

Heritage Assessment

Cultural Heritage Assessment at Pacific Pines Estate Lennox Head, NSW



Prepared for

Petrac
PO Box 3910
South Brisbane, Qld 4101

JANUARY 2008



Richard Robins
Everick Heritage Consultants Pty Ltd
47 Arthur Terrace
Red Hill Qld 4059
ABN 78102206682

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Executive Summary

The following report presents the outcomes of a Cultural Heritage Assessment over the Pacific Pines Estate Lennox Head in northern coastal NSW. This report is to provide supporting documentation to the preparation of a revised Master Plan to meet the requirements of a Concept Plan (under Part 3A of the *Environmental Planning and Assessment Act 1979 (NSW)* (Petrac 2007:3). The Plan envisages a staged residential precinct incorporating medium density housing, community centre and sports fields.

An Archaeological Assessment was conducted over the subject land with the assistance of the Jali Local Aboriginal Land Council (Jali LALC) in 2003 (Piper 2003). No archaeological sites were found. Recommendations were formulated by Jali LALC for the preservation of ‘...native flora including varieties known as food sources... and ...what appeared to be a natural spring source... To mitigate potential impacts upon archaeological sites the Jali LALC recommended that ...initial excavations... be monitored by representatives of the Jali LALC’ (Piper 2003: Appendix A).

The recommendations for the preservation of native food sources and the natural spring have been incorporated within The Green Network of the Indicative Concept Plan (Petrac 2007:9). As no construction has taken place monitoring of initial earthworks has not been undertaken.

The Aboriginal Community Consultation process was carried out via a newspaper advertisement in the Northern Star on the 31st of May and the 1st and 2nd of June, 2007, a mail out to individuals and organisations and on site meetings. There were no responses to the advertisement after a two week period. A mailout to individuals and organisations was undertaken in the event that persons may not have had an opportunity to see the advertisement (Appendix B). The Jali LALC registered an expression of interest in the advertisement after the two week period, and were subsequently included in the consultation process.

A desktop review including a review of previous archaeological reports over the North Creek and Lennox Head areas and a review of the Department of Environment and Climate Change (“DECC”), AHIMS register (13-06-07) found there were no additional reports or sites registered, with information that would alter the findings of the 2003 report.

On site meeting was attended by the Jali LALC Heritage Officer Mr. Marcus Ferguson (29-06-07), as the only respondent organization to the advertisement. At the on site meeting the scope and extent of the 2003 inspection was explained and the existing surface conditions compared to those of 2003. The representative of the Jali LALC was in agreement that there was no substantial change that would warrant a further full field inspection. The results of the Cultural Heritage Assessment are as follows:

Aboriginal Community Consultation

The consultation process with the Aboriginal community did not result in the additional identification of any sites or areas to which any cultural heritage significance is attached or cultural heritage values that would be destructively impacted by the proposed development. There was no response to letters and newspaper advertisement as required under the DECC *Draft Interim Community Consultation Guidelines for Applicants*. No Aboriginal community concern in addition to recommendations proposed by Jali LALC in 2003 with regard to cultural heritage in the area to be impacted by this development, has been expressed.

Copies of the draft report were emailed to the Jali LALC for the attention of the Coordinator Mr. Gavin Brown and Sites Officer Mr. Marcus Ferguson on July 5th 2007. Mr Brown left the position in late August 2007 and there was a delay receiving the response. This was despite repeated representations made by Everick by telephone between July and October 2007 and by Mr. Daryl Creighton Aboriginal Community Liaison Officer, Ballina Shire Council on behalf of Everick. A meeting with Executive members of the Jali LALC was arranged by Mr. Creighton on September 12th 2007 in an attempt to facilitate a response.

Jali LALC subsequently provided Everick with their views on the report in a letter dated 21 January 2008 (Appendix D). In it they affirmed that they were the recognised Local

Aboriginal Land Council for the survey area and agreed with the findings and recommendations contained in the Draft Report. They included a request that any alterations to the proposed works be communicated to the Jali LALC. They also supported the recommendation of Everick contained in this report that where any artifacts are located, work should stop immediately and they should be contacted for a further assessment with the area.

Archaeological Assessment

There were no changes to the results of the field inspection of the 2003 report.

As no sites or areas of significance have been identified in the subject lands there are no recommendations as to the management of specific sites. The Jali LALC recommendations of 2003 that refer to the retention of an area including indigenous resource flora and the source of what appeared to be a natural spring have been implemented, by their designation within parks and open space.

The following recommendations are based upon the results of:

- Recommendations proposed by Jali LALC from a 2003 report over the Pacific Pines Estate have been addressed in the 2007 report.
- The Aboriginal community consultation process undertaken under the DECC Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation.
- The desktop review including an overview of previous archaeological reports and a search of the DECC AHIMS sites register and the outcomes and recommendations of an archaeological assessment over the Pacific Pines estate in 2003.

As no sites or areas of significance have been identified in the subject lands there are no recommendations as to the management of specific sites. The Jali LALC recommendations

of 2003 that refer to the retention of an area including indigenous resource flora and the source of what appeared to be a natural spring have been implemented, by their designation within parks and open space.

The following recommendations are both outstanding and cautionary from the 2003 report.

Recommendation 1

Jali LALC made a third recommendation as a result of the 2003 assessment, which was intended to mitigate destructive impacts upon potentially concealed, ‘culturally significant items’ (Jali LALC Appendix A). The recommendation states, ‘that nominated representatives from Jali LALC be engaged to monitor initial excavations’. As the proposed development is extensive and may come to fruition over a long period of time we would suggest monitoring be carried out by strip sampling by grader scrape of the lower slopes indicated in Figure 7. The Proponent/Project Managers must give prior warning of at least two weeks of the programme of works to the Jali LALC. The costs of monitoring are to be negotiated between the Proponent and the Jali LALC.

Recommendation 2

The consultants recommend that if in the process of works within the area of the proposed extractive industry, that at any time it is believed materials of an Aboriginal origin are found, works at the location must stop immediately. The NSW DECC Regional Office - Coffs Harbour and Jali LALC must be advised and advice sought as to the most appropriate course of action to follow. Jali LALC may also wish to inform Traditional Owner respondents and seek their views as to how cultural heritage values might be impacted and to how best to mitigate potential impacts. Works must not proceed in the specific location without written consent of the DECC and Jali LALC.

Recommendation 3

Prior to any vegetation clearing and initial 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.

1. INTRODUCTION

1.1 Cultural Heritage Background

The following report presents the outcomes of a Cultural Heritage Assessment over the Pacific Pines Estate Lennox Head in northern coastal NSW. The 80 ha site is located to the south of the Lennox Head Village off North Creek Road. This report is to provide supporting documentation to the preparation of a revised Master Plan to meet the requirements of a Concept Plan (under Part 3A of the *Environmental Planning and Assessment Act 1979 (NSW)* (Petrac 2007: 3).

An Archaeological Assessment was conducted over the subject land with the assistance of the Jali Local Aboriginal Land Council (“Jali LALC”) in 2003 (Piper 2003). No archaeological sites were found. Recommendations were formulated for the preservation of ‘...native flora including varieties known as food sources...’ and ‘...what appeared to be a natural spring source...’ To mitigate potential impacts upon archaeological sites the Jali LALC recommended that initial excavations be monitored by representatives of the Jali LALC (Piper 2003: Appendix A).

The recommendations for the preservation of native food sources and the natural spring have been incorporated within The Green Network of the Indicative Concept Plan (Petrac 2007:9). As no construction has taken place monitoring of initial earthworks has not been initiated.

On advice from the DECC that, as the Pacific Pines Estate has been ‘on sold’ since the archaeological assessment of 2003, Cultural Heritage matters pertaining to the proposed development will be required to conform with the more recent Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation July 2005.

1.2 The Proposed Concept Plan

The Plan envisages a staged residential precinct incorporating medium density housing, community centre and sports fields.



Figure 1: General location of Subject Lands



Figure 2: Subject lands in planning context (Courtesy Geolink)



Figure 3: Aerial photo of Subject Lands (defined by red line)

2. COMMUNITY CONSULTATION

2.1 Newspaper Advertisement.

Advertisements were placed in the regional Northern Star newspaper on May 31 and June 2, 2007, in the Public Notices section (Appendix B). The advertisement headed Aboriginal Cultural Heritage, invited Aboriginal persons with an interest in the future planning of the remaining stages of the Pacific Pines Estate, Lennox Head, to contact Everick Heritage Consultants.

Two weeks were allowed for respondents to respond to the advertisement. There were no responses. The Co-ordinator of the Jali LALC when subsequently advised of the advertisement made an expression of interest by email on June 12 2007.

2.2 Mailout.

In the event that Aboriginal Community organisations and individuals had not had the opportunity to see the advertisement, a letter from Everick Heritage Consultants inviting Aboriginal cultural heritage interest in the project together with explanatory materials, a copy of the advertisement and a copy of the recommendations by Jali LALC 2003 was sent by Registered Mail to the following:

Bundjalung Elders Aboriginal Corporation

Bunjum Aboriginal Co-operative

Jali LALC

Ms. S Anderson

Mr. D Anderson

2.3 Onsite Meetings

At an onsite meeting (29-06-07) attended by Jali LALC Heritage Officer Mr. Marcus Ferguson and Everick Heritage Consultants, Dr. Richard Robins and Adrian Piper the main features of the Master Plan were pointed out. The Jali recommendations of 2003 were discussed and the areas they referred to were pointed out. The only change to the landscape as it was in 2003 is the cleaning out and landscaping of the pond in the lower western sector. It was agreed that an additional field inspection of the estate was not warranted.

3. ENVIRONMENTAL CONTEXT

A recognition of the broad environmental contexts within the study area and past and present land uses can assist in making predictive statements as to the potential for Aboriginal sites, their type, possible locations and detectability.



Figure 4: View northwest of the northern sector of Pacific Pines Estate



Figure 5: View west of the southern sector Pacific Pines Estate



Figure 6: View north of the landscaped pond



Figure 7: View northeast of the lower southern sector of Pacific Pines Estate

3.1 Topography, soils, vegetation

The main landform pattern is rolling hills c. 50 m elevation (AHD) that form a barrier that extends from Lennox Head to Ballina between the coastline and the Newrybar wetlands to the west (Figures 4 and 5). The study area is mainly a moderate (10% - 20%) to gentle (6% - 10%) western slope terminating on wetlands that extend to North Creek. Level ridge crests are only a small proportion of total area on the northern boundary at Shearwater and Hendersons Lane and on North Creek Road. Several non-perennial streams drain the study area. All streamlines fall to a central lower drainage basin where fresh water may collect and mix with saline overflows from North Creek.

Soil types in the study area are derived from basalts of the Lamington Volcanics overlying older Neranleigh – Fernvale strata. The upper soils are red/brown krasnozems on the slopes and ridge crests. These soils tend to be friable and porous and readily erodable if

exposed. The lower drainage basin has been excavated and its surroundings landscaped since the 2003 inspection (Figure 6).

Vegetation on slopes and crests is predominantly open grassland interspersed with narrow bands of sclerophyll regrowth and some littoral rainforest species (Tuckeroo) in streamlines (Figures 4 and 5). Some species have been identified by Jali LALC Sites Officers as indigenous sources of food and fibre materials (Piper 2003: Appendix A).

4. CULTURAL BACKGROUND

4.1 Settlement and movement

The Aboriginal people of the lower Richmond region were part of a larger linguistic group, the Bundjalung, which inhabited the area between the Clarence and Logan Rivers extending west to Tenterfield. Dialect groups composed of interlinked family groups occupied distinct areas within the wider Bundjalung association. Land belonged to individual clans whose territorial boundaries had been established in mythology (Creamer 1974). The study area is located within the territory of the Arakwal people, with the Bundjalung to the west and the coastal Minjanbal to the north of Byron Bay (Tindale 1974; Crowley 1978). Contact between local clans and more distant groups took place for the purposes of exchange, inter-marriage, armed conflict and during times of seasonally abundant food supply. Population numbers on the coastal plain were high, possibly reflecting the wide variety and high productivity of coastal ecologies. Ainsworth (1922) is the most detailed of early sources for this area, writing specifically of the Aboriginal people of east and west Ballina. Ainsworth (1922:43) recorded ‘... In 1847 there were between 400 and 500 in the native tribes belonging to East and West Ballina ...’ Bray records that Ballina people often mixed with the Coodjimburra a coastal clan group extending from the Tweed to the Brunswick Rivers (Bray 1901:9).

Models to describe possible patterns of settlement and movement in the region vary. One suggests that groups ranged between the sea coast 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 on 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 (McBryde 1974:9). Similar sightings were reported by Rous on the Richmond (McBryde 1974), Oxley on the Tweed (Piper 1976) and in Moreton Bay (Hall 1982). The 'solid' construction methods described for these huts seem to suggest occupation for periods of months at a base camp rather than a constant wide-ranging pattern of low-level land use. Godwin (1999) 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.

Early sources indicate that coastal clans remained within a defined territory in small family groups, which gathered en masse at times of abundant food resources. Ainsworth recorded that the Ballina people '... usually camped in divisions at different places excepting during the oyster season, when they assembled unitedly at Chickiaba on North Creek, where the large oyster banks on the foreshores to this day mark the old feeding grounds ...' (Ainsworth 1922:45). While Ainsworth is not specific as to the oyster season, he does refer to an annual migration to the beaches in the month of September for salmon fishing (ibid: 44).

Movement across established tribal boundaries is documented by Petrie (1975) and Bundock (1898). Bundock described the Richmond Aborigines attending bunya nut feasts in the Bunya Mountains of south-east Queensland. These gatherings occurred every fourth year, attracting groups to their own traditionally defined camping areas and serving to promote trade and strengthen kinship networks across a vast area of western Queensland, south-east Queensland, and north-east N.S.W.

4.2 Economy

According to Ainsworth (1922:43-44) the coastal people between Ballina and Byron Bay relied on '... fish and oysters and the varied products of the chase ...'. He refers to the spearing of salmon on the beaches and the netting of estuarine fish by means of '... a "tow-row"-a finely meshed net attached to a stick of bamboo bent in the shape of a bow ...'. He is not specific about which estuarine fish were caught by this method, although an excavation of a North Creek shell midden did indicate the exploitation of flathead and bream (Bailey 1975:55). Ainsworth places an emphasis on the consumption of oyster to the exclusion of other estuarine, coastal rock platform and open shore molluscs, all of which are recorded in local shell middens (Bailey 1975; Campbell 1982; Hughes 1991). Modern research supports Ainsworth's assessment as to the prominence of oyster at least for certain periods, in the diet of the Ballina group to the extent that this species comprises the greatest volume of estuarine shellfish represented in Aboriginal middens (Hughes 1991).

Terrestrial animal foods mentioned by Ainsworth (1922:43) include pademelons, wallabies, bandicoots, and 'iguanas'. He reports that flying foxes provided a source of food and were easily brought down with the boomerang and pademelon stick. Bundock also records the hunting of flying fox '... by going into the camps where they sleep during the day, when it is raining heavily, as they will not fly...' (Bundock: 1898). At Byron Bay flying fox were so prolific and reliable that the natives though often shifting camp, seldom went far away on account of this source of food supply (Anon. n.d.,b:1 in Sullivan 1978:107).

Ethno-historical records are largely directed towards descriptions of hunting techniques which employed large groups of people and obvious types of technology requiring demonstrable physical skills-the use of spears, clubs, boomerangs, the 'tow-row' (net) etc. As a result, the role of plant foods in the local economy is often understated or overlooked entirely. Certainly, vegetable foods are given no particular prominence in Ainsworth's recollections at Ballina. He refers to yams obtainable in the scrubs, and to bread made from nuts which grew on the coastal headland (Ainsworth 1922:43). McFarlane (1934) placed greater emphasis on the role of vegetable foods '... the woods supply much variety in the

shape of fruit or berries but every description of vegetable contributed to the digestive requirements of the collector of food necessities...’.

Commentary on material equipment from the North Coast is provided by McBryde (1978). Her sources refer to shields (McFarlane 1934; Dawson 1935), single point fire-hardened spears, three types of boomerang (Dawson 1935), clubs-nulla nulla and pademelon sticks, bark and palm leaf bags, wooden water vessels, possum rugs, cane and shell necklaces and stone knives (Bundock 1898).

5. ARCHAEOLOGICAL BACKGROUND

5.1 Prehistory

There is evidence of occupation during the Pleistocene for coastal northern N.S.W. and southern Queensland. For example, at Wallen Wallen Creek on North Stradbroke Island, a cultural sequence dating between 22000-1000 years before the present (BP) has been investigated. Analysis of faunal material from the site indicates an economy initially based upon the hunting of terrestrial animals, changed to one based upon a reliance on marine fish and shellfish. The change was directly linked to changing local ecologies caused by rising sea levels (Neil 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 Sexton Hill 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 a deliberately manufactured shape (Appleton 1993:17-18). An earlier excavation of a shell midden 2.5 km further 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.

At Ballina a shell midden on Chickiba Creek was found to have accumulated between 1,750 BP and c.100 BP (Bailey 1975:52). Shell samples from the 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. 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. Fore-dune 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 middens 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 (Collins1994).

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 in the Lennox Head locality

The review of previous archaeological assessments forms part of the basis for making predictive statements as to the type of sites and the environmental contexts in which they might be found. Previous assessments of this locality can be grouped into two broad categories: those studies which have assessed areas of coastal uplands, low hills which originally carried rainforests (Morand 1994:55) and a second group of studies of sand barriers and inter-barrier swamps of the coastal plain (ibid: 231, 232). This assessment, on the basis of soil type and topography is similar to the first group of studies which have attempted to assess coastal uplands.

6.1.1 Coastal Uplands the North Creek Hills

In this report coastal uplands are the area of hills that extend from the southern edge of the village Lennox Head south to the North Creek floodplain. They are bounded by the

coastline to the east and North Creek to the west. North Creek Road extends on the crest for the length of the ridge. Most of the western and eastern slopes of the North Creek uplands have been the subject of archaeological impact assessments. No Aboriginal sites have been recorded on the plateau or the upper and lower slopes. These assessments include Collins 1992, Piper 1994, 1997, 1999, 2003, 2004, 2005, and 2006.

Western slopes. All of the western slope between North Creek Road and the North Creek wetlands, north to the Byron Bay Road and south to Skennars Head Road has been assessed by Collins 1992 and Piper 1999, 2003, 2004 and 2005. These studies have included approximately 150 ha of slopes in an area of c. 2.5 km north/south and up to approximately 1.0 km east/west. The surface areas possible to inspect were low due to heavy ground cover. In 1992, J. Collins assessed 28.5 ha of lower slopes adjoining the northern boundary of the subject land. Only 5% of the study area could be effectively inspected due to heavy grass cover. No sites were found (Collins 1992:14). The remaining stages of the Pacific Pines Estate north to Henderson Lane were assessed by Piper (2003). Approximately 80ha of slopes, of the subject land were inspected. Surface visibility was restricted to c. 3% of total area, no Aboriginal sites were found (Piper 2003:33).

Southern slopes. Approximately 40 ha of the slopes falling towards Skennars Head Road was assessed by Piper 1994. No Aboriginal sites were found. Surface visibility was low and the possibility of *in situ* sites was considered unlikely due to European land uses (Piper 1994:20).

Eastern slopes. The eastern slope of the coastal escarpment was assessed by Piper and Robins 2006. The 70 ha property adjoined the 1994 study to the south. Two AHIMS sites listed as located on the eastern slope were found to be errors in recalibration from 1:1 mile map sheets. No Aboriginal sites were found. Exposed surface were only 3% of total area. Immediately to the west of the 2006 assessment 10ha were inspected without locating Aboriginal sites (Piper 1997:19).

6.1.2 Assessments of the coastal plain

The earliest recording of sites in the sand barrier systems of the coastal plain are in the Lennox Head area in 1968-1969. The Sim Report (1968) indicates the presence of foredune middens north to Lake Ainsworth. It is not clear which sites listed in the present DEC AHIMS register were the result of recordings made in 1968, but an open campsite (# 04-5-0031) recorded by Oakes in 1969 may have been one previously referred to in the 1968 report. The site contained pebble tools, large flakes and flaked pieces on the foreshore adjacent to Pacific Parade. McBryde (1974), who conducted studies of a generalised nature at Lennox Head, recorded a burial (# 04-5-0018) in the foredune, while Starling (1974) recorded a midden/open campsite (# 04-5-0029) in a foredune near Lake Ainsworth and a midden (04-5-0017) in the vicinity of the Lennox Head Public School. Bailey (1975) recorded ‘...open shore middens...’ in the Lennox Head area (# 04-5-0029, # 04-5-0049, # 04-5-0052 and # 04-5-0054). The present given AHIMS 1:25k listings for the Bailey sites are unreliable.

Studies on Pleistocene dune sheets west of Lennox Head found an extensive open campsite/burial (# 04-5-0094) in the ecotone between sand sheets and wetlands (Navin 1991; Navin and McConchie 1991; Dallas *et al* (1991). The site was the focus of the archaeological investigation detailed in Collins and Piper 2000. The initial assessment of Site # 04-5-0094 (1991) was that it was an extensive and concentrated site with major archaeological potential. Artefact types including a large number of backed blades, blade and multi-platform cores, and uni-and-bifacial pebble tools. Identified raw stone materials included chert, chalcedony, jasper, basalt, limestone, quartz, quartzite and river/beach pebbles (Dallas 1991: N.P.W.S. site file). Its potential archaeological significance combined with the presence of one known human burial, meant that the site was of particular cultural significance to the Jali LALC. It was recommended that Site # 04-5-0094 be further recorded and mapped prior to final assessment.

An archaeological investigation by Collins and Piper 2000, at Site # 04-5-0094, found Aboriginal cultural materials were exposed intermittently from east to west for approximately 525m. These materials were identified at six 'focal points' on a sand rise between the dunefield extending to the north and drained wetlands to the south. The study required that a shovel and auger test pitting investigation be conducted within four of the focal points (Area A, C, D, E) and at a 50 metre radius of Area B where a known human burial and a potential for others, precluded sub-surface investigation. Forty six stone artefacts and 41 pieces of midden shell were recovered from 23 of the 68 test pits. Forty-five test pits contained no archaeological evidence. The results suggested that low-level scatters of artefacts will occur in surface sand across the sand rise and the sand plain (Collins and Piper 2000:3). An assessment of the floodplains and sand rise to the west confirmed that Aboriginal sites extend almost continuously between the Lennox Head/Byron Bay Road and Ross Lane (Piper 2002:37).

The major focal point of the investigation of Site # 4-5-94 referred to as Area B is the only known open campsite/burial in a sand plain environment remaining in the north coast region and one of the few surviving sites with links to the Lennox Head Bora Ground (Collins and Piper 2000:3-4). A sample (# 281) of the stone artefact component was dominated by white siliceous stone (53.4%), mudstone (18.9%, siltstone (14.2%) other materials included chert (5.7%), chalcedony (2.5%) and other (5.4%). (Collins and Piper 2000:29). These materials were believed to have been procured locally from three probable sources; Lennox Head headland, shingle beds fringing the Lennox Head/Ballina shoreline and Tintenbar c 7km west of the study area. (Collins and Piper 2000:68). The total lithic assemblage was dominated by micro-debitage (36.7%) and unmodified flakes and blades (32.8%). Other artefact types included pebble fragments (10.7%), flaked pieces (6.2%), multi-platform (3.4%), single platform (0.3%) and bipolar (1.7%) cores, flake and nuclear tools (each 2.3%), rejuvenation flakes (0.6%), backed blades (0.6%) and block fractured pieces (0.3%). Unmodified pebbles made up 2.3% of the assemblage (Collins and Piper 2000:56).

The investigation concluded, that although its archaeological value was undoubtedly diminished due to the activities of illegal collectors Site # 04-5-0094 is a regionally unique

site type with further research potential. The value of the site was enhanced through its proximity to the Lennox Head Bora Ground and links which it appears to have with the Bora Ground locality. On this basis the site as a whole is assessed to have a high level of scientific/archaeological significance (Collins and Piper 2000:76). The site is considered to be of a high cultural/social significance stemming particularly from the existence of a known burial and a potential for others (Collins and Piper 2000:75).

In 1992 Collins conducted a survey on the dunefield in the vicinity of the Lennox Head Bora Ground (# 04-5-0029) north into a proposed housing subdivision. During the survey, a total of 154 stone artefacts were recorded at four separate locations (# 04-5-0105, # 04-5-0106 and # 04-5-0108) north from the Bora Ground. It was recommended that previously registered midden material adjacent to the Bora be investigated to determine its spatial extent, and that an investigation of the recorded artefact scatters be undertaken to establish whether *in situ* subsurface archaeological material was present. The result of the subsurface (shovel test pit) component of the investigation were reported by Collins in March 1993(a). The investigation concluded that one area (Area B; Site # 04-5-00105) contained materials assessed to be *in situ* and therefore of archaeological significance. It was recommended that a *Consent to Destroy* be granted to the proponent to allow the proposed subdivision to proceed providing a 10m easement encompassing Site # 04-5-0105 was excluded from the development. It was further recommended that an embankment south-west of the Bora Ground be retained and protected in its present condition. Although highly disturbed, the embankment contains archaeological materials, which are of high cultural heritage value due to their likely direct link with Bora Ground use.

Prior to the 1993 investigation it was assumed that the Bora Ground, strategically placed between beach foreshore and extensive former swamps, would have been a major focus for Aboriginal occupation. However, the low-density of artefacts (4.8 per 100 m²) and lack of extensive concentrated occupation deposit suggested that the area as a whole had not been subject to intensive prehistoric use. On the basis of the available evidence, it was concluded that shell deposits and reduced beach pebbles adjacent to the Bora Ground were most likely directly associated with its use, but that this was not necessarily the case with artefact finds

further to the north which probably represented a prior function-specific activity by small local foraging groups (Collins 1993a:31-33).

6.2 The DECC AHIMS Sites Register

A search (13-06-07) over 15² km centering on the Pacific Pines Estate indicates 21 sites in the search area and none within the proposed development. The nearest sites to the subject lands are sites recorded to the south on North Creek and sites recorded within the sand plain and beach foreshores on which the Lennox Head township is located.

A quantitative analysis of 53 sites between the Richmond River and Lennox Head concluded that 'A strong correlation is apparent between the distribution of sites and specific environmental characteristics' (Collins 1996:16). Collins calculated that 91% of the recorded sites are associated with sand substrates on creek banks and dunes and 88% of all sites to be within 1.5km of marine water. The exceptions to this distribution pattern are artefact scatters/open campsites (# 04-5-0068, 04-5-0069, 04-5-0154, 04-5-0155, 04-5-0157) and a midden (# 04-5-0070) located on Pleistocene dunes that extend from north of Ross Lane south through Sandy Flat and Cumbalum approximately 4km west of the modern shoreline.

Of the Lennox Head sites 10 are artefact scatters/open campsites and 7 are shell middens. Two burials are recorded in addition to the well-known ceremonial area, the Lennox Head Bora Ground (# 04-5-0029). All of the recorded sites, with exception of three listed as located in coastal foredunes (# 04-5-0030, 04-5-0031, 04-5-0018); occur in a sand sheet/wetland context. Collins (1992) recorded four open sites on the western edge of Lennox Head. These are open campsites (# 04-5-0105, 04-5-0106, 04-5-0107 and 04-5-0108). Later shovel pit testing (Collins 1993) indicated that only # 04-5-0105 contained *in situ* subsurface materials.

The open campsite/burial (# 04-5-0094) which was the initial focus of an archaeological investigation (Collins and Piper 2000) was recorded by Dallas in 1991. The site is located on an elevated (2-3 m AHD) dunefield bordered by wetland to the south and east.

Sites have been recorded in the vicinity of Lennox Head since 1969 when an open site comprising pebble tools and flaked pieces was located in an eroding coastal foredune (# 04-4-0031). In 1974, McBryde recorded a burial in the foredune (# 04-5-0018) and Starling recorded stone artefacts and shell material adjacent to the Bora Ground (# 4-4-29) and a midden immediately south of Lake Ainsworth (# 04-5-0030). An open campsite was also recorded in the vicinity of Lennox Head Public School (#04-5-0017 and 04-4-0009); this site consisted of pipi shell and stone artefacts. Bailey (1975) recorded shell middens in sand/heath conditions in Lennox Head (# 04-5-0048, # 04-5-0049 and # 04-5-0054) as part of a detailed study focused on the North Creek sites. The AHIMS 1:25k grid references for sites recorded by Starling (1974) and Bailey (1975) are highly likely to be incorrect (Robins and Piper 2006).

All of the sites referred to above occur on sand-based ground adjacent to wetlands. The subject lands contain no environmental contexts characteristic of the sites referred to above. The only site in the Lennox Head area recorded in red basalt derived soils is a probable quarry site (# 04-5-0160) at Lennox Headland (Collins and Piper 2000:68). Nodules of siliceous stone erode from a basalt soil in a cliff face c 30 m above a rock platform and pebble beach. A pebble core tool at the site indicates the location was used for a purpose but does not necessarily confirm its status as a quarry although siliceous stone of the same types is found in middens and artefact scatters throughout the Lennox Head area.

The review of relevant documentation has indicated that studies over slopes and low hills on red/brown krasnozem and podzolic soils that prevail in the subject land, have produced very little archaeological evidence of Aboriginal use/occupation. Evidence is limited to a few stone waste flakes, isolated artefacts and a possible quarry site. Each of the studies undertaken in these contexts considered to have been within the former subtropical rain forests of the 'big scrub' have concluded that European land uses particularly intensive land clearing has dispersed or destroyed evidence of transit through or occupation of the 'big scrub'.

Heavy vegetation cover has reduced the 'detectability' of cultural materials by surface inspections to a minimum in each of the coastal uplands studies. Ethnographic sources

indicate the coastal uplands between the shoreline and Alstonville plateau were used by Aborigines for ceremonial/spiritual purposes, raw material procurement of wood/fibre, siliceous stone, food and medicinal plants and animals accessible via established transit corridors. The archaeological evidence for these activities between the Alstonville plateau and the shoreline between Lennox Head-Ballina has been minimal. The potential for Aboriginal sites to be found in the subject land appears low, unless in unusual circumstances e.g. extensive areas of surface visibility.

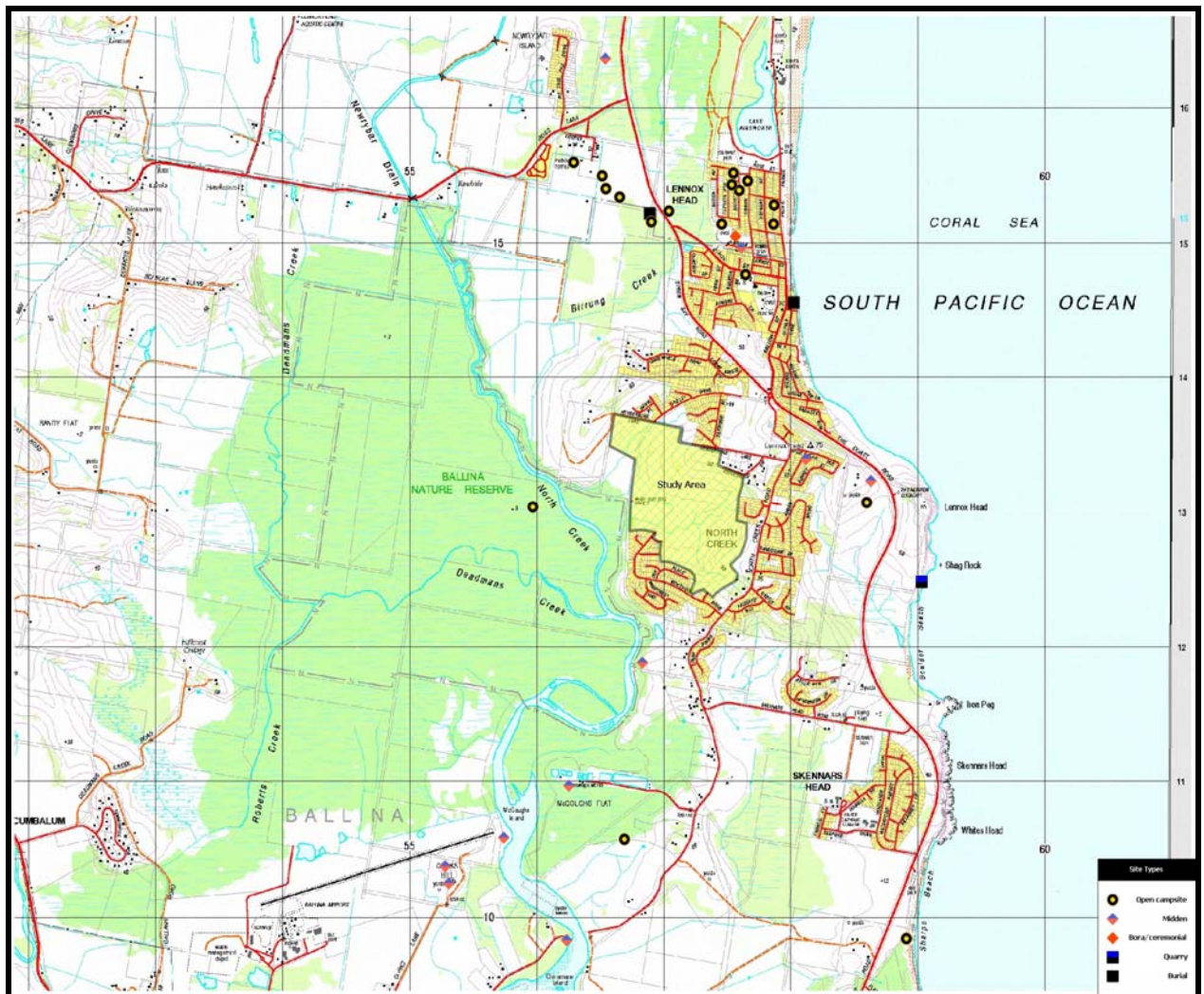


Figure 8: DECC AHIMS sites in the vicinity the subject lands (Ballina 1:25,000 mapsheet)

6.3 Potential Site Types

6.3.1 Archaeological Sites

From the desktop review of the results of previous assessments and the review of the current AHIMS site listings it is clear that there is a generally low potential association between the low hills landform unit and Aboriginal sites particularly the upper slopes and plateaus. There is a slightly greater potential for sites to be situated on the lower slopes particularly where sources of shellfish are nearby and easily transported to drier conditions.

The most common environmental context of archaeological sites in this area is sand plain, wetlands and estuaries in which *middens, artefact scatters/open campsites and isolated artefacts* are most commonly found. In the Lennox Head locality these sites are invariably found in sand based ground adjacent to wetlands and estuarine creeks.

In the context of the subject lands, the lower slope margins adjoining the North Creek wetlands have the greatest potential to contain sites. However as these margins are invariably heavily grassed the 'detectability' of sites is usually low.

Quarry sites may occur where sources of hard quartz sandstones, conglomerate or cryptocrystalline sedimentary rock occurs. However ground covers and the proneness of these soils to erosion and slumping make it unlikely quarry sites or evidence of associated stone fabrication floors would be exposed. *Ceremonial sites* which feature raised sand, earth, or stone mounds are unlikely as the terrain would be too steep and heavily forested in its pre European state. Land clearing over the subject lands would also have caused the destruction of ceremonial sites containing fixed structures and possibly scatter surface archaeological materials. *Scarred trees* are trees that have been utilized in some way, such as bark for canoes or holed to obtain honey, leaving a scar. There are no trees other than regrowth of the last 50 years within the study area therefore no potential exists for scarred trees. *Burials*. The highly acidic nature of krasnozems soils and the additional impact of land clearing make it highly unlikely a human burial could remain intact. The potential for the subject lands to

contain burials is considered to be low or nil unless midden sites, where the preservative effects of leached alkaline water through shell may preserve bone materials, were found.

7. FIELD INSPECTION

An additional field inspection to that conducted in 2003 is considered unwarranted as there is no substantial change to the landscape with the exception of the widening of the pond in the lower western sector. This would not to any substantial degree affect the extent of area possible to inspect and therefore would not alter the results and outcomes of the archaeological assessment. On site meetings were conducted attended by the Jali LALC Heritage Officer Mr. Marcus Ferguson (29-06-07), as the only respondent organization to the advertisement. At the on site meeting the scope and extent of the 2003 inspection was explained and the existing surface conditions compared to those of 2003. The representative of the Jali LALC was in agreement that there was no substantial change that would warrant a further full field inspection.

8. RESULTS OF THE CULTURAL HERITAGE ASSESSMENT

8.1 Aboriginal Community Consultation

The consultation process with the Aboriginal community did not result in the identification of any sites or areas to which any cultural heritage significance is attached.

8.2 Archaeological Assessment

There were no changes to the results of the field inspection of the 2003 report.

9. RECOMMENDATIONS

The following recommendations are based upon the results of:

- Recommendations proposed by Jali LALC from a 2003 report over the Pacific Pines Estate have been addressed in the 2007 report.
- The Aboriginal community consultation process be undertaken in accordance with the DECC *Draft Interim Community Consultation Requirements for Applicants*.
- There was no response to letters and newspaper advertisements as required under the DECC *Draft Interim Community Consultation Requirements for Applicants*. No Aboriginal community concern in addition to recommendations proposed by Jali LALC in 2003 with regard to cultural heritage in the area to be impacted by this development, have been expressed.
- The desktop review including an overview of previous archaeological reports and a search of the DECC AHIMS sites register and
- The outcomes and recommendations of an archaeological assessment over the Pacific Pines estate in 2003.

Copies of the draft report were emailed to the Jali LALC for the attention of the Co-ordinator Mr. Gavin Brown and Sites Officer Mr. Marcus Ferguson on July 5th 2007. Mr Brown left the position in late August 2007 and there was a delay receiving the response. This was despite repeated representations made by Everick by telephone between July and October 2007 and by Mr. Daryl Creighton Aboriginal Community Liaison Officer, Ballina Shire Council on behalf of Everick. A meeting with Executive members of the Jali LALC was arranged by Mr. Creighton on September 12th 2007 in an attempt to facilitate a response.

Jali LALC subsequently provided Everick with their views on the report in a letter dated 21 January 2008 (Appendix D). In it they affirmed that they were the recognised Local Aboriginal Land Council for the survey area and agreed with the findings and recommendations contained in the Draft Report. They included a request that any alterations to the proposed works be communicated to the Jali LALC. They also supported the recommendation of Everick contained in this report that where any artifacts are located, work should stop immediately and they should be contacted for a further assessment with the area.

As no sites or areas of significance have been identified in the subject lands there are no recommendations as to the management of specific sites. The Jali LALC recommendations of 2003 that refer to the retention of an area including indigenous resource flora and the source of what appeared to be a natural spring have been implemented, by their designation within parks and open space.

The following recommendations are both outstanding and cautionary from the 2003 report.

Recommendation 1

Jali LALC made a third recommendation as a result of the 2003 assessment, which was intended to mitigate destructive impacts upon potentially concealed , ‘culturally significant items’ (Jali LALC Appendix A). The recommendation states, ‘that nominated representatives from Jali LALC be engaged to monitor initial excavations’. As the proposed development is extensive and may come to fruition over a long period of time we would suggest monitoring be carried out by strip sampling by grader scrape of the lower slopes indicated in Figure 9. The Proponent/Project Managers must give prior warning of at least two weeks of the programme of works to the Jali LALC. The costs of monitoring are to be negotiated between the Proponent and the Jali LALC.



Figure 9: Identified significant Aboriginal areas (2003) and recommended monitoring areas (2007)

Recommendation 2

The consultants recommend that if in the process of works within the area of the proposed development, that if in the process of works at any time it is believed materials of an Aboriginal origin are found, works at the location must stop immediately. The NSW DECC Regional Office - Coffs Harbour and Jali LALC must be advised and advice sought as to the most appropriate course of action to follow. Jali LALC may also wish to inform Traditional Owner respondents and seek their views as to how cultural heritage values might be impacted and to how best to mitigate potential impacts. Works must not proceed in the specific location without written consent of the DECC and Jali LALC.

Recommendation 3

Prior to any vegetation clearing and initial 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.

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APPENDIX A: CORRESPONDENCE JALI LOCAL ABORIGINAL LAND COUNCIL 2003

JALI Local Aboriginal Land Council

Cabbage Tree Island

P.O. Box 24

WARDILL NSW 2477

Phone: (02) 66834413 Fax: (02) 66834679

15th August 03

Adrian Piper
54 Quarter Deck
Tweed Heads 2485

Re: Proposed Development at Pacific Pines

In relation to sites field investigation conducted by sites officers Troy Anderson and Robert Brown, specifically PT Lot 217, DP 1017615 and Lot 216 DP 101615, the following recommendations are made as a result of their observations.

A strip of natural rainforest was observed running up the hillside. This strip contained various varieties of native flora including varieties known as food sources for Indigenous and vines known to be used for rope and bag making etc. It is important that any development be diverted around this rainforest as natural food sources are becoming increasingly rare and are essential in maintaining our Culture.

The North East section also contained what appeared to be a natural spring source. It is also important that this spring be preserved as again such natural water sources are ingrained richly into our cultural stories and are therefore very significant to us. This would also be necessary as to not have adverse effects on our ecosystem.

Finally, due to the richness of culturally significant items being found in that particular area, we feel that nominated representatives from Jali Lalc be engaged to monitor initial excavations to ensure that any sites uncovered could be properly documented.

Signed

Frances Paden
Co-ordinator for
The Executives

APPENDIX B: ADVERTISEMENT NORTHERN STAR -31 MAY,
2 AND 3 JUNE 2007

**ABORIGINAL CULTURAL
HERITAGE**

Aboriginal persons with an interest in
the future planning of the remaining
stages of the Pacific Pines Estate,
Lennox Head, please contact

Everick Heritage Consultants
(07)33682660 or
email: everick@bigpond.net.au

APPENDIX C: ACCOMPANYING LETTER TO ABORIGINAL ORGANIZATIONS AND INDIVIDUALS.

Ref: EV.71

19 June 2007

Dear

Re: Pacific Pines, Lennox Head

Between 31 May and 2 June 2007, we placed an advertisement in the *Northern Star* relating to a Cultural Heritage Assessment that is required over the remaining Pacific Pines Estate at North Creek Road, Lennox Head. A copy of the advertisement is attached.

An archaeological assessment of this property was undertaken by Troy Anderson, Robert Brown and Adrian Piper on 16 July 2003. The recommendations of Brown and Anderson have been included within the development plan and are attached. However, as a Development Application is proposed to be lodged in the near future, a broader consultation process with the Aboriginal community is required than was the case in 2003. Please see a copy of 'A Summary of Outcomes' that gives an overview of the development so far.

If you have Cultural Heritage interests in the proposed development we would like to invite you to an onsite meeting at your earliest convenience. Would you please contact the above number and details will be arranged.

Yours faithfully

Dr Richard Robins MAACAI
Director

APPENDIX D: JALI LALC LETTER DATED 21.01.08

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: J036

21st January 2008

Dear Adrian

Re: Pacific Pines Estate Lennox Head, NSW

The Jali LALC has- reviewed the report on the Pacific Pines Estate Lennox Head NSW 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