

CULTURAL HERITAGE ASSESSMENT

LOT 156 CREEK STREET HASTINGS POINT, NSW



REPORT PREPARED FOR WALTER ELLIOT HOLDINGS PTY LTD



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EXECUTIVE SUMMARY

The following report presents the results and outcomes of an archaeological assessment at Creek Street Hastings Point. The Subject Lands are identified as Lot 156 DP 628026, Parish: Cudgen, County of Rous in the Tweed Shire local government area. The area is 17.77ha. Zonings include 2(E) Residential Tourist and 7(A) Environmental Protection (Wetlands and Littoral Rainforests). The Proponent, Walter Elliot Holdings Pty Ltd proposes to make Application to the NSW Department of Planning for a concept plan for a subdivision containing both residential and tourist components.

This project was granted Part 3A Major Works Project status by the NSW Department of Planning in mid 2008. As part of the conditions of approval, the proponents are required to consult with the Aboriginal community in accordance with the DECCW guidelines: *"Interim Community Consultation Requirements for Applicants"* (2005). Accordingly, advertisements were placed in the Tweed Daily News on the 4th, 6th and 7th of October 2008. Jackie McDonald, Jason McDonald, Adam Mazzarella and Joyce Summers responded to the Ads and registered their interest.

In discussions with Traditional Owners in the region, it is apparent that significant strain is being placed on the local Aboriginal community by the large number of developments being undertaken in the region. The sheer volume of reports and meetings combined with a lack of resources provided to the community are repeatedly cited as reasons for reduced participation from the community.

Everick is committed to identifying the opinions of the Aboriginal community and providing the opportunity to participate in this assessment as fully as possible. Copies of this report have been forwarded to Traditional Owners who are regarded within the Aboriginal community as being able to 'speak for country'. Lesley Mye of the Tweed Shire Council has tabled this report with the Tweed Shire Council Aboriginal Advisory Committee on 7 November 2008 and several Traditional Owners attended a Community meeting held on 8 November 2008. During this meeting the attendees were provided an opportunity to inspect the site with Everick's archaeologists and discuss future recommendations. Comments received to date indicate that Traditional Owners are satisfied with the recommendations made in this report.

Section 3 of this report outlines the broad environmental features of the Subject Lands, which is a narrow section of inter-barrier creek floodplain bounded by estuarine swamp to the west and north west and residential/tourist park to the east and north east. It is important to note that the existing lagoon provided fill material which has been spread and levelled over the Subject Lands during the 1970s and/or 1980s. To what depth and how extensively the fill material has been spread over the proposed development site remains uncertain, however 0-0.5 metres of fill is probably a reasonable estimate.



Prior to the infilling that has taken place a significant proportion of the Subject Lands was subject to inundation during high tides and periodic flood events. It appears doubtful if any of the land proposed for residential/tourist development is original surface.

Section 4 presents a review of literature sources relevant to the Aboriginal people of the Tweed Coast region that may provide insights into the environment, land use practices, material culture and ceremonial life, which can provide a context for predictive statements relating to the archaeological assessment.

The review of previous archaeological assessments (Section 6.1) and the review of the DECCW AHIMS (Section 6.2) indicate that there are recorded Aboriginal sites as near as 250 metres to the Subject Lands, although not within the Subject Lands. Sites within the search area include ceremonial areas, middens, open campsites, quarries, a workshop and isolated artefacts. A predictive model based upon the literature review and mindful of the highly disturbed nature of the Subject Lands concludes that there is only a low potential for Aboriginal sites that would be middens, open campsites and isolated artefacts.

The field inspection (Section 7) was carried out with the assistance of the Sites Officer of the Tweed Byron LALC. While the Sites Officer and the Land Council are aware of the numbers and types of Aboriginal sites in this coastal region, there was no knowledge of specific sites within the Subject Lands or parts of the Subject Lands which the Land Council considered culturally significant. The assessment was carried out by the Tweed Byron LALC Sites Officer and the consultant on 6 February 2007.

The field inspection was conducted on foot. The field inspection covered all available sand exposures on the Subject Lands. Grass cover was short and due to the dry conditions an extensive area of the property had sand exposures, where a high degree of surface visibility allowed effective visual inspection. The approximate total area for site detection in the proposed development area was 9.9(ha) or 54% (excluding Environmental Protection Zones – tidal sand/mudflats). This is considered to be an adequate sample on which to base a conclusion as to an absence of Aboriginal sites in the Subject Lands.

The results of the archaeological assessment are:

No Aboriginal sites or relics were found as a result of the field inspection of Lot 156 DP 628026 at Creek Street Hastings Point.

The Tweed Byron LALC is of the view that there are no areas of cultural significance to the Land Council in the Subject Lands (Appendix A).



The following recommendations are cautionary in nature and follow consultation with the Traditional Owners for the land.

Recommendation 1: Aboriginal Human Remains

It is recommended that if human remains are located at any stage during construction works within the Subject Lands, all works must halt in the immediate area to prevent any further impacts to the remains. The Site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Tweed Byron LALC, and the DECCW Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the site for criminal activities, the Aboriginal community and the DECCW should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations.

It is also recommended that in all dealings with Aboriginal human remains, the proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.

Recommendation 2: Aboriginal Cultural Material

It is recommended that contractors engaged for the development, construction and rehabilitation of surrounding vegetation at the proposed Creek Street Hastings Point-Residential Development be advised that under the terms of the *National Parks and Wildlife Act 1974 (NSW)* it is an offence for any person to knowingly destroy, deface or damage or permit the destruction, defacement or damage to a relic or Aboriginal place without first obtaining the written consent of the Director General of the Department of Environment, Climate Change and Water (DECCW).

It is recommended that if it is suspected that Aboriginal material has been uncovered as a result of development activities within the Subject Lands:

- (a) work in the surrounding area is to stop immediately;
- (b) a temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site;
- (c) an appropriately qualified archaeological consultant is to be engaged to identify the material;



- (d) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the DECCW guidelines: "*Interim Community Consultation Requirements for Applicants*" (2005); and
- (e) an appropriate 'keeping place' is to be identified in accordance with the wishes of the Aboriginal community.

Recommendation 3: Notifying the DECCW

It is recommended that if Aboriginal cultural material is uncovered as a result of development activities within the Subject Lands, they are to be registered as Sites in the Aboriginal Heritage Information Management System (AHIMS) managed by the DECCW. Any management outcomes for the site will be included in the information provided to the AHIMS.

Recommendation 4: Conservation Principles

It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the proponent and the Aboriginal Community.

1. INTRODUCTION

1.1 Locality

The following report presents the results and outcomes of an archaeological assessment at Creek Street Hastings Point in coastal north eastern NSW. The Subject Lands are accessed via the Tweed Coast Road at the northern approaches to the Cudgera Creek Bridge (Figure 1).



Figure 1 – Subject Lands Locality

1.2 Property Description

The Subject Lands are identified as Lot 156 DP 628026, Parish: Cudgen, County of Rous. Area is 17.77ha. Zonings include 2(E) Residential Tourist and 7(A) Environmental Protection (Wetlands and Littoral Rainforests) (Figure 2).

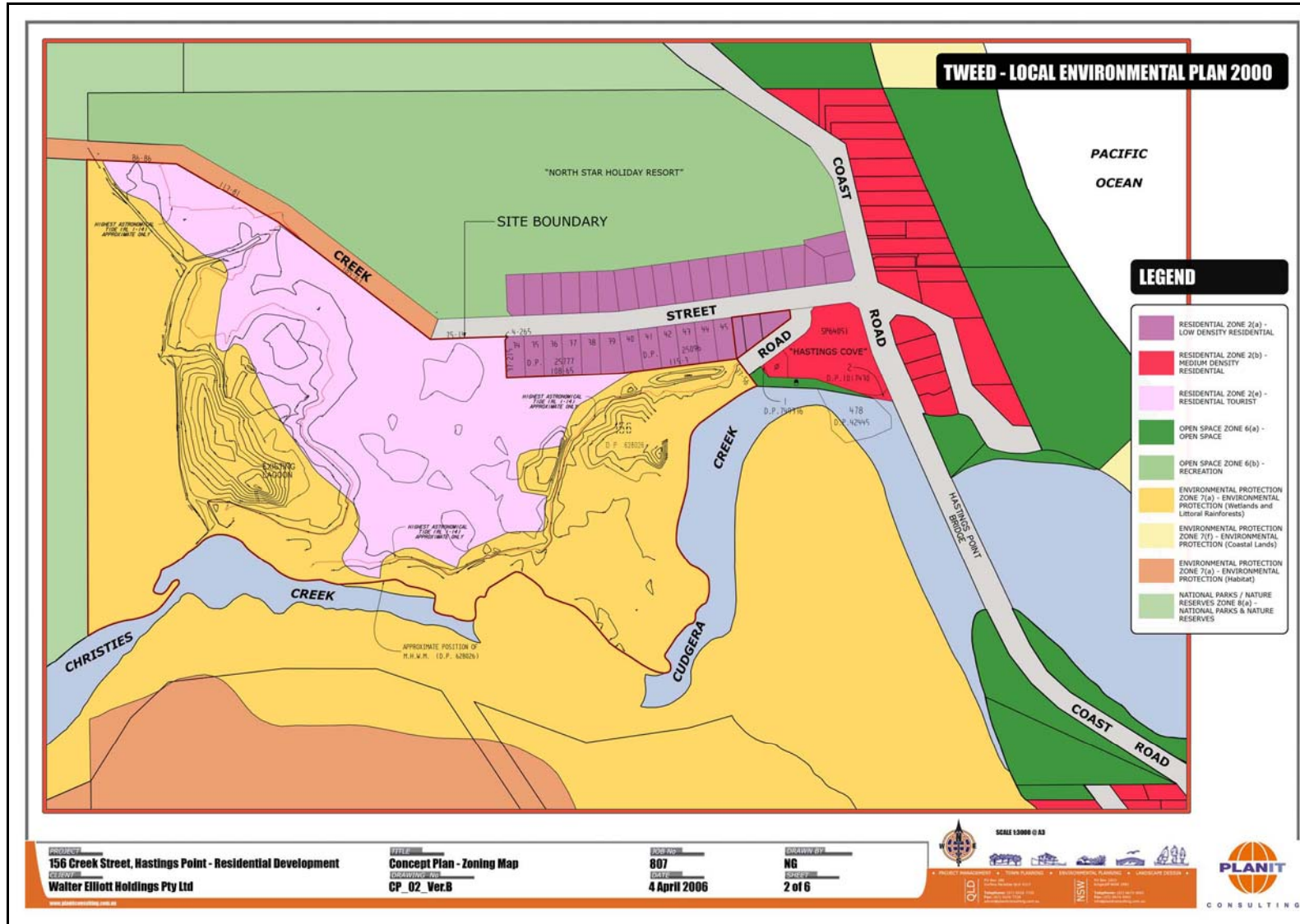


Figure 2 – Tweed Shire Local Environment Plan 2000

1.3 Development Proposal

The Proponent Walter Elliot Holdings Pty Ltd proposes to make application for a concept plan for a subdivision containing both residential and tourist components. The proposal comprises 39 residential (2.1947Ha) (including two integrated allotments) and two tourist allotments (0.333Ha). The remainder of the site is proposed to be dedicated to public open space and roads (15.246Ha). The total site area being 17.77Ha (Figures 3 and 4).



Figure 3 - Aerial Photograph of Subject Lands



2. ABORIGINAL COMMUNITY CONSULTATION

2.1 Traditional Owner Knowledge

The Traditional Owners are the primary determinates of the significance of any Aboriginal objects or places. The Traditional Owners have been consulted in regard to their concerns not only about archaeological sites, but other cultural values such as historic and spiritual significance, and values relating to flora and fauna of the area.

2.2 Initial Site Assessment by Cyril Scott (Tweed Byron LALC)

The Creek Street Subject Lands are within the area administered by the Tweed Byron Local Aboriginal Land Council. An initial site assessment was carried out by the Tweed Byron LALC Sites Officer and the consultant on 6 February 2007. It was agreed Sites Officer, Mr. Cyril Scott, would represent the Land Council's interests as per its usual procedures. While the Sites Officer and the Land Council are aware of the numbers and types of Aboriginal sites in this coastal region there was no specific knowledge of sites within the Subject Lands or parts of the Subject Lands which the Land Council considered culturally significant. The views of the Tweed Byron LALC on the conduct and outcomes of this report are contained in Appendix A of this report.

2.3 The Consultation Process

A consultation process with the Aboriginal community has been undertaken in accordance with the DECCW guidelines: *"Interim Community Consultation Requirements for Applicants"* (2005). Accordingly, advertisements were placed in the Tweed Daily News on the 4th, 6th and 7th of October 2008. The following authorities and Aboriginal parties were notified in writing on 7 October 2008 that Everick was undertaking a cultural heritage assessment of the property identified as Lot 156 on DP 628026 and Lots 10 and 11 on DP 24564 (Lot 156 Creek Street) Hastings Point:

Tweed Byron Local Aboriginal Land Council
New South Wales Native Title Services
Cultural Heritage Unit of the DECCW
The Tweed Shire Council
Jackie McDonald

In response to the notices above, Jackie McDonald, Jason McDonald, Adam Mazzarella and Joyce Summers registered their interests on 27 October 2008.

A copy of the ***Draft Archaeological Assessment for Lot 156 Creek Street, Hastings Point, North Coast NSW*** was subsequently forwarded on 23rd and 30th of October 2008 to the following parties, who are known to hold Traditional Knowledge for the region:

- Kyle Slabb (TBLALC)
- Jackie McDonald
- Jason McDonald
- Jamie McDonald
- Adam Mazzarella
- Peter Buxton
- Paul Buxton
- Lesley Mye
- Joyce Summers
- Deirdre Currie

In a letter accompanying the Draft Archaeological Assessment, Everick requested that they contact us and provide any comments they may have concerning the Assessment. Lesley Mye of the Tweed Shire Council has written to Everick discussing the need for identifying an appropriate 'keeping place' for cultural material. This has been incorporated into the recommendations in this report (Recommendation 2(e)). Ms Mye also tabled the Creek Street Archaeological Assessment at the Aboriginal Advisory Committee meeting held on Friday 7 November 2008.

An on-site background information meeting was held on 8 November 2008. All registered Aboriginal participants were invited to this meeting, along with others nominated by the registered participants as being potential interested persons who can speak for country. Attendees at the meeting were Traditional Owners Joyce Summers, Jackie McDonald, Kyle Slabb (Tweed Byron LALC), Cyril Scott (Tweed Byron LALC), Glenda Nalder (Gold Coast Native Title Group), Dr Richard Robins and Adrian Piper of Everick Heritage Consultants. Apologies were received from Lesley Mye (Tweed Byron LALC), Carol Dawney and Des Williams.

During this meeting an updated report produced by Everick entitled ***Draft Cultural Heritage Assessment for Lot 156 Creek Street, Hastings Point, North Coast NSW*** was distributed by Dr Richard Robins in both hard copy and on CD. Additional copies were provided to meeting participants so that they could distribute them to any other interested persons at a later date. The report was subsequently mailed to Russell Logan, Carol Dawney, Des Williams and Lesley Mye who could not attend the meeting. Minutes from the meeting are attached as Appendix B. At the time of publishing this report no additional comments have been received from the Aboriginal community.

3. ENVIRONMENT

The Subject Lands is a narrow section of filled inter-barrier creek floodplain bounded by estuarine swamp conditions to the west and north west and residential/tourist park to the east and north east. Soils in their original context would be a mixture of alluvium and aeolian sands of Pleistocene and Holocene origin. Relief is low (<2m) and slope <1%. The elevated sand-based land is extensively cleared carrying regrowth paperbark (*Melaleuca quin quernivia*), swamp oak (*Casuarina glauca*) and tuckeroo (*Cupaniopsis anacardioides*). The creek banks and swamps of Christies Creek are dominated by mangrove (Figures 5-9).



Figure 5 - View south-east from the western boundary



Figure 6 - View north across the proposed residential area



Figure 7 - View south-west over lagoon from which sand has been extracted to fill the development site



Figure 8 – View north over proposed tourist precinct



Figure 9 – View north-west at the southeast boundary, formed sand mounds

3.1 Previous land uses

3.1.1 Review of Historic Aerial Photography

Aerial photographs from 1944, 1962, 1970, 1993 and 2007 were reviewed for evidence of past ground disturbance and to aid in developing a predictive model of potential sites. As can be seen in Figure 10, much of the south of the site is low-lying wetland/swamp. To the north-west also lies wetland area with clusters of vegetation on higher areas. The centre north contains a small track running from east to west. Little change is evident between the 1944 aerial photograph and the 1962 aerial photograph (Figure 11). The ephemeral creek system on the western portion of the block is more pronounced and may be semi-permanent.



Figure 10 - 1944 Aerial photograph of the Subject Lands



Figure 11 – 1962 Aerial photograph of the Subject Lands

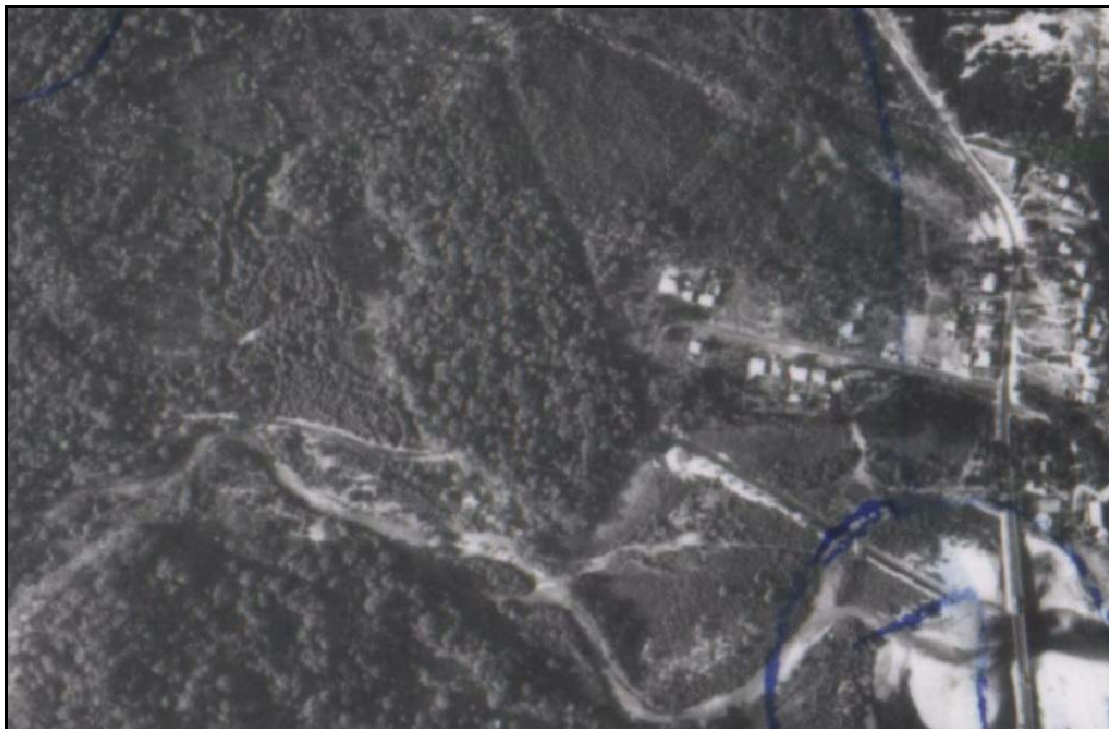


Figure 12 – 1970 Aerial photograph of the Subject Lands

Although the photograph is of poor quality, clearly evident in the 1970 aerial is dense re-growth in the central and western portion of the Subject Lands (Figure 12). The south eastern portion has been cleared, and is covered in grass. In the western portion some fill or levelling looks to have taken place that has restricted the flow of the creek north. This action has likely caused significant disturbance to any cultural heritage that may have been located in this area. Part of the small wetland area and ephemeral creek system within the western portion of the site has been filled. As a result of this the creek now runs along a more defined route through the south of the Subject Lands.

The 1993 aerial shows that most if not all of the development area within the Subject Lands has been impacted by extensive clearing (Figure 13). The northern portion of the Subject Lands has been filled and levelled. The creek line running along the southern boundary of the Subject Lands is more clearly defined highlighting fill on its northern edges. The far north-west corner has been cleared of original vegetation/regrowth. The ephemeral creek system in the north-west of the property evident in the 1962 aerial photograph has been filled and now only consists of a series of small drainage lines. A large pond from which sand has been extracted to fill the Subject Lands can be seen on the western edge.



Figure 13 - 1993 Aerial photograph of the Subject Lands



Figure 14 - 2007 Aerial photograph of the Subject Lands

3.1.2 Evidence of past land use visible during the inspection

A feature of interest is an estuarine lagoon of approximately 2.0ha between Christies Creek and the elevated sand plain connected by a mechanically excavated drain. The lagoon was formed as a result of the excavation of fill material which has been spread and levelled over the Subject Lands during the 1970s and or 1980s. To what depth and how extensively the fill material has been spread over the proposed development site is uncertain but 0-0.5 metres of fill is probably a reasonable estimate. Artificial mounds of sand have been placed between the adjoining residences (Lots 39-45) in Creek Street and the tidal flats of Cudgera Creek and also on the southern boundary of the proposed resort development on the margins of the tidal mud flats. Prior to the infilling that has taken place the Subject Lands, or a significant proportion of it, was inundated during high tides and periodic flood events. It appears doubtful if any of the land proposed for residential/tourist development is original surface.

4. CULTURAL CONTEXT

The following are some of the features of Aboriginal society and economy that prevailed in the vicinity of the Subject Lands around the time of the European contact period. The review of literature sources relevant to the Tweed Coast region may provide insights into the environment, land use practices, material culture and ceremonial life, which can provide a context for predictive statements relating to the archaeological assessment.

4.1 Territories and Movement

The Aboriginal people of the coastal Tweed-Brunswick Rivers were associated with a wider linguistic group the Bunjalung, which was spoken with dialect differences between the Clarence and Logan Rivers and extending possibly as far west as Tenterfield. Land belonged to clan groups whose boundaries had been established in mythology (Creamer 1984). Dialect groups composed of interlinked clan/family groups occupied distinct areas within the wider Bunjalung association (Crowley 1978). Curr provides some evidence for this model suggesting that dialects between the Albert River and Tweed River were closely related (Curr 1887:321). Tindale recognised a similar common language group extending north-south between Byron Bay and Southport and west to Murwillumbah, which he called Minjanbal (Tindale 1940:191). Tindale's Minjanbal language group possibly contained two main land holding clans, the Kombemerri north of the Tweed River and the Coodjimbingurra south of the Tweed River.

Joshua Bray a postmaster, and 'Protector of Aborigines' defines the Coodjimbingurra territory as, '... the part along the coast between the Tweed and Brunswick rivers, about ten miles back from the coast....' (Bray 1901:9). The word for Bray's 'tribe' is ku-ging corrupted to modern Cudgen. 'This was the place where the blacks get the red raddle or pigment to paint themselves with when going fighting or to corroboree....' (Bray 1990:10). The hills where the 'red raddle' was procured are immediately to the west of the Kingscliff 12km north of Hastings Point. The Kombemerri land north of Tweed River, Bray describes as belonging to a 'tribe' called Moorung Moobar, '... who had all north of the Tweed to the McPhersons Range....'(Bray 1901:9).

Population estimates for the Tweed Valley and coast have been based upon general reports to government authorities and on estimates from specific sightings. In the mid-1800's Commissioner of Crown Lands Simpson, estimated the population between Point Danger and Fraser Island at not less than 5000 (Simpson 1844:484-486). Bray, from near his residence at Kynnumboon observed 600 people camped on the Wollumbin Plain west of Murwillumbah in the 1860's (Bray 1901). A party of 200 men armed with spears had been observed by John Oxley's party on Fingal Head in 1823 (Uniake

1825:40). Pierce suggested that this gathering of men would indicate a population of about 500 for the Tweed District and a population density between the Tweed and Brunswick Rivers and inland for some miles, '... of about three per square mile (Pierce 1971:13).

Models to describe possible patterns of settlement and movement in the North Coast region vary considerably. One suggests that clan groups ranged between the seacoast and foothills of the coastal ranges on a seasonal basis (McBryde 1974). Early sources support this view to some extent as there are records describing the movement of inland groups of the Clarence River to the coast during winter (McFarlane 1934; Dawson 1935:25). A second model suggests that movement of coastal people was not frequent, and that semi-sedentary groups moved north and south within the coastal plain rather than to the upper rivers (Coleman 1982). The model is based upon reports of numbers of small villages composed of dome-shaped weatherproof huts between the mid-NSW coast and Moreton Bay. Flinders described a small group of huts in the vicinity of Yamba in 1799, and Perry described two villages on the banks of the lower Clarence in 1839. Similar sightings were reported by Rous on the Richmond (McBryde 1974:9), Oxley on the Tweed (Piper 1976) and in Moreton Bay (Hall 1982). The construction methods described for these huts seem to suggest occupation for a period of months at a base camp rather than a constant wide-ranging pattern of low-level land use. Godwin (1999:211-217) argues that neither of the above 'models' is supported by the archaeological record and that local conditions dictated exploitation strategies on the North Coast of N.S.W.

Bray records that, '... the Coodjimburra tribe inhabiting the coast, used to mix very much with the Ballina Richmond River Blacks...' (Bray 1901: 9). Bray also observed that for ceremonial occasions Tweed people would travel up to forty miles (Bray 1902:8). Here Bray was referring to a Bora ceremony west of Mount Warning. Movement within the Coodjimburra territory is most likely to have been in response to seasonal availability of foods (Piper 1976:74). A number of observers refer to movement from the coastal plain to foothills during wet seasons on the Richmond/Tweed (Moehead: n.d.; Hanna 1946). During the wet season on Moreton Bay, Backhouse observed, '... the Aborigines resort to elevated situations contiguous to those parts of the coast abounding with oysters. In these situations their huts are said to be large enough to stand up in'(Backhouse 1843: 274). Jones (1896) stated that the Tweed coastal group moved to the shoreline during the mullet season. It appears that in the normal course of food foraging, the boundaries of the local land holding groups were clearly defined and crossed under threat of death. For agreed purposes it was possible to cross boundaries between adjoining groups, such as the movement to the Bunya Mountains, every third year so 'Under a sort of 'Truce of God'....For the blacks went through each other territories unharmed...' (Bundock 1898 in McBryde 1978:265).

4.2 Economy – Material Culture

The Aboriginal people of the coastal plain had access to a wide variety of resource rich food and raw material producing zones. These included extensive belts of rainforest on basalt soils, tracts of 'Wallum' swamp, open beaches, estuaries, sclerophyll forest on poorer inland soils and littoral rainforests on fore dunes and exposed slopes. Records of coastal diet emphasise the role of marine foods. Ainsworth (1922:43) suggests the principal diet in spring and summer was, '... fish and oysters and the varied produce of the chase...'

Ainsworth also noted that in the Ballina area, pademelons, wallabies, bandicoots, iguana, flying foxes, yams and pandanus nuts were part of the diet (Ainsworth 1922:43-44). In the Tweed area a ships crew, who spent Christmas with Aborigines on Kirra Beach in 1875, described '...feasts consisting of roast scrub turkey, crabs, fish, oysters and pademelon...' (Piper 1976:62). In the Tweed and north to Moreton Bay, the rhizome of the Bungwahl fern (*Blechnum indicum*) was the major component of the vegetable diet. Thomas Pamphlett, a shipwrecked convict, observed that fern root was a daily part of the diet and carried in bundles when the tribe moved. '... Women and children spent the bulk of the day procuring fern root and a part of which they gave the men in exchange for fish...' (Uniacke in Field (ed) 1825:99).

The heavy stone cleavers or bevelled pounders used in the pounding of the bungwahl rhizome and the large lower stone on which the starch was extracted and ground have been identified on the Tweed and south to the Brunswick River by Jackson (1935) and Piper (1976, 2002). Their distribution is now known to extend at least to the Brunswick River (Piper 2002: 49-50). Use-wear studies on bevelled pounders have been conducted by Kamminga (1981:31) who has identified them as used for processing starchy plant material. Aborigines of the Tweed coast not only had access to the estuaries and associated ecologies, but also to the rainforest and sclerophyll clad ridgelines which border the rivers and creeks, within kilometres of the coastline.

The written records of European observers suggest a similarity in material culture among people of the Tweed and Moreton Bay. Spears for battle and fishing, fighting clubs, hunting clubs (pademelon sticks), hafted stone axes, a range of boomerangs, wooden shields and digging sticks were noted in early sources (Byrne 1946:2). The multi- pronged fishing spear and the shellfish hook are absent from this region. Fish were caught in nets or speared in the shallows (McBryde 1978:187). Spears were single pointed fire hardened weapons (Dawson 1935:22), of both a lighter and heavier variety (Byrne 1946:3). The woomera and the throwing stick were not used in this region (Dawson *ibid*). The stone tool element in the material culture was small and unspecialized. The archaeological evidence suggests changes to a simpler stone tool technology took place only centuries before European settlement. The

stone tools in use immediately prior to European settlement, ‘... show little typological sophistication and did not require highly skilled craftsmanship...’ (McBryde 1978:198).

Women produced a range of woven string or grass bags. Strong rope for nets and binding was made from the inner bark of the kurrajong, flame tree and hibiscus (Bundock 1898 in McBryde 1978; Byrne 1946). Another carrier, ‘...was made from the Bangalow Palm, about fifteen inches long and neatly pleated at both ends with a vine over the top...’ (West: n.d.). Fishing nets in the Tweed River were made a couple of yards long with a stick at each end used individually or in combination of many of the same (Seymour in Piper 1976). Bundock (1898) and Ainsworth (1922) describe similar nets in use on the Richmond River for game drives in coastal and inland forests and cod fishing in summer.

The physical evidence that remains of the manufacture of implements and utensils are discarded tools, debitage, tree scars and rare museum examples of wood and fibrous weapons, nets and utensils (McBryde 1978). Stone materials are found in isolation and or at the sites of shell middens, scarred trees, stone quarries and open campsites. Evidence of ceremonial/spiritual life still remains at Bora grounds, stone arrangements and natural mythological sites, for example Mount Warning. These sites are considered by the Aboriginal community and the N.S.W DECCW to have a scientific/ archaeological significance together with sites which have a high social/ cultural significance to the Aboriginal community or a combination of both.

5. ARCHAEOLOGICAL CONTEXT

5.1 Prehistory

Evidence for occupation of coastal N.S.W. and QLD is dated into the Pleistocene at Wallen Wallen Creek on North Stradbroke Island where an occupation phase between 20560 ± 250 years and the early Holocene period is evident. Analysis of faunal materials from the site suggests an economy initially based upon the hunting of terrestrial fauna changing to one based upon a reliance on marine fish and shellfish which may reflect changing local ecologies caused by gradual rises in sea levels during the late Pleistocene (Neal and Stock 1986).

Coastal sites in northern N.S.W. date to within the Holocene period. The earliest of these is a shell midden at the base of East Banora Point on the lower Tweed River where an occupation phase was dated between 4,700 BP and 4,200 BP (Appleton 1993:34). Faunal material showed a predominance of oyster, cockle and whelk by volume, in addition to remains of pademelon, kangaroo, bream, whiting,

flathead and schnapper. The stone component exhibited few diagnostic traits, only four artefacts appearing to be of a deliberately manufactured shape (Appleton 1993:17-18).

An earlier excavation of a shell midden 2.5km upstream yielded a basal date of 605 ± 90 BP. A column sample revealed compacted fish bone remains at the lower levels, with a greater content of shellfish in the upper levels. Bone points were also recovered. It was concluded that the diet, initially based upon fish and possibly terrestrial fauna, changed to one more reliant upon shellfish, which probably reflected the gradual siltation of the Tweed River to a mudflat ecology (Barz 1980), in that location at least.

Excavations at the Bushrangers Cave at the head of the Numinbah and Tweed Valleys (elevation c. 700m AHD) indicate people began to use the shelter about 10,000 years ago. The caves occupants exploited rainforest food sources present today namely, pademelons, possums and pythons together with regular consumption of crayfish and bush turkey eggs (Ulm and Hall 1996:45-62).

A shell midden on Chickiba Creek (Richmond River) was found to have accumulated between 1,750 BP and c 100 BP (Bailey 1975:52). Shell samples from the nearby Angels Beach area are dated between 800 BP and 530 BP, with one sample at 900 - 1,000 BP (Rich 1994:195). Stone artefacts were assessed on technological grounds to date to within the past 2,000 years (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 (Roy in Rich 1994). By contrast, the Tweed River estuarine site below Sextons Hill was in use some 3,000 years earlier than this (Appleton 1993).

Beach fore-shore sites investigated to date have been associated with more recent phases of occupation than estuarine sites. Fore dune sites typically take the form of narrow bands of pipi shells, or surface scatters of pipi and a few stone artefacts. Pipi horizons at South Ballina and Broadwater have been dated to 260 years BP and 200 years BP respectively (McBryde 1982:77). A more substantial pipi midden (#04-06-0061) investigated on the foreshore at Byron Bay had been formed between approximately 1,000 and 400 years BP. The 80 centimetre 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).



Figure 15 - Aboriginal Sites

6. DESKTOP REVIEW

6.1 Previous Archaeological Assessments

6.1.1 Cudgen Creek/Casuarina

While the greatest proportion of the coastal fore-dune and hind-dune deposits have been sand mined, in effect destroying the archaeological resource they contained, studies east of the old Tweed Coast Road and or east of the coastal streams of Cudgen, Cudgera and Mooball Creeks have recorded the surviving remnants of Aboriginal sites on lands free of sand mining.

A study by Collins (1996) between Bogangar and Kingscliff included a strip of sand mined beach dunes between the old Tweed Coast Road and Cudgen Creek. The Collins study located two open sites (# 04-05-0139, 04-05-0140). A third site an *in situ* midden (#04-05-0138) was located on the eastern bank of Cudgen Creek. The artefactual material at the open sites consisted of chert, chalcedony and quartz materials. The midden shell content is a low-density deposit of pipi over an area 30 metres x 5metres. Because of its apparent undisturbed context and unknown archaeological potential it was assessed to have a medium level of scientific significance. The open campsites because of their lack of spatial or stratigraphic integrity were considered to have a low scientific significance (ibid: 4-35).

A study by Piper (2001) of land adjoining the new suburb of Casuarina to the north of the 1996 Collins study assessed a 1 km section of mined and unmined sand dunes between the ocean and Cudgen Creek. The study found that a small area of hind dunes west of the sand mined dunes on the banks of the Cudgen Creek contained areas that had not been mined although impacted by land clearing. One apparently *in situ* pipi midden (Seaside City 1 #04-02- 0111) was found to extend for c. 120 metres x 5 metres on a low dune falling to Cudgen Creek. Visible shell exposures led to an assessment that a loose sub-surface deposit up to 10 centimetres in depth or potentially greater, exists at the surface and immediate sub-surface. The site was only c.400 metres north of the *in situ* midden (# 04-05-0138) recorded by Collins (1996) in a virtually identical context.

A second site (Seaside City 2 # 04-02-0112), an open campsite, was found 200 metres east of the midden on a mechanically formed sand bank (c 1.00 metres elevation). The material at the site consisted of a low-density scatter of shell fragments and four stone artefacts. The artefacts consisted of a greywacke stone piece bevelled on one edge, possibly the result of pounding on wood, a large beach cobble stone, almost spherical with pitting and grinding striations on one surface, a red quartzite scraper and a brown chert retouched flake (Piper 2001:37-38). The small artefact collection at the site

is possibly reflective of wooden tool maintenance and the preparation of bungwall fern rhizome, a food staple in this region.

Given the rarity of this type of site, its 'connectedness' with other sites in the vicinity, and its *in situ* position, the midden site was considered to be of a high level of archaeological and cultural significance in a regional sense. The open campsite materials were considered to have been redeposited and lacking further research potential but were considered culturally significant to the Tweed Byron LALC (Piper 2001: 45).

6.1.2 Norries Head/Bogangar

At Norries Head a midden/open campsite (# 04-02-0040) contained pipi obtained from the beach below the dune and cartrut shell from a boulder bed on the north side of the headland. Large basalt stone flakes and flaked pieces were eroding from the site onto the beach. The site was covered, signed and fenced by the N.P.W.S. in the nineteen seventies.

6.1.3 Hastings Point

Piper (1976) recorded two stone quarrying sites in the Hastings Point area. A stone quarry (#04-02-0145) is located on the northern spur of the high ground immediately west of the Cudgera Creek estuary. The site is c.250 metres west of the Subject Lands on slopes falling to Christies Creek. The site consists of large volumes of split feldspathic sandstone forming a talus slope. Large flakes are evident. A large core scraper was observed and photographed from the site (Piper 1976:94).

A knapping floor is evident on the eastern face of Hastings Point (# 04 - 02 - 0108) c 850m south east of the Subject Lands. The worked material is c.25 centimetres below the surface and extends for approximately 80m north to south. The material is flaked feldspathic sandstone, which may have originated from the Hastings Point quarry 1.5km to the west or from boulders at the base of the low headland (Piper 1976:115-118).

6.1.4 Hastings Point/Christies Creek

Christies Creek joins Cudgera Creek at the estuary in the south western boundaries of the Subject Lands. Christies Creek drains land to the west of the unnamed high ground that extends south from Hastings Point and separates its watershed from Cudgera Creek. The Koala Beach Estate is located on the ridges and slopes at the southern end of the high ground. Collins (1993) located eight sites on

the slopes and flats in the Christies Creek watershed. Four open campsites (#04-02-0072 to 04-02-0075) and four isolated artefacts (#04-02-0117 to 04-02-0120) were recorded. Of the 42 artefacts recorded, 23 were classed as flaked pieces, 18 were flakes and one a core. The materials were predominantly chalcedony/agate with siltstone, fine grained volcanics, chert and quartz (Collins 1993:26). Collins observed, that "... it was likely that use of the area centered on exploitation of multi resources including both fresh and marine aquatic foods..." Collins concluded with supporting statements by Lilley (1993) and Piper (1976:173) that "... although no seasonal indicators were evident, that the use of the low ridges and spurs of the coastal foothills complexes may have been used by small summer foraging groups who camped along the lower ridgelines to escape the inundation of less elevated areas during the wet season..." (Collins 1993:31). An archaeological assessment of a 3 metre optic fibre cable trench route that passes at the intersection of Creek Street and the Tweed Coast Road, c.125 metres east of the Subject Lands found no evidence of archaeological sites (Davies 1991:34).

6.2 The DECCW AHIMS

A review of the AHIMS of recorded Aboriginal sites in a search area of c. 24 km² centering on Hastings Point indicate 19 sites within the search area. These sites are Bora/ceremonial areas (#2), middens (#2), open campsites (#10), quarries/knapping floor(#2), and isolated artefacts(#3). Figure 15 indicates that no sites are recorded within the Subject Lands nor are the recorded sites impacted by works at the proposed Creek Street Residential Development.

6.3 Potential Site Types

From an assessment of the findings of previous reports and the DECCW AHIMS that have assessed areas of the Tweed Coast in close proximity to Hastings Point and with similar characteristics to the Subject Lands, it is reasonable to conclude that Aboriginal cultural materials could have been at least discarded over the Creek Street property. As the Subject Lands has not been sand mined and if undisturbed sections of the banks of Christies Creek remain there is a potential for at least remnants of Aboriginal camp sites to exist. However in the circumstances that all or the major part of the Subject Lands has been filled to variable depths there is little likelihood that sites could be detected, particularly as much of the land was subject to periodic inundation prior to its filling. The following types of sites have a low potential to occur or be visible: middens, open campsites and isolated artefacts.

6.3.1 Middens

Midden sites in the Tweed Valley and Tweed Coast are invariably found on elevated ground adjacent to the source of the shellfish. The sources are open beaches, rock platforms, tidal mud flats, rocks and mangrove roots. Middens in this area are mainly composed of five edible species pipi, cartrut, cockle, whelk and oyster. The sites may reflect only one source of gathering or a combination of sources. Middens may contain faunal remains, stone artefacts and cooking hearths. Human burials have been associated with midden sites in the Tweed River estuary and Fingal Peninsula.

Coastal sand mining has removed almost all *in situ* sites from the former coastal fore dunes and hind dunes. Particular concentrations of Aboriginal sites were known to have existed at Fingal Head, Cudgen Headland, Cudgen Creek and Bogangar. The fact that burials have been associated with a large proportion of North Coast middens means their significance to the Aboriginal community can be considered greater than an archaeological/scientific importance only.

While estuarine midden sites are the most common midden sites in the Tweed region middens which derive from the beach gathering of pipi and cartrut shell have been severely depleted as a result of sand mining. *In situ* pipi middens are rare not only in the Tweed Coast region but in northern coastal N.S.W. A midden (# 04-02-0040) recorded at Norries Headland was distinctive in being the only example of a fore dune midden to survive sand mining between the Queensland border and south for approximately 30 km. The site consisted of a cap of shell refuse approximately 30 cm in depth mixed with charcoal and large stone artefacts fabricated from basalt stone in cobble beds nearby. The site was also distinctive in that a large proportion of its shell content consisted of cartrut shell procurable from cobble beds on the northern side of Norries Headland. The site was covered and signposted by the N.P.W.S. in the nineteen-seventies.

Only three undisturbed pipi middens are known to exist between Kingscliff, Hastings Point and Pottsville. They are located on mixed sands of Holocene and possibly of Pleistocene age, which border Cudgen Creek or lowlands on Cudgen Creek. The rareness of such sites was illustrated by Collins (1996). Assessing the status of 43 recorded pipi middens between the Queensland border and Ballina, 34 had been destroyed or completely disturbed. Of the 13 remaining with some *in situ* deposits only two were associated with outer barrier dune fields (Collins 1996:34). In addition to the two surviving pipi midden sites referred to by Collins in 1996, two additional middens were recorded by Piper (1999) and Piper (2001). The sites (# 04-02-0106, 04-02-0111) were recorded on sand rises east and west of Cudgen Creek. Their relatively undisturbed condition was one factor in assessing the sites as scientifically and culturally significant and containing further research potential.

6.3.2 Open Campsites

The greatest number of recorded sites on the coastal plains and hills between the Tweed and Brunswick Rivers are open campsites. They may be found in almost any elevated position adjacent to wetlands or creeks. They will also be found on low grades or the level sections of ridge crests and spur lines, particularly where higher ground tapers toward the coastal plain. Materials at these sites are generally stone artefactual material only. A recorded site may consist of as little as two artefacts within 50 metres of each other or heavy concentrations of stone artefactual material and other materials such as ochre, bone and cooking hearths. Low-density scatters of midden shell may also be present.

Previous reports of the Tweed Coast indicates that open campsites may be found in the 'lee' of headlands, raised sand masses east and west of the coastal streams (Cudgen, Cudgera and Mooball Creeks) and on adjacent lowlands. The material at these sites is mainly retouched and unretouched flakes predominantly on chalcedony in addition to stone scrapers also fabricated on siliceous materials.

Open campsites (#04-02-0072 to 04-02-0075) were recorded by Collins (1993) west of Cudgera Creek. The open sites (#4) contained low-density scatters of stone artefacts, 42 in all, chiefly on chalcedony. Collins (1996) recorded three open campsites in remnant dunes between Cudgen Creek and sand mind hind dunes. The study included a strip of hind dunes and wetland immediately west of the Casuarina estate at south Kingscliff. Site 1 (#04-05-0138) is believed to contain *in situ* shell material. Site 2 and 3 (#04-05-139 and #04-05-140) were found to contain six and four stone artefacts respectively. The artefacts were produced chiefly on chert with instances of chalcedony and quartz (Collins 1996:26 - 30). An open campsite (#04-02-0039) on inner barrier sands on the west bank of Cudgen Creek contained pieces of ochre, two flaked pieces, a backed blade and a stone axe (Nicholson & Cane 1989; Piper 1997).

Open campsites are recorded in the inner barrier sand sheets west of Cudgen Creek at the base of the Cudgen/Duranbah hills. The open sites consist of surface scatters of stone artefacts, chiefly on chalcedony with scatters of pipi fragments. Open campsites (#04-02 -0089 to #04-02-0092) were found on sand mined inner barrier dunes at the base of the Cudgen/Duranbah hills. The contents were flaked and unflaked pieces of chert and chalcedony. No shell refuse was noted with the stone artefactual materials. None of the materials was considered to be *in situ* (Piper 1994).

One open campsite is registered immediately west of Cudgen Creek (#04-02-0036). The site was recorded by Gollan (1989) and consisted of two flaked pieces, eight unretouched flakes, two retouched flakes, one manuport and one piece of red ochre. A remnant dune or sand rise that defines the western banks of Cudgen Creek was found to contain archaeological materials extending for approximately 900 metres between two recorded open campsites (AHIMS# 04-02-106 and #04-02-36). The site/sites

contain surface and *in situ* materials and potentially burials. While its cultural significance to the Aboriginal community will be highly significant, its archaeological significance has not been adequately assessed.

6.3.3 *Isolated Artefacts*

These sites consist of single artefacts, which may have been discarded due to breakage, lost or randomly discarded during tool fabrication and maintenance. They may occur in almost any situation but are commonly found on elevated areas in dune fields or on lower slopes and ridge crests.

6.4 A Predictive Model for Site Types and Locations

The following predictive model is based upon information gained from previous reports which have established an association between specific types of sites and broad ecological contexts, in the area between north Kingscliff and Hastings Point.

Middens may occur as consolidated sub-surface shell deposits or low density surface scatters of shell and other materials. Midden sites in this locality will contain a predominance of pipi shell with a lesser component of estuarine oyster and whelk and a small component of ocean rock platform, cartrut shell. Middens may also include stone artefacts, the remains of cooking hearths, fish and terrestrial animal remains and ochre fragments.

Middens occur in Hastings Point although to date anecdotal evidence suggests they are found in the original village residential area on hind dunes on the eastern side of Cudgen Creek. A remnant midden is evident at the intersection of the Tweed Coast Road and the road to Hastings Point.

Where middens on the Tweed Coast occur they have invariably been found on low sand ridges or sand rises adjacent to wetlands and or estuarine waterways. Given the Subject Lands is a level sand plain on the estuary of Christies and Cudgera Creeks and a short distance to the open beach both potential sources of marine shellfish, there is a low potential for midden sites to exist in the Subject Lands. However, given the probable low level of the land prior to its being filled with additional sand from the now existing lagoon, it is likely the land was too low to contain extensive elevated sand banks above the high water mark suitable for midden sites.

Open campsites in this area invariably consist of low-density scatters of stone artefacts of volcanic siliceous materials the predominant raw materials being chalcedony and chert. The stone tool component may include larger tools, e.g. axes or large chopping tools of greywacke procurable from

rock outcrops on the coastal foothills to the south west (Nicholson–Cane 1989; Piper 1999). The known locations of open campsites are more wide ranging than for midden sites. They have been identified in inner and outer barrier dune field locations, on low spurs projecting from the Cudgen/Duranbah hills, and on sand elevations adjacent to Cudgen Creek. The potential for open campsites to exist is low, for the same reasons as given above for middens.

Human burials or human skeletal materials may occur in soils, but are almost invariably found interred within soft sediments such as sand or shell midden deposits. Human burials are known to have been disturbed at several locations in the lower Tweed by sand mining and development works. However, unless disturbed, usually by mechanical means, surveys of this kind are unlikely to detect them.

There are no trees of sufficient age to carry Aboriginal **tree scars**. There is therefore no potential for tree scars to be found. Given the Subject Lands has been cleared previously of all but isolated trees it is unlikely **ceremonial areas** such as Bora grounds or stone arrangements would survive intact on sandy or swamp ground. **Stone quarries** have a nil potential to occur within the Subject Lands as there are no suitable stone outcrops. However stone quarries have been identified on coastal foothills at Hastings Point c.250 metres west of the Subject Lands where bedrock greywacke has been exploited. It would seem likely that stone material, in the form of tools or raw materials from the quarry that overlooks the Subject Lands, could have been discarded on the property. *Isolated artefacts* could be found anywhere within the Subject Lands.

7 FIELD ASSESSMENT

7.1 Site Inspection

The Creek Street Subject Lands are within the area administered by the Tweed Byron Local Aboriginal Land Council. It is usual practice for the Land Council to appoint its Sites Officer, to represent the Land Council's interests in archaeological assessments of this kind. It was agreed Sites Officer, Mr. Cyril Scott, would represent the Land Council's interests as per its usual procedures. The Land Council's views on the conduct and outcomes of the assessment are contained in Appendix A of this report. While the Sites Officer and the Land Council are aware of the numbers and types of Aboriginal sites in this coastal region there was no specific knowledge of sites within the Subject Lands or parts of the Subject Lands which the Land Council considered culturally significant. The assessment was carried out by the Tweed Byron LALC Sites Officer and the consultant on 6 February 2007. The views of the Tweed Byron LALC on the conduct and outcomes of this report are contained in Appendix A of this report.

7.2 Survey Strategy - Method

The field inspection was conducted on foot. The field inspection covered all available sand exposures on the Subject Lands. Grass cover was short and due to the dry conditions an extensive area of the property had sand exposures where high degrees of surface visibility allowed effective coverage. 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 are made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features. An overview of surface conditions and site detection condition is given in Sections 7.3 and 7.4. An indication of areas searched and areas of surface visibility is given in Figures 16-18.



Figure 16 - View north-east at the south east boundary, formed sand mounds



Figure 17 - View north-east across EPZ 7(a) and tourist precinct

7.3 Constraints to Site Detection

The constraints to site detection are influenced by previous European land uses, the area of surface exposure, the degree of surface visibility and current conditions such as land uses, natural events such as flooding, land slippage etc. The following broadly describes the conditions for site detection in the Subject Lands.

Sand plain: Highly disturbed through the addition of sand from the lagoon and levelling. Artificial mounds of sand are located to the rear of the residences in Creek Street adjoining 7(a) Environmental Protection lands: Surface exposure: 80%. Surface visibility: 70%. Type: eroded surface sands.

Marsh: Fringing the north east banks of the lagoon and in the north-west corner adjoining 7(a) Environmental Protection lands: Surface exposure: 20%. Surface visibility: 5%. Type: mud flat.

Tidal mud flat: 7(a) Environmental Protection (Wetlands and Littoral Rainforests). Surface exposure (at LW): 60%. Surface visibility: 90%. Type: sand exposures.

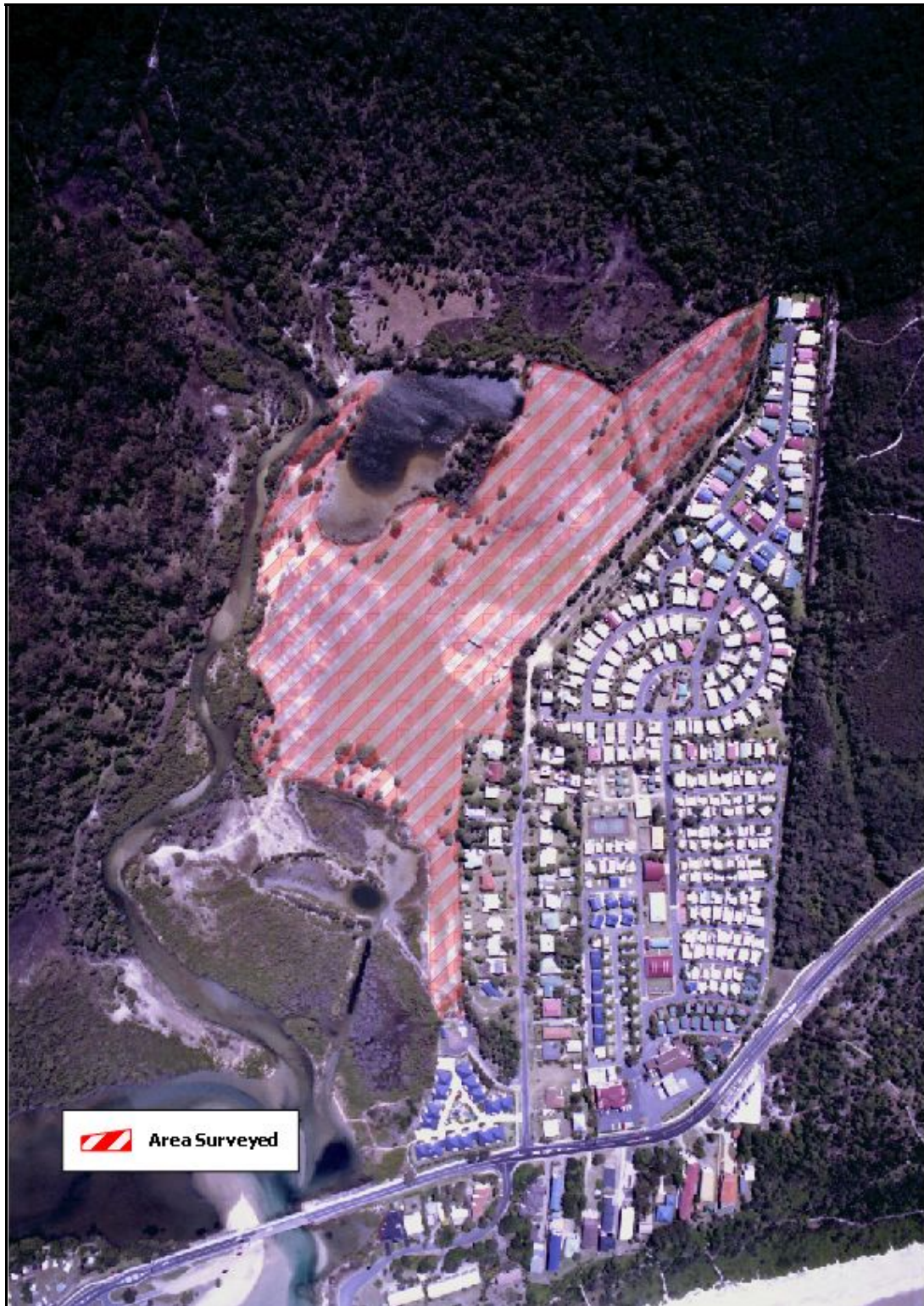


Figure 18 - Survey coverage

7.4 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 NSW 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 DETECTION (ha)	% OF LF FOR SITE DETECTION
SANDPLAIN	17.8	80	14.2	70	9.9	56
MARSH	0.5	20	0.1	5	0.005	0.01
TIDAL SAND/ MUDFLAT	6.8	60	4.0	90	3.6	0.5

Approximate total area for site detection in the proposed development area: 9.9(ha) or 54% (Excluding Environmental Protection Zones-tidal sand/mudflats).

7.5 Results of the Archaeological Assessment

No Aboriginal sites or relics were found as a result of the field inspection of Lot 156 DP 628026 at Creek Street Hastings Point.

The Tweed Byron LALC is of the view that there are no areas of cultural significance to the Land Council in the Subject Lands (Appendix A)

8. RECOMMENDATIONS

The following recommendations are based upon:

- consultation with the Traditional Owners and Tweed Byron LALC (Section 2 & Appendix A);
- the literature review (Sections 6.1 & 6.2); and
- the results of the field assessment (Section 7.5).

The following recommendations are cautionary in nature and have been reviewed by the Traditional Owners for the land.

Recommendation 1: Aboriginal Human Remains

It is recommended that if human remains are located at any stage during construction works within the Subject Lands, all works must halt in the immediate area to prevent any further impacts to the remains. The Site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Tweed Byron LALC, and the DECCW Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the site for criminal activities, the Aboriginal community and the DECCW should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations.

It is also recommended that in all dealings with Aboriginal human remains, the proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.

Recommendation 2: Aboriginal Cultural Material

It is recommended that contractors engaged for the development, construction and rehabilitation of surrounding vegetation at the proposed Creek Street Hastings Point-Residential Development be advised that under the terms of the *N.S.W. National Parks and Wildlife Act (1974)* it is an offence for any person to knowingly destroy, deface or damage or permit the destruction, defacement or damage to a relic or Aboriginal place without first obtaining the written consent of the Director General of the Department of Environment, Climate Change and Water.

It is recommended that if it is suspected that Aboriginal material has been uncovered as a result of development activities within the Subject Lands:

- (a) work in the surrounding area is to stop immediately;

- (b) a temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site;
- (c) an appropriately qualified archaeological consultant is to be engaged to identify the material; and
- (d) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the DECCW guidelines: *"Interim Community Consultation Requirements for Applicants"* (2005).
- (e) an appropriate 'keeping place' is to be identified in accordance with the wishes of the Aboriginal community.

Recommendation 3: Notifying the DECCW

It is recommended that if Aboriginal cultural material is uncovered as a result of development activities within the Subject Lands, they are to be registered as Sites in the Aboriginal Heritage Information Management System (AHIMS) managed by the DECCW. Any management outcomes for the site will be included in the information provided to the AHIMS.

Recommendation 4: Conservation Principles

It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the proponent and the Aboriginal Community.

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APPENDIX A: CORRESPONDENCE FROM TWEED BYRON LOCAL ABORIGINAL LAND COUNCIL



TWEED BYRON LOCAL ABORIGINAL LAND COUNCIL

P.O. Box 1410
Kingscliff, NSW 2487
Telephone: (02) 6674 3600
Fax: (02) 6674 3603
cyril@tblalc.com
info@tblalc.com.au

Wednesday, 21 March 2007

Adrian Piper
54 The Quarterdeck
Tweed heads
N.S.W 2485

Dear Adrian,

Re: Proposed Estate Development at Hasting point

Tweed Byron Local Aboriginal Land Council rep Cyril Scott had accompanied Adrian Piper (Consultant Arc) for an Aboriginal heritage review of this area which is located at the above address.

Visibility of all areas was good and survey was done on foot.

The land consists of mostly low lying flood plains and the majority of the property has been destroyed

Based on the impact of its current land use, chances of finding Aboriginal sites or relics within this areas are very low and the Tweed Byron LALC has no concerns and are happy with the outcome.

If you require any further information please don't hesitate to contact me on the above number.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Cyril Scott', is written over the typed name.

Cyril Scott
Sites Officer

APPENDIX B: MINUTES FROM COMMUNITY MEETING 8TH NOVEMBER 2008



EVERICK
Heritage Consultants Pty Ltd

Minutes

Attendees:	Joyce Summers (TO), Jackie McDonald (TO), Kyle Slabb (TO/CEO Tweed Byron LALC), Cyril Scott (TO, Aboriginal Heritage Sites Officer, Tweed-Byron LALC, Richard Robins (Everick), Adrian Piper, Glenda Nalder (Gold Coast Native Title Group),
Apologies:	Lesley Mye (Tweed Byron LALC), Carol Dawney (TO), Tim Robins (Everick), Des Williams
Meeting date:	Saturday 8 November 2008
Meeting time:	12:30 pm (EDST)
Location:	Creek Street, Kingscliff

Minutes:

A report produced by Everick Heritage entitled **Cultural Heritage Assessment, Creek Street, NSW** was distributed by Richard Robins in both hard copy and on CD. Additional copies were provided so that they could be distributed by the meeting participants at a later date.

Adrian Piper pointed out the extent of the proposed development and the fact that the land had been cleared, and filled to a minimum of 50cm with sand dredged from a part of the site.

Cyril Scott explained the extent of the survey and the fact that no cultural heritage was identified on the site. Site management recommendations were discussed in general. Some concern was expressed by Glenda Nalder over the proximity of the development to the creek. It was agreed that higher resolution plans would be distributed to members.

Comments on the report were requested within 20 days. No concerns over particular sites or the outcome of the survey were raised at the meeting.