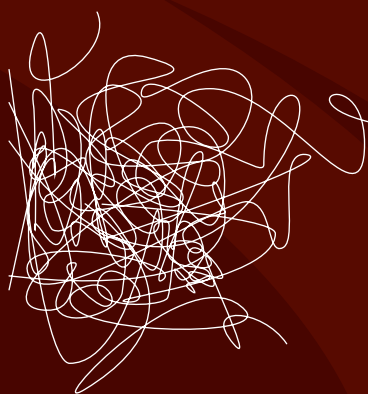
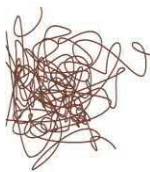




SUPER LOT 5, EPIQ ESTATE LENNOX HEAD: ABORIGINAL CULTURAL HERITAGE ASSESSMENT



EVERICK HERITAGE CONSULTANTS
SEPTEMBER 2018



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EXECUTIVE SUMMARY

The following report details the Cultural Heritage Assessment for the proposed amendment to concept plan approval to provide for a mixed residential and commercial property development at Montwood Drive, Lennox Head, NSW (the 'Project'). The lands subject to assessment comprise Lot 5 DP 1239938, (the 'Project Area') and are approximately 4.17 hectares in area (Figure 1). The intent of this cultural heritage assessment is to assess the potential for the amended land use proposal to impact Aboriginal and historic (non-Indigenous) heritage.

Everick Heritage Consultants (the 'Consultant') was commissioned by Clarence Property Corporation ('the Proponent') to undertake a Cultural Heritage Due Diligence Assessment to support an application for the EPIQ Super Lot 5 Project to amend the existing approval. In accordance with the relevant administrative and legislative standards for New South Wales (see Section 2 below), the methods employed in this assessment included:

- a) a search of relevant heritage registers;
- b) a review of environmental resources for the region;
- c) a review of relevant archaeological and ethnographic studies for the region;
- d) a site inspection conducted with a representative of the Jali Local Aboriginal Land Council (Jali LALC);
- e) assessments of archaeological and cultural heritage significance and impact; and
- f) report on findings and recommended management strategies.

The methods used for this assessment are in compliance with the OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010* and all relevant legislation as described in Section 2 of this Report. The following report complies with the accepted methodology for undertaking a Due Diligence Assessment under the *National Parks and Wildlife Act 1974* ('NPW Act').

The proposed amendment will provide for the construction of an integrated residential development comprising dwellings and Torrens title subdivision (refer Figure 2). The proposal will also require the construction of roads, carparking underground utilities and landscaping.

As a result of the desktop study, field inspection and consultation with Jali LALC Sites Officer Maddison James, the following were agreed:

- The Project Area was obviously disturbed and was not likely to contain Aboriginal objects on the ground surface. This disturbance includes approximately 1m of fill over the lower alluvial area and extensive agricultural activities on the lower slopes in the northern portion of the Project Area.



- The Project Area is in a landscape that is unlikely to contain subsurface Aboriginal Objects,
- The extensive past ground disturbance across the Project Area makes it unlikely that the Project will impact on archaeological sites of high significance.
- All of the Project Area has been disturbed in a manner which constitutes 'disturbance' within the meaning of the Due Diligence Code and is consistent with the Due Diligence Code.

No items of European heritage value were identified within the Project Area.

The Consultant is of the opinion that any proposed works resulting from the development application are unlikely to lead to harm to Aboriginal objects. Whilst additional archaeological investigations are not considered necessary, as a precautionary measure the following recommendations are provided:

Recommendation 1: Aboriginal Object Find Procedure.

If it is suspected that Aboriginal material has been uncovered as a result of development activities within the Project Area:

- 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 or Aboriginal Sites Officer from Jali Local Aboriginal Land Council 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 *ACHCRP Guidelines* (2010).

Should the material be identified as an Aboriginal object and the proposed works cannot be amended to avoid the Aboriginal site an Aboriginal Heritage Impact Permit ('AHIP') would be required prior to recommencement of works in the vicinity of the site. Consultation with stakeholders from the Aboriginal community would be required as a part of the AHIP application process.

Recommendation 2: Aboriginal Human Remains

Although it is unlikely that Human Remains will be located at any stage during earthworks within the Project Area, should this event arise it is recommended that 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 (Ballina), the OEH Regional Office (Coffs Harbour) and the Jali LALC are all 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 OEH 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.

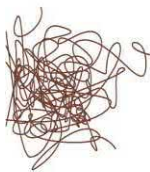
Recommendation 3: Conservation Principles

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, OEH and the Aboriginal community.



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DEFINITIONS

The following definitions apply to the terms used in this report:

Aboriginal Object means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.

Aboriginal Place means any place declared to be an Aboriginal place (under s. 84 of the NPW Act) by the Minister administering the NPW Act, by order published in the NSW Government Gazette, because the Minister is of the opinion that the place is or was of special significance with respect to Aboriginal culture. It may or may not contain Aboriginal Objects.

ACHCRP Guidelines means the OEH Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010).

AHIP means Aboriginal Heritage Impact Permit

Archaeological Code of Practice means the OEH Code of Practice for Archaeological Conduct in New South Wales (2010).

Assessment Area means the lands under archaeological and cultural heritage assessment

BSC means the Ballina Shire Council

Due Diligence Code means the OEH Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010).

LALC means Local Aboriginal Land Council

LEP means the Local Environment Plan

LPI means the New South Wales Government Land and Property Information Division

NPW Act means the National Parks and Wildlife Act 1974 (NSW).

NPW Regulations means the National Parks and Wildlife Regulations 2009 (NSW).

OEH means the New South Wales Office of Environment and Heritage.

Project Area means the land subject to this assessment located at Montwood Drive, Lennox Head N.S.W. and comprising part of Lot 54 DP1222919.

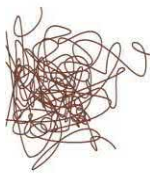
Proposed Works means all activities associated with proposed future earth works, construction and landscaping within the Project Area (including activities undertaken by subsequent landholders).



Proponent means the Clarence Property Corporation, and all associated employees and contractors and subcontractors of the same.

The Project means the proposed EPIQ Super Lot 5 project being a mixed commercial and residential development as described under Project Area, and as identified in Figures 1-2.

The Consultant means qualified archaeological staff and/or contractors of Everick Heritage Consultants Pty Ltd.



1. INTRODUCTION

1.1 Purpose of the Archaeological Investigation

The following report details the Cultural Heritage Assessment for the proposed amendment to concept plan approval to provide for a mixed residential and commercial property development at Montwood Drive, Lennox Head, NSW (the 'Project'). The lands subject to assessment comprise Lot 5 DP 1239938, (the 'Project Area') and are approximately 4.17 hectares in area (Figure 1). The intent of this cultural heritage assessment is to assess the potential for the amended land use proposal to impact Aboriginal and historic (non-Indigenous) heritage.

1.2 Proponent, Project Brief & Methodology

Everick Heritage Consultants (the 'Consultant') was commissioned by Clarence Property Corporation ('the Proponent') to undertake a Cultural Heritage Due Diligence Assessment to support an application for the EPIQ Super Lot 5 Project to amend the existing approval. In accordance with the relevant administrative and legislative standards for New South Wales (see Section 2 below), the methods employed in this assessment included:

- a) a search of relevant heritage registers;
- b) a review of environmental resources for the region;
- c) a review of relevant archaeological and ethnographic studies for the region;
- d) a site inspection conducted with a representative of the Jali Local Aboriginal Land Council (Jali LALC);
- e) assessments of archaeological and cultural heritage significance and impact; and
- f) report on findings and recommended management strategies.

The methods used for this assessment are in compliance with the OEH *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010* and all relevant legislation as described in Section 2 of this Report. The following report complies with the accepted methodology for undertaking a Due Diligence Assessment under the *National Parks and Wildlife Act 1974* ('NPW Act').

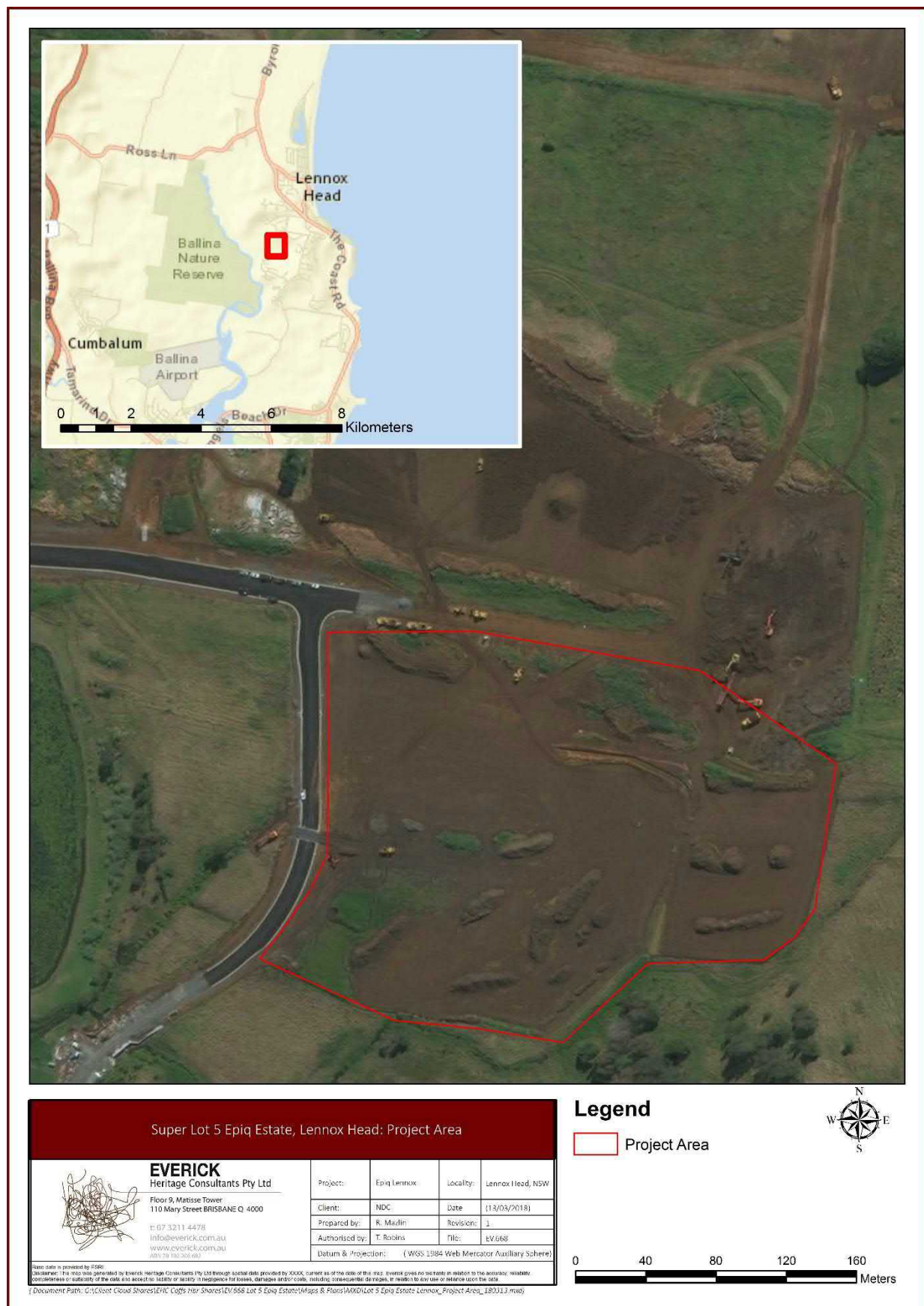
1.3 Description of Proposal

The proposed amendment will provide for the construction of an integrated residential development comprising dwellings and Torrens title subdivision (refer Figure 2). The proposal will also require the construction of roads, carparking underground utilities and landscaping.



1.4 Report Authorship

The desktop study was undertaken by Senior Archaeologists Adrian Piper and Tim Hill and Archaeologists Pauline Fowler and Robbie Mazlin. The field inspection was conducted by Adrian Piper and Tim Hill. This report was written by Tim Robins, Adrian Piper, Tim Hill, Pauline Fowler and Robbie Mazlin. Aboriginal Community Consultation was conducted by Adrian Piper and Tim Hill.



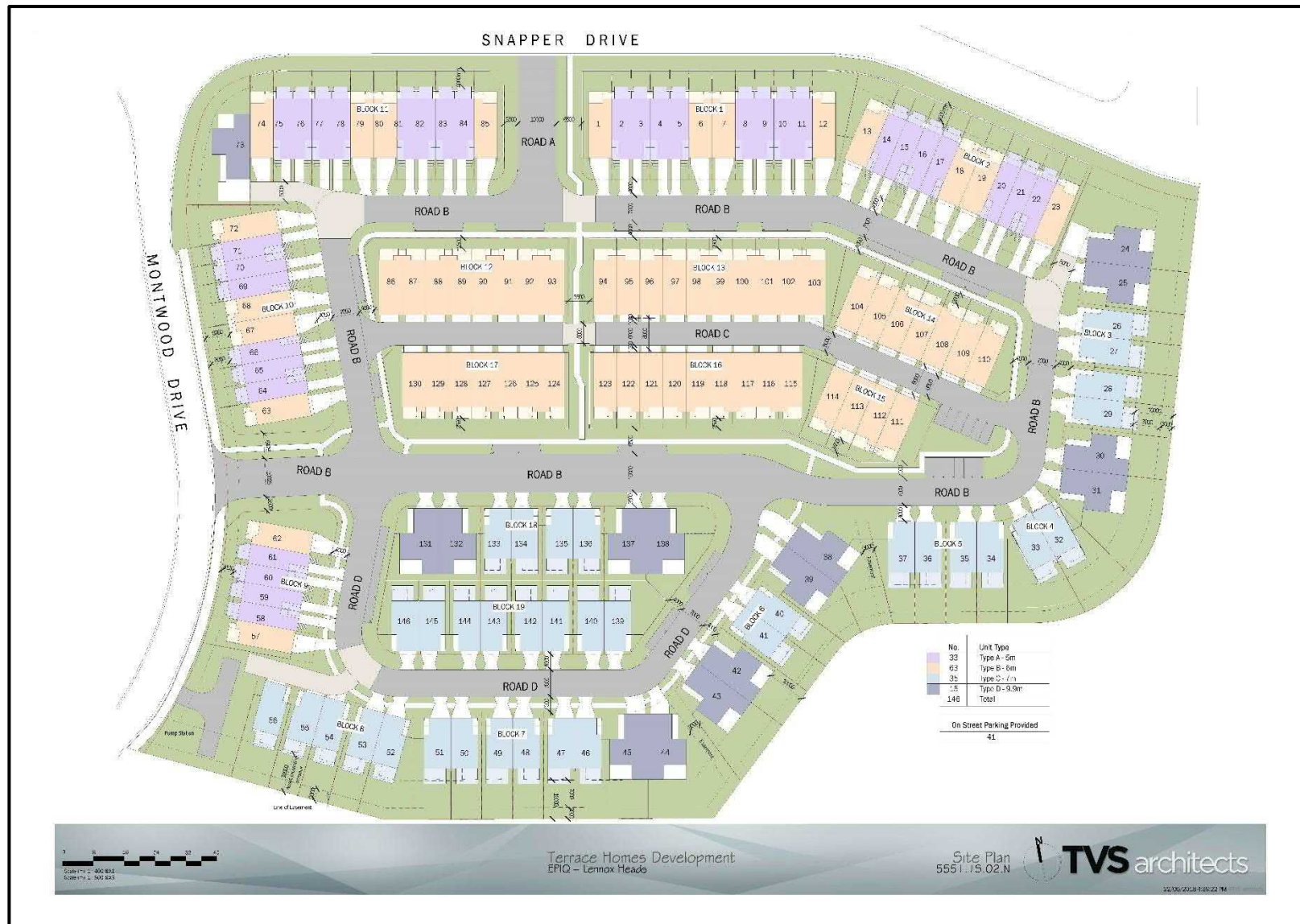


Figure 2: Proposed EPIQ Super Lot 5 layout.



2. LEGISLATIVE AND PLANNING CONTEXT

The primary State legislation concerning cultural heritage in New South Wales are the *National Parks and Wildlife Act 1974* (NSW) and the Council Local Environment Plans and Development Control Plans. The Commonwealth also has a role in the protection of nationally significant cultural heritage through the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth), *The Protection of Movable Cultural Heritage Act 1986* (Cth) and the *Historic Shipwrecks Act 1976* (Cth).

For the purposes of this assessment it is the State and local legislation that are most relevant. The consent authorities will be the Ballina Shire Council and, where a referral agency is required, the OEH. Approval from the OEH will also be required should the Project impact on identified Aboriginal Objects. The information below lists the legislative and policy framework within which this assessment is set.

2.1 *The National Parks and Wildlife Act 1974* (NSW)

The *National Parks and Wildlife Act 1974* (NSW) (NPW Act) is the primary legislation concerning the identification and protection of Aboriginal cultural heritage. It provides for the management of both Aboriginal Objects and Aboriginal Places. Under the NPW Act, an Aboriginal Object is any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area, regardless of whether the evidence of habitation occurred before or after non-Aboriginal settlement of the land. This means that every Aboriginal Object, regardless of its size or seeming isolation from other Objects, is protected under the Act.

An Aboriginal Place is an area of particular significance to Aboriginal people which has been *declared* an Aboriginal Place by the Minister. The drafting of this legislation reflects the traditional focus on Objects, rather than on areas of significance such as story places and ceremonial grounds. However, a gradual shift in cultural heritage management practices is occurring towards recognising the value of identifying the significance of areas to Indigenous peoples beyond their physical attributes. With the introduction of the *National Parks and Wildlife Amendment Act 2010* (NSW) the former offence provisions under Section 86 of ‘disturbing’, ‘moving’, ‘removing’ or ‘taking possession’ of Aboriginal Objects or Places have been replaced by the new offence of ‘harming or desecrating’. The definition of ‘harm’ is ‘destroying, defacing or damaging an Object’. Importantly in the context of the management recommendations in this assessment, harm to an Object that is ‘trivial or negligible’ will not constitute an offence.

The new amendments also significantly strengthen the penalty provisions. The issue of intent to harm Aboriginal cultural heritage has been formally addressed by separating it from inadvertent harm. The penalty for individuals who inadvertently harm Aboriginal Objects has been set at up to \$55,000, while for corporations it is \$220,000. Also introduced is the concept of ‘*circumstances of aggravation*’ which allows for harsher penalties (up to



\$110,000) for individuals who inadvertently harm Aboriginal heritage in the course of undertaking a commercial activity or have a record for committing similar offences. For those who knowingly harm Aboriginal cultural heritage, the penalty will rise substantially. The maximum penalty will be set at \$275,000 or one year imprisonment for individuals, while for corporations it will rise to \$1,100,000.

Where a land user has or is likely to undertake activities that will harm Aboriginal Objects, the Director General (OEH) has a range of enforcement powers, including stop work orders, interim protection orders and remediation orders. The amended regulations also allow for a number of penalties in support of these provisions. The NPW Act also now includes a range of defense provisions for unintentionally harming Aboriginal Objects:

- a) Undertaking activities that are prescribed as '*Low Impact*';
- b) Acting in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010);
- c) Using a consulting archaeologist who correctly applies the OEH *Code of Practice for Archaeological Conduct in New South Wales* (2010) ('Archaeological Code of Practice') and
- d) Acting in accordance with an Aboriginal Heritage Impact Permit (AHIP).

2.1.1 '*Low Impact Activities*'

The regulations allow for a range of low impact activities to be undertaken without the need to consult the OEH or a consulting archaeologist. Generally, those who undertake activities of this nature will not be committing an offence, even if they inadvertently harm Aboriginal Objects. These activities include:

- a) Maintenance - For example on existing roads and tracks, or on existing utilities such as underground power cables and sewage lines.
- b) Farming and Land Management - for land previously disturbed, activities such as cropping, grazing, bores, fencing, erosions control etc. *
- c) Removal of dead or dying vegetation - only if there is minimal ground disturbance.
- d) Environmental rehabilitation - weed removal, bush regeneration.
- e) Development in accordance with a Development Certificate issued under the EPA Act 1979 (provided the land is previously disturbed). *
- f) Downhole logging, sampling and coring using hand held equipment.
- g) Geochemical surveying, seismic surveying, costeaning or drilling. *



* This defense is only available where the land has been disturbed by previous activity. Disturbance is defined as a clear and observable change to the land's surface, including but not limited to land disturbed by the following: soil ploughing; urban development; rural infrastructure (such as dams and fences), roads, trails and walking tracks, pipelines, transmission lines, and storm water drainage and other similar infrastructure.

2.2 Due Diligence Code of Practice for the Protection of Aboriginal Objects

The Due Diligence Code has been applied in Section 8 of this assessment. It operates by posing a series of questions for land users before they commence development. These questions are based around assessing previous ground disturbance. An activity will generally be unlikely to harm Aboriginal Objects where it:

- a) will cause no additional ground disturbance; or
- b) is in a developed area; or
- c) in a significantly disturbed area.

Where these criteria are not fulfilled, further assessment for Aboriginal cultural heritage will typically be required prior to commencing the activity.

2.3 The ACHCRP (2010)

The *Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010)* ('ACHCRP') provide an acceptable framework for conducting Aboriginal community consultation in preparation for impacts to Aboriginal cultural heritage. Proponents are required to follow them where a Project is likely to impact on cultural heritage and where required by Council. It is recommended by the OEH that all cultural heritage assessments involve this level of consultation, although it is not strictly a requirement unless it meets the above criteria.

The ACHCRP Guidelines typically take a minimum of 90 days to complete. However, in complicated Projects this period may need to be extended by several months. The Guidelines require public notice of the assessment, preparation of a proposed methodology, undertaking site meetings and excavations where required, the production of a draft report, which is distributed to the registered Aboriginal groups and the production of a final report. Although not strictly required, a thorough consultation process will treat the ACHCR Guidelines as a minimum standard of community consultation. Generally, consultants must go to further effort to identify the significance of a given site to the Aboriginal community. This will likely include undertaking additional site inspections if requested by Aboriginal stakeholders, fully resourcing the community by providing copies of past archaeological and environmental assessments in the region and meeting with community members to seek their opinions of the site.



2.4 The Ballina Local Environment Plan 2012

The Ballina LEP 2012 provides statutory protection for items already listed as being of heritage significance, items that fall under the ambit of the *Heritage Act 1977* (NSW) and Aboriginal Objects under the *National Parks and Wildlife Act 1974* (NSW). It aims to ensure best practice components of the heritage decision making process are followed. For listed heritage items, the following action can only be carried out with the consent of the Ballina Shire Council:

- a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):
 - i. a heritage item; or
 - ii. an Aboriginal object; or
 - iii. a building, work, relic or tree within a heritage conservation area; or
- b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item; or
- c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed; or
- d) disturbing or excavating an Aboriginal place of heritage significance; or
- e) erecting a building on land:
 - i. on which a heritage item is located or that is within a heritage conservation area, or
 - ii. on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance;
- f) subdividing land:
 - i. on which a heritage item is located or that is within a heritage conservation area, or
 - ii. on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

In addition, Council may not grant development consent without considering the effect the proposed development will have on the heritage significance of the heritage item or heritage conservation area concerned. As a result of this process, Council may only provide consent with the submission of a Heritage Conservation Management Plan to protect and mitigate impacts to known heritage. Council must also notify the Heritage Council of proposed development on Archaeological Sites, with consent being conditional on the views and response of the Heritage Council.



In regards to Aboriginal heritage significance, the consent authority must, before granting consent under this clause to the carrying out of development in a place of Aboriginal heritage significance:

- a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and
- b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.



3. ABORIGINAL COMMUNITY CONSULTATION

3.1 Traditional Owner Knowledge

The Aboriginal Stakeholders are the primary determinants of the significance of their cultural heritage. Members of the Aboriginal community will be consulted, and will continue to be consulted, with regard to their concerns not only about known archaeological sites in the region, but also about cultural values such as areas with historic and spiritual significance, and other values relating to flora and fauna of the area. Everick recognises that there is Traditional Owner knowledge associated with the region that may have to be treated in a confidential manner. Where there is potential for impacts upon Aboriginal heritage as a result of future development proposals, consultation under ACHCRP (2010) would apply.

3.2 Consultation with the Jali LALC

Project information was provided to Jali LALC by email on the 16 March 2018. Jali Sites Officer Maddison James undertook an inspection of the Project Area with Everick on the 20 March 2018. Maddison is aware of places of particular cultural significance within Lennox Head area, and further Aboriginal archaeological sites in close proximity to the Project Area and is familiar with archaeological investigation methods.

Maddison was not aware of any intangible Aboriginal sites within the Project Area.



4. ABORIGINAL CULTURAL HERITAGE DESKTOP REVIEW

4.1 The OEH Aboriginal Heritage Information Management System (AHIMS)

An extensive search was conducted on 14 March 2018 of the OEH AHIMS for the area -28.8124, 153.5769 - Lat, Long To: -28.8009, 153.5952 with a with 1000 metre buffer). The search returned sixteen (16) known Aboriginal Sites (Service ID 333336). No sites were recorded within the Project Area (Figure 3).

Care should be taken when using the AHIMS database to reach conclusions about site prevalence or distribution. For example, a lack of sites in a given area should not be seen as evidence that the area was not occupied by Aboriginal people. It may simply be an indication that it has not been surveyed for cultural heritage, or that the surveys were undertaken in areas of poor surface visibility. There may also be errors with the data.

Table 1: AHIMS search results.

Site ID	Site Name	Easting	Northing	Status	Feature Type(s)	Permits
04-5-0158	North Creek 1	556700	6811750	Valid	Shell : -, Artefact : -	
04-5-0143	Site 1; Fern St;	557300	6814575	Valid	Artefact : -	1101,1102
04-5-0048	Lennox Head;	557320	6813900	Valid	Shell : -, Artefact : -	
04-5-0052	Lennox Head;	558000	6813200	Valid	Shell : -, Artefact : -	
04-5-0054	Lennox Head;	558500	6813000	Valid	Shell : -, Artefact : -	
04-5-0009	Lennox Head Public School Lennox Head	557300	6813720	Valid	Artefact : -	
04-5-0017	North Creek	558600	6812900	Not a Site	Artefact : -	
04-5-0018	Lennox Head;	558100	6814500	Valid	Burial : -	
04-5-0029	Lennox Head near Gibbons Street (NPWS Lennox Head Bora Ring)	557550	6814850	Valid	Shell : -, Artefact : -, Ceremonial Ring (Stone or Earth) : -	2827
04-5-0249	HUTLEY DRIVE 1	556650	6812325	Valid	Potential Archaeological Deposit (PAD) : 1	
04-5-0270	BLH-01	559020	6812463	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -, Shell : -	
04-5-0278	BLH-05	559020	6812417	Valid	Aboriginal Ceremony and Dreaming : -	
04-5-0281	BLH-11	558899	6812065	Valid	Aboriginal Ceremony and Dreaming : -	
04-5-0303	Lennox Head Stacks / Shag Rock	559063	6812652	Valid	Aboriginal Ceremony and Dreaming : 1	
04-5-0305	Seven Mile Beach Fishing Traps	558100	6814119	Valid	Aboriginal Resource and Gathering : 1	
04-5-0318	Boulder Beach (Quarry Site)	559015	6812402	Valid	Stone Quarry : 1	



Figure 3: AHIMS Search Results.



4.2 Other Heritage Registers: Aboriginal & Historic Cultural Heritage

The following heritage registers were accessed on 14 March 2018:

- a) **The National Heritage List:** Contains no Aboriginal heritage listings within the Project Area.
- b) **Commonwealth Heritage List:** Contains no Aboriginal heritage listings within the Project Area.
- c) **Register of the National Estate:** Contains no Aboriginal heritage listings within the Project Area.
- d) **The State Heritage Register:** Contains no Aboriginal heritage listings within the Project Area.
- e) **Ballina Local Environment Plan 2012:** Contains no Aboriginal heritage listings within the Project Area.



5. LANDSCAPE CONTEXT

5.1 Environment Locality

The Project Area is located approximately 3km south west of Lennox Head and located to the west of Montwood Drive. The site Project Area is flat with a southerly aspect and is currently cleared and dominated by improved pasture grass (*Setaria spp.*). A small portion of the of Project Area abuts a lower south facing slope which is not subject to this assessment. Elevation is typically less than 10 m.a.s.l.

5.2 Soils and Geology

The flat alluvial portion of the Project Area is mapped within the 'Disputed Plain' soil landscape (Morand 1996: 112-114) which is described as being "basalt derived valley in-fills and alluvial fans forming gently inclined slopes. Relief 10–30 m, slopes 1–3%. In cross-section fans have a gentle convex appearance. Partly active and/or stable gullies are common. Closed sod grassland and open-sedgeland on possibly naturally treeless areas." Soils are generally deep and poorly drained Black Earths and Dense Clays.

The northern lower hillslope portion of the Project Area site is mapped within the Bangalow soil landscape (Morand 1996:88-90) which is described as being "...low "rolling hills on basalt. Relief 40–100 m, elevation 100–150 m. Slopes are 15–25%. Extensively cleared closed-forest, now closed sod grassland." Soils are generally moderately deep to deep (100->200cm) Krasnozems.

5.3 Vegetation

Morand provides the following vegetation model for the 'Disputed Plains' soil landscape (Morand 1996:112);

The fans of the Disputed Plain soil landscape are generally totally cleared and have possibly never supported any native trees. Present cover is a closed sod grassland–open rushland community. Kikuyu (*Pennisetum clandestinum*), couch (*Cynodon dactylon*), paspalum (*Paspalum dilatatum*), setaria (*Setaria spachelata*) and foxtail (*Alopecurus myosuroides*) are common grasses. Rush (*Juncus spp.*) often forms an open-rush land in poorer drained areas.

Morand provides the following vegetation model for the "Bangalow" soil landscape (Morand 1996:88);

Extensively cleared closed-forest (subtropical rainforest) (see Wollongbar soil landscape for original vegetation details). Present vegetation is extensive sod grassland consisting of improved pasture species, kikuyu (*Pennisetum clandestinum*) and paspalum (*Paspalum dilatatum*) being the more common. Camphor laurel (*Cinnamomum camphora*) is a very common exotic tree.

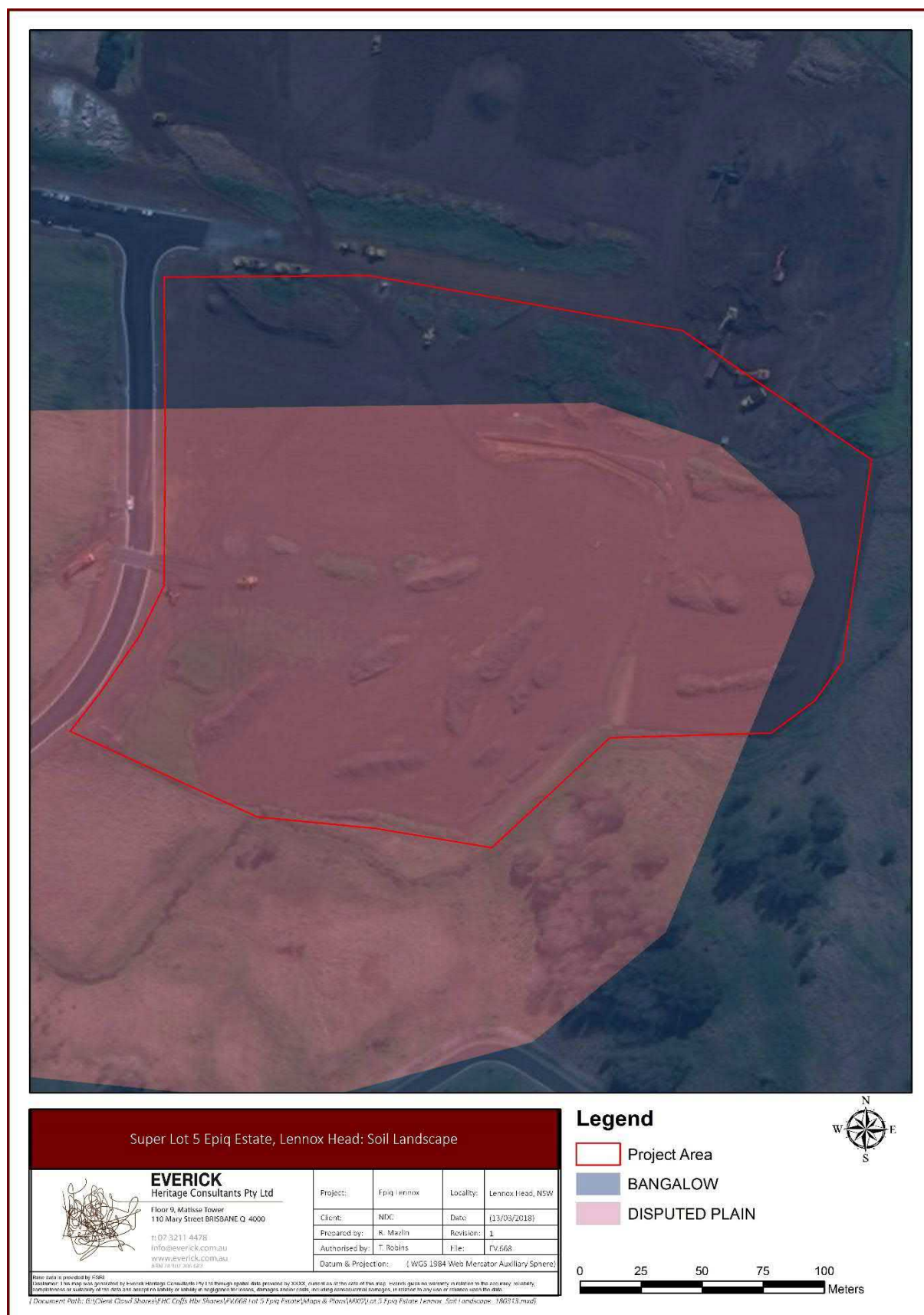


Figure 4: Soil Landscape (Morand 1996).



5.4 Disturbance Analysis

The Project Area is within an area which meets the definition of 'Disturbed' under the Due Diligence Code of Practice. The Due Diligence Code of Practice (OEH 2010) provides the following definition of 'disturbed land';

"Land is disturbed if it has been the subject of human activity that has changed the land surface, being changes that remain clear and observable. Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water and sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks" (OEH 2010:18)

The Project Area is located within land subject to the following types of disturbance;

- Forest clearing;
- Dairy farming;
- Introduction of fill material on the lower slopes; and
- Routine maintenance using tractor and slasher.

The removal of trees and other vegetation would have had the effect of disturbing soil profiles and changing water regimes. There is evidence of bulk earthworks, being the deposition of fill material to raise the level of the lower most of the southern portion of the Project Area. The effect of this has been to completely cover any natural low lying ground surface.



6. CULTURAL BACKGROUND

6.1 Ethnohistory

Crowley (1978) in Sharpe (1985) proposes that the Aboriginal people of the Ballina area are known as Nyangbal, a coastal Bundjalung dialect spoken between the Evans River north through to Broken Head and west to the uplands of the Alstonville Plateau. The Wiyabal and Bandjalang adjoined the Nyangbal to the west and south west (Crowley 1978). They were part of a larger linguistic group, the Bundjalung, which spoke a range of closely linked dialects in the area between the Upper Clarence region extending west to Tenterfield, Warwick and Beaudesert joining the coast at near to Beenleigh. Crowley's (1978) maps place the Minyanbal to the north and the Gumbayngirr to the south of the Evans River. Linguistically Sharpe suggests "...a time depth for the cultural differences of less than 500 years..." (Sharpe 1985:103-104). Dialect groups and sub clans 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 and Godwin 1984).

At Ballina, Ainsworth describes movement over the short distance between the beaches and the 'big scrub', a distance of only a few kilometres. He suggests that Aborigines of east and west Ballina were scattered in small groups combining at times of abundant food resources:

'... the tribe usually camped in divisions at different places except during the oyster season when they assembled unitedly at Chickiba, on North Creek ... The blacks in the month of September each year flocked to the beaches for salmon fishing' (Ainsworth 1922: 44).

An exception to normal movement practices across tribal boundaries was that documented by Petrie (1904) and Bundock (1898). Bundock recorded the movement of the upper Richmond River Aborigines in the Wyangarie area to the Bunya Mountain, '... every third year or so ... under a sort of 'Truce of God'... for the blacks went through each other territories unharmed' (Bundock 1898). These gatherings occurred every fourth year, attracting groups to their own traditionally defined camping areas and served to promote trade and strengthen kinship networks across a vast area of western Queensland, south-east Queensland, and north-east NSW.

According to Ainsworth (1922: 43-44) the coastal Nyangbal (Crowley 1978) people 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 at Ballina 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).

From the few eye witness sources available for the North Coast we can suggest that contact between elements of the coastal clans was frequent and may have involved relatively large numbers. Bray records that the coastal Coodjinburra '...used to mix very much with the Ballina Richmond River Blacks' (Bray 1901: 9). However it may have been a way of life that rapidly disappeared under the impacts of disease and restrictions on Aboriginal groups by 'authorities' on the movement of Aboriginal people. A review of sightings of Aboriginal coastal groups in Coleman's review of ethno historical sources led her to a conclusion that in the initial stages of European contact, observers of coastal groups describe, '...consistently high, semi sedentary local populations on the coast with a highly sophisticated organic material culture which vanished almost overnight with European contact' (Coleman 1982).



7. SELECTED ARCHAEOLOGICAL SYNTHESIS AND PREDICTIONS

7.1 Previous Archaeological Assessments

The review of previous archaeological assessments forms part of the basis for making predictive statements as to the type and densities of Aboriginal sites and the environmental contexts in which they might be found.

Previous assessments of this locality can be grouped within three broad landform categories: those studies which have assessed areas of coastal uplands, low hills which originally carried rainforests (Morand 1994:55), a second group of studies of sand barriers and inter-barrier swamps of the coastal plain (Morand 1994:231, 232), a third group the immediate foreshores of North Creek. On the basis of soil type and topography, the landform under assessment is consistent with the first group of studies which have attempted to assess landform elements of coastal uplands and the slopes that emanate from them. In this case the Project Areas are lower slopes and drainage basins characterised by swamp conditions for approximately 70% of Lot 7. The remainder of Lot 7 is lower slope.

It is of note that virtually all substantial areas of land with a potential for residential or similar development to the east and west of North Creek Road between Lennox Head and Ballina have been the subject of Aboriginal cultural assessment and archaeological investigation. No Aboriginal cultural heritage has been found in or near the Project Area in the Bangalow soil landscape i.e. red/brown kraznozom soil slopes originally supporting subtropical rainforest. The exception within the area defined above has been, sand based soil conditions as exist in the Angels Beach estates where Aboriginal cultural heritage has been 'extensive' in terms of the numbers, variety and contents of Aboriginal sites. For the purposes of this review of previous archaeological assessments those assessments between Lennox Head and Skennars Head Road that include an approximate 2.76 sq. km area of the North Creek hills and slopes are reviewed here.

Coastal uplands include the area of hills that extend from the southern edge of the village at Lennox Head south to Skennars Head Road. 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 hills to The Coast Road not already under residential sub divisions have been the subject of archaeological impact assessments. These assessments were undertaken by Collins (1992), Everick (2010, 2010a, 2016) and Piper (1994, 1997, 1999, 2003, 2004 and 2005). No Aboriginal sites have been recorded on the hill crests or the upper and lower slopes with the exception of a midden at Amber Drive adjacent to a coastal swamp (Marcus Ferguson pers. comm. 25-02-15).



The entire 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 archaeologically assessed by Collins (1992), Piper (1999, 2003, 2004, 2005) and Everick (2010a, 2010b). These studies have included approximately 165 ha of slopes in an area of c. 2.5 km north / south and up to approximately 1.0 km east / west. The effective ground coverage, meaning the percentages of bare soils possible to inspect was low, due to generally closed ground cover and low surface visibility.

In 1992, Collins assessed 28.5 ha of lower slopes adjoining the northern boundary of Pacific Pines Estate. Only 5% of the assessed land could be effectively inspected due to heavy grass cover. No Aboriginal archaeological sites were found (Collins 1992:14). Adjoining parcels to the east extending to Byron Bay Road were assessed by Everick 2010b and Piper 2004. The 15ha of slopes was considered highly disturbed under the Due Diligence Code Guidelines. Assessment conditions were poor due to closed ground covers throughout. No Aboriginal cultural heritage was found.

The remaining stages of the Pacific Pines Estate north to Henderson Lane were assessed by Piper (2003). Approximately 80 ha of slopes of the Pacific Pines Estate were inspected. Surface visibility was restricted to c.3% of the total area. No Aboriginal sites were found (Piper 2003:33). The Pacific Pines Estate was subject to a cultural heritage assessment under the *DECCW Interim Community Consultation Requirements for Applicants 2005*. No further archaeological or cultural heritage issues arose in addition to the 2003 report.

The 41 ha Summit Estate west of North Creek Road and south of Pacific Pines Estate was assessed with the result that two sites of Aboriginal shell middens (North Creek 1) and (North Creek 2), were located on the eastern bank of North Creek approximately 0.5—1.0 m above the high water mark (Piper 1999:36).

The Hutley Drive easement linking the lower slopes of the proposed Summit Estate and Pacific Pines Estate was assessed for Aboriginal cultural heritage by Everick 2010b. During the survey an Aboriginal midden site was identified approximately 50 m to the west of the proposed route alignment. It is almost certain that subsurface cultural material extends further than that visible on the surface. Adopting a cautionary approach, it was anticipated that the midden stretches from north to south for approximately 50 m, is approximately 30 m wide and up to 50 cm deep. The midden is high in organic content with evidence of extensive shell and fish bone found on the exposed ground surface (Everick 2010b). The midden was evaluated as being of a high cultural significance to the Aboriginal community and potentially high scientific significance (Ibid: 42).

Approximately 40 ha of the slopes falling towards Skennars Head Road and former swamp/wetlands south of the road was assessed by Piper (1994). The Project Area was open grazing land with low visibility conditions. The conclusion of the 1994 study was surface visibility was low and the possibility of *in situ* sites was considered unlikely



due to its low lying context and European land uses (Piper 1994:20). No Aboriginal cultural heritage was found. A small area of Bangalow soil landscape at Tara Downs Road was assessed for cultural heritage by Everick (2016). No cultural heritage was found.

The eastern slope of the coastal escarpment from Blue Seas Parade was assessed by Piper and Robins 2006. The 70ha property adjoined the 1994 Skennars Head Road assessment area to the south. Two AHIMS sites listed as located on the eastern slope to the Coast Road were found to be errors in recalibration from 1:1 mile map sheets. Exposed surfaces were only 3% of total area. No Aboriginal sites were found. Immediately to the west of the 2006 assessment, 10ha from Survey Street were inspected without locating Aboriginal sites (Piper 1997:19). Everick has since been informed of a midden site uncovered at the lower end of Amber Drive at the 'head' of a fresh water swamp (Marcus Ferguson pers. comm., 25-02-15).

7.2 Predictive Model Aboriginal Sites

On the basis of the results of previous archaeological and cultural heritage assessments the Project Area would appear to contain few of the attributes which would suggest it was a preferred campsite option, unlike the coastal dunes to the east of The Coast Road, although a midden has been identified at the head of a swamp west of The Coast Road. At best assessment the Project Area (Lot 7) is largely a drainage basin prone to inundation and swamp conditions unsuitable to Aboriginal campsites. Clearly it contained a source of fresh water of which there are many in this locality. It is probable that the Project Area was part of a vast expanse of catchment area for food and resources to the occupants of nearby campsites on the dune fields to the north but not a focal point of occupation.

The results of many cultural heritage assessments and archaeological investigations confirms a view that Aboriginal sites in this locality are located on low dune fields or eucalypt woodlands on hills adjacent to the dune fields. No cultural heritage has yet been recorded within the former rainforest and low swamp environment that characterises the Project Area. It is possible that randomly scattered stone artefacts could have been discarded or lost in this environment but there is no systematic means of predicting such objects.

In the unlikely event that Aboriginal objects did exist they would be limited to single isolated artefacts or the remains of artefact scatters representative of what archaeologists call 'background scatter' which as the term implies there is no means of predicting. Middens or low density shell scatters must also be considered a possibility, although unlikely. Unless there are old growth trees there will be no evidence of Aboriginal tree scarring or carving. There are no prominent landscape features within the Project Area that are likely to contain spiritual or ceremonial significance although this is a matter for the Aboriginal community. Given the prior land uses and the totally disturbed surface conditions through the introduction of fill to approximately 1 metre there is a very low or no potential for significant Aboriginal archaeological sites or relics to be found. For the above reasons the



archaeological potential of the Project Area can be expected to be low. The following types of sites are reviewed as having a potential, be it low, to exist in the Project Area.

7.2.1 Isolated artefacts

These will consist of single stone artefacts, which may have been randomly discarded during fabrication or due to breakage. They may occur in almost any environmental context exploited by Aboriginal people. They are commonly tools, including stone axes, hammer stones, bevelled edged pounders and abraded pebbles, and usually include flakes and cores. Their presence may indicate that more extensive scatters of stone artefacts exist or existed nearby, perhaps obscured by vegetation or dispersed by mechanical means. Predicting isolated finds with precision is impossible; their detection in the disturbed sediments and dense ground cover of the Project Area is unlikely.

7.2.2 Artefact scatters

Approximately 41% of known sites in the Ballina-Lennox Head area are artefact scatters (Collins 1996). To date they have been found in sand dune or sand plain conditions in this locality. They consist of scatters of stone artefacts and possibly bone and hearths. Their exposure to the elements means that evidence of food resources used on the site (with the exception of shellfish) is usually lacking. Artefact scatters are invariably found in elevated positions adjacent to creeks or wetlands. They consist of low or high density scatters of primary and secondary flakes in addition to the types of artefacts found as isolated finds. Given the former rainforest and lower slope conditions which prevailed in the Project Area in the past and present, artefact scatters are considered highly unlikely.

7.2.3 Middens

Middens are campsites which are dominated in volume by shellfish remains. Middens may be composed of deep compacted debris reflecting consistent use over long periods of time, or thin scatters of shell which reflect use on a single occasion by a small group, perhaps in transit or gathering food away from a large campsite. Approximately 39% of known sites in the Ballina-Lennox Head area are middens. Middens are usually situated near a source of shellfish and comprise predominantly, mature oyster, pipi, whelk, cockle and cartrut species in addition to terrestrial animal and fish bone, stone artefacts, charcoal and ash from fireplaces. The largest midden complexes at Ballina are located in the Chickiba, North Creek. (Barz 1980a; Bailey 1972; Lourandos 1979). These middens date from the late Holocene period to less than 200 years BP. Human burials have been associated with a number of middens between the Tweed and Richmond Rivers (Barz1980b; Bailey1972; Lourandos1979).



All recorded middens have been located in elevated positions beside estuarine waterways or on elevated sand substrates close to wetlands. The dominant species found in estuarine middens is oyster, while locations away from the waterways contain pipi or combinations of estuarine, open beach and rock platform species. Middens are considered highly unlikely in the Project Area.



8. FIELD SURVEY: ABORIGINAL CULTURAL HERITAGE

8.1 Survey Team

The Project Area is within the area administered for Aboriginal cultural heritage purposes by the Jali LALC. A pedestrian survey for Aboriginal cultural heritage of the Project Area was undertaken by Maddison James, Sites Officers of the Jali LALC with Adrian Piper and Tim Hill of Everick Heritage Consultants on 20 March 2018.

8.2 Assessment Methods

The field methods aimed to inspect exposed ground surfaces as conditions would allow; to record any archaeological material found and assess its significance; and assess the potential for concealed Aboriginal archaeological sites. The assessment also aims to establish if there are sites or areas of a non-archaeological nature significant to the Aboriginal community. At this stage of the assessment this is through consultation with Jali LALC.

Photographs were taken as a record of general features and conditions and to document the degree of surface visibility. Notes were made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features. GPS (GDA 94 – accuracy c. 5 - 15m) was used to record the extent of survey coverage. Mapping and plans used in this assessment were provided by Hydrosphere Consulting and represent the level of information provided to the consultants.

8.3 Constraints to Site Detection

An assessment of the constraints to site detection is made to assist in formulating a view as to the effectiveness of the field inspection to find Aboriginal sites and cultural materials (Table 2). It also assists in the forming of a view of the likelihood of concealed sites, keeping in mind a site specific knowledge of the impacts that European land uses and natural processes may have had on the 'survivability' of Aboriginal sites in a Project Area.

Table 2: Summary of Environment and Ground Disturbance for Survey Units

<i>Survey Unit/Lot</i>	<i>Environmental Description</i>	<i>Ground Disturbance Description</i>	<i>Survey visibility</i>
Area Lower Slope	Lower Slope typical of Bangalow soil landscape	Complete land clearing, excavation of drains and services, introduction of fill and road base.	(<5%) Survey visibility significantly constrained by grass cover.



Alluvial flat	Alluvial flat comprising with no slope between Hutley Drive and the lower slope.	This area has been raised by means of introduced fill at approximately 0.5m depth across the entire alluvial flat.	(<5%) Survey visibility significantly constrained by grass cover.
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The constraints to site detection are almost always most influenced by post European settlement land uses and seldom by natural erosion processes. The area of surface exposure and the degree of surface visibility within exposed surfaces are usually the product of 'recent' land uses e.g. land clearing, ploughing, road construction, natural erosion and accelerated (manmade) erosion (McDonald et al. 1990:92).

In this case the major 'man made' constraints to Aboriginal site survivability and detection would be due to the replacement of native vegetation with improved pastures which had not been maintained at the time of the survey.

8.4 Survey Coverage

To achieve as thorough an archaeological assessment as possible a systematic ground survey of all surfaces is the best method for effective coverage. Due to the relatively small size of the Project Area and the limited original ground surface available to inspect, all of the areas with a reasonable potential to contain surface Aboriginal Objects were inspected, most more than two times.

Having consideration for the constraints to the survey from grass cover, it was decided not to undertake a systematic or meandering pedestrian survey across the Project Area (refer Figure 5 and Figure 6). However, the survey did discuss and agree on the potential of the Project Area to contain archaeological sites and the requirement for additional investigation. The discussion included the following;

- The absence of known Aboriginal sites in the local area and more generally between Lennox Head and Ballina;
- The outcomes of previous archaeological investigation (refer Section 7.2 above); and
- The visible extent of existing disturbance.



Figure 5: The Project Area looking south to north with south facing slopes in rear of photo.



Figure 6: Typical grass cover across the Project Area.



9. RESULTS OF THE SITE INSPECTION

As a result of the desktop study, field inspection and consultation with Jali LALC Sites Officer Maddison James, the following were agreed:

- The Project Area was obviously disturbed and was not likely to contain Aboriginal objects on the ground surface. This disturbance includes approximately 1m of fill over the lower alluvial area and extensive agricultural activities on the lower slopes in the northern portion of the Project Area.
- The Project Area is in a landscape that is unlikely to contain subsurface Aboriginal Objects,
- The extensive past ground disturbance across the Project Area makes it unlikely that the Project will impact on archaeological sites of high significance.
- All of the Project Area has been disturbed in a manner which constitutes 'disturbance' within the meaning of the Due Diligence Code and is consistent with the Due Diligence Code.

No items of European heritage value were identified within the Project Area.



10. CONCLUSIONS AND RECOMMENDATIONS

The Consultant is of the opinion that any proposed works resulting from the development application are unlikely to lead to harm to Aboriginal objects. Whilst additional archaeological investigations are not considered necessary, as a precautionary measure the following recommendations are provided:

Recommendation 1: Aboriginal Object Find Procedure.

If it is suspected that Aboriginal material has been uncovered as a result of development activities within the Project Area:

- 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 or Aboriginal Sites Officer from Jali Local Aboriginal Land Council 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 *ACHCRP Guidelines* (2010).

Should the material be identified as an Aboriginal object and the proposed works cannot be amended to avoid the Aboriginal site an Aboriginal Heritage Impact Permit ('AHIP') would be required prior to recommencement of works in the vicinity of the site. Consultation with stakeholders from the Aboriginal community would be required as a part of the AHIP application process.

Recommendation 2: Aboriginal Human Remains

Although it is unlikely that Human Remains will be located at any stage during earthworks within the Project Area, should this event arise it is recommended that 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 (Ballina), the OEH Regional Office (Coffs Harbour) and the Jali LALC are all 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 OEH 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 3: 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, OEH and the Aboriginal community.



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