (Collins 1994).

The most extensive archaeological investigation of sites on Pleistocene sand substrate has been that conducted by Rich (1994) at what is now known as Angels Beach Estate, Ballina. This study resulted in the recovery of 40,000 shells and shell fragments, bone fragments, a piece of ochre and 9,000 stone artefacts. Rich's investigation at Angels Beach Estate produced results, which are largely in accord with those from other studies in the Lennox Head-Ballina area, revealing an assemblage of unmodified flakes, backed blades, cores, hammerstone, uni- and bifacially faked pebble tools, manufactured chiefly on chalcedony, chert and acid volcanic beach/river pebbles. Bone and shell fragments indicated exploitation of estuarine shellfish and terrestrial animals in addition to fish.

Rich concluded that evidence for the spatial distribution of intra-site activities, specifically meat butchering and tool manufacturing, suggested that the sites were not the product of itinerant or random occupation, but of repeated occupation by groups larger than a single family unit (Rich 1994:204). Radiocarbon determinations for shell samples revealed an occupation

phase dating between c. 100 BP and 530 BP. On technological grounds, stone working events were dated to within the last 2,000 years (Rich 1994:9).

6. DESKTOP REVIEW

6.1 Previous Archaeological Assessments

6.1.1 West Ballina floodplain

A recent assessment over cultivated floodplain adjoining an area of mangrove immediately south west of the subject lands identified an artefact scatter/open campsite. The materials on the site (Fishery Creek 1 AHIMS#.04-5-0211) were pebble cores, bevilled pounders and flakes. The type and range of artefacts were considered to be indicative of a permanent campsite and the site to be significant in view of its having potential for further research (Robins and Piper 2005).

The assemblage was dominated by large artefacts often referred to as pebble tools (58%). Technologically, they are unifacial cores. All were made on pebbles (probably from nearby beaches), and all retained a high proportion of pebble cortex. Four of them had bevelled edges that showed evidence of use wear in the form of a silica gloss, along one margin.

While the relief of the floodplain in this locality probably bears little resemblance to the original relief due to the impacts of drainage, land clearing, leveling and cultivation making detection unlikely or impossible, the 2005 assessment shows that archaeological evidence does exist in floodplain contexts although it will require unique conditions to detect it e.g. very high degrees of disturbance and extensive areas of surface visibility.

Shovel test pitting across the subject lands was conducted by Navin and McConchie (1991) during an assessment of the impact of a sewage line in the power line easement which passes south-north through the property. No cultural materials were found where the sewage line passes through the 'River Oaks' property. Studies by Collins (1996) of alternative routes

for the Ballina Bypass across an extensive area of flood plain west of the subject lands found no evidence of Aboriginal sites.

An archaeological assessment was conducted over Lots 1, 3, and 5 DP 1074242 and part of Lot 269 by Piper (1999). The assessment evaluated the potential impact of a proposed residential sub division on an area of the floodplain immediately adjoining the lands to the north of the present subject lands. The archaeological assessment found no heritage constraints to the proposed subdivision.

A cultural heritage assessment was conducted over the same parcels of land i.e. Lots 1, 3, and 5 DP 1074242 and part of Lot 269 by Everick Heritage Consultants (2007). The cultural heritage assessment was conducted under the *DECC Interim Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* July 2005. The study assessed the archaeological and cultural heritage values of lands proposed for residential subdivision immediately adjoining Lot 2 to the north extending to the Pacific Highway. Due to vegetation clearing extensive areas of surface visibility allowed for a more effective assessment of the archaeological potential of the land. It was concluded that no archaeological or cultural heritage values were impacted by the proposed subdivision (Robins 2007:31).

6.1.2 East Ballina estuary and dunefields

Archaeological attention in the lower Richmond has focused on the Richmond River estuary and the coastal dunes and plains between Lennox Head and South Ballina. With the exception of Bailey (1972) the majority of studies have been in response to impact assessments. These studies include those of Stockton (1974), Godwin (1986), Bonhomme (1988), Cane and Nicholson (1989), Navin and McConchie (1991), Collins (1992, 1993, 1996), Hughes (1991) and Rich (1994). At least 29 sites in the Richmond estuary extending northwards across dune fields have been recorded as a result of these studies. The sites recorded included 16 midden sites consisting of estuarine and beach species and stone artefacts. Thirteen open camp sites comprising low density shell scatters and stone artefacts were recorded. The greatest concentration of sites is the middens on the North Creek/Chickiba estuary and open sites scattered across the adjacent dune fields of what is now known as the Angels Beach estate.

The estuarine sites are extensive high volume shell middens, predominantly composed of oyster.

The current picture of site locations in the Ballina area is that the majority of known sites are located on elevated sand masses of Holocene or Pleistocene origins. Godwin (1986), having recorded 26 sites in the near vicinity of the North/Chickiba Creek estuary, predicted that evidence for use of the estuarine land unit would be restricted to levees and raised sand areas. The wetlands, Godwin observed, were not likely to contain large sites and discard would probably be restricted to the odd stone tool. The dune system, and any raised areas close to food gathering areas are likely to be extremely archaeologically sensitive with the likelihood that sites found here would represent a wide range of activities (Godwin 1986).

The most extensive study of sites on Pleistocene sand dune substrate is that conducted by Rich (1994) at what is known as the Angels Beach Estate. The study recovered 40,000 shell and fragments, bone fragments, a piece of ochre and 9000 stone artefacts. The sites had originally been recorded by Godwin (1986) and others (Smith 1989) who concluded that the main focus of Aboriginal activity were the raised sand masses or lower slopes adjacent to the estuary and wetlands of North and Chickiba Creeks. They also suggested that sites in sand dunes at greater distances from immediate foreshores represented less intense activities (Godwin 1986:64-65). Studies by Kuskie (1991) Collins (1993) and Piper (1994 and 1997) in dunes south and south east of the Angels Beach Estate did not record any sites. However, all of these studies were hampered by poor surface visibility conditions. The Kuskie survey excavated 55 test pits/anger holes in three transacts across a hind dune west of the Ballina - Lennox Head coast road. Only one quartz blade was recovered. The lack of materials led Kuskie to agree with Cane and Nicholson's (1989) conclusion at Newrybar Swamp that sparse intermittent shell and stone artefact deposits represented sporadic short term random occupation of the sand dunes (Kuskie 1991: 11).

The Rich (1994) study at the Angels Beach Estate produced an artefact catalogue and raw material base consistent with that of other sites in the Lennox Head - Ballina area. Unretouched flakes, backed blades, and cores, were manufactured on chalcedonies, cherts and jaspers. Hammerstones, and flaked and bifacially flaked pebble tools were manufactured

chiefly on acid volcanic beach/river pebbles. Bone and shell fragments indicated a primary exploitation of estuarine shellfish and terrestrial animals in addition to fish. Rich concluded that evidence of spatial distribution of functions within the site e.g. meat butchering and tool fabrication, indicated the site was not representative of an itinerant nor random occupation, rather a base camp the focus of wider ranging activities (Rich 1994: 9).

6.1.3 Cumbalum-Newrybar dune field

At the eastern base of the hills comprising Cumbalum, Tintenbar and Knockrow, low north /south sand rises possibly of Pleistocene age form a natural barrier between the coastal hills and extensive swamps which are bound to the east by dune systems and hills of the modern shoreline. The sand rises of Newrybar and south to Sandy flat contain a number of artefact scatters.

Sites adjacent to former wetlands were located in the course of a study by Bonhomme (1988). This study extended 4.5km north of Ross Lane, with Newrybar Swamp to the east and coastal foothills to the west. The midden site (Site No: 04-5-0070) was described by Bonhomme (1988) as a very extensive site, spread over 100 m x 100 m. The site contained sub-surface midden material in a layer 10cm thick. One hundred and fifty artefacts were exposed on the surface. They consisted of broken grindstones, hammerstones, cores, and retouched flakes. The shell material was predominately pipi. Artefact raw materials were volcanic river pebbles, cherts and chalcedonies (Bonhomme 1988:29-30). Two open campsites recorded by Bonhomme (1988:25-28) were located south of the midden on the same dune and comprised low density stone artefact scatters. A sample of the artefactual material included cores, flakes and flaked pieces manufactured on cherts, chalcedonies, quartz crystals and a white stone of unknown lithology (Bonhomme 1988:25-28).

These sites were subsequently investigated by Cane and Nicholson (1989) in relation to an application for Consent to destroy the sites, prior to mineral sands extraction. One open site (04-5-0068) and the midden site (04-5-0070) were augured to determine their subsurface content, which was described as containing a low density of materials. In all, 138 artefacts

were collected from the three sites and the artefact content expanded to include backed blades and ochre. Cane and Nicholson (1989) concluded that the material was of a low density and appeared less significant than may have first appeared. They suggested that the sites were representative of a larger distribution of artefacts that extended throughout the dune complex in the Newrybar and Lennox Head area. The sites were assessed as representing 'dinner-time' camps associated with the activities of small groups ranging from North Creek. Alternatively, they suggest that the sites represent discarded materials at transit camps between non specific locations (Cane and Nicholson 1989:30-33). The sites were subject to Consent and Destroy orders on 28 December 1989. Sites where 'Consent to Destroy' has been determined are still retained on the Register of the Aboriginal Heritage Information Management System.

6.2 Department of Environment and Climate Change (DECC) Aborginal Heritage Information Management System (AHIMS) Register of Recorded Sites

A search of the register of recorded sites found that there were no registered AHIMS sites within the subject lands. The ecological context of recorded sites north of the Richmond River and west to Alstonville has been previously assessed by J. Collins (1996). She assessed 53 sites in the region for their environmental associations. The majority of sites (91%) were found to be located on sand dunes of Holocene or Pleistocene age. The remaining 9% of sites are based on sand/silt deposits edging the estuary (Collins 1996:16). There have been no recorded sites on the lower Richmond River flood plain beyond the present fringes of the estuary system. However the original extent of the sand/silt deposits may have been far more extensive than appear now. Due to clearing, drainage and filling what was originally potential estuarine campsite areas bordering waterways are now open floodplain. The original ecological context of the artefact scatter/ open campsite on Fishery Creek (#04-5-0211) may have been more the bank of an estuarine waterway than open floodplain as it appears now.

The sites register indicates approximately 63 registered sites between South Ballina/Patchs Beach north to Lennox Head and west to the coastal uplands of Cumbalum, Tintenbar and Knockrow. Of these 25 (39%) are shell middens, 26 (41%) are open campsites, and 3 (4%) are burials. Sites with multiple classifications include 6 (9.5%) open campsites/midden, 1

(1.5%) open campsite burial, 1 (1.5%) open campsite/midden/burial and 1 (1.5%) midden ceremonial (bora ground) site. The list of sites for the lower Richmond is, however, not complete. For example two burial sites (Site Nos: 4.5.0144 and 4.5.0145) in the vicinity of Patches Beach do not appear. Their inclusion would mean burials were 7% of the total of known sites in the region. The distribution of sites within the study area is indicated in Figure 12.

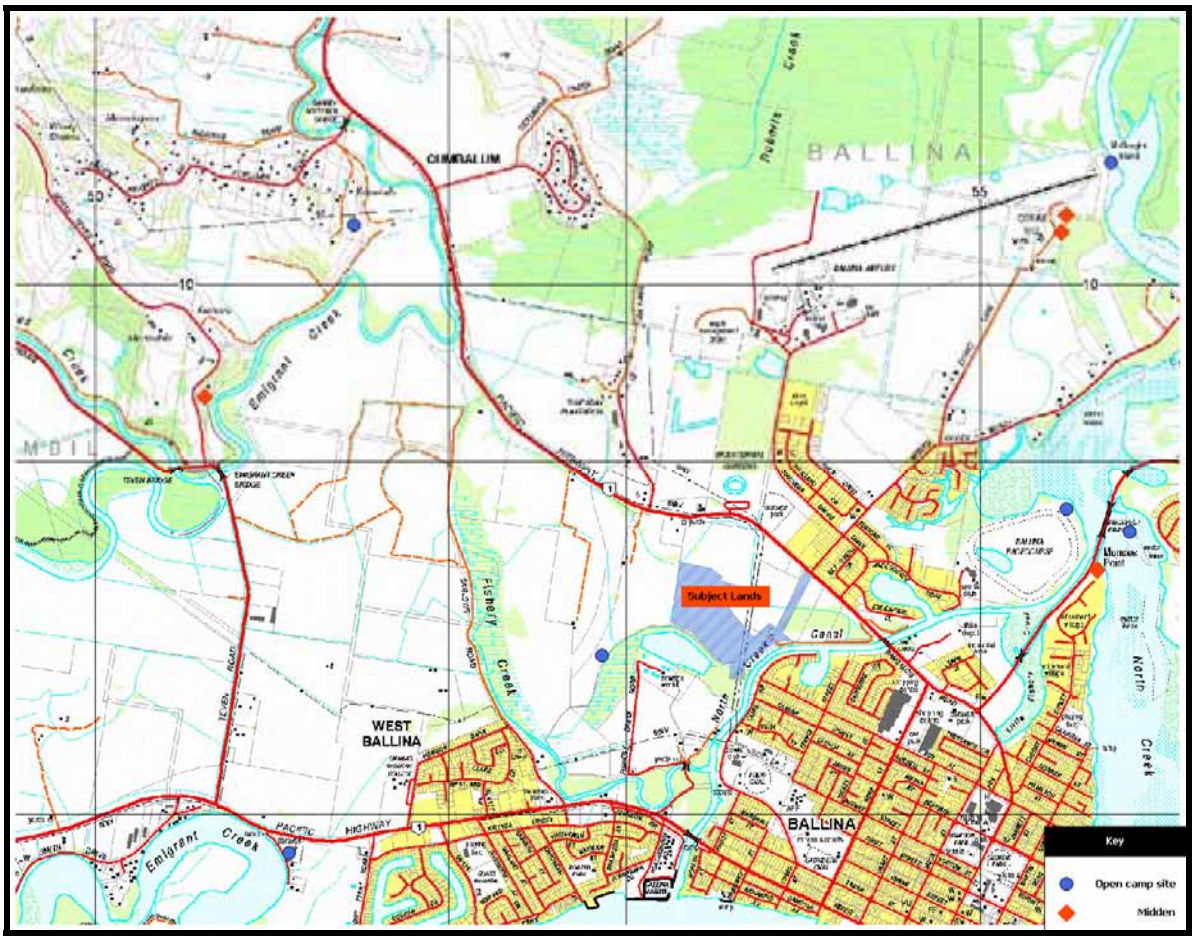

Figure 12 - DECC AHIMS sites in the vicinity of the Subject Lands

Shell middens dominate site types on the waterways of North Creek and Chickiba Creek. Here, middens dominated by oyster refuse form large mounds. Adjacent dune fields of east Ballina and Angels Beach carry a greater proportion of artefact scatters/open camp sites. Here, content is less dominated by shell and more by other materials, predominately stone. Coastline middens adjacent to beaches tend to be thin with linear profiles and dominated by pipi shell and/or cartrut shell where beach rock platforms are accessible. Sites contained in hind dunes of East Ballina/Angels Beach between the estuary and open beach may contain a combination of shell species from both estuarine and ocean beach sources.

Open campsites are the most common site type further inland. Surface studies over Pleistocene dunes at the base of the coastal uplands and west of the coastal wetlands by Bonhomme (1988), Cane and Nicholson (1989) at Newrybar and Robins (2007) at Sandy Flat and Cumbalum, suggest that extensive artefact scatters/open camp sites with research potential comprising predominantly stone artefacts may be contained within these inner barrier sand masses.

6.3 Archaeological Potential

On the basis of the results of previous archaeological assessments, the subject lands would appear to contain few of the attributes which would suggest it was a preferred campsite option. The subject lands are low and in their original situation no doubt subject to frequent flooding. Land clearing, the excavation of a drainage network and cultivation over these lands has significantly altered the natural topography creating a more level profile than was originally the case. Archaeological sites in the nature of *in situ* artefact scatters and shell scatters are unlikely to be found in this environment, while it is possible a background scatter of stone artefacts and shell debris without focal points of concentration may exist throughout the landscape.

Referring to the selection of campsites, Sullivan (1982) found that the essential determinant was the availability of fresh water. 77% of shell middens were found within 100 metres of a fresh water source. Given that prevailing winds blow from the south and south east, 89% of campsites lie between west and north-west of shelter. 70% were located behind headlands (Sullivan 1982:143-146). The subject lands would no doubt have contained sources of fresh

water although it was probably densely forested and too low lying to afford the type of sheltered conditions to which Sullivan refers.

The present known distribution of Aboriginal sites on the lower Richmond River floodplain indicates that sites with *in situ* (and possibly) consolidated archaeological deposit are rare. The Collins (1996) study found that 91% of sites were found on sand masses of Holocene or Pleistocene age and the remaining nine percent of sites are located on sand/silt substrate edging the estuary (Collins 1996: 16) A subsequent study (Robins and Piper 2005), located an artefact scatter on adjoining land 250 m to the south west of the subject lands. However whether the original ecological context of the site was estuarine sand/silt, swamp/waterway or floodplain as it now appears is problematical.

The destructive impacts of previous European land uses and prior natural events particularly the deposition of sediments through flooding are most likely to have had a highly destructive impact upon the 'survivability' of Aboriginal sites and the capacity of surface inspections to detect them in what are generally poor visibility conditions. However two field inspections over the adjoining 24 ha of low lying land to the north extending to the Pacific Highway, with relatively extensive surface visibility conditions (17.5%) found no evidence of archaeological sites (Robins 2007: 31). The surface conditions in the current study area are virtually identical without the level of available surface area possible to inspect. There are no old growth trees that could contain Aboriginal tree scars. There are no stone outcrops therefore quarry sites are not possible. Above ground structures that could delineate a ceremonial area are not possible. For the above reasons the archaeological potential of the study area can be expected to be low.

6.4 Potential Aboriginal Archaeological Sites

The following site types have a potential to occur in the Subject Lands: isolated artefacts, artefact scatters/open campsites, middens and scarred trees.

6.4.1 Isolated artefacts

These will consist of single stone artefacts, which may have been randomly discarded or lost. They may occur in almost any environmental context exploited by Aboriginal people. They are commonly stone axes, single cores, hammer stones, bevelled pounders, pebbles and flakes. Their presence may indicate that more extensive scatters of stone artefacts exist or existed nearby, perhaps obscured by vegetation or dispersed by mechanical means. Predicting isolated finds is impossible; their detection in the dense ground cover of most of the subject lands is unlikely unless exposed in the banks of drainage channels.

6.4.2 Artefact scatters/open campsites

Artefact scatters consist of scatters of stone artefacts and possibly bone, remnants of hearths. Their exposure to the elements means that evidence of food resources used on the site (with the exception of shellfish) is usually lacking. In the Ballina area open campsites are invariably found in elevated positions adjacent to creeks or wetlands. An open campsite containing a large component of shell refuse may be described as a midden. They invariably consist of low or high density scatters of flakes in addition to the types of artefacts found as isolated finds. Open campsites may contain burials when located on sand strata.

6.4.3 Middens

Middens are campsites which are dominated by shellfish remains. Middens are usually situated near a source of shellfish and comprise predominantly, mature oyster, pipi, whelk, cockle and cartrut species in addition to terrestrial animal and fish bone, stone artefacts, charcoal and ash from fireplaces. Human burials have been associated with a number of middens between the Tweed and Richmond Rivers (Barz 1980; Bailey 1972; Lourandos 1979).

Middens may be composed of deep compacted debris reflecting consistent use over long periods of time, or thin scatters of shell which reflect use on a single occasion by a small group, perhaps in transit or gathering food away from a large campsite. All recorded middens have been located in elevated positions beside estuarine waterways or on elevated sand

substrates close to wetlands. The dominant species found in estuarine middens is oyster, while locations away from the waterways contain pipi or combinations of estuarine, open beach and rock platform species. To date no shell middens have been identified on basalt soil uplands. A low potential applies for the presence of shell middens in the subject lands.

6.4.4 Scarred trees

The majority of scarred trees on the North Coast of NSW result from the removal of bark for use as covering, shields, containers or canoes. As an outcome of widespread intensive land clearing and natural causes, only one scarred tree has been discovered in the wider study locality. This tree (Bel-1, N.P.W.S. registration number unknown) carries a single oval scar around 1m long and 30cm wide and standing on a flat adjacent to wetland bordering Belongil Creek at Byron Bay. The tree species has not been reported (Envirosciences 1994). There are old growth mangrove in the south east corner of the Subject Lands therefore a potential exists for scarred trees.

7. FIELD INSPECTION

A search of the DECC AHIMS register of Aboriginal sites found that there were no recorded sites within the subject lands. However as the subject lands are c. 2-3 km west of the known concentration of sites on the North Creek/Chickiba Creek systems, c. 250 m north east of sites on Fishery Creek the possibility of sites being found in the subject lands required field assessment.

7.1 Methods

7.1.1 Aboriginal Cultural Heritage

The field inspection was conducted on foot by the Everick Heritage Consultants Archaeologists, Aboriginal stakeholder respondents Doug Anderson and Darren Anderson, Jali Sites Officer Marcus Ferguson on 3rd December 2007. Exposed surface areas were

examined for possible scatters of shell and stone artefacts. Exposed surface areas were restricted to the banks of the north/south drain on the western boundary, the east west drain that crosses the approximate centre of the land, a small dam and the tidal mud flat in the south east. The mangrove trees in the mud flat were inspected for tree scars of Aboriginal origin.

Photographs were taken as a record of general features and conditions, to indicate the degree of surface visibility and the content of any sites found. Notes were made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features. An over-view of surface conditions and site detection conditions is given in Sections 7.2 and 7.3. An indication of areas searched and areas of surface visibility is given in Figure 13. The field inspection was a sampling assessment of all exposed surfaces. If archaeological sites were located, they would be photographed, the characteristics of their contents recorded and the location fixed by GPS using WSG 84 datum.

Figure 13 - Areas of Subject Land investigated

7.1.2 Non-Indigenous Cultural Heritage

A search was made of the *Ballina Shire Council Local Environment Plan 1987 (19th October 2007 Edition)* Schedule 1 to ascertain whether any buildings, vegetation or any other features of cultural heritage value were within the subject lands. Item 29 contains general Lot scale references to 23 Aboriginal sites none of which are located within the subject lands (Ballina LEP 1987:59).

A search of the NSW State Heritage Register Section 1, items (-s136) listed under the ***Heritage Act 1977*** **(NSW)** found no heritage items in the Subject Lands. Section 2 (-s 170) items listed by Local Government and State Agencies lists 10 items including one Aboriginal site in the Ballina Local Government Area. The site on Duck Creek in the Alstonville area is described as a significant Aboriginal fishing and camp site. The site details state that the site has not been found by either the Land Council or NSW Department of Agriculture staff.

A search was made of the Commonwealth Governments Department of Environment and Water Resources ***Register of the National Estate***. There were no sites within the Subject Lands on this register. The field inspection also sought evidence of objects, structures and feature that might be of European cultural importance.

7.2 Constraints to Site Detection- archaeological sites

The constraints to site detection are influenced by previous European land uses, the area of surface exposure, the degree of surface visibility, current land uses and natural and accelerated (man made) erosion, aggradations' and inundation by sediments (McDonald, Isbell, Speight 1990:92-96). The main landform element within the subject lands is floodplain that includes a small (0.5 ha) mudflat that supports several old growth mangrove trees. The following is a summary of surface conditions.

Floodplain: Grassed throughout with the exception of exposed faces on drainage channels. Surface exposure: 5%. Surface visibility: 70%. Type: Mechanical excavation.
Tidal mudflats: Vegetated with mangrove, inspected for tree scars.

7.3 Survey Coverage

Table 1 indicates the extent to which survey data provides sufficient evidence for an evaluation of the distribution of archaeological evidence across the study area. An evaluation of survey coverage provides an approximate measure of the potential for the landform unit and or its sub element to reveal archaeological evidence. This method is the preferred method outlined in N.S.W. N.P.W.S. Aboriginal Cultural Heritage Guidelines for Archaeological Survey Reporting, Appendix 4:44 - 48. The figures in Table 1 do not provide an exact percentage of ground areas but a reasonable estimate.

Table 1 - Survey Coverage

LANDFORM ELEMENT	AREA (ha)	EXPOSURE %	AREA OF EXPOSURE (ha)	VISIBILITY %	AREA FOR SITE DETECTION (ha)	% OF LF FOR SITE DETECTION
FLOODPLAIN	17	10	1.7	40	0.7	4.0

Approximate area for site detection: 0.07 ha (4%)

7.4 Results

7.4.1 Cultural Heritage Assessment

Consultation on site and field inspection with Aboriginal stakeholder respondents Doug and Darren Anderson established that they were not concerned that any cultural heritage sites or values would be destructively impacted by the proposed works on the Subject Lands. Their written view is contained in Appendix A. The written response from Jali LALC points out its cultural heritage responsibilities over the Subject Land and concurs with the findings and recommendations of this report (Appendix C).

7.4.2 Archaeological Assessment

There were no archaeological sites found or areas considered to be potentially archaeologically significant on the subject lands. Inspection of the exposed banks of the excavated drain which will form the western margin of the proposed drainage swale and where future ground disturbance can be expected to be greatest found no trace of shell or stone artefacts that may indicate concealed sites in the north south course (c. 300 m) of the proposed drainage swale. The west/east course (c. 500 m) of the drainage swale will be excavated from fill gained from the construction of the Ballina Sewage Works immediately to the south.

7.4.3 European Heritage Assessment

The field inspection and reference to the Ballina Shire Council Local Environmental Plan 1987 (as amended 2007) Schedule 1 and reference to other registers of Aboriginal and European heritage items found no items of European or Indigenous heritage were identified within the subject lands.

No applications arising from this report for consents pursuant to Part 6 of the N*ational Parks and Wildlife Act 1974* (NSW) are warranted.

6. RECOMMENDATIONS

The following recommendations are based upon the results of:

- The Aboriginal community consultation process undertaken under the DECC ICCR Guidelines resulted in responses from the Jali LALC and Ms. Sue and Mr. Doug Anderson. Representatives of the Aboriginal Stakeholder Respondents participated in the field inspection.

- The desktop review including an overview of previous archaeological reports and a

search of the DECC AHIMS sites register and searches of other European and Aboriginal cultural heritage registers (see Section 7.1.2).

- The results of a field inspection on December 3rd, 2007 of the subject lands.

As no sites or areas of cultural heritage significance have been identified in the Subject Lands and there are no cultural heritage issues to be addressed arising from Aboriginal Community Consultation, there are no recommendations concerning the management of specific sites.

The following recommendations are cautionary.

Recommendation 1

Prior to any earthworks contractors be advised of the statutory requirements of the *National Parks and Wildlife Act 1974* (NSW) that in regard to Aboriginal sites or relics: it is an offence to knowingly disturb, deface, damage or destroy, or to permit the disturbance, defacement, damage or destruction of a relic without first obtaining written consent to do so from the Director General of the DECC.

Recommendation 2

The consultants recommend that if in the process of works in the construction of the drainage swale and proposed Link Road if at any time it is believed materials of an Aboriginal origin are found, works at the location must stop immediately. The DECC Regional Office - Coffs Harbour, Jali LALC and Mr. Doug and Ms. Sue Anderson must be advised and advice sought as to the most appropriate course of action to follow. Jali LALC may also wish to inform other Traditional Owner respondents and seek their views as to how best to mitigate potential impacts. The location and the materials must be fenced from the remainder of the Works until they have been identified by qualified persons and management strategies agreed upon. Works must not proceed in the specific location of the cultural heritage materials without written consent of the DECC, Jali LALC, and Mr. Doug and Ms. Sue Anderson.

If the above recommendations are adhered to there are no further cultural heritage constraints to the proposed construction of the drainage swale and link road.

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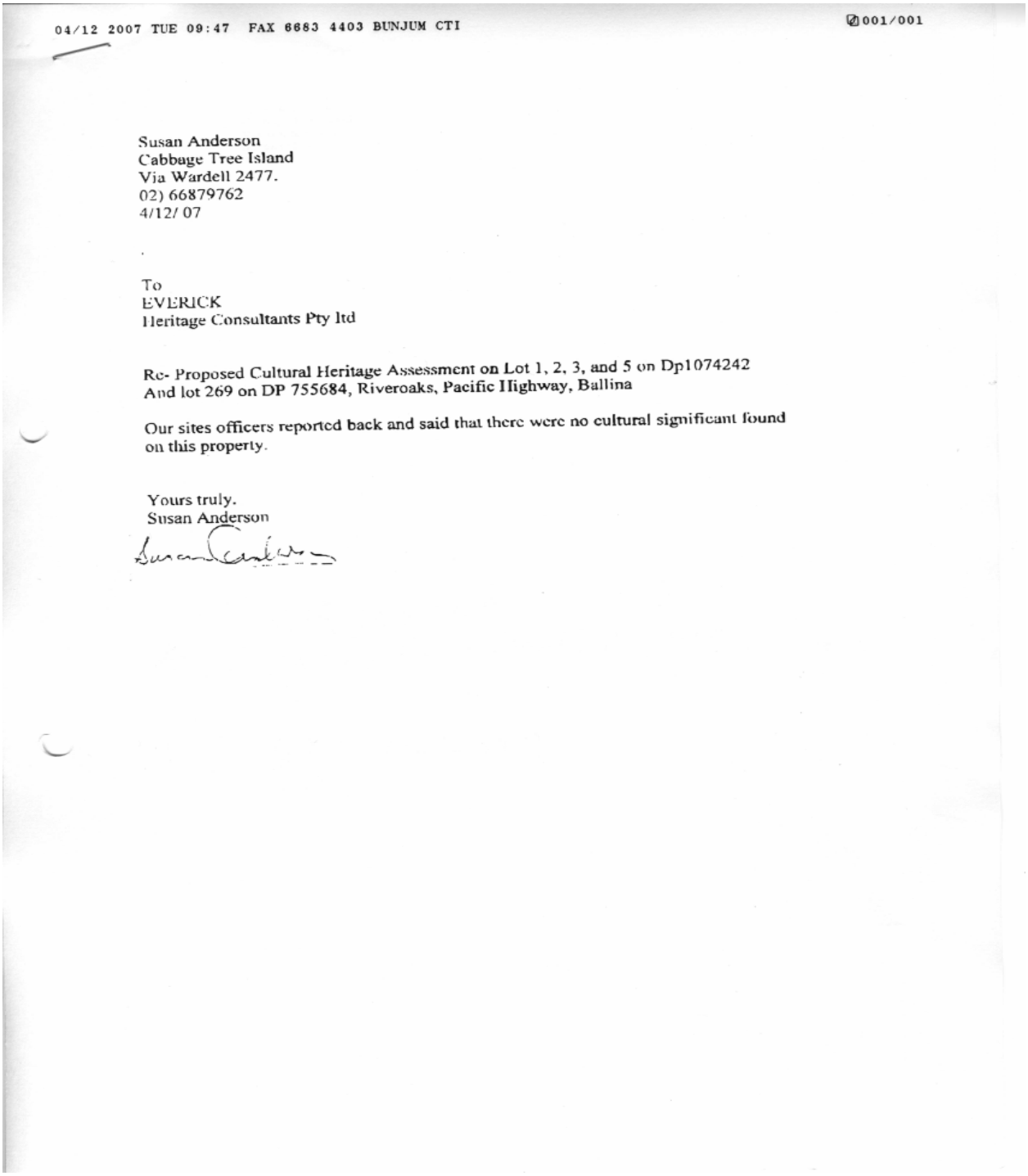
APPENDIX A – RESPONSES FROM TRADITIONAL OWNERS



04/12 2007 TUE 09:47 FAX 6683 4403 BUNJUM CTI 001/001

Susan Anderson
Cabbage Tree Island
Via Wardell 2477.
02) 66879762
4/12/ 07

To
EVERICK
Heritage Consultants Pty ltd

Re- Proposed Cultural Heritage Assessment on Lot 1, 2, 3, and 5 on Dp1074242
And lot 269 on DP 755684, Riveroaks, Pacific Highway, Ballina

Our sites officers reported back and said that there were no cultural significant found on this property.

Yours truly.
Susan Anderson

APPENDIX B – ADVERTISEMENT, NORTHERN STAR – 9/11/07

Aboriginal Cultural Heritage and Archaeological Study

Registration of Interest in being Consulted

What's happening?

Everick Cultural Heritage Pty Ltd ABN 78 102 206 682, on behalf the proponent, Rayshield Pty Ltd, are seeking to consult with Aboriginal persons with an interest in the land where a housing development is to be built on:

Riveroaks, Pacific Highway, Ballina (Identified on Lots 1, 2, 3 and 5 on DP 1074242 and Lot 269 on DP 755684)

As part of this development, Everick Cultural Heritage will be conducting a cultural heritage Assessment of the site, which may result in the proponent making an application for approvals under Part 6 of the National Parks and Wildlife Act 1974.

What do you need to do?

The Aboriginal community is invited to register their interest in writing with:

Everick Cultural Heritage
PO Box 146
RED HILL QLD 4059

When must registration be received?

Registration must be received by 23 November 2007

APPENDIX C – JALI LALC LETTER DATED 18TH JANUARY 2008

JALI Local Aboriginal Land Council

4/48 Tamar Street
P.O. Box 1677
BALLINA NSW 2478

Telephone: (02) 66 867 055
Fax: (02) 66 868 255

Ref: J034

18th January 2008-01-18

Dear Adrian

Re: Riveroaks – Pacific Highway via Ballina.
Lot 2- DP 1074242 and Lot 269 – DP 755684

The Jali LALC has reviewed the report on the Riveroaks via Ballina on Lot 2 and Lot 269 conducted by Everick Heritage Consultants.

The Jali Local Aboriginal Land Council concurs with your findings and recommendations contained in the report.

The NSW Aboriginal Land Council has designated Local Aboriginal Land Council boundaries based on traditional parish boundaries. Jali Local Aboriginal Land Council is the incorporated body responsible for Aboriginal issues within the survey area.

It is a role of Jali LALC to minimize the risk, damage or destruction to heritage sites and limit the environmental impact within our boundaries.

Please note however should there be any alterations to the proposal in the report Jali LALC expects that these proposed changes be formally communicated with us for our assessment and comment.

Should any archaeological artefacts on the proposed sites be uncovered as a result of this project then we require that works immediately cease and an assessment of the area is undertaken.

I am contactable on 66867055 or on 0438668344 should you require further correspondence.

Yours sincerely

Veronica Williams
Acting CEO