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CULTURAL HERITAGE ASSESSMENT



Plan Title:
Development Area for River Heights
Lot 1 on DP 1168904
Tweed Shire LGA

Key:
■ Exclusion Area - EPA Wetlands
□ Exclusion Area Boundary
■ Project Area Boundary

Project: River Heights Tourist
Park
Client: MCM Group Holdings
Location: Tweed Heads South
NSW

File: EV166 River Heights
Prepared By: A. BISHOP
Date: 23/05/2013

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EXECUTIVE SUMMARY

The following is a report detailing the Cultural Heritage Assessment of Aboriginal and non-Indigenous (historic) cultural heritage for the proposed River Heights Tourist Park at Tweed Heads South, northern NSW. The land subject to assessment is identified as Lot 1 on DP 1168904 ('Project Area') situated approximately 3km southwest of Tweed Heads.

This assessment has been commissioned by MCM Group Holdings Pty Ltd (The Proponent) in support of the proposed Development Application of the Project Area. It involved a literature review, heritage register searches, consultation with the Aboriginal community, field inspection, and ARCHAEOLOGICAL test excavations. The methods used in this assessment conform with the NSW Office of Environment and Heritage ('OEH') (formerly DECCW) *Code of Practice for Archaeological Conduct in New South Wales* (2010) ('Code of Practice'), a checklist for which is included as Appendix B.

As part of a desktop study, Everick undertook searches of the relevant Aboriginal and historic heritage registers. Searches conducted on 12 April 2011 and 11 March 2013 of the OEH Aboriginal Heritage Information Management System ('AHIMS') identified eighty-four recorded sites for the broader search area. One of these sites, An artefact scatter and stone arrangement, was recently recorded within the Project Area. There are no Indigenous Places within the Project Area listed in other heritage registers.

A survey for historic and Aboriginal cultural heritage was carried out on 17 May 2011 by Everick personnel Senior Archaeologist Adrian Piper and Archaeologist Jane Lavers, with Jacqueline and Adam Mazzearella (Traditional Owners), and Julie Nutting (representative for Azzura) also attending.

No Aboriginal Objects or Places were identified within the Project Area during the survey. However, at the time of survey, Ground Surface Visibility (GSV) was extremely limited due to exotic vegetation covering the majority of the Project Area. This lowered GSV severely hampered the ability of the Cultural Heritage survey team to accurately assess the Project Area. The Tweed Byron LALC provided written support for the recommendations put forward within the Preliminary Advice report, asking for clearing of the exotic vegetation which hampered effective Cultural Heritage assessment. Their response to the draft assessment is included as Appendix E.



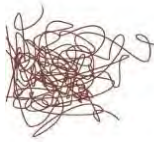
Test excavations took place over the course of eight days intermittently, starting on 18 April 2013. Excavations were carried out by Everick personnel Senior Archaeologists Dr Richard Robins, Adrian Piper and Archaeologist Anna Bishop with Lyndon Combo, Warren Phillips, and Trevor Smith representing the Tweed Byron Local Aboriginal Land Council (LALC), and Jason and Levi McDonald (Traditional Owners). Prior to excavation, vegetation on the crest of the main ridge was cleared with an excavator under the supervision of Des Williams of the Tweed Byron LALC. Test pits sampled a variety of topographic and physiographic zones within the Project Area. The five test pit transects on the ridge crest were selected by Des Williams of the Tweed Byron LALC. The results showed no Aboriginal Objects or cultural material across a total of 36 test pits. Excavations ended when enough information had been recovered to adequately characterize the nature and significance of the site. No physical Aboriginal cultural heritage was identified within the Project Area.

STATEMENT OF HERITAGE SIGNIFICANCE

Through the course of community consultation, a picture has developed of the significance of the Project Area and surrounds to the Aboriginal people of the Tweed. The following statement on cultural significance has been developed through phone attendances, community meetings and excavations involving the Aboriginal Stakeholders. Their involvement provided the socio-cultural context of the area, encompassing past and present activities and sets the archaeological research into a broader cultural landscape (Ross et al. 2003:80). All correspondence that has contributed to this statement has been provided to the JRPP.

The River Heights development area is situated within a greater, significant cultural landscape known to the Aboriginal people of the Tweed. The region was intensively occupied, and contained a number of important occupation, ceremonial and spiritual places. The Project Area is a prominent landscape feature within the region. The Aboriginal Stakeholders are of the opinion that, owing to the significance of the region and the prominence of the landscape feature, the Project Area would once also have been significant. On this basis, the Aboriginal Stakeholders object to the excavation of the hill crest, lowering the hill by several metres.

However, there is no evidence to suggest the Project Area is of particular cultural significance, beyond its association to the broader cultural landscape. During consultation, it has been suggested that parts of the Project Area may be a 'men's place', contain stone axes and other Aboriginal Objects, contain several stone arrangements and contain human burials. None of these suggestions have been substantiated. Although the Aboriginal



Stakeholders contend otherwise, there is no evidence to suggest that the hill of the Project Area is any more significant than any of the other basalt ridges that characterise the Tweed region. There is no evidence for any stone arrangements or burial grounds within the Project Area. There is no evidence for any bora grounds in close proximity, other than the Kirkwood Road Bora Ground approximately 1.5 km to the east.

The Project Area is not significant for its physical heritage, although again, the Aboriginal Stakeholders contend otherwise. There is no evidence of Aboriginal stone tools or cultural modification of trees. Had any stone arrangements been located on the project area, they would have certainly long ago been destroyed by the impacts of land clearing and cropping. Burials are unlikely to have occurred within the shallow rocky soils of the development footprint, and are unlikely to have survived in the wetland, where they are asserted to have been located.

STATEMENT OF HERITAGE IMPACT

During the archaeological Test Excavations, Everick Senior Archaeologists Adrian Piper and Dr Richard Robins undertook detailed inspections and recording of the stones associated with Site #04-02-0184. While some were of a general shape reminiscent of axes, none of these stones showed any evidence of being worked by humans. The edges had clearly not been ground, and there had been no flakes removed such that could be described as evidence of retouch. The lack of evidence of occupation identified during test pitting further supports these conclusions. A subsequent inspection by Dr John Kamminga (Appendix F) also concluded that the stones were not of Aboriginal cultural origin.

A survey for stone arrangements (or remnants of such) was also undertaken. There was no evidence for any stone arrangements. The hill is characterised by numerous small basalt outcrops and introduced basalt boulders. It has subsequently been heavily modified. A previous archaeological assessment done by Adrian Piper in 1998 of the Project Area confirmed that there were no stone arrangements in the area currently registered with AHIMS (Piper 1998). The potential for any identifiable evidence of stone arrangements being located within the Project Area is considered nil.



The sincerity of the belief by the Aboriginal Stakeholders that the Project Area was an important cultural place cannot be doubted. The difficulty for them is that there is no evidence to substantiate their specific claims of heritage significance. They are relying on their own interpretations of significance, based on knowledge derived from surrounding areas and knowledge of their culture more generally. This type of 'reinterpretation' of place is, in Everick's experience, becoming increasingly common. However, there is little protection for places ascribed such significance in New South Wales legislative or administrative regimes. There may be good public policy reasons for this, however, such reasons have not been articulated in the relevant Statutes or guidelines. Regardless, such issues are beyond the scope of this assessment. For the purposes of this assessment, it can be safely concluded that no types of heritage significance will be impacted by the Project that are afforded protection under the heritage regime of New South Wales.

RECOMMENDATIONS:

The following recommendations are cautionary in nature, and based upon the desktop review, the results of the field assessment and consultation with the Aboriginal Stakeholders and the Tweed Byron LALC. There are no recommendations for historic heritage.

Recommendation 1: Removal of AHIMS Site

The 'axes' collected from the monitoring of the Kirkwood Road extension and deposited within the Project Area do not fit the definition of an Aboriginal Object. There is no evidence to suggest these stones have been modified by humans, such that an archaeologist might identify them as artefacts.

There is no evidence for any stone arrangements on the Project Area. The likelihood of stone arrangements surviving the extensive European impacts that have occurred over at least the last 100 years is considered extremely unlikely. There is no ethnographic or historical evidence for stone arrangements having occurred within the Project Area.

It is therefore recommended that AHIMS Site #04-2-0184 is removed from the AHIMS register. An AHIP may be required as a legal technicality, although this would appear unwarranted as there is no heritage to which the AHIP might apply.



Recommendation 2: Aboriginal Human Remains

It is recommended that if human remains are located at any stage during earthworks within the Project Area, all works must halt in the immediate area to prevent any further impacts to the remains. The Site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Tweed Local Aboriginal Land Council and the OEH Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the 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: Aboriginal Cultural Material

It is recommended that 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 is to be engaged to identify the material; and
- (d) if the material is found to be of Aboriginal origin, the Aboriginal community, including the Tweed Byron LALC, is to be consulted in a manner as outlined in the OEH guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).



Recommendation 4: Notifying the OEH

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

Recommendation 5: 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.



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.

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

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

Burra Charter means the International Council of Monuments and Sites ('ICOMOS') Burra Charter (1999).

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

EP&A Act means the Environmental Planning and Assessment Act 1979 (NSW).

NCREP 1988 means the North Coast Regional Environmental Plan 1988.

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 Government Office of Environment and Heritage.



Project Area means the land subject to this assessment identified as Lot 1 on DP 1168904 at Kirkwood Road in Tweed Heads South, NSW.

Proposed Works means all activities associated with construction and landscaping within the Project Area (Figure 2), including activities undertaken by subsequent landholders.

Proponent means MCM Group Holdings (the ‘Proponent’) and all employees and contractors of the Proponent.

The Project means the proposed rezoning and development at Lot 1 on DP 1168904 at Kirkwood Road in Tweed Heads South, NSW.

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

Tweed Byron LALC means the Tweed Byron Local Aboriginal Land Council.

Tweed Shire LEP means the Tweed Shire Local Environmental Plan 2000.



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1. INTRODUCTION

1.1 Purpose of the Archaeological Investigation

The following report is a Cultural Heritage Assessment of Aboriginal and historic (non-Indigenous) cultural heritage relating to the proposed Development Application for a property at Kirkwood Road, Tweed Heads South (the Project). The land subject to assessment is identified as Lot 1 on DP 1168904 (Project Area). The intent of the investigation was to identify any archaeological or cultural heritage constraints to the eventual use of the Project Area for tourist accommodation purposes.

1.2 Proponent & Project Brief

Everick Heritage Consultants (The Consultant) was commissioned by MCM Group Holdings Pty Ltd (the Proponent) to undertake this assessment. The brief for this project was to undertake a Cultural Heritage assessment in support of a Development Application to the Tweed Shire Council.

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) consultation with the Tweed Byron Local Aboriginal Land Council (LALC) and Tweed Shire Councils Aboriginal Advisory Committee (AAC);
- (b) searches of applicable heritage registers;
- (c) a review of ethnographic and historic resources relevant to the region;
- (d) a review of previous archaeological assessments from the region;
- (e) a review of historic aerial photography;
- (f) archaeological survey of the Project Area;
- (g) archaeological test excavations;
- (h) assessments of archaeological significance and impact; and
- (i) report on findings and recommended management strategies.

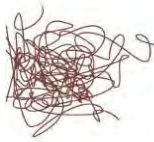


Figure 1: Project Area General Locality



Figure 2: Aerial View of the Project Area (Google Earth 2013)



1.3 Defining the Project Area

The Project Area is situated within the Tweed Shire Council local government area, approximately three km southwest of Tweed Heads (Figure 1). The area subject to this assessment includes all of Lot 1 on DP 1168904 (Figure 2). The land is bounded by the Pacific Motorway on the east and Kirkwood Road to the north. The Project Area is approximately 18.02 ha in area.

1.4 Report Authorship

The site survey was undertaken by qualified Senior Archaeologist Adrian Piper and Archaeologist Jane Lavers of Everick Heritage Consultants, assisted by Traditional Owners Jacqueline and Adam McDonald, and also Azzura representative Julie Nutting. Archaeological excavations were undertaken by qualified archaeologists Dr Richard Robins, Adrian Piper and Anna Bishop, assisted by Jason McDonald, Levi McDonald, Lyndon Combo, Warren Phillips and Trevor Smith.

The desktop study was undertaken by Adrian Piper and Jane Lavers. This report was written by Adrian Piper, assisted by Tim Robins, Anna Bishop, Jane Lavers and Caroline Ingram.

2. LEGISLATIVE AND PLANNING CONTEXT

The following legislation provides the context for cultural heritage in NSW: the *National Parks and Wildlife Act 1974* (NSW), the *Environmental Planning and Assessment Act 1979* (NSW) and the *Heritage Act 1977* (NSW). 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 is most relevant. The consent authorities will be the Tweed Shire Council and, where a referral agency is required to be reported to, 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.



As of 1 October 2010, a range of legislative amendments came into operation in New South Wales affecting Aboriginal heritage. The methods used in this assessment have been informed by these legislative amendments, which are discussed in further detail below.

2.1 The National Parks and Wildlife Act 1974 (NSW) and the National Parks and Wildlife Regulations 2009 (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 NPWA also now includes a range of defense provisions for unintentionally harming Aboriginal Objects:

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

2.1.1 ‘*Low Impact Activities*’

The new 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 defence 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 stormwater 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 7.2 of this assessment. It operates by posing a series of questions for land uses 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) is 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 ACHCR (2010)

The OEH has recently published the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) (ACHCRP). These requirements replaced the former *Interim Community Consultation Requirements for Applicants* (2004) (ICCR) as of 12 April 2010. The ACHCR provide an acceptable framework for conducting Aboriginal community consultation in preparation for Aboriginal Heritage Impact Permits.

Proponents are also required to follow the ACHCR where undertaking a project that is likely to impact on cultural heritage and/or where required by the consent authority.



2.4 The Heritage Act 1977 (NSW)

The Heritage Act 1977 (NSW) ('Heritage Act') is aimed at identifying and protecting significant items of historic (as opposed to Aboriginal) cultural heritage. The focus of the legislation is on identifying places of either local or state heritage significance, and protecting them by registration on heritage registers. Significant historic heritage items are afforded little protection (other than at the discretion of councils) where they are not on a heritage register.

Of note are the provisions allowing for interim heritage orders (Part 3), which grants the Minister or the Minister's delegates, (which importantly may include a local government agent) the power to enter a property and provide emergency protection for places that have not yet been put on a heritage register but that may be of local or State significance.

The Heritage Act 1977 (NSW) also makes allowances for the protection of archaeological deposits and relics (Part 6). An archaeological "relic" means any deposit, object or material evidence which relates to the settlement of the area, not being Aboriginal settlement. Importantly, a former requirement for an archaeological relic to be 50 years or older has recently been repealed. The focus is now on the item's potential heritage significance, not its age. As will be discussed below, it is highly unlikely that archaeological relics of significant historic sites are located within the Project Area.

2.5 The Tweed Shire Local Environmental Plan 2000

The Tweed Shire LEP 2000 provides statutory protection for items already listed as being of heritage significance (Schedule 2), 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 ensures that essential best practice components of the heritage decision making process are followed.

For listed heritage items, relics and heritage conservation areas, the following action can only be carried out with the consent of the Tweed Shire Council:

- a) demolishing, defacing, damaging or moving a heritage item or a building, work, relic, tree or place within a heritage conservation area, or
- b) altering a heritage item or a building, work or relic within a heritage conservation area by making structural changes to its exterior, or



- c) altering a heritage item or a building, work or relic within a heritage conservation area by making non-structural changes to the detail, fabric, finish or appearance of its exterior, except changes resulting from any maintenance necessary for its ongoing protective care, which does not adversely affect its heritage significance, or
- d) moving a relic, or excavating land for the purpose of discovering, exposing or moving a relic, or
- e) erecting a building on, or subdividing, land on which a heritage item is located or which is within a heritage conservation area.

In addition, Council may not grant development consent without considering whether the lands contain potential Aboriginal archaeological deposits (Section 44).

2.6 The State Environment Planning Policy (North Coast Regional Environmental Plan 1988)

The State Environment Planning Policy (North Coast Regional Environmental Plan 1988) ('NCREP 1988') provides statutory protection for a select number of state and regionally significant heritage items and places in northern NSW. A "heritage item" means a building, work, relic, tree or place of heritage significance to the North Coast Region, as specified or described in Schedule 2 or 3 of the NCREP 1988. For these items, the Tweed Shire Council remains the consent authority. Under the NCREP 1988 Council must consider:

- the views of the Heritage Council;
- the heritage significance of the item to the State or region;
- the extent to which the carrying out of the development would affect the heritage significance of the item and its site;
- whether the setting of the item, and in particular, whether any stylistic, horticultural or archaeological features of the setting should be retained;
- measures taken to conserve and preserve the heritage item, including where appropriate, any conservation plan; and
- whether the item constitutes a danger to the users or occupiers.



The main difference between the NCREP 1988 and other Council planning controls is that it focuses on regional significance rather than local significance. For heritage items of regional significance, it also requires referral to the NSW Heritage Council, regardless of whether the item is on the NSW Heritage Register.

2.7 The NSW Heritage Manual

The NSW Heritage Manual lists an 8-step process that is generally considered a best practice guide to assessing significant items. The process steps are:

1. Summarise what is known about the item.
2. Describe the previous and current uses of the item and the associations it may have to individuals or groups and its meaning for those people.
3. Assess the significance using the NSW heritage criteria.
4. Check if a sound analysis of the item's heritage significance can be made.
5. Determine the item's level of significance.
6. Prepare a succinct statement of heritage significance.
7. Get feedback.
8. Write up the information.

Contrary to common belief, a significant heritage item need not be particularly 'old' (the exception to the rule being the definition of an Archaeological Relic discussed above). Rather, the focus is on identifying what aspects of a particular item may be significant.

The NSW Heritage Manual contains a set of 7 assessment criteria that act as a guide to assessing significance.

They are:

- **Criterion (a):** An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area);
- **Criterion (b):** An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area);
- **Criterion (c):** An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);



- **Criterion (d):** An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons;
- **Criterion (e):** An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);
- **Criterion (f):** An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area); and
- **Criterion (g):** An item is important in demonstrating the principal characteristics of a class of NSW's
 - cultural or natural places; or
 - cultural or natural environments.

3. DESCRIPTION OF DEVELOPMENT PROPOSAL

This report accompanies a Development Application for the construction of a tourist accommodation development comprising at total of 355 units, ancillary communal recreation facilities and on-site car parking for 375 vehicles at the subject site. . The proposal provides a communal facilities building located adjacent to the site entry which will provide swimming pools, barbeques, a kiosk, dining area, games room and administration offices. Within the site, the accommodation units are accessed via the internal driveway network and car parking is provided adjacent to each unit. A significant portion of the Project Area will be dedicated to future open space / parkland. The risk to any cultural material in these areas is generally lower than within the areas of proposed tourist accommodation.

The proposed earthworks include maximum cuts in the order of 27m in the centre of the site. However, at the 'edges' of the proposed earthworks pad the height of batters is generally between 2m – 8m with a small length of batter along the western side being up to approximately 14m in height.

The eastern part of the site containing the ecologically significant vegetation will be retained with no access to these areas. A 50 m buffer will be provided to the SEPP 14 wetland and a further APZ area comprising allowable low fuel vegetation will be provided beyond the buffer area.

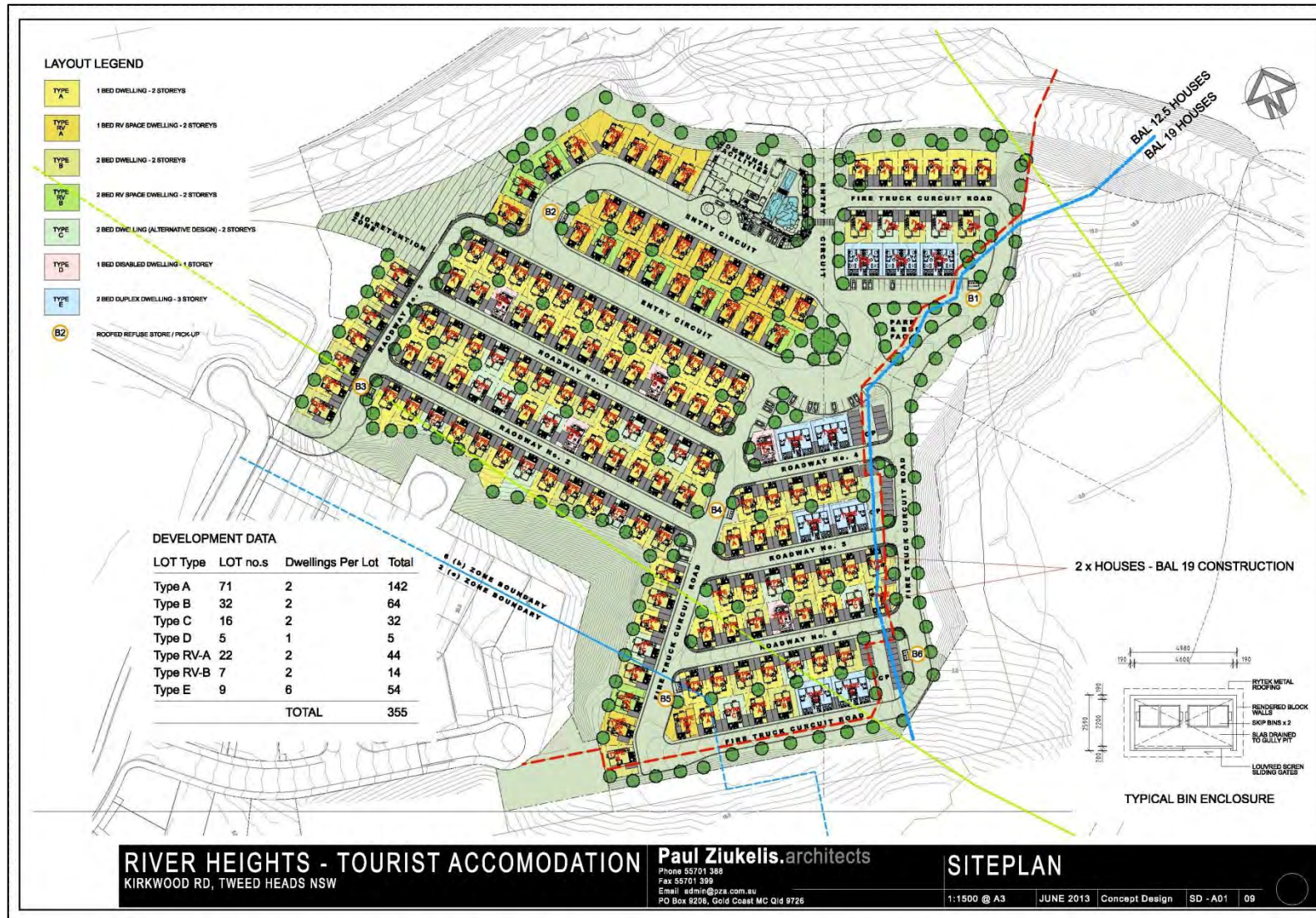


Figure 3: Project Area Development Plan



Figure 4: Exclusion Area



4. ABORIGINAL COMMUNITY CONSULTATION

The Aboriginal community are the determinants of the significance of their cultural heritage. Members of the Aboriginal community have been 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.

4.1 The Register of Aboriginal Stakeholders

A consultation process with the Aboriginal community has been undertaken in accordance with the OEH ICCR Guidelines. A copy of the 'Index of the Community Consultation File' is provided in Appendix A.

On 5 October 2012 a notice was placed in the Tweed Daily News newspaper inviting Aboriginal persons/organisations with cultural heritage interests in the River Heights Development Area to advise Everick Heritage Consultants in writing.

From these responses a Stakeholders Register has been compiled into a stakeholders register. Responses have been received from the following:

- Jackie McDonald and on behalf of Jason McDonald
- The Tweed Byron LALC

The following authorities have been notified and responded to the proposal to produce a cultural heritage assessment for cultural heritage at River Heights:

- Tweed Byron Local Aboriginal Land Council (Tweed Byron LALC)
- Cultural Heritage Unit of the OEH
- The Tweed Shire Council

The Project Area does not fall within the boundaries of the any Native Title groups.



4.2 Consultation Process

A preliminary field assessment was conducted on 17 May 2011 by Everick archaeologist Adrian Piper and Helene Tomkins, Mr Cyril Scott, Sites Officer for the Tweed Byron Local Aboriginal Land Council, and local Traditional Owner representatives Jackie and Adam McDonald. Everick used the results of background research and survey to formulate a proposed methodology for investigating and managing cultural heritage within the Project Area.

The project was introduced to the members of the Tweed Shire Council Aboriginal Advisory Committee (AAC) on 7 November 2011 (Appendix A). A project information booklet was prepared, which provided a brief introduction to the project, including project description, plans, and satellite imagery of the site. A follow up meeting was required to seek further input after the AAC members had time to consider the implications of the development.

During the AAC meeting on 1 June 2012 the site's preliminary survey results were discussed, in addition to the need for better ground surface visibility and vegetation clearance. The AAC expressed concern over the plans for making a cut into the hill at River Heights at both the June and August 2012 meetings.

On 5 October 2012 a notification for potential Aboriginal Stakeholders was placed in the Tweed Daily News and also mailed to numerous potential Stakeholders that were identified by the OEH (Appendix A). The Stakeholders list was later compiled from the responses received.

An initial off-site background information meeting was held on 8 February 2013 (Appendix A). All registered Aboriginal participants were invited to this meeting. Attendees were Minjungbal descendents Jackie and Jason McDonald, local Aboriginal Representative Aunty Joyce Summers, Des Williams (Chairperson of the Tweed Byron LALC), Robert Sullivan and Julie Nutting of Azzura International Constructions, Bradley Lane of Darryl Anderson Consulting, and Tim Robins and Anna Bishop of Everick Heritage Consultants.

The cultural significance of the River Heights landscape and its part in the greater Tweed cultural landscape was discussed extensively by Aboriginal Stakeholders. Stakeholders expressed belief that the ridge at River Heights may have been a lookout point or part of a pathway through the Tweed. The existence of a tuckeroo



tree at the top of the ridge was also an item of concern. Because of this, Stakeholders stated that they would not approve of a cut into the hill.

Survey works performed on the property adjacent to the Project Area were also discussed. Stakeholders notified Everick that seven stone axes were discovered during this recent survey and that their position might be within the Project Area boundary. It was agreed that the exact location of the stone axes would need to be identified to determine if they are within the Project Area, and therefore require protective measures.

Tim Robins discussed the results of the preliminary survey and sought opinions on appropriate excavation methods and clearing of the area. It was agreed that mechanical clearing of the site would be best suited for the vegetation and terrain that occupy the Project Area. It was also agreed that excavations would cover the ridgeline in order to retrieve any cultural material that might be on the ridge. Aboriginal participants expressed confidence in the survey methods and the proposed excavation methods during this meeting.

From the results of the on-site meeting, Everick developed an Excavation Strategy and distributed it to the registered Aboriginal participants and the Tweed Byron LALC at a meeting on 22 February 2013 (Appendix A). Everick received no written feedback regarding the Excavation Strategy. Discussions with the Registered Stakeholders identified no concerns, and they were generally satisfied with the proposed scope of the excavations.

On 3 May 2013 a meeting was held with the Aboriginal Advisory Committee at the Minjungbal Aboriginal Museum. At this meeting Des Williams revealed that he had located a burial ground in the wetlands zone of the Project Area and two ceremonial grounds on properties adjacent. This burial ground is believed to have as many as 1200 burials. Des Williams indicated that because of this the site would have been avoided in the past, and thus it is unlikely that any artefacts will be found in the Project Area.

Des Williams visited the site on 7 May 2013 to further inspect the ridge crest and the area around the burial ground. During this visit Des requested that the Test Excavation Strategy be altered to increase the number of transects on the Upper Ridge Crest to five instead of three. The test excavation plans were altered to suit these requests.



This consultation process was modelled based on the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents*. The process complied with all sections of the act, and can be reviewed in the Community Consultation Report found in Appendix A.

4.3 Excavations

Everick notified the OEH of the proposed Test Excavations on 1 March 2013. Due to inclement weather, archaeological test excavations were unable to commence until 18 April 2013. They ran for eight days. A review of the excavation results is provided in Section 8.2 of this report. Aboriginal Stakeholders representing the Tweed Byron Local Aboriginal Land Council and the Minjungbal descendants were all invited to participate.

The following Aboriginal Stakeholders worked on excavations with Everick's archaeologists:

- (a) Jason McDonald;
- (b) Levi McDonald;
- (c) Lyndon Combo;
- (d) Warren Phillips;
- (e) Trevor Smith.

The excavations identified all areas as having low - nil archaeological significance. During the course of the excavations, Everick's archaeologists were afforded the opportunity to discuss the general significance of the region to the Aboriginal people of the Tweed. The discussions, along with many others undertaken during the course of community consultation, have provided the basis for the assessment of cultural significance provided in Section 10 of this report.

4.4 Draft CHA Report

Although repeated requests were made of the Land Council to hold a meeting to review the results of this assessment prior to issuing a draft report, a meeting was unable to be arranged. A draft Cultural Heritage Assessment (CHA) report was provided to the Registered Stakeholders on 4 June 2013. Everick requested responses to the draft report be provided by 2 July 2013.



A conference call was held on 24 June 2013 between registered Stakeholders Des Williams and Jackie McDonald and Tim Robins of Everick. Des Williams clarified that the Aboriginal Stakeholders did not object to development of the site. What they objected to was removal of several metres of the top of the hill, and any disturbance within close proximity to the fallen Tuckeroo Tree at the highest point of the ridge. Tim Robins agreed that he would clarify this matter in his report. Both Stakeholders clarified that the alleged Aboriginal stone tools had been found during monitoring works for the Kirkwood Road Extension, near the crest of the hill, in close proximity to the Tuckeroo tree. The Registered Stakeholders confirmed that they would not be supporting the development plans as proposed.

4.4.1 Response from Jackie McDonald

Jackie McDonald (also on behalf of Aunty Joyce Summers) provided a written response to the June 2013 draft CHA on 26 July 2013 (Appendix A). In it, she raised several matters which have been clarified in this final report, being:

- (a) Additional weight to the Statement of Significance (see Section 10).
- (b) The potential existence of Stone Arrangements on the Project Area (see Sections 8 and 11).
- (c) The objection from the Stakeholders to the Project is based on the modification of the hill crest, rather than development of any parts of the Project Area (see Section 4.5, 10 and 11).
- (d) Amendments to the wording of some sentences of the report to reflect the opinions of the Aboriginal Stakeholders.

Jackie McDonald objected to the removal of the AHIMS site listing on the Project Area and requested further consultation. She also stated that the test excavations were not comprehensive enough or carried out to the registered Stakeholders 'satisfaction'. This opinion has been discussed further in Section 8.2. It is of note that the final test pit locations on the ridge crest were selected by Des Williams, with the initial planned strategy of three transects being amended to five at his request.



4.4.2 Site Inspection

An on-site meeting was held on 6 August 2013. In attendance were Jackie McDonald, Jason McDonald, Warren Phillips (TBLALC) and Lyndon Combo (TBLALC) and Adrian Piper. In providing general information, Jackie McDonald stated that the hill crest of the project area was related to traditional story that linked many of the hill tops of the Tweed Valley. This included Mt Murraba and Jungarabah ('Razorback'). She expressed the view that whilst she was aware of the significance, it was not her place to tell the story. She requested that Everick speak to either Kyle or Joshua Slabb, local residents and knowledge holders.

Jason McDonald and Warren Phillips explained where the stones at the tuckeroo tree came from. Two of the stone came from a machine scrape approximately 8m north west of the Tuckeroo tree at a depth of approximately 60cm (Jason indicated with his hands). One came from below the level of the original track up the ridge crest, at the rear of the van village. The others were found around the edge of the existing cut.

During the site inspection, the community representatives raised concerns that part of a stone arrangement had been moved from site. An alleged grindstone had also been moved (see Appendix A correspondence from the Land Council). The discussion was the first time during consultation with community that the possibility of a grindstone being located on the Project Area had been raised with Everick. Everick is unable to verify whether the stone shown in the Tweed Byron LALC's correspondence constitutes an Aboriginal Object under the NPW Act, as upon inspection it was not within the Project Area.

4.4.3 Response from the Tweed Byron Local Aboriginal Land Council

A written response to Evericks June 2013 draft heritage assessment was provided by the Tweed Byron LALC on 9 August 2013 (Appendix A). The Tweed Byron LALC strongly disagreed with the cultural heritage Statements of Significance and Heritage Impact Statement in the draft assessment. The concerns raised by the Tweed Byron LALC can be summarised as follows:

- (a) proper consideration has not been given to the intangible heritage values of the Project Area, including;
 - a. the Aboriginal community should determine cultural significance;



- b. the Aboriginal community deems the cultural significance of the Project Area to be high, and this has been incorrectly reported in Everick's draft assessment report; and
 - c. there is community knowledge on the cultural significance of the ridge crests of the Tweed that has not been properly considered;
- (b) during initial consultation, community was not aware of the level of excavation (cut) over the ridge crest;
- (c) the Project Area contains physical Aboriginal heritage, including:
 - a. Three large stone arrangements;
 - b. A grinding dish;
 - c. Seven artefacts, including three stone axes, some pounders and other tools; and
 - d. Human burials in the lower wetlands of the Project Area;
- (d) archaeological excavations were not undertaken to the Land Councils satisfaction:
 - a. They were not undertaken in areas deemed most likely to contain Aboriginal heritage by the Aboriginal community; and
 - b. suggestions that archaeological excavations should be undertaken in close proximity to the tuckeroo tree where the alleged stone tools were found were dismissed by Everick;
- (e) the Tweed Byron LALC should be included as a contact in the event that Aboriginal heritage is located during the development works; and
- (f) the Tweed Byron LALC wished to clarify that the issue is not that they do not support any development within the Project Area. It is that they do not support the entire removal of the ridge crest as it currently is.

The response from the Tweed Byron LALC to the draft assessment report raised a considerable number of issues. Most of these issues are discussed in other sections of this report. However, specific comments relating to the concerns raised by the Tweed Byron LALC are provided below.



<i>Ref</i>	<i>Issue</i>	<i>Everick Response</i>
(a)	No Proper Consideration of Intangible Heritage Values.	<p>Everick is aware and has acknowledged that the South Tweed is an important cultural landscape (Section 10.2). There is no doubting the sincerity of the belief of the Aboriginal Stakeholders that to remove the top of the ridge line will harm the cultural significance of this region. However, no cultural information has been provided that would elevate the significance of the Project Area above that of any other ridge crest within the Tweed. In consultation with the community in 1998 and from 2011 to 2013, there has been no specific story, ceremony or other knowledge provided linking the Project Area to past intangible heritage values.</p> <p>The function of this report is to accurately present the information as provided by the Aboriginal Stakeholders, so that potential impacts to any Aboriginal heritage by the development can be assessed. Final recommendations are made in accordance with the relevant Statutory guidelines.</p> <p>It is of note that following a meeting with the Aboriginal Stakeholders on 6 August 2013, additional knowledge holders in the region may be able to provide further information on the intangible significance of the Project Area. Meetings are being arranged in the near future.</p>
(b)	Community was not aware of the level of proposed cut during initial consultation	<p>Everick has consistently consulted on the basis that the project would involve substantial modification of the Project Area. There was some initial confusion over whether the area of the tuckeroo tree would be impacted, as it is within the Kirkwood Road easement. Everick has confirmed with all Stakeholders that this area will also be impacted under the development plans, as evidenced by the letters in response to the draft assessment report.</p>
(c)	The Project Area contains important physical heritage.	<p>Everick is of the opinion that there are no Aboriginal Objects within the Project Area. A second opinion from Dr Johan Kamminga was also sought on the alleged artefacts, and his opinion is that they are not Aboriginal Objects. The archaeological test excavations confirmed that the proposed development is unlikely to impact on Aboriginal Objects.</p>



		<p>The potential grindstone could not be verified by inspection, and is regardless not within the Project Area upon recent inspections.</p> <p>There is no evidence for stone arrangements or burials within the Project Area. Whilst there are basalt boulders on the Project Area, the extensive ground disturbance over a long period of time (including cropping and construction of a homestead) would place significant doubt over the potential for these stones to be considered Aboriginal stone arrangements. This land was also surveyed in 1998 by the Land Council and Adrian Piper, who identified no stone arrangements.</p>
(d)	Archaeological excavations were not undertaken to the Land Councils Satisfaction	<p>An excavation strategy was provided to the Aboriginal Stakeholders for comment. The initial clearing of the ridge crest and selection of final test pit locations was undertaken in consultation with Mr Des Williams, Chairperson of the Tweed Byron LALC. As his request, the test pits were placed on 5 transects rather than the initially proposed 3. Whilst the Stakeholders may have wanted more test excavations, the results are conclusive enough to provide a sound understanding of the archaeological potential of the Project Area.</p> <p>The area immediately surrounding the tuckeroo tree was not excavated as this is a site registered on the AHIMS database, and as such a permit would be required from the OEH. Never-the-less, there is no reason to suggest that the area immediately surrounding the tuckeroo tree is of higher potential than lands 20 m to the west.</p>
(e)	Change to Recomm. 3.	Everick has altered recommendation 3 to specifically reference the Tweed Byron LALC in the event of a suspected cultural heritage find.
(f)	Clarification to TBLALC Objection	Everick has clarified in this report that the Land Council object to removal of the ridge crest, no all development within the Project Area.



4.5 Summary of Consultation Outcomes

In all, five community meetings were held in preparation for this Cultural Heritage Assessment. Everick has taken numerous file notes and meeting minutes documenting key conversations with Stakeholders. A copy of the community consultation file will be provided to the JRPP to assist in its determination.

Everick has had many conversations with Stakeholders, in which concerns were raised. Generally, the Aboriginal Stakeholders do not support the development proposal as planned. The reasons are summarised below. A review of the merits of the types of cultural significance identified in this Section is provided in Sections 10 and 11 of this report.

4.5.1 General Landscape Significance

The Project Area comprises a prominent hill within South Tweed Heads, visible from the surrounding areas. Under the proposal, substantial excavation works would occur, lowering the hill and constructing tourist accommodation over it. This type of act is viewed as inappropriate by the Aboriginal Stakeholders. In doing so, the Project will impact on the ability of present day and future generations of Aboriginal people to access and interpret the landscape the way their ancestors have.

The Project Area is located within a region that contains a number of important cultural places (Figure 5). These include a bora ground just 1.5km to the east, numerous middens and story places closer to the coast. The Aboriginal Stakeholders are of the opinion that this region was an important cultural region.

4.5.2 'Stone Axes'

As mentioned earlier, the Aboriginal Stakeholders were of the opinion that a group of seven artefacts, some being 'stone axes' were found by Aboriginal Monitors, during construction works on the road easement immediately north of the Project Area. These 'artefacts' were placed within the Project Area, and registered as Site 04-2-0184 on the AHIMS database. There was initial suggestion that the Project Area was therefore a 'men's place.' A full discussion on the 'axes' and the archaeological potential of the Project Area is provided in Section 10.



4.5.3 Stone Arrangement

It has been proposed by several Stakeholder (Appendix A, Des Williams pers. comm, Jason McDonald pers. comm.) that a stone arrangement was located on the upper ridge crest of the Project Area. This site was registered as AHIMS site O4-2-O184 by the OEH. This site was mapped and given a 10 m buffer area during test excavations; however no stone arrangement was noted during the subsequent site inspection on 7 May 2013. No Stone Arrangement has been identified by Everick in this assessment, a discussion on which is provided in Section 10.

4.5.4 Tuckeroo Tree

A Tuckeroo tree that occupied the ridge crest was mentioned throughout the consultation process. The tree was identified as located on the area of particular significance, and was not of itself significant. This tree blew over in high winds in February 2013.

4.5.5 Burial Site

Everick was advised by Des Williams that a burial site is located within the wetlands (eastern portion) of the Project Area. Mr Williams was of the opinion that there are 1200 burials at this location. The oldest was many thousands of years ago, while the youngest was just 98 years ago. Some of the burials were on raised platforms above the wetlands. Mr Williams is of the opinion that the significance of the area as a burial ground would mitigate against Aboriginal occupation of the ridge crest within the Project Area.

4.5.6 Cultural Heritage Values Map

A cultural heritage values map is shown in Figure 5 below. It should be noted that this map is a reproduction of the information provided to Everick by the Aboriginal Stakeholders during the consultation process. It is not an endorsement by Everick or the Proponent that any such sites are within the Project Area.



Figure 5: Cultural Heritage Values Map



5. HERTIAGE REGISTERS: ABORIGINAL AND HISTORIC

5.1 The OEH Aboriginal Heritage Information Management System

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, or that the survey was undertaken in areas of poor surface visibility. Further, care needs to be taken when looking at the classification of sites. For example, the decision to classify a site an Open Campsites containing shell rather than a Midden can be a highly subjective exercise, the threshold for which may vary between archaeologists. There are also errors with the data.

A search was conducted on 12 April 2011 of the OEH Aboriginal Heritage Information Management System (AHIMS service number 32722) over 25 km² centring on Tweed Heads. The search identified 83 registered Aboriginal sites within the search area (Figure 6). The majority of the registered sites are Open Campsites. Twenty three are listed as containing artefact scatters or single artefacts. An additional three Open Campsites contained shell material as well as artefacts, but were not classed as Middens. One Open Site was listed as a PAD (Potential Archaeological Deposit), although whether it would contain shell, artefacts, burials or other types of evidence of human occupation is unknown. The search identified 17 middens within the search area. As is consistent with the archaeological record for other parts of the region, the middens are located close to the resource. Five burial sites are listed in the search area. No sites were listed within the Project Area.

An updated search was later conducted on 11 March 2013. This search covered the Project Area and the maximum 1 km buffer area around it. The results showed an additional site to the previous AHIMS search, site 04-2-0184 (Information restricted/site card unavailable), described as an artefact/stone arrangement. This site is located in the Project Area, on the east end of the Upper Ridge Crest, near to where a large cut has been made into the ridge for the Kirkwood Road extension. This site was given a 10 m buffer during excavations. This specific site was not noted as a place of community concern during the site inspection by Des Williams (TBLALC representative) on 7 May 2013.



Figure 6: 2011 AHIMS Search Results



Site 04-2-0014 is a Bora Ground approximately 2km from the Project Area. Bora grounds are highly significant Aboriginal ceremonial sites that likely were used as processional pathways, and were visited by a large number of Aboriginal groups. The location of a Bora Ground is often carefully chosen in order to accommodate large groups of visitors, with enough space for campsites and proximity to a river or other source of water. Because of this, the area immediately surrounding a Bora Ground is also important, and tends to harbor a great accumulation Aboriginal Objects and campsites.

Within the Tweed Heads South area two middens were discovered, one along Dry Dock road and the other along Fraser Drive (04-2-0034 and 04-2-0088). These may have been a result of groups gathering in the vicinity of the nearby Bora Ground.

5.2 The Bundjalung Mapping Project (BMP)

The BMP is a privately run cultural heritage database for the Tweed Region. It is accessed with the permission of the Tweed Byron LALC and participating Traditional Owners. The BMP has records for the northern Tweed from anecdotal sources of Aboriginal cultural heritage information as well as the data derived from the OEH AHIMS.

No sites are listed on the BMP within the Project Area. In addition to the New South Wales OEH AHIMS registered sites in that database, four artefact scatters and one possible resource tree had been recorded in the bushland between the Cobaki Broadwater and the Tugun Bypass (I. Fox pers. comm. April 2008). Information on two additional sites was located in the files of the Bundjalung Mapping Project. These were a burial ground for both Aboriginal and non-Aboriginal people on the south bank of the Terranora Inlet at Phillip Parade, and a possible ceremonial ground at Lakeview Drive on a ridge overlooking Terranora Broadwater. This site was observed in 1974 after a bushfire, but now has houses on it.

A request was made to re-inspect the BMP database prior to issuing this report. However, due to the transition of responsibility for the BMP over to the Tweed Byron LALC, has not been available. It is of note that the BMP has no records a burial ground or stone arrangement within the Project Area. Prior consultation with the Land Council (Appendix E) over the Project Area did not identify the existence of any burial grounds or stone arrangements.



5.3 Other Heritage Registers: Indigenous & Historic Cultural Heritage

The following heritage registers were accessed on 18 March 2013 for Indigenous and historic places within the Tweed Shire LGA:

- **The World Heritage List:** Contains one place listing for the Tweed LGA. The Gondwana Rainforests of Australia – Shield Volcanoes Group. This place is not with close proximity to the Project Area.
- **The National Heritage List** (Australian Heritage Council): Contains one place listing for the Tweed LGA. The Gondwana Rainforests of Australia – Shield Volcanoes Group. It is not within close proximity to the Project Area.
- **Commonwealth Heritage List** (Australian Heritage Council): Contains no place listings for the Tweed Shire LGA.
- **Register of the National Estate** (Australian Heritage Council): Contains 16 place listings for the Tweed Shire LGA. The Ukerebagh Nature Reserve has been determined as having Indigenous values of National Estate significance. It is approximately two kilometres from the Project Area. There are no other places listed within proximity.
- **The State Heritage Register** (NSW Heritage Office): Contains two place listings, neither close to the Project Area.
- **Tweed Shire Council Local Environment Plan 2010:** No listed places are in close proximity to the Project Area.

No culturally restricted sites or information were identified in these searches.

5.4 Synthesis of Archaeology and Ethnohistory

5.4.1 Prehistory

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



Coastal sites in northern N.S.W. date to within the Holocene period. The earliest of these is a shell midden at the base of East Banora Point on the lower Tweed River where an occupation phase was dated between 4,700 BP and 4,200 BP (Appleton 1993:34). Faunal material showed a predominance of oyster, cockle and whelk by volume, in addition to remains of pademelon, kangaroo, bream, whiting, flathead and schnapper. The stone component exhibited few diagnostic traits, only four artefacts appearing to be of a deliberately manufactured shape (Appleton 1993:17-18).

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

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

A shell midden on Chickiba Creek (Richmond River) was found to have accumulated between 1,750 BP and c. 100 BP (Bailey 1975:52). Shell samples from the nearby Angels Beach area are dated between 800 BP and 530 BP, with one sample at 900 - 1,000 BP (Rich 1994:195). Stone artefacts were assessed on technological grounds to date to within the past 2,000 years (Rich 1994:161). Bailey's basal date of 1,750 BP suggests that the modern resource-rich environment may not have been productive enough at an earlier time to support any more than small groups (Roy in Rich 1994). By contrast, the Tweed River estuarine site below Sextons Hill was in use some 3,000 years earlier than this (Appleton 1993).

Beach foreshore sites investigated to date have been associated with more recent phases of occupation than estuarine sites. Fore dune sites typically take the form of narrow bands of pipi shells, or surface scatters of pipi and a few stone artefacts. Pipi horizons at South Ballina and Broadwater have been dated to 260 years BP and 200 years BP respectively (McBryde 1982:77). A more substantial pipi midden (04-06-0061) investigated on the foreshore at Byron Bay had been formed between approximately 1,000 and 400 years BP. The 80cm deep midden deposit was overwhelmingly dominated by pipi shell, with minor inclusions of periwinkle, limpet, sand snail, oyster and cartrut. Bream was the most abundant vertebrate species. Although



in lower quantities relative to bream, a broad range of fauna was represented in the midden, including other types of fish, tortoise, macropods, bandicoot, possums, rodents, birds and reptiles. The midden's stone assemblage was characterised by primary flaking debitage which reflected the poor knapping quality of the raw materials used. All of these materials are believed to have been collected from intertidal pebble beds adjacent to the site (Collins 1994).

An archaeological test excavation at a site in relation to the Tugan Bypass (Zone 7) produced an assemblage of 388 stone artefacts and 132 manuports or otherwise unidentifiable fragments from 28 excavation squares. These comprised 26 assemblage elements (or different categories of stone artefacts) and 12 varieties of raw material (Ozark 2006b:28). The site was considered to possess a number of unusual features; the richness of the assemblage was high, the site was intact and showed patterning that could indicate an intact cultural stratigraphy, the number of backed blades point to areas of the site likely used as knapping floors for backed artefacts (an extremely rare find in the region), and the preponderance of large red, yellow and black ochre crayons with abundant signs of use suggest decorative activities were an important part of the use of the site (Ozark 2006b:52-53). A radiocarbon determination of a charcoal sample returned a relatively modern age for the site at 298 BP (or c. 1600AD) (Ozark 2006b:50).

A subsequent salvage excavation programme at pier construction impact points over the Zone 7 site produced 389 stone artefacts from 24 excavation squares, comprising 12 classes of artefacts on nine types of raw materials. From the mean artefact density of the 1x1 m excavated squares it was estimated that 76,418 artefacts and ochre fragments were contained in the pier cluster areas (Ozark 2007:29,30). A radiocarbon determination of 7,258 BP was obtained from a charcoal sample. However the authors urged caution in accepting the date as one that necessarily related to Aboriginal occupation as there were no intact archaeological features from which a date could be obtained. Early dates (9,000 – 15,000 years ago) are referenced in the report as a possible context for the Tugun sites if the date can be accepted (Ozark 2007:37).

A salvage excavation of a small disturbed midden deposit 200m above the entrance to Cobaki Broadwater was found to be composed of estuarine shell species, mainly oyster, and one stone artefact. The report postulates the shell deposit represents a '...single ephemeral event – possibly a single meal for a small group of Aboriginal people...' The archaeological significance of the site was assessed as low. The social/cultural significance of the site to the local Aboriginal community was assessed as culturally significant (Converge



2008:26). Two shell samples indicated occupation at 463 +/- 35 BP and 379 +/- 36 BP (I. Fox pers comm.).

5.4.2 Settlement

The Aboriginal people of the Tweed Coast were part of a larger linguistic group, the Bundjalung, which spoke a range of dialects in the area between the Clarence and Logan Rivers extending west to Tenterfield. 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 (Godwin and Creamer 1984). The Project Area is within the territory of the Minjungbal people, with the Kalibal/Widjabal to the west and the Arakwal to the south (Tindale 1974; Crowley 1978). The Minjungbal occupied the coastal plain and river valleys from a short distance north of Byron Bay to Southport and west to the coastal ranges. Curr provides some evidence for this model suggesting that dialects between the Albert River and Tweed River were closely related (Curr 1887:321). Tindale recognised a similar common language group extending between Byron Bay and Southport and west to Murwillumbah, which he called Minjanbal (Tindale 1974:191).

Keats (1988) and Crowley (1978) differ from Tindale's interpretation in that they generally agree on the northern boundary of the Arakwal but place the southern boundary of the Minyanbal on Cudgera Creek at Hastings Point (Keats 1988:30). Bray writing of his personal observations of the disbursement of the Tweed 'tribes' in the 1860s states that a probable coastal horde or clan groups the Coodjingburra '... had the part along the coast between the Tweed and Brunswick Rivers, about ten miles back from the coast...' (Bray 1901:9). Keats and Crowley for unstated reasons cut the southern boundary of the Coodjingburra on Cudgera Creek at Hastings Point (Keats 1988:15, 30).

5.4.3 Movement

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).

Population estimates for the Tweed Valley and coast have been based upon general reports to government authorities and on estimates from specific sightings. In the mid 1800's Commissioner of Crown Lands, Simpson estimated the population between Point Danger and Fraser Island at not less than 5000 (Simpson 1844:484-486). Bray, from near his residence at Kynnumboon observed 600 people camped on the Wollumbin Plain west of Murwillumbah in the 1860's (Bray 1901). A party of 200 men armed with spears had been observed by John Oxley's party on Fingal Head in 1823 (Uniacke 1825:40). Pierce suggested that this gathering of men would indicate a population of about 500 for the Tweed District and a population density between the Tweed and Brunswick Rivers and inland for some miles, '... of about three per square mile...' (Pierce 1971:13). Population estimates by eye witnesses of Aboriginal numbers for the coastal regions immediately after European settlement are highly likely to be underestimates of pre contact numbers due to the impacts of diseases particularly small pox that spread throughout coastal groups prior to official settlement.

Bray also observed that for ceremonial occasions Tweed people would travel up to forty miles (Bray 1901:8). Here Bray was referring to a Bora ceremony west of Mount Warning. Movement within the Coodjimburra territory is most likely to have been in response to seasonal availability of foods (Piper 1976:74). A number of observers refer to movement from the coastal plain to foothills during wet seasons on the Richmond/Tweed (Moehead: n.d.). During the wet season on Moreton Bay, Backhouse observed, '... the Aborigines resort to elevated situations contiguous to those parts of the coast abounding with oysters. In these situations their huts are said to be large enough to stand up in...' (Backhouse 1843:274). Jones (1896) in Piper (1976:73) stated that the Tweed coastal group moved to the shoreline during the mullet season. It appears that in the normal course of food foraging, the boundaries of the local land holding groups were clearly defined and crossed under threat of death. For agreed purposes between adjoining groups it was possible to cross boundaries, such as the movement to the Bunya Mountains, every third year so '...Under a sort of "Truce of God"....For the blacks went through each other territories unharmed...' (Bundock 1898 in McBryde 1978:265).

Models to describe possible patterns of settlement and movement in the North Coast region vary considerably. One suggests that clan groups ranged between the seacoast and foothills of the coastal ranges on a seasonal basis (McBryde 1974). Early sources support this view to some extent as there are records describing the movement of inland groups of the Clarence to the coast during winter (McFarlane 1934; Dawson 1935 in



McBryde 1978). 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). This model is based upon reports of numbers of small villages composed of dome-shaped weatherproof huts between the mid-NSW coast and Moreton Bay. Flinders described a small group of huts in the vicinity of Yamba in 1799, and Perry described two villages on the banks of the lower Clarence in 1839. Similar sightings were reported by Rous on the Richmond (McBryde 1974), Oxley near Chinderah on the Tweed (Piper 1976) and in Moreton Bay (Hall 1982). The 'solid' construction methods described for these huts seem to suggest occupation for a period of months at a base camp rather than a constant wide-ranging pattern of low-level land use. Godwin (1999:211-217) argues that neither of the above 'models' is supported by the archaeological record and that local conditions dictated exploitation strategies on the North Coast of NSW.

5.4.4 Economy – Material Culture

The Aboriginal people of the coastal plain had access to a wide variety of resource rich, food and raw material producing zones. These include extensive belts of rainforest on basalt soils, tracts of 'Wallum swamp', open beaches, estuaries, dry sclerophyll forest on poorer inland soils and littoral rainforest on foredune terraces. Records of coastal diet emphasised the role of marine foods. Ainsworth (1922) suggests the principal diet in spring and summer was, '... fish and oysters and the varied produce of the chase'. According to Ainsworth (1922:43-44) the coastal Arakwal (Tindale 1974) or Nyangbal (Keats 1988, 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. In the Tweed area a ship's crew, who spent Christmas with Aboriginal people on Kirra Beach in 1875, described '... feasts consisting of roast scrub turkey, crabs, fish, oysters and pademelon' (Piper 1976:62). 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).

Ethnohistorical 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. 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) writing of the Clarence River 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.

An indication of the importance of rainforest foods and material resources can be synthesised from chapters of '*Records of Times Past*', dealing with ethnohistory (Sullivan 1978:101) and *Museum Collections from the Richmond River District*, edited by Isabel McBryde (1978). Items of material equipment and weapons fashioned from rain forest materials that are detailed in these sources include water carrying vessels (Bangalow Palm), string bag, woven bag (Stinging tree), shield (Stinging tree), nets (Stinging tree) tow row (Stinging tree, lawyer cane), axe handles (lawyer cane), necklets (lawyer cane, shelter supports (lawyer cane), cane bugles (lawyer cane) cordage (Stinging tree, fig tree), clubs (Black bean). Food sources identified include possums, paddymelon, bandicoot, Moreton Bay Chestnut, cunjevoi, macadamia, wild grapes, Burrawang tree or palm, wild cherries. These items are identified as pertaining to the Richmond River area and do not include more generally available resources more widely utilised such as rainforest birds and medicinal plants. The above would be equally relevant to the Tweed Valley.

J. J. Byrne wrote a number of newspaper articles for the Tweed Daily in 1945 in which he reflects on aspects of customs and incidents involving Aboriginal people of the Murwillumbah area between c 1863 and the 1870's. He emphasises that fish was the primary diet and that along with fish "...they ate all the birds and reptiles that abounded in the Northern Rivers..." (Byrne1945). Tools and weapons mentioned are stone axes, shield, nulla nulla, 'battle spears', lighter spears, digging sticks, bags, nets, bangalow palm watertight containers and fire sticks. In addition to fish in general he refers to sea mullet and catfish, quail, scrub turkey and their eggs and honey. Byrne mentions group hunting, describes tree climbing technique, hut construction and how movement between camps was undertaken.

The most detailed analysis of material culture of the North Coast has been that undertaken by McBryde (1978). The region of the Tweed, Richmond and Clarence Rivers would seem to form a distinct unit. This is particularly so in the case of fishing technology. The multi-pronged fishing spear and the shellfish hook are both absent from this region. Fish were caught in nets or speared in the shallows (McBryde 1978:187). Spears were single pointed fire hardened weapons (Dawson 1935 in McBryde 1978), of both a lighter and



heavier variety (Byrne 1946:3). Neither the woomera nor the spear throwing stick was used in this region (Dawson 1935 in McBryde 1978). The range of materials is considered wider than that of central Australian tribes with fewer all-purpose items, few composite tools and a number of specialised ones. This may reflect a more sedentary life style in a rich environment requiring fewer specialised tools (McBryde 1978:187).

The stone tool element in the material culture was small and unspecialised. The archaeological evidence suggests changes to a simpler stone technology took place only centuries before European settlement. The stone tools in use immediately prior to European settlement, ‘... show little typological sophistication and did not demand highly skilled craftsmanship’ (McBryde 1978:198). Stone materials can be found in isolation, at the sites of shell middens, scarred trees, stone quarries or open campsites. Evidence of ceremonial/spiritual life can be identified by Bora grounds, stone arrangements and natural mythological site such as Mount Warning. These sites can be considered by Aboriginal people and the OEH to have a scientific/archaeological significance or a social/cultural significance to the Aboriginal community, or a combination of both.

5.5 Previous Archaeological and Cultural Heritage Assessments

The purpose of a review of previous archaeological and cultural heritage assessments “... is to provide a context and baseline for what is known about Aboriginal cultural heritage in the subject area. This contributes to the assessment of archaeological significance of the proposed development area.” (OEH, COPAI: 6).

For the purpose of this desk top review of relevant literary sources the review is confined to assessments conducted on the foreshores of the Tweed River estuary, embayments and coastal foothills. These include Appleton (1993), Barz (1980), Benton (2006), Bonhomme and Craib (2003), Collins (1999, 2005), Hall (1990a, 1990b), Lamb (2004), Lilley (1981), Navin/Officer (2007), Piper (1976, 1980, 1991, 1993, 1994, 1996, 2000, 2004), Piper and Robins (2006, 2009) Robins et. al (2010, 2011).

Each of these assessments with the exception of the Collins (2005), Piper (1998, 2004), Robins et. al (2010, 2011), Piper and Robins (2006, 2009) assessments in the Bilambil/Terranora hills have concentrated on estuarine waterways, old coastal dune formations and the Tweed River floodplain. Of most relevance to this assessment was the Piper (1998) assessment of the ridge crest of the Project Area, which identified no Aboriginal cultural heritage. Poor ground surface visibility was noted. As a result, the Tweed Byron LALC recommended monitoring of initial ground disturbance (Appendix E).



Recent studies in relation to the extension of the Coolangatta Airport and the Tugan to Tweed Heads Bypass route, east of the Cobaki Broadwater include Collins (1999), Bonhomme and Craib (2003), Eastern Yugembeh Limited (2005) and Benton/Ozark (2006a, 2006b, 2007).

The Cobaki Broadwater dune fields and uplands have been the subject of cultural heritage and archaeological investigation by Everick (2009) and the adjacent McPherson Range by Eastern Yugembah Limited (2005).

5.5.1 Previous Archaeological Assessments: The Tweed River - Northern Banks

The Piper assessment (1980, 1991) located ten shell middens on the northern bank of the Tweed River. These ranged from low-density shell scatters to large raised mounds of shell and artefactual materials. One site (Terranora 19) known to contain skeletal material, was the subject of a salvage excavation by Barz (1980). The study also recorded four open campsites containing stone artefactual material and six isolated instances of edge ground axes. Nine bevelled pounders, used in the preparation of fern rhizome, were in the recorded sites. The shell content of each midden site was estuarine species, particularly oyster, cockle and whelk. All of the sites were located in a 3 km strip on the northern banks of the Tweed River extending above Barneys Point Bridge. The condition and content of these sites was further reviewed by Piper (1994a) as part of an archaeological assessment of the upper Tweed River.

5.5.2 Estuarine Embayments - Tweed Heads South

Previous archaeological and cultural heritage assessments in the vicinity of the Project Area have sampled all of the major landforms in this area, these being the banks of estuarine waterways of Terranora Creek and Terranora Broadwater and the low hills and floodplains that partially encircle these waterways. Assessments of the waterways have recorded by far the majority of Aboriginal archaeological sites.

Adrian Piper undertook an archaeological survey and assessment of the River Heights Project Area for the Kirkwood Road Alignment Project in 1998 (Piper 1998). The survey was undertaken with TBLALC Sites Officer Cyril Scott, and inspected the low level river flat, the lower slopes of the ridgeline, and the upper slopes and crest of the ridge in the Project Area. It was noted that the riverflats were cleared grazing land dissected by drains. Spoil from the drains showed no cultural material. The mid and lower slopes contained exposed surfaces along vehicle tracks and cattle trails which showed no indication of artefacts. The upper slopes and



ridge crest had moderate surface visibility assisted by exposed soil from the excavation of large basalt boulders and vehicle tracks.

Photographs from the survey show the ridge to be extensively cleared. No artefacts, features, or other Aboriginal objects were identified during this site inspection, and the TBLALC expressed no Aboriginal significance attached to the Project Area (Piper 1998). This report was written before investigations by Everick at the Cobaki Lakes began, which changed the perception of archaeological significance for cleared open woodlands in the Tweed region.

Other studies that have included both low hills and embayment landforms of South Tweed Heads include the Flametree Park Estate 2.25 km to the west (Piper 1995), the Vintage Lakes Estate 1.75 km to the west (Piper 1994b), Fraser Drive 0.75km to the west (Everick 2008) and at Dry Dock Road 0.5 km to the northeast (Lamb 2004), Everick (2012). With the exception of the Fraser Drive study the remainder have produced no additional sites of Aboriginal or European heritage.

The Fraser Drive study relocated a midden (OEH AHIMS #04-02-0088) on a low saddle approximately 5 metres above the floodplain, at the intersection of Fraser Drive and Champagne Drive (closed road). "...The site comprises a relatively dense deposit of predominantly estuarine shell to a depth of approximately 30 cm. The shell comprises both whole and fragments of oyster, cockle and whelk with a surface density varying between approximately 2 and 30 valves per m² ..." (Everick 2008: 44).

5.5.3 Previous Archaeological Assessments: Terranora Broadwater

The study of the foreshores of Terranora Creek and Terranora Broadwater (Piper 1991) recorded nine midden sites between Barneys Point Bridge and Tommy's Island in Terranora Broadwater a distance of approximately 5.0 km. These sites ranged in content from thin bands of estuarine shell eroding from slopes falling to the river to compacted (20–50 cm) deposits of shell and stone artefacts many metres in extent. The shell contents of these sites were estuarine shell species; oyster, cockle and whelk. A small number of stone artefacts comprising a retouched flake were observed at Site 5 (# 04-02-79) and a bevelled pounder and stone axe recorded at Site 10 (# 04-02-83). These sites are separated from the study area by a high ridge, which forms the eastern shore of Terranora Creek and Terranora Broadwater. Poor visibility due to dense vegetation bordering the waterways hampered the effectiveness of the survey. However, 14 estuarine shell middens were located. The bank of midden sites (Sites 6–13) on the eastern shore of Terranora Broadwater was considered to be of high archaeological and Aboriginal significance (Piper 1991:16–18) because of there being few sites



of concentrated deposits remaining. Four other middens (Sites 1, 2, 3 and 5) were assessed as being of low to moderate archaeological significance. A shell midden on Ukerebagh Island (Site 14) was also considered to have a high archaeological and Aboriginal significance.

Information on two additional sites was located in the files of the Bunjalung Mapping Project. These were a burial ground for both Aboriginal and non-Aboriginal people on Phillip Drive and a possible ceremonial ground on Lakeview Drive. This site was observed in 1974 after a bushfire, but now has houses on it.

5.5.4 Previous Cultural Heritage Assessments: Cobaki Broadwater

Studies in the vicinity of Cobaki Broadwater have included Lilley (1981), Hall (1990) and Collins (1999). These studies were in relation to proposed residential development, planning proposals at Coolangatta Airport and road route options for the Pacific Highway. These studies inspected large parcels of land to the north of Cobaki Broadwater and the south western banks, (Lilly 1981, Hall 1990). An archaeological area was found to extend on higher dune plain between the eastern margins of Cobaki Broadwater and the runway at Coolangatta Airport. A midden (# 04-02-0039) described by Hall (1990:11) contained dense concentrations of surface and sub-surface shell, mainly estuarine (oyster, cockle and whelk) with a small proportion of beach pipi. Stone artefactual material consisted of cores, flakes and flaked pieces on chert, quartz, silcrete and pebbles of volcanic origin. Bevel pounders used in the preparation of fern root were described as common. This site is considered to have a high archaeological significance as well as a high cultural social significance to Aboriginal organizations north and south of the State border.

A study by Collins (1999) reassessed the area in relation to a Route Selection Study for the Pacific Highway through the area. In addition to the archaeological material recorded by Hall, three open campsites and an isolated artefact were recorded on the elevated dune plain between Cobaki Broadwater and the Coolangatta Airport runway. The sites are low-density scatters of stone artefacts, fragments of oyster shell and a nodule of ochre. Raw materials were cherts, silcrete and sandstone (Collins 1999:34-35).

The archaeological content and Aboriginal cultural heritage significance of the Coolangatta Airport lands, northern shores of Cobaki Broadwater and areas of Tweed Heads West was reviewed by Collins (1999) Bonhomme, Craib (2000) Eastern Yugambeh Limited (2005) and Benton/Ozark (2006a, 2006b, 2007).



Ozark (2006 and 2007) undertook archaeological survey and excavations in preparation for the Tugun Bypass, running approximately 3 km north of the Project Area. The excavations were undertaken on Pleistocene sand ridges similar to those that once ran through the Project Area. The May 2006 report recommended that test excavations and possibly salvage excavations should be conducted in two zones (7 & 10) of the proposed route. Monitoring of vegetation clearance and ground disturbing works should take place in five zones (5, 7, 10, 11, 13) of the proposed route (Ozark 2006a, b, 2007).

An archaeological test excavation at a site in Zone 7 produced an assemblage of 388 stone artefacts and 132 manuports or otherwise unidentifiable fragments from 28 excavation squares. These comprised 26 assemblage elements (different categories of stone artefacts) and 12 varieties of raw material (Ozark 2006b:28). The site was considered to possess a number of unusual features: the richness of the assemblage was high; the site was intact and showed patterning that could indicate an intact cultural stratigraphy; the number of backed blades point to areas of the site likely used as knapping floors for backed artefacts (an extremely rare find in the region), the preponderance of large red, yellow and black ochre crayons with abundant signs of use suggest decorative activities were an important part of the use of the site (Ozark 2006b:52-53). A radiocarbon determination of a charcoal sample returned a relatively modern age for the site at 298 BP (Before Present) (or c. 1600AD) (Ozark 2006b:50).

A subsequent salvage excavation programme at pier construction impact points across the Zone 7 site produced 389 stone artefacts from 24 excavation squares, which comprised 12 classes of artefacts on nine types of raw materials. From the mean artefact density of the 1x1 m excavated squares it was estimated that 76,418 artefacts and ochre fragments were contained in the pier cluster areas (Ozark 2007:29,30). A radiocarbon determination of 7,258 BP was obtained from a charcoal sample. However the authors urged caution in accepting the date as one that necessarily related to Aboriginal occupation as there were no intact archaeological features from which a date could be obtained. Early dates (9,000 – 15,000 years ago) are referenced in the report as providing a possible context for the Tugun sites if the dates can be accepted (Ozark 2007:37).

Everick (2009) undertook a survey and archaeological excavations at the proposed Cobaki Lakes Development Site, approximately 3.5 km northwest of the Project Area. The development area for the project was adjacent to the western shoreline of the Cobaki Broadwater (580 ha. in area). The Everick assessment identified three land forms within the development area, these being low foothills/slopes ('mid to lower back slopes') in the west and north, a sand ridge in the south and low lying marsh lands in the east and south.



Extensive disturbance following past development applications meant only 100 ha of the 580 ha development site retained a reasonable possibility of retaining Aboriginal cultural heritage. The survey of these areas identified 19 Aboriginal artefacts/sites. Five of these were single artefacts in the mid to lower back slopes and the remaining 14 were located on the sand ridge.

Subsequent test excavations revealed extensive subsurface deposits over most areas of the mid-to-lower back slopes and sand ridge. Approximately 700 artefacts were identified in 270 m² of trenching in the mid to lower back slopes. Approximately 3,100 artefacts were identified in 180 m² of trenching in the sand ridge. It is estimated that well in excess of one million artefacts are located within this landscape. In particular, the sand ridge retained a high concentration of artefacts.

5.5.5 Previous Aboriginal Cultural Heritage Assessments: Coastal Uplands - Terranora/Bilambil Heights

The result of previous field assessments indicate the main concentration of recorded Aboriginal sites is in the immediate vicinity of the waterways of the Tweed River estuary, be it a small proportion of the original number. A far lesser concentration of recorded sites occurs in the upland areas of Terranora, Bilambil, Carool and Tumbulgum which form catchments adjacent to the coastal plain and the creek systems, which flow from them. Few studies have been conducted in these areas where the impact of land clearing is arguably greatest and the spread of urban development less concentrated.

A study (Piper 1994c) of an earth/rock quarry site above Duroby Creek could find no evidence of Aboriginal materials. The quarry located is 7 km southwest of the study area on a ridgeline terminating at the Duroby Creek flats. A study (Piper 1996) over 100 ha of ridge crest and slopes on red/brown krasnozems soils overlooking Cobaki Creek 9 km southwest of the study area produced a similar result. An assessment by Piper (2004) and Collins (2005) of areas of the Bilambil hills also produced a nil result. A study (Robins and Piper 2006) of 14.0 ha of the Terranora plateau investigated an area where a stone axe had been recorded, collected by a collector (Piper 1980). The total evidence of Aboriginal use/occupation of the coastal uplands of the Terranora plateau is restricted to a small number of isolated stone artefacts. The effectiveness of archaeological assessments in these uplands is invariably diminished by poor surface visibility.



An assessment of the Rise residential development at Bilambil Heights (former Terranora Country Club) was undertaken in 2009 by Everick Heritage Consultants (Robins and Piper 2009). This assessment identified a number of stone terraces that had been built in the 1950s and 1960s to support a cropping industry similar to that within the Project Area. The crop terraces were used for growing beans, tomatoes, sweet potatoes, zucchini and bananas. The terraces were constructed by dozer, and did not demonstrate particularly high levels of ingenuity or aesthetic appeal. Using the NSW Heritage Manual Criteria, they were assessed as potentially being of local heritage significance under Criteria G. Items that fulfil Criteria G have a strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons. In the instance of the stone terraces of Bilambil Heights, the group with the special association was identified as the Aboriginal and Islander communities who worked in the fields.

An assessment of the Banora Point upgrade of the Pacific Highway was undertaken by Navin and Officer in 2007 for the NSW Road and Traffic Authority. The upgrade comprised a 2.5 km length of road between the northern end of Barneys Point Bridge and the southern end of the Tweed Heads Bypass. These works are approximately 3.0 km to the north-east of the Project Area. The report was prepared for a proposed Pacific Highway alignment with six lanes and associated works. It details the results of their investigation of three archaeological features representing sites of Indigenous and non-Indigenous cultural heritage.

A cultural heritage assessment (Robins et. al 2010) at upper Fraser Drive over 297ha of low hills and slopes on krasnozem soil slopes falling to Terranora Broadwater identified small crop terraces dating from the mid-20th century. No items of Indigenous heritage were identified throughout the Subject Lands (Robins et. al 2010: 2).

5.6 Aboriginal Sites and Features (Range and Nature)

From the review of previous archaeological and cultural heritage assessments in the Tweed Heads South and broader regional locality, specific environment contexts contain all of the known archaeological sites. These are beach dunes, elevated sand plain landforms adjacent to wetlands or former wetlands, estuarine creek banks and low hills with immediate access to the coastal plain and estuary. The following site types and potential types have been identified in the above contexts.



5.6.1 Isolated artefacts

These will consist of single stone artefacts, which may have been randomly discarded or lost. They may occur in almost any environmental context exploited by Aboriginal people. They are commonly stone axes, single cores, hammer stones, bevelled pounders, pebbles and flakes. Their presence may indicate that more extensive scatters of stone artefacts exist or existed nearby, perhaps obscured by vegetation or dispersed by mechanical means.

Information was passed on to Everick Heritage consultants during this survey that a number of stone axes – a comparatively significant Cultural Heritage item – were known to have been located on the property adjacent to the northern boundary of the current Project Area.

It is highly possible that isolated artefacts could be found within the Project Area.

5.6.2 Open Campsites / Artefact Scatters

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. In the Tweed Heads area open campsites are invariably found in elevated positions adjacent to creeks or wetlands. An open campsite containing a large component of shell refuse may be described as a midden. They invariably consist of low or high density scatters of primary and secondary flakes in addition to the types of artefacts found as isolated finds. Open campsites may also contain burials when located on sand strata. Few open campsites are found on kraznozom and podzolic soils, possibly due to the destructive impacts of land clearing and the heavy vegetation cover. Detection is usually unlikely unless high degrees of surface visibility are present.

It is possible that artefacts scatters could be found within the Project Area.



5.6.3 Middens

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

Middens may be composed of deep compacted debris reflecting consistent use over long periods of time, or thin scatters of shell which reflect use on a single occasion by a small group, perhaps in transit or gathering food away from a large campsite. All recorded middens have been located in elevated positions beside estuarine waterways or on elevated sand substrates close to wetlands. The dominant species found in estuarine middens is oyster, while locations away from the waterways contain pipi or combinations of estuarine, open beach and rock platform species. To date no shell middens have been identified on kraznozem soil uplands.

Given the closeness of Terranora Creek (approximately 0.5km) remnant shell scatters from food gathering are possible. Consolidated deposits of compacted shell and associated artefactual materials normally found in midden deposits are unlikely. The potential for middens to be found within the Project Area is low, whereas the potential for low density shell scatters associated with artefact scatters is moderate to high.

5.6.4 Quarry Sites

A stone quarry in the northern NSW coastal region may occur where a source of opaline silica exists, as reported at Tintenbar (Collins 1996 :31) or other siliceous types of stone occur (e.g. chert, chalcedony and silcrete). To date the only confirmed quarry sites known to the author, in the broad coastal zone between Ballina and the QLD border are on the Tweed Coast where greywacke outcrops have been excavated at several locations (Piper 1976:94). As there may not be visible suitable bedded rock outcrops or known sources of siliceous material in the Project Area the potential for quarry sites to be found is low. While basalt rock, which occurs throughout the higher elevations of the Project Area, is known as a raw material source for stone artefacts, it has not been known to be found in a quarried situation, but rather a case of collection of isolated, suitable pebbles.

The potential for quarry sites to be located within the Project Area is low.



5.6.5 Scarred Trees

The majority of scarred trees on the North Coast of NSW result from the removal of bark for use as covering, shields, containers or canoes. No doubt, as an outcome of widespread intensive land clearing and natural causes very few have survived.

There are not believed to be trees of sufficient age within the Project Area to bear cultural scars. The development footprint was entirely cleared of trees in the 1970's and 1980's.

5.6.6 Burial Sites

The majority of burials recorded to date in the northern NSW coastal zone occur in coastal dunes and or sandy soil substrates. They are most commonly found as individual or small group interments in association with middens. On the lower Richmond, burials have been recorded at Patch's Beach (N.P.W.S.), South Ballina (Lourandos 1979) and in middens along the banks of the estuarine system (Bailey 1972). At Lennox Head, burials have been discovered in foredunes contexts as well as on Pleistocene sand sheets west of the village. A burial (# 04-5-0018) is recorded in foredunes and one known burial is associated with an open campsite (# 04-5-0094) on the dunefield adjacent to the Lennox Head/Byron Bay Road. Most of the known burials have been located by accidental means through mechanical disturbance or natural erosion.

The shallow soils and rocky nature of the higher elevations and the acidic nature of the soils at lower elevations, as well as the additional impact of land clearing in the greater area over time all contribute to the very low potential for there to be burials within the Project Area. The potential for burials to have once been located within the Project Area cannot be ruled out.

5.6.7 Ceremonial Sites

There is little potential for the Project Area to contain ceremonial sites in the order of Bora grounds, which contain raised features in the form of earth or stone mounds. Surviving Bora grounds in this coastal region are without exception found in sand based ground. There is a reference to a ceremonial event having taken place in 1847 at Tintenbar on the Emigrant Creek flats attended by up to 300 Aborigines. This confirms the use of rain forested areas for both ceremonial and economic purposes (Collins 1996:13).



Given the thorough nature of vegetation clearing during the mid-late twentieth century, the likelihood of physical evidence of ceremonial grounds remaining undisturbed within the Project Area is negligible. However, note the discussion in Section 11 of this report regarding consultation with the local Aboriginal community.

5.6.8 Mythological Sites

These sites are natural features, which derive their significance from an association with stories of the creation and mythological heroes. In the upper Richmond and Tweed Valleys these include rock pinnacles, mountains, waterfalls and waterholes. A particular concentration of these sites exists in the headwaters of the Richmond and Tweed Rivers. A variant of the mythological site is the increase site or 'djurebil' (jurraveel in Byrne 1984:11) where rites were conducted which assured the continued productivity of plants and animals.

No knowledge of the presence of a mythological site at the Project Area, within it, nor in relation to it, was conveyed during the Cultural Heritage Assessment undertaken on 17 May 2011.

5.7 Predictive Models – Land Use Strategies

In terms of Aboriginal archaeological potential in the region, the river banks and foreshores of the estuary streams are potentially the most sensitive in terms of the numbers and variety of Aboriginal sites the landform contains. Therefore it follows that these areas are commonly of very high significance to the Aboriginal/Islander community for their connection with the traditional past and for fishing and gathering practices that continue to the present. The traditional occupants and visitors to this area no doubt mainly relied on the resources of the river and nearby ocean and used its banks as transit corridors. That large numbers on occasions gathered and camped throughout this locality is evidenced by the existence of a bora/ceremonial ground within 2.5 km.

It is probable that Aboriginal camp sites, (also known as Open Sites) if they had existed within the Project Area, would be found on the ridge crest, the northern face of the ridge, and at the base of the hill to the north of the Project Area.

Aboriginal occupants of the Tweed Heads South area would have had access to the terrestrial foods of the rainforest and to a lesser extent vegetable foods in the form of the cunjevoi lily, Moreton Bay Chestnut and seasonally available fruits and berries. The major vegetable staple in this region was the rhizome of the Bungwall fern (*Blechnum indicum*) which would have been available almost anywhere across swamps



between the estuary and the Terranora foothills. Marine resources principally fish and shellfish could be procured from Terranora Creek, the Tweed River and Terranora Broadwater. Stone resources include basalt stone pieces commonly used in the production of edge ground stone axes and fine grained siliceous stone used to produce small or wood working tools. The use of rainforest/sclerophyll forest by Aboriginal groups is not well researched, one reason being that few sites have been located unless in rock shelters protected from land clearing. However, the use of rainforests for both food, medicinal resources, together with their technological materials, is referred to by Bundock (1898), and by Ainsworth (1922).

6. LANDSCAPE CONTEXT

6.1 Environment Locality

The Project Area measures approximately 18.02 ha at Tweed Heads South is situated in the centre of a coastal landform pattern of wetland areas and low rolling hills (Speight et al 1990: 34) bounded by the Tweed and Terranora Creek.

6.2 Topography

The Subject Land comprises hill slopes in the south and west facing north and east respectively on to a floodplain extending to the north. Local relief ranges from <1m on the flood plain to 60 m on the hillslopes. Elevations range from 30 m AHD to 90 M AHD. The flood plain contains three topographic features: low boggy ground at the base of the hill slopes, a tidal mudflat/wetland (SEPP 14- Wetland) in the northwest and a filled former sand rise bordering the SEPP 14 wetland.

6.3 Geology & Soils

Rock types in the area are basalts of the Lamington Series on the higher levels, overlying Neranleigh-Fernvale Beds. These lower level rocktypes include greywacke, quartzites and slates. Soils derived from these rock types are red /brown krasnozems at the upper slopes and red/brown/ yellow clays on the lower slope. At the base of the foot slopes, floodplain soils beneath the introduced fill are colluvial. The remainder are dark loamy sands over grey and yellow/grey sands overlying peat and alluvium (Morand 1996:152). Pasture grasses and regrowth rainforest species grow on the southern slopes and floodplain. Sclerophyll/brushbox forest grows



in the northern slope. The SEPP 14 Wetland has Swamp sclerophyll forest, Mangrove Forest Woodland and Coastal salt marsh (Fraser Drive, South Tweed Environmental Assessment 2007:33).

6.4 Vegetation

Due to land clearing, most of the vegetation on the Project Area can be considered regrowth, with the possible exception of an ecotone of subtropical rainforest on the lower southeast slope of the central ridge and remnants of sclerophyll forest on the upper southeast slope of the central ridge and at the southern boundary fence. The southeast portion of the Project Area is predominantly Melaleuca swamp wetlands. This part of the Project Area is subject to development constraints. The slopes of the ridge and most of the northern portion have been cleared for grazing in the past. Fill and concrete culverts have been used to build up the corridor alongside the motorway at the southern end of the eastern boundary.



Figure 7: Contour Map of Project Area (Tweed Shire Council 2013)



6.5 Land-use History

6.5.1 Historic Record of River Heights

Previous land use in the area would have been generally small rural holdings (Morand 1996:30). The Project Area was part of land owned by Annie Sullivan until it was transferred to W.R. Sullivan in the early 1900s. Historic Parish maps dating from 1894 to 1959 were reviewed to gather a recent history of the property. The earliest maps showed that the property was bordered by an easement on the north, east, and south boundaries. By 1913 Fraser drive was built, crossing through the south-western half of the property. A small road that headed northeast connecting Fraser drive and Kirkwood road was attributed to the Sullivan family. However this road appears to have closed by 1913 and was not on the Sullivan property. By 1918 a further road was built on the Sullivan property, heading southwest connecting to Fraser road. Additionally, the easements surrounding the property were terminated by this point. Beyond this, little change was seen in later maps.

The Project Area overlooks the site of the first settlement on the north coast of NSW at the 'Tarranora Cedar Camp' first established in 1844. The camp developed so that by 1905 it had a population of 70 and included a Post Office, rooming house/shanty, ship building yards, government dry dock and 200 acres under cultivation (LTRHS: Kirkwood File. January 12 1906). It is not unreasonable to suggest that the timber of the Project Area was cleared very early in the settlement period firstly for its timber and to create a clear vantage point to sight shipping at the Tweed River entrance/s and the river channel to the settlement.

A site history prepared by HMC Environmental Consultants in 2011 discusses agricultural land use of the site in the 1960s and later (Mark Tunks 2011). Historic aerials from 1962 revealed banana farms that ran through the Project Area and expanded over approximately 6000m² of land. The extent of banana cultivation in this photo took place in the northeast portion of the Project Area (Figure 8).

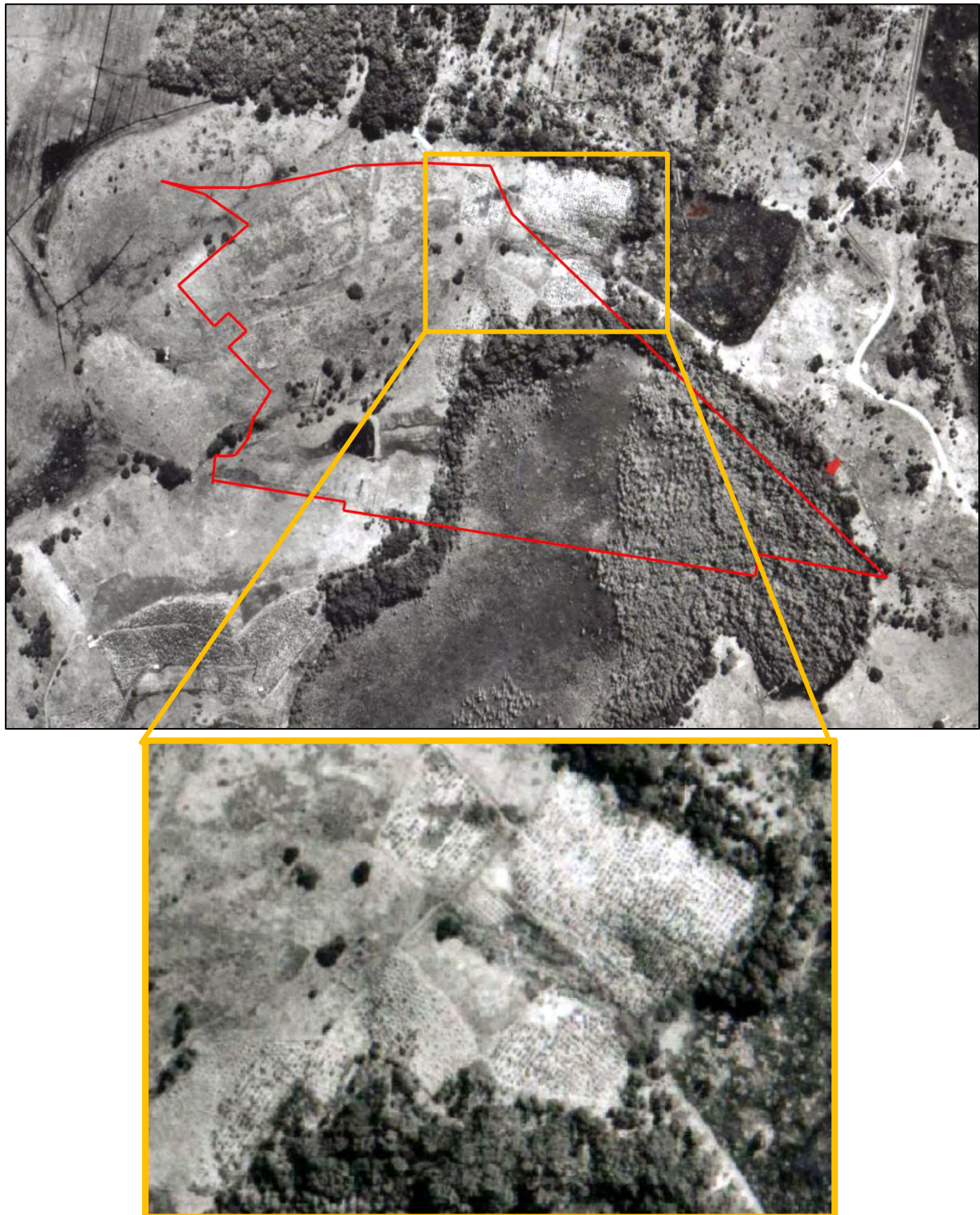


Figure 8: 1962 Historic aerial of Project Area and location of banana farming
(Tweed Shire Council 2011, Mark Tunks 2011)



Aerial photographs from 1970 show a continuation of banana cultivation, as well as the construction of an associated shed (Figure 9). A drain has also been cut through the wetland.



Figure 9: Location of Banana Cropping and Shed (Mark Tunks 2011)

However, the banana farm is absent in later photos from 1987. Banana agricultural activity was confirmed by the previous land owner and through a ground inspection performed by Everick Archaeologist Adrian Piper, which revealed the environmental remains of banana specific farming activities.

6.5.2 A Review of Historic Aerial Photography

Aerial photographs from 1962, 1976, 1987, and 1995 were reviewed in order to assist in the identification of original environmental / topographic features and the degree of site disturbance post European settlement. These aerial photographs are shown in Appendix D.



The 1962 aerial photograph shows the majority of the Project Area, with the exception of the Environmental Protection Zone, has been almost totally cleared of vegetation. The majority of this clearing was probably done for grazing, with the exception of the banana farming in the north-eastern portion of the site, as discussed above. A dam is located in the southwest section of the site. A creek line running through the southern portion of the Project area, just above the dam, is lined with trees and undergrowth. Aboriginal Objects and sites are often located close to such water resources. An area to the south of the creek line shows ground level vegetation most likely due to an increase in moisture common to low lying areas.

The 1976 aerial photograph shows little change to the Project Area apart from a slight reduction of vegetation along the creek line. This would likely have resulted in disturbance to any Aboriginal Objects located in this area. A drain cut through the wetland is evident.

The 1987 photograph shows a greater level of disturbance within the site. A number of clear paths and dirt roads run through the site at this point, along the southern boundary and through the southeast corner of the Project Area, as well as along the tree line of the wetlands in the centre of the site. The land surrounding the Project Area indicates an increase in development around the site.

The 1995 aerial photograph shows the construction of the Pacific Motorway close to the eastern boundary of the Project Area. The southern portion of the Project Area shows a slight increase in vegetation.

Conclusions: The Project Area has a history of moderate to extensive ground disturbances since European settlement. The initial clearing activities were likely to have caused ground disturbance, subsequent erosion would have likely had a significant impact to the depositional integrity of any Aboriginal Objects. Additional disturbance would have been caused by grazing and farming activities, as well as the construction of roads. In response to concerns raised by the Aboriginal Stakeholders, the potential for Aboriginal stone arrangements to survive this level of repeated impacts is considered to be nil.



7. PREDICTIONS

7.1 A Predictive Model: Aboriginal Cultural Heritage

From the desktop review, there was considered a moderate potential for archaeological materials to be within the Project Area. They were considered likely to be single artefacts and/or scatters of stone artefacts. Middens were seen to be unlikely; however they cannot be ruled out due to the fact that a midden was located in the greater surrounding area on Fraser Drive. The existence of campsites is considered low due to the fact that these are uncommon on ridge crests. However, Traditional Owners believe that the topography of the hill at River Heights still would have made it a point of interest and of spiritual significance. There is no possibility that cultural materials of organic materials such as wood, fibre or cordage would survive and there is an extremely low possibility that above ground earth mounds or stone arrangements could remain 'in situ' due to clearing activities. However, the community are of the opinion that there may have been a stone arrangement at River Heights on the top of the main hill.

7.2 Aboriginal Cultural Heritage Due Diligence Assessment

It is possible at this stage to assess the proposed development activities against the OEH Due Diligence Code. The Project Area has seen extensive ground disturbance within the meaning of the Due Diligence Code. This occurred primarily through phases of vegetation clearing and construction over approximately 20 years (see discussion in Section 5 above). In accordance with the principles of the Due Diligence Code, the proposed Project activities are unlikely to cause additional disturbance to any Aboriginal Objects, should they be located within the Project Area.

7.3 A Predictive Model: Historic Cultural Heritage

The desktop review identified no items of historic cultural heritage significance. Dry stone walling, a locally historic agricultural feature on basalt derived soils of this region, is absent. No structures reflective of activities in the nature of industry, agriculture, pastoral or mining were found.



8. ARCHAEOLOGICAL INVESTIGATIONS

8.1 Preliminary Archaeological Survey

8.1.1 Sampling Strategy & Survey Methods

The purpose of this survey was to comply with recent amendments to the *National Parks and Wildlife Act 1974* (NSW) as recommended by the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (2010) (COPAI) and the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) ('ACHCRP').

The effectiveness of a sampling or whole site inspection strategy is based upon the extent (% per sq. m.) and 'quality' (e.g. 5%, 90%) of surface visibility. The available area of surface visibility and its 'quality' is dependent upon natural erosional processes and man-made (accelerated) erosional process e.g. construction, cultivation (McDonald et al. 1990:92). 'Quality' is impeded or enhanced by a lack of vegetation cover.

The Project Area was very densely vegetated at the time of Cultural Heritage assessment, a factor which greatly impeded the 'Quality' of surface visibility within the Project Area.

The Project Area has been the subject of archaeological assessment in 1998 (Piper) therefore the topography and conditions for field survey were known. The purpose of this survey was to assess if conditions had changed from those of 1998 and to comply with recent amendments to the *National Parks and Wildlife Act 1974* (NSW) (See section 2 above).

The field inspection was conducted on foot by the consultant, the Sites Officer of Tweed Byron LALC and Community Representative Jacqueline McDonald on 17 May 2011. Photographs were taken as a record of general features and conditions, to indicate the degree of surface visibility and the content of any sites found. Notes were made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features. An indication of areas searched and areas of surface visibility is given in Figure 6. The field inspection was a broad ranging sampling assessment of exposed surfaces.

In such a small area as this an intensive survey in systematic transects of the whole site would be feasible if not for heavy vegetation cover and two wetland areas. As a result, the only option available was a foot survey



through the various landform elements and a 'spot check' search of all possible exposed soils. These are several vehicle, livestock and foot tracks running through the area, and cuttings and embankments associated with the tracks.

8.1.2 Survey Units

Survey units are indicated (Figure 7). They are broadly the landform elements identified in Section 5.2 – Topography. Their general conditions for survey are indicated below.

Area A (Figures 8-10) The Flat which rises to a moderate slope: mainly heavily grassed with scattered trees except for an area of mid-high regrowth (*Acacia*) with varying ground cover. Track of gravel road base overgrown with grass. Patches of dumped road base. Slope 5 - 30%. Area of surface exposure approximately 1%. Types: gravel road base, track cuttings, clearings in ground cover. Surface visibility 50%.

Area B (Figure 11) The Ridge Crest: heavily grassed on the north west and tall forest regrowth to the south east, varying ground cover, scatterings of basalt boulders. Slopes 3%-20%. Area of surface exposure c 1%. Types: track surfaces, clearings in ground cover. Surface visibility 10%.

Area C (Figures 12-15) The Steeper Slope: falling south from ridge to flat area and gully ranges from moderate to steep, heavily vegetated with low closed forest and varying ground cover. Several track and access cuttings. Large items of rubbish and derelict recent structures. Slopes 10 - 30%, Area of surface exposure c1%. Types: track cuttings, track surface, clearings in ground cover. Surface visibility 50%.

Area D (Figures 16) The Low Lying Swamp: heavily vegetated with swamp grasses and Melaleuca forest. Large areas of water with vegetation. Visibility restricted to tracks along area boundary. Slopes 0%. Area of surface exposure approximately 1%. Types: track surface. Surface visibility 50%.

Area E (Figures 17) Toe slope falling north to low lying swamp with tall trees, varying ground cover, significant leaf litter. Slope 0 - 5%. Area of surface exposure c1%. Types: track surface, clearings in ground cover. Surface visibility 10%.



Figure 10: Project Area Survey Units



Figure 11: View north east Area A showing heavily grassed slope with track (left)



Figure 9: View south Area A. Patch of dumped road base



Figure 10: View west Area A showing *Acacia* regrowth



Figure 12: View south Area B. Top of ridge showing boulders and vegetation



Figure 13: View north east Area C. Rubbish on track



Figure 14: View north west Area C showing embankment above track



Figure 15: View north Area C. Milky quartz deposit eroding out of embankment



Figure 16: View south east along track - Area C.



Figure 17: View south east Area D showing *Melaleuca* swamp

8.1.3 Survey Coverage

Table 1: Survey Coverage

Survey Unit	Landform	Area (m ²)	Visibility %	Exposure %	Effective Coverage Area (m ²)	Effective Coverage %	Sites Found
Unit A	Ridge and Lowlands	34,000	50	1	170	50%	0
Unit B	Ridge	24,000	10	1	24	10%	0
Unit C	Ridge and Lowlands	48,000	50	1	240	50%	0
Unit D	Wetland Swamp	63,000	50	1	315	50%	0
Unit E	Toe Slope	3422	10	1	3.4	10%	0



Table 2: Landform Summary

Landform	Area (m ²)	Area Effectively Surveyed (m ²)	Landform Effectively Surveyed (%)	Sites Found	Artefacts or Features Found
Ridge	45,000	170	.38%	0	0
Lowlands	48,000	24	.05%	0	0
Wetlands	65,000	240	.37%	0	0
Toe Slope	3422	315	9.2%	0	0

8.1.4 Results

Indigenous Cultural Heritage

No physical evidence of Aboriginal Cultural Heritage was identified as a result of the field inspection. However, the inspection was significantly hampered by extremely poor survey conditions and ground surface visibility. The results of the survey are not considered to be indicative of a lack of Aboriginal Objects within parts of the Project Area.

No knowledge of non-physical sites, either of a mythological or ceremonial nature, was imparted to the Consultant during the CH Survey. However, during consultation with the AAC, members indicated that it would be inappropriate to excavate the entire hill on which the Project Area is situated. Further discussion is provided below.

Historic Cultural Heritage

There were no historical archaeological sites identified as a result of the field inspection.

8.1.5 Analysis and Discussion

The field inspection found no evidence of Indigenous archaeological materials.

The predictive model outlined in Section 7.1 proposed that the Project lands were unlikely to contain substantial archaeological sites but allowed for the possibility of single artefacts and low/medium density



artefact scatters. The lack of cultural material found during the field inspection supported this proposition. Furthermore, it is certain that grazing and changes in vegetation patterns would have disturbed any artefacts in the Project Area. These culturally destructive impacts together with natural erosion processes would disperse or scatter surviving stone materials from their original locations, thus diminishing archaeological significance.

The effectiveness of the assessment was hindered by the low surface visibility ranging from 50% to 10%, due to dense vegetation. It is therefore difficult to make statements about the presence of Indigenous archaeological cultural heritage materials without clearance of the vegetation.

The Project Area contains alluvial soils and hard clay approximately 50 – 10 cm below the surface over most parts of the upper slope and ridgeline. Should any artefacts be located in this area, they would have moved through the upper alluvial layer, nearing the clay layer.

No evidence of Aboriginal occupation is expected to be found along the steep ridge slopes and steeper portions of the ridgeline due to the slope and disturbance. The Melaleuca Wetlands have a low archaeological potential, however, given their proximity to local resource areas the decision has been made to test portions of this area.

Community consultation has identified the ridge crest as being of cultural importance. Ethnographically, ridge crests were used as pathways, and hold cultural significance for this reason. Whilst occasional campsites have been known to occur on ridge crests in rainforest environments, they are relatively rare.

8.2 Archaeological Test Excavations

8.2.1 *General Excavation Methods*

For the River Heights Test Excavations the site was divided into four different physiographic zones. These included the Upper Ridge Crest (the top of the ridge at River Heights), the Hill Slopes (the lower slopes on the ridge), the Lower Melaleuca Margins (the lowlands surrounding the ridge that are made up of mostly Eucalypt and Melaleuca vegetation), and the Wetlands (the EPA swamp area). These zones are shown below in Figure 18.

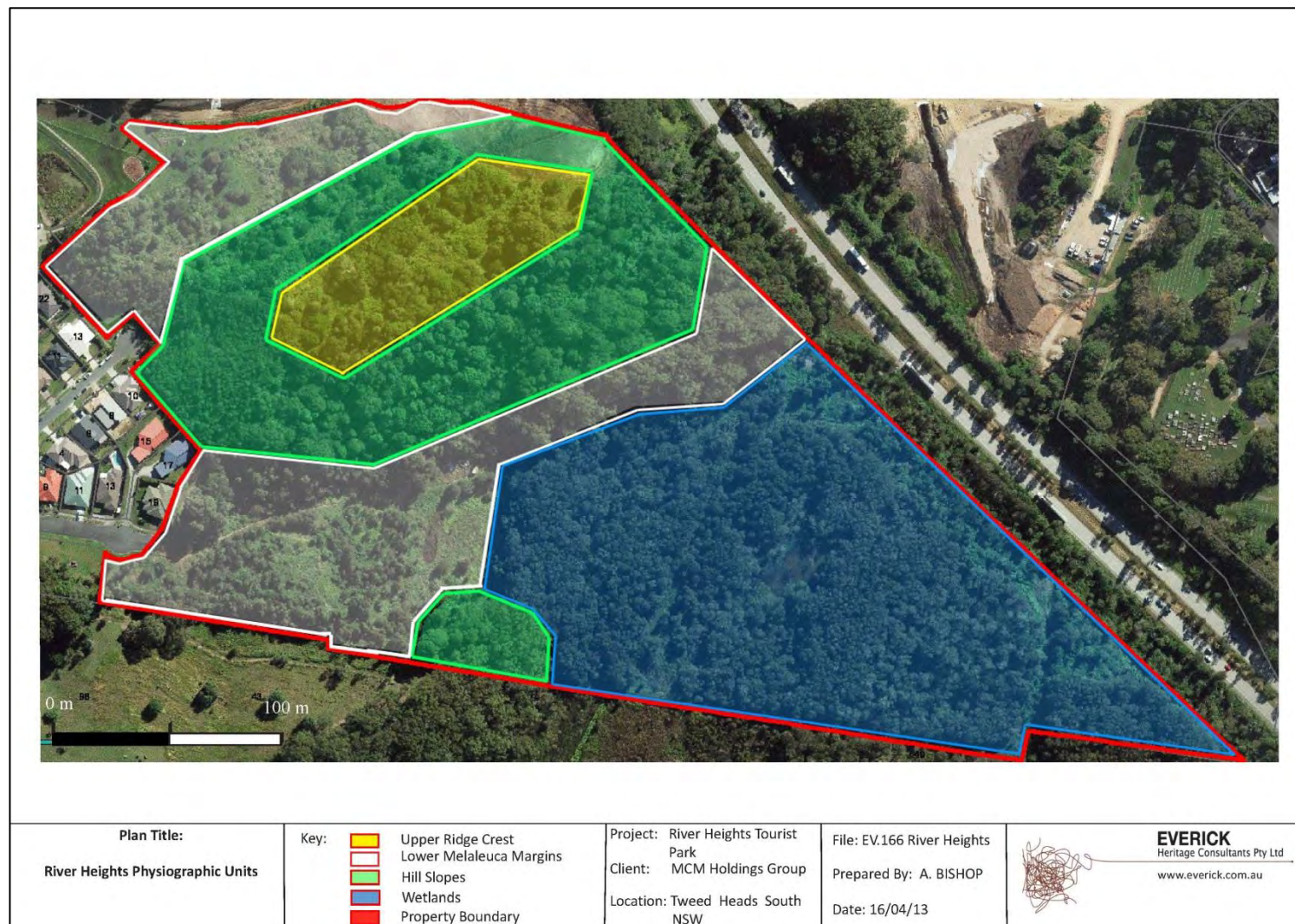


Figure 18: Physiographic Zones



Of these zones, the ones chosen for excavation were the Upper Ridge Crest, the Hill Slopes, and the Lower Melaleuca Margins. The wetlands were excluded due to their proximity to the water table and the improbability of remaining material culture in the zone. All other zones were surveyed in order to determine the distribution of sites across the landscape and positively identify any areas of further potential for archaeological deposits.

The Upper Ridge Crest was believed to have the greatest potential for archaeological material, so it was excavated the most intensely. Five lines of test pits ran across the Upper Ridge Crest at an angle perpendicular to the ridge, running up and down the slope of the ridge crest (Figure 19). The purpose of this was to identify the distribution of artefacts in proximity to the ridge top and along the slope. Originally three lines of test pits were planned for excavation in this area. However, this was increased at the request of Des Williams, and due to the greater length and smaller width than anticipated of land appropriate for test pitting.

The Hill Slopes were tested in two distinct places. On the main ridge three test pits were excavated on the west hill slope, and on the toe slope five test pits were excavated (Figure 19). Originally one test pit was planned for the east hill slope, however this area was not excavated due to a large cut that has recently been made into this side of the hill.

Finally, four test pits were excavated in the Lower Melaleuca Margins. Originally, seven test pit locations were planned for this excavation. However, two in Survey Unit A were abandoned due to orders from the Tweed Shire Council, and only four could be dug in Survey Unit C due to dense vegetation, high water levels, and a lack of appropriate locations for test pitting (Figure 19).

The Test Excavation Strategy test pit locations were adhered to as much as possible, and were adapted when the situation was rendered too difficult. Due to dense vegetation and limited clearing methods, test pits were set up in locations that had the space required for excavating, rather than strictly in the locations laid out below.

As per the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (2011), test excavations were carried out by hand, digging 50 cm x 50 cm test pits in 5-10 cm spits for close control. Deposits were excavated through the upper soil unit (A horizon) until the clay B horizon was reached. This level was characterized by reddish/yellow clay which artefacts could not have passed through. In most cases this soil occurred between 10 to 25 cm. Deposits were sieved through 4 and 8 mm mesh sieves.

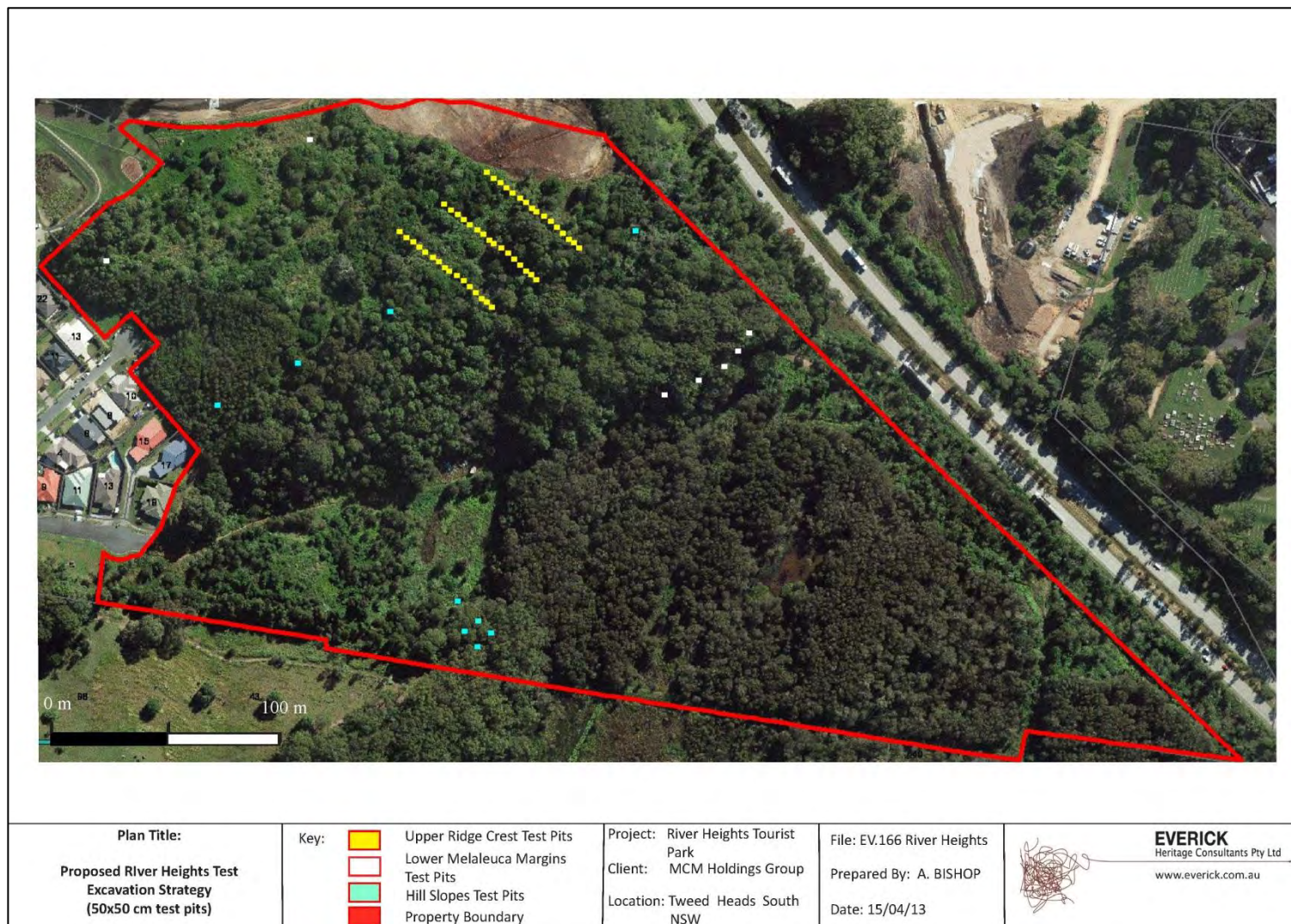


Figure 19: Aerial view of River Heights test excavation strategy



8.2.2 Upper Ridge Crest Excavations

Test pits across the Upper Ridge Crest were placed perpendicular to the ridge crest to determine whether there was a relationship between elevation and artefact density, and to test the degree of intra- sample unit variability. While the original Test Excavation Strategy planned for three transects of 15 test pits each, this was changed on site to five transects, with as many test pits as could be excavated before reaching the boundary of the zone. These changes were made based on requests from Des Williams (TBLALC representative), and the ground limitations of the site. Twenty four test pits were excavated to a maximum depth of 30 cm, owing in most part to the clay and rock 'B' horizon.

Test excavations in this area revealed a high level of variation between soil profiles in terms of the depth of the 'B' horizon, soil characterized by the 'B' horizon, and other factors such as the presence of clay shale and dense rock layers. With no obvious pattern linked to test pit location, topography or erosional forces, the high variation in soils is most likely the result of significant ground disturbance. When combined with evidence from historic aerials and previous archaeological reports, the excavations in this zone confirm that the area was highly disturbed through a combination of processes which most likely included clearing and grazing, at the very least.

No artefacts or features were found from these excavations. Because no test pits contained artefacts, the investigations at the Upper Ridge Crest found no correlation between landform, test pit location, and artefact density. Furthermore, the fact that no artefacts were found at all demonstrates a lack of occupation and a lack of archaeological significance in this zone, previously thought to have been a landform that would have attracted Aboriginal peoples.

The ridge crest was predominately cleared of trees in preparation for the test excavations. The clearing of vegetation, together with the cutting up of the soil caused by the tracks of the excavator, provided an opportunity to inspect the ground surface and subsurface soil layers for artefacts. No artefacts were identified during this survey, providing further weight to excavation results. .



8.2.3 Hill Slopes Excavations

Test pits across the Hill Slope sampled two different topographic areas (the west slope and toe slope) to determine whether there was a relationship between landform and artefact density, and test the degree of intra- sample unit variability. While originally the Test Excavation Strategy also accounted for one test pit on the Hill Slope East of the ridge, no suitable location could be found for this due to a significant cut that was recently made into the east side of the ridge. Eight test pits were excavated to a maximum depth of 24 cm, owing to the clay 'B' horizon.

There was a significant variation between soil profiles from the Toe Slope and the Hill Slope West. Test pits on the Toe Slope had a much deeper 'A' horizon, and a silty, dark brown soil, followed by a wet clay 'B' horizon. In contrast, test pits on the Hill Slope West had a very shallow 'A' horizon that consisted of sandy soils, immediately followed by a dry clay, clay shale 'B' horizon. This is most likely a reflection of erosional forces in relation to the differences in slope at these two different localities. The Toe Slope had a more gradual slope, while the Hill Slope West had a significantly steeper slope that would have contributed to a higher rate of soil erosion. Given the nature of these soils, a steep slope is unlikely to retain a significant amount of soil above the clay 'B' horizon, hence the shallowness of the Hill Slope West test pits, and the exposure of clay shale in these locations. These erosional forces, combined with other processes suggested by aerial photographs and previous archaeological reports (such as clearing and grazing), would have caused significant ground disturbance in this zone.

No artefacts or features were found in this zone. Because no test pits contained artefacts, the excavations found no correlation between landform, test pit location, and artefact density. Furthermore, the fact that no artefacts were found demonstrates a lack of occupation and a lack of archaeological significance in this zone.



8.2.4 Lower Melaleuca Margins Excavations

Test pits across the Lower Melaleuca Margins were placed to sample three different topographic areas (north of hill, west of hill, and south east of hill) to determine whether there was a relationship between landform and artefact density and test the degree of intra- sample unit variability. However, only one of these localities was able to be excavated due to orders from the Tweed Shire Council referencing subsurface infrastructure in Survey Unit A. Despite this set back, test pits in LMM 2 and LMM 3 were located in areas that have been heavily disturbed over the last 50 years, as attested to by the presence of this subsurface infrastructure. Additionally, only four locations suitable for excavation were found at LMM 1, so the original number of five test pits was not carried out. Four test pits were placed on the boundary between the Hill Slopes and the Wetlands zones, along a dirt path that had been created by cutting into the hill slope to form a level surface.

Test pits excavated in LMM 1 had a great degree of variation in soil profiles. These profiles gave a snapshot of the disturbance that this land has undergone overtime as well. Test pits 1 and 4 were both very shallow and had a clear clay 'B' horizon, while test pits 2 and 3 lacked the same distinctive clay. The clay found in test pits 1 and 4 is most likely the result of fill, used from the cut made into the hill slope to create the current dirt path immediately adjacent to test pits. The clay horizon that this fill came from can be seen in the wall alongside the dirt path, and from this it can be assumed that the excess dirt was pushed away from the hill slope into the area that now borders the River Heights wetlands zone. The lack of a similar clay horizon in test pits 2 and 3 demonstrates that the soil in this area is varied and disturbed, and that the fill from the dirt pathway is not a uniform feature. When this data is added to the image painted by historic aerials and previous archaeological and soil reports, there is little doubt that this area was highly disturbed through a combination of earthworks (cutting and filling), in addition to clearing and possibly banana farming.

No artefacts or features were found in this zone. Because of this, no correlation was found between landform, test pit location, and artefact density. Furthermore, the fact that no artefacts were found demonstrates a lack of occupation and a lack of archaeological significance in this zone in addition to the others.



8.2.5 AHIMS Site # 04-2-0184

During the archaeological Test Excavations, Everick Senior Archaeologists Adrian Piper and Dr Richard Robins undertook a detailed inspection and recording of the stones associated with Site #04-02-0184. These artefacts were recovered during monitoring of the Kirkwood Road extension and moved onto the Project Area and placed at the base of a Tuckeroo tree. While some were of a general shape reminiscent of axes, none of these stones showed any evidence of being worked by humans. The edges had clearly not been ground, and there had been no flakes removed such that could be described as evidence of retouch. The lack of evidence of occupation identified during test pitting further supports these conclusions.

A survey for stone arrangements (or remnants of such) was also undertaken. There was no evidence for any stone arrangements. The hill is characterised by numerous small basalt outcrops. It has subsequently been heavily modified. Everick has been informed that these basalt stones have been deposited from the earthworks at the adjacent residential subdivision (Nutting Pers Comm.). A previous archaeological assessment done by Adrian Piper in 1998 of the Project Area confirmed that there were no stone arrangements in the area currently registered with AHIMS (Piper 1998). The potential for any identifiable evidence of stone arrangements being located within the Project Area is considered nil.

8.2.6 Discussion

Excavations at River Heights revealed much about Aboriginal use of this area, or rather the lack thereof. While originally thought to have been a site that would have attracted Aboriginal people because of the ridge that runs through the Project Area, no archaeological evidence was found to support this. The Test Excavation Strategy was written based on the theory that the mapped podsolic soils would have supported predominately open woodland, rather than wet sclerophyll rainforest. Whilst this was true of the lower slopes, upon undertaking clearing of the land, it became apparent that a more fertile volcanic soil covered the ridge crest. This would have supported denser rainforest vegetation. Consistent with other rainforested areas in the Tweed, the upper ridge crest has little or no evidence of occupation.

This excavation strategy was carefully designed to uncover any Aboriginal objects remaining on the property, concentrating the most test pits in areas deemed the most likely to have been visited by Aboriginal peoples in the past (i.e. the Upper Ridge Crest). Therefore, the fact that absolutely no cultural material was recovered is



telling of the fact that this Project Area saw minimal occupation before European settlement, and has since been significantly disturbed.

While artefacts cannot tell the whole story of this site, the soil content and profiles that were excavated paint a picture of a highly disturbed landscape that has been scraped and scarred over the years. Inconsistencies in soil profiles and content across the Upper Ridge Crest show that the land has been significantly reworked and severely disturbed, while shallow depths along the Hill Slope West show how erosion has depleted remnant soil on the slopes of the main ridge. Furthermore, test pits in the Lower Melaleuca Margins attest to European cutting of the land, most likely in relation to agriculture. All of this data complements the results of previous archaeological assessments, soil reports, and aerial photography, which demonstrate that the land at River Heights was cleared, most likely cropped or grazed, and used as a banana farm

9. ARCHAEOLOGICAL SIGNIFICANCE OF PROJECT AREA

9.1 Aboriginal Cultural Heritage

9.1.1 Principles of This Significance Assessment

The assessment of archaeological (scientific) significance is a key aspect of developing future management strategies for the proposed development. There are many considerations that contribute to the evaluation of a site or landscape's potential archaeological significance. Two important criteria, listed in the New South Wales *Aboriginal Heritage Standards and Guidelines Kit* (1997:88), are research potential (defined as the potential to elucidate past human behaviours) and educational potential. The primary considerations when evaluating a site's research potential are discussed below.

Rarity: This is related to how prevalent a particular site type is in a given region. Sites that are particularly scarce have the potential to contribute more to our knowledge of past behaviours relative to sites which are common place. For example, in the north coast of New South Wales, coastal (beach) middens would have been common prior to European settlement. However, the impacts of sand mining and development have resulted in coastal middens becoming relatively rare, thus increasing their archaeological significance.



Antiquity: The value in a site's antiquity is closely linked to its rarity. As a general rule, the numbers of particularly old sites will reduce as time progresses. When sites of great antiquity are identified, they are of high archaeological significance.

Representativeness: A site's representativeness indicates whether a site is considered to represent a particular pattern of past human behaviour. It is important to identify sites that have high representative value and conserve them for future generations (Pearson and Sullivan 1995:148). Representativeness is assessed based on current research questions and technologies, and may change through time. It should be noted that a site's representativeness is also related to its cultural value, as distinct from its purely scientific value.

Complexity: A site may demonstrate a range of human behaviours and/or past climate and environmental changes (Pearson and Sullivan 1995:148).

Integrity: The stratigraphic integrity of a site relates to the subsequent disturbance of a site once it has entered the archaeological record. Disturbance may have been the result of impacts by humans (such as land clearing) or natural causes (such as erosion or bioturbation from ants). It is generally the case that the greater a site's integrity, the greater its archaeological significance.

Connectedness: A site should not be viewed in isolation, as the human behaviours that were responsible for the creation of the site were invariably connected to other sites reflecting different behaviours nearby.

9.1.2 Limitations

With all scientific research, including the assessment of 'scientific significance', it is important to acknowledge the limitations of any conclusions that have been drawn in relation to the assessment of the Project Area.

The assessment of archaeological significance is a highly subjective activity, and depends much on the values of the researcher(s) involved. In this assessment, we have categorised the Project Area into areas of 'High', 'Moderate – High', 'Moderate', 'Low – Moderate', 'Low' and 'No/Nil' archaeological significance. The values we have used are not precise. They exemplify arbitrary distinctions that are necessary for ease of demonstrating the scientific value of the Project Area as a whole. These categories represent a relative continuum of significance, which is demonstrated by the diagram in Figure 18. The intention of Figure 13 is to show examples of the values used in this assessment. Of course, it is quite possible that even a single



artefact may be of high archaeological significance, where it can be demonstrated that the artefact exhibits one or more of the criteria above.

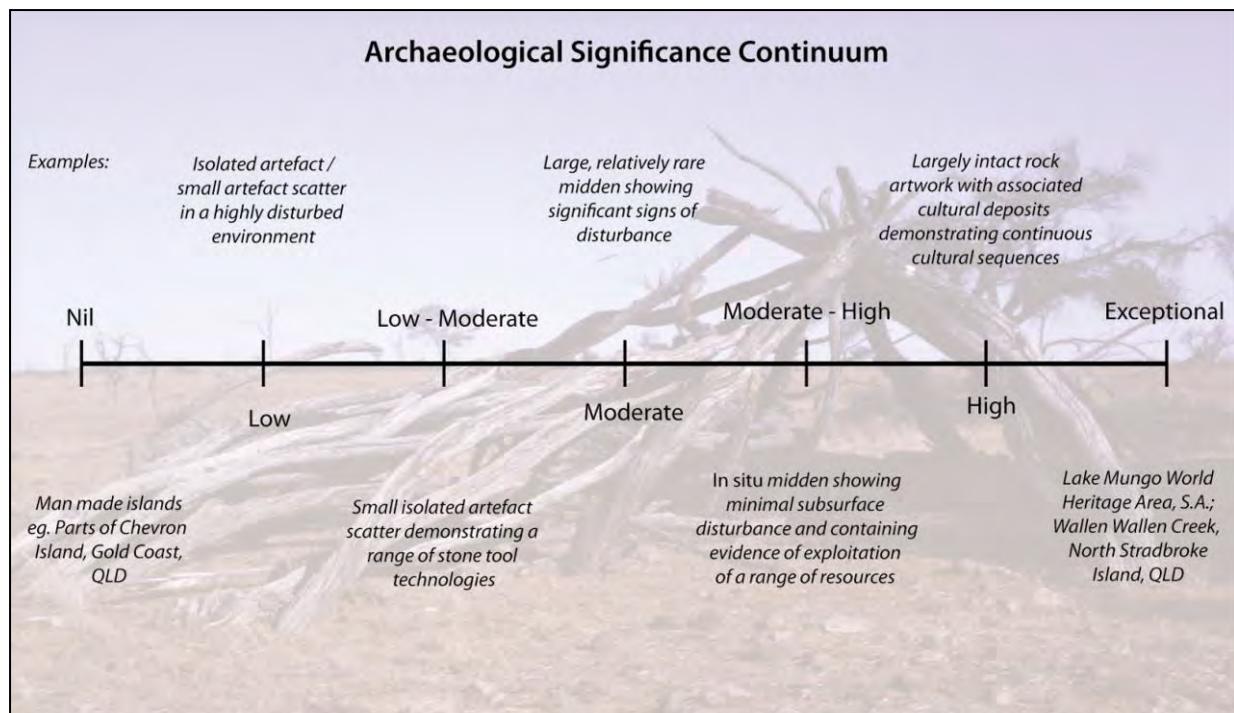


Figure 20: Archaeological Significance Continuum applied in this assessment

9.1.3 Archaeological Significance of Upper Ridge Crest

Initially identified as being of Low to Moderate archaeological sensitivity, the archaeological test excavations at the Upper Ridge Crest have revealed this to be an inflated assessment of the zone. The Upper Ridge Crest has no evidence of occupation, and a Nil level of archaeological significance.

9.1.4 Archaeological Significance of Hill Slopes

Initially identified as being of Low to Moderate archaeological sensitivity, the archaeological test excavations at the Hill Slopes have revealed this to be an accurate assessment of the zone. Test pit locations were chosen to see if artefacts occurred in a capacity that correlated with elevation or proximity to the Upper Ridge Crest. However, no artefacts or features were found on the Hill Slopes. This indicates that the Hill Slopes has a Nil level of archaeological significance, and no evidence of occupation.



9.1.5 Archaeological Significance of Lower Melaleuca Margins

Initially identified as being of Low to Moderate archaeological sensitivity, the archaeological test excavations at the Hill Slopes have revealed this to be an inflated assessment of the zone. No artefacts were found in the Lower Melaleuca Margins. This indicates that this zone has a Nil level of archaeological significance.

9.2 Historic Cultural Heritage

There are no items of potential historic heritage significance within the Project Area.

10. CULTURAL SIGNIFICANCE OF PROJECT AREA

10.1 Theoretical Framework

A cultural landscape approach recognises the continuity between past and present by acknowledging the connection between the remembered past and contemporary communities (Brown 2007:38). An integral part of contextualising a cultural landscape is to facilitate the incorporation of the knowledge of Traditional Owners. This can enable a comprehensive understanding of the socio-cultural context and a true recognition of significance and meaning (Harrison 2005:258; Ross *et al.* 2003:80). For some Aboriginal people sites have a particular significance which has little or no relationship to the archaeological significance (Greer 1999:117). To assess Aboriginal cultural heritage sites appropriately, they must be seen in the context of the people to whom the sites are significant (Godwin and Weiner 2006:127; Greer 1999:116). For Aboriginal people, places are situated within a complex web of memories, beliefs, stories, practices, family members, local environments and cultural places that together constitute a cultural landscape that represents both ancient, traditional life and dynamic living traditions (Bradley *et al.* 2002:9; Ross 1996:4; Smith and Burke 2005:389). This view embraces Aboriginal people's conception of space and time, where "places always exist in relation to other...places" and "the past impacts actively on the present" (Smith and Burke 2005:382).



The lived experience of past and present traditions illuminates connections that are both tangible and intangible, and are visible in the dynamic, on-going cultural interaction that Aboriginal groups have with their country (Godwin and Weiner 2006:127; Sullivan 1993:60). It is important to remember that places do not have inherent cultural significance. It is through memories, stories, visiting, teaching and other activities with places that the significance is ascribed by the people who interact with them (Brown 2007:137; Smith 1996:67). Collaborative research, community consultation and the collection of oral histories can be used to inform an understanding of the nature of intangible experiences and values that are associated with the tangible aspects of sites and landscapes. This understanding underpins the identification and assessment of the cultural significance of a site or landscape.

10.1.1 Cultural Heritage & Conflict

As a concept, heritage has often been perceived to be ‘conveniently ambiguous’ (Harrison 2013:14 citing Lowenthal 1998; see also Davidson [2000] 2006), being put to use for many different social and political purposes. An understanding of the role of politics and conflict in heritage management is essential to developing effective management strategies. The very act of significance assessment is subjective, with political and social influences of shaping how Aboriginal communities might express a place’s significance (Griffiths 1996; Sullivan 1996).

In her book *Uses of Heritage*, Smith (2006:277) discusses what she describes as ‘the dissonant nature of heritage’ (see also Abercrombie *et al* 1980; Tunbridge & Ashworth 1996). Central to this concept is the politics of identity that is inherent in cultural heritage (Smith 2006:277). Who should control how heritage is defined, and therefore how it should be managed? Smith argues that this is a political contest. And given the different political positions in which land users, governments and Indigenous groups will often find themselves, it is inevitable that such conflict can on occasions manifest itself in a power struggle. This observation rings true about the consultation to date on the Project Area. Final conclusions on this issue are provided in the Statement of Significance in Section 10.2 below.

10.1.2 Defining and Verifying Intangible Cultural Heritage

The aim of cultural heritage management is to establish the values particular groups of persons may associate with places or objects (Byrne 2003). Although assertions as to the existence of physical heritage (stone tools, stone arrangements, burial grounds, bora rings) have been made, it has been observed that there is no evidence for such. None of these sites had been recorded in the extensive, publically available literature for



the region. The Tweed Byron LALC was not aware of such sites when the Project Area was assessed for cultural heritage in 1998 (Appendix E). It is therefore more likely that such assertions relate to attempts to protect the intangible (non-physical) values of the Project Area.

Importantly, value of intangible connections to landscapes by Aboriginal people has been well documented by Australian anthropologists since the late 19th Century (Weiner 2011:189). The value of the intangible often far outweighs values placed on the physical (Turnpenny 2007).

It is relevant at this juncture to review the accepted definitions of intangible heritage. Intangible heritage is defined in the UNESCO International Convention for the safeguarding of the Intangible Heritage (2003) as being (Article 1):

practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. The “intangible cultural heritage”... is manifested inter alia in the following domains:

- (a) oral traditions and expressions, including language as a vehicle of the intangible cultural heritage;*
- (b) performing Arts;*
- (c) social practices, rituals and festive events;*
- (d) knowledge and practices concerning nature and the universe; and*
- (e) traditional craftsmanship.*

Whilst Australia does not rank amongst the 137 States that have ratified the UNESCO treaty, it does make for a relevant starting point. The UNESCO definition is particularly broad. In the context of the present assessment, it is clear that a burial place, ceremonial place and stone arrangement (even if destroyed) would fit within this definition. Ceremony is a well-documented traditional practice of Aboriginal people, and these cultural traditions can be a vibrant mix of oral traditions, performing arts, rituals, festivals and expressions of spiritual knowledge.

From the definition provided above, a critical element would appear to be where the UNESCO convention notes that intangible heritage is ‘transmitted from generation to generation.’ It could be argued that the reinterpretation of cultural landscapes, as has occurred by some Aboriginal Stakeholders, may be precluded from this definition of intangible heritage.



Despite an extensive literature review, there are no ethnographic accounts on the public record that relate to the Project Area as being a place of particular cultural significance. It is of note that the Courts require a standard of evidence in verifying these claims that has been almost entirely absent in this instance.

10.1.3 New South Wales Legislation and Intangible Heritage

Researchers have for some time criticised the disconnect between theoretical heritage 'best practise' and the legislation of Australia (English 2003; Godwin and Weiner 2006: 127; Turnpenny 2007; Andrews and Buggey 2008). This is particularly so for the assessment and management of intangible heritage. When legislation along the eastern seaboard of Australia is compared, a common thread is that their main focus is undeniably on physical Aboriginal heritage (MacLaren 2006; Ross *et. al* 2010; Schnierer 2011).

Never-the-less, this assessment has been commissioned in a development context, and there are strong public policy and administrative reasons for the legislation being structured the way it is. Chief among these reasons is most likely a desire to find equitable outcomes amongst all members of society, including those of affected landholders and Aboriginal persons. This assessment must, therefore, be firmly grounded in the relevant state legislation.

As reviewed in Section 2 above, the primary legislation in New South Wales for the protection of Aboriginal cultural heritage is the NPW Act. The Act protects both Aboriginal Objects and Aboriginal Places. Aboriginal Places must be declared places, and registered on the AHIMS Register. Section 84 of the NPW Act defines Aboriginal Places as "in the opinion of the Minister, is or was of special significance with respect to Aboriginal culture." As to what constitutes 'special significance', guidance can be sought from both the AHIMS listing of Aboriginal Places and the OEH *Aboriginal Places Policy* (2011) ('APP').

A comparative review of declared Aboriginal Places in northern New South Wales has also been undertaken during this assessment. The closest Aboriginal Place is the Aboriginal settlement of Ukerebagh Island, approximately 1.5 km to the east of the Project Area. The next closest places to the Project Area are:

- (a) **Casino Bora Ground:** One of the largest Bora Grounds in the region and extensively documented. Unfortunately now destroyed.
- (b) **Cubawee:** the historic self-managed Aboriginal settlement of Cubawee, with considerable material remains.
- (c) **Parrots Nest:** a sacred place including: Sacred hoop pine trees, rock engravings, stone arrangements, rock paintings, axe grooves and fallen carved trees.
- (d) **Capeen Mountain:** a natural mythological site and dominant physical feature of the area, with no Aboriginal Objects associated on the site record.
- (e) **Yabbra Spring:** a natural mythological site with no Aboriginal Objects associated.



- (f) **Tooloom Falls:** a natural mythological site relating to the story of the creation of the Clarence River.
- (g) **Ti Tree Lake:** a sacred women's site and mythological place.
- (h) **Cocked Hat Rocks:** a natural mythological site.

A common feature of all of these places is that their significance has been well documented in the ethnographic record.

The review of OEH policy and previous declarations for Aboriginal Places in the region demonstrate that, on the evidence available, it is highly unlikely that the Project Area would reach the threshold for being declared an Aboriginal Place. There is no other legislative protection afforded to intangible heritage places in New South Wales, other than the general discretion of the consent authority (Tweed Shire Council) to consider impacts to Aboriginal cultural heritage.

10.2 Statement of Cultural Significance

Through the course of community consultation, a picture has developed of the significance of the Project Area and surrounds to the Aboriginal people of the Tweed. The following statement on cultural significance has been developed through phone attendances, community meetings and excavations involving the Aboriginal Stakeholders. Their involvement provided the socio-cultural context of the area, encompassing past and present activities and sets the archaeological research into a broader cultural landscape (Ross et al. 2003:80). All correspondence that has contributed to this statement has been provided to the JRPP.

The River Heights development area is situated within a greater, significant cultural landscape known to the Aboriginal people of the Tweed. The region was intensively occupied, and contained a number of important occupation, ceremonial and spiritual places. The Project Area is a prominent landscape feature within the region. The Aboriginal Stakeholders are of the opinion that, owing to the significance of the region and the prominence of the landscape feature, the Project Area would once also have been significant.

However, there is no evidence to suggest the Project Area is of cultural significance, beyond its association to the broader cultural landscape. There is no evidence to suggest that the hill of the Project Area is any more significant than any of the basalt outcrops that characterize the Tweed region. There is no evidence for any stone arrangements and burial grounds within the Project Area. There is no evidence for any bora grounds in close proximity, other than the Kirkwood Road Bora Ground approximately 1.5 km to the east.



The Project Area is not significant for its physical heritage. There is no evidence of Aboriginal stone tools or cultural modification of trees. Had any stone arrangement been located on the Project Area, they would have certainly long ago been destroyed by the impacts of land clearing and cropping. Burials are unlikely to have occurred within the development footprint, and are unlikely to have survived in the wetland, were they once located there.

The sincerity of the belief by the Aboriginal Stakeholders that the Project Area was an important cultural place cannot be doubted. The difficulty for them is that there is no evidence to substantiate their specific claims of heritage significance. They are relying on their own interpretations of significance, based on knowledge derived from surrounding areas and knowledge of their culture more generally. This type of 'reinterpretation' of place is, in Everick's experience, becoming increasingly common. However, there is little protection for places ascribed such significance in New South Wales legislative or administrative regimes. There may be good public policy reasons for this, however, such reasons have not been articulated in the relevant Statutes or guidelines. Regardless, such issues are beyond the scope of this assessment. For the purposes of this assessment, it can be safely concluded that no types of heritage significance will be impacted by the Project that are afforded protection under the heritage regime of New South Wales.

11. STATEMENT OF HERITAGE IMPACT

11.1 Indigenous Cultural Heritage Impact Assessment

The development Proposal will include substantial amounts of excavation, lowering the ridge line within the Project Area by at least six metres. This will have a substantial detrimental effect on the general significance identified by the Aboriginal Stakeholders.

Although the Aboriginal Stakeholders contend otherwise, it is Everick opinion that - on the evidence available - the Project will not impact on any features of high intangible (non-physical) cultural significance.

There will be no impacts to physical cultural heritage (Aboriginal Objects) if the Project is to proceed. Although it does not fulfil the definition of heritage under NSW legislation, it is of note that the alleged burial ground within the wetland areas will not be impacted by the project.



11.2 Historic Cultural Heritage Impact Assessment

There are no non-Indigenous cultural heritage sites or relics within the Project Area. Although the Project Area was once the home of Kirkwood, and important Tweed pioneer, no physical evidence of his occupation was identified during the test excavations. It is considered highly unlikely that the Project will impact on any unidentified items of historic heritage significance.

12. RECCOMENDATIONS

12.1 Aboriginal Cultural Heritage

The following recommendations are cautionary in nature, and based upon the desktop review, the results of the field assessment and consultation with the Aboriginal Stakeholders and the Tweed Byron LALC.

Recommendation 1: Removal of AHIMS Site

The 'axes' collected from the monitoring of the Kirkwood Road extension and deposited within the Project Area do not fit the definition of an Aboriginal Object (see Appendix F). There is no evidence to suggest these stones have been modified by humans, such that an archaeologist might identify them as artefacts.

There is no evidence for any stone arrangements on the Project Area. The likelihood of stone arrangements surviving the extensive European impacts that have occurred over at least the last 100 years is considered extremely unlikely. There is no ethnographic evidence for stone arrangements having occurred within the Project Area.

It is therefore recommended that AHIMS Site #04-2-0184 is removed from the AHIMS register. An AHIP may be required as a legal technicality, although this would appear unwarranted as there is no heritage to which the AHIP might apply.



Recommendation 2: Aboriginal Human Remains

It is recommended that if human remains are located at any stage during earthworks within the Project Area, all works must halt in the immediate area to prevent any further impacts to the remains. The Site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Tweed Local Aboriginal Land Council and the OEH Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the 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: Aboriginal Cultural Material

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

- (e) work in the surrounding area is to stop immediately;
- (f) 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;
- (g) an appropriately qualified archaeological consultant is to be engaged to identify the material; and
- (h) if the material is found to be of Aboriginal origin, the Aboriginal community, including the Tweed Byron LALC, is to be consulted in a manner as outlined in the OEH guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).

Recommendation 4: Notifying the OEH

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



Recommendation 5: 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.

12.2 Historic Cultural Heritage

With no historical evidence located within the Project Area by the field assessment or the desktop research, no further actions or recommendations regarding Historic Cultural Heritage are warranted for the Project Area.



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APPENDIX A: KEY ABORIGINAL COMMUNITY RESPONSES

TWEED BYRON LOCAL ABORIGINAL LAND COUNCIL



P.O. Box 6967
Tweed Heads South NSW 2486
21/25 Ourimbah Road,
Tweed Heads NSW 2485
Telephone: (07) 55361 763
Fax: (07) 55369 832
admin@tblalc.com

Friday, 9 August 2013

Mr Tim Robins
Operations Manager/Archaeologist
Everick Heritage Consultants Pty Ltd
PO Box 146
Red Hill Qld 4059

Dear Tim,

Re: Draft Cultural Heritage Assessment River Heights Lot 1 DP1168904, Tweed Heads South NSW

General Comments

Tweed Byron LALC rejects this report as there are opinions expressed that are untrue and misrepresent our input as Aboriginal Stakeholders to this project. The report is written in a way that is demeaning and condescending to our on site monitors, Elders and community. We have concerns about the content and the assertion that our Aboriginal community representatives cultural knowledge, expertise and experience is irrelevant unless it is qualified by non-Aboriginal 'experts'. We also have concerns that the intangible elements have no weight or bearing in this report.

We concur with Jackie McDonald Stakeholder, that certain information was not provided for cultural reasons. In light of being informed that the hill is now going to be significantly modified compared to the original proposal, wider community input is being given.

TBLALC was also a stakeholder on the Kirkwood Road project, which is adjacent to the River Heights property, and on which our onsite representatives made it very clear to Tweed Shire Council that the crest of the ridgeline was to be protected.

It is a core function for the Tweed Byron LALC Under the *NSWALR Act s52 (4) Aboriginal culture and heritage*;

(a) to take action to protect the culture and heritage of Aboriginal persons in the Council's area, subject to any other law,



(b) to promote awareness in the community of the culture and heritage of Aboriginal persons in the Council's area.

Specific Comments

Statement of heritage significance page 3, disputes the opinion of the Aboriginal stakeholders of the landscape features significance.

Tweed Byron LALC strongly disagrees with this opinion, we state quite clearly that it is the Aboriginal community who determines the significance and level of significance of cultural objects and places, as well as landscapes.

Whilst you have acknowledged that we the Aboriginal stakeholders have provided certain information regarding the area and its significance to our community from past to present, you state in a following paragraph that there is no 'evidence' to suggest the Project Area is of cultural significance. We reconfirm that Aboriginal objects were found on or in close proximity to the River Heights site (which are AHIMS registered). We also confirm that there appear to be 3 large stone arrangements which included a large grinding dish (please find photo's attached) which were identified by stakeholder representatives during field assessment for test pitting.

We are of the understanding that the stakeholder representatives made Everick's representative aware of the 3 stone arrangements and grinding dish but appear to have been ignored and those specific objects were never investigated as part of this Assessment. We believe that there was sufficient evidence that what appeared to be standing stones and a grinding dish warranted further assessment and this is why the stakeholder representatives flagged the location with coloured tape. Tweed Byron LALC also reconfirms that we believe there is a burial site within this property.

Recommendation 3

Tweed Byron LALC should have been included as a point of contact.

Statement of Heritage Impact p. 4

Tweed Byron LALC rejects these comments/opinions. Stakeholder representatives at no stage indicated that all objects found were stone axes, it was stated that some were in fact pounders.

Your statement "The lack of evidence of occupation identified during test pitting further supports these conclusions:" Whilst all stakeholders did "express confidence in the survey methods and proposed excavation methods", upon meeting with our on-site monitors we were happy to follow their advice to carry out further test pitting closer to the River Heights & Kirkwood Road boundary which was in closer proximity to where the 7 stone artefacts had been found but this suggestion was dismissed by Everick representatives. We therefore do not agree that excavations along the ridgeline were carried out to our satisfaction.



Recommendations

The recommendations were not developed “in consultation with the Aboriginal stakeholders and the Tweed Byron LALC”. Whilst this might be inferred in a broad sense, we were not specifically asked what recommendations we would like to see in the report.

Recommendation 1 Removal of AHIMS Site

We disagree with this recommendation as our Aboriginal stakeholders and OEH have formally identified these items as Aboriginal objects.

4.2 Consultation Process page 27

“a cut into the hill at River Heights” originally proposed at the beginning of the consultation, differs significantly to what is now being proposed and is of concern to our community as previously indicated.

Page 28 & 30 “Seven stone axes”

As stated previously, at no stage did stakeholder representatives indicate that 7 stone axes had been found, we were informed that 7 stone artefacts had in fact been found which consisted of stone axes and pounders.

4.4 Summary of consultation process page 30. Misrepresented statement about Aboriginal stakeholders do not support the development.

Tweed Byron LALC is extremely concerned of the new proposal to now remove the entire crest of the ridgeline. This was not clearly advised in early discussion/consultation with us and has in fact drawn great concern from our community once it was understood. The impact resulting from the removal of the ridgeline will have a profound affect on cultural significance. Cultural information and belief is held by some of our members that the ridgeline is part of a cultural story. This story is told from an overlooking vantage point. Removal of such a significant part and area of the ridge will impact on that story and alter the context for future belief and passing of that knowledge. This is why we have referred to that ridge and its position as “part of the broader cultural landscape”.

The statement “Generally, the Aboriginal Stakeholders do not support the development” is not entirely correct. We have consistently objected to the modification/removal of the crest of the ridgeline. Development of appropriate areas for urban settlement is acceptable to us.

4.4.6 Cultural heritage values map, page 31.

Why are you including a map that depicts the community knowledge that you have clearly dismissed in this report? We feel this knowledge is entirely relevant to the assessment.

The AHIMS map Figure 6 page 34

Whilst it is indicated in the appendix this map does not show all of the AHIMS registered sites as at 2013.



Conclusion

As this response has been delayed due to unforeseen circumstances, we would like to add and bring to attention that an on site visit at the River Heights site took place Tuesday 6/8/13, Warren Phillips, Lyndon Combo, Jackie McDonald, Jason McDonald (community representatives) and Adrian Piper (Everick) attended.

During the inspection it was discovered that the stone arrangements had been disturbed and some of the stones, in particular a large grinding dish, are missing. It appeared that machinery was used and a different colour flagging tape has replaced the tape originally placed by our stakeholder representatives during the test pitting.

Tweed Byron LALC's Recommendations

That the Cultural Heritage Assessment is redone to address our above concerns and that an investigation commence as to why the stone arrangements and large grinding dish have been disturbed, damaged, and apparently removed. (See the attached photographs taken by the stakeholder representatives during test pitting which commenced on 18/04/13, and those taken by the community representatives on 6/8/13).

Yours sincerely

Leweena Williams
CEO

cc. Rosalie Neve – Office of Environment and Heritage
Nick Pulver – Office of Environment and Heritage
Ashley Moran – Office of Environment and Heritage
Andrew Chalk – Chalk & Fitzgerald Lawyers
Tina Williams – New South Wales Aboriginal Land Council
Stephen Ryan - New South Wales Aboriginal Land Council
Tweed Shire Council Aboriginal Advisory Committee
Colleen Forbes – Tweed Shire Council



ATTACHMENT A

PHOTOS TAKEN ON OR BEFORE 18 APRIL 2013 AT RIVER HEIGHTS





ATTACHMENT B

PHOTOS RELATING TO DISTURBANCE AT RIVER HEIGHTS ON 6 AUGUST 2013





63 Tringa St

West Tweed Heads 2485

24 July 2013

Everick Heritage Consultants
47 Arthur Terrace
Red Hill Qld 4059

Dear Tim, **River Heights Cultural Heritage Assessment June 2013**

Thank you for providing me with a copy of the Aboriginal Cultural Heritage Assessment (ACHA) and the Excavation Report for the River Heights project. As a registered Aboriginal stakeholder for the project and a descendant of the Traditional custodians of the Tweed Valley, I wish to respond to the report. I have also been asked to represent the views of Aunty Joyce Summers, Community Elder & Aboriginal Advisory Committee member.

Firstly, we are very concerned about the way the information provided for the project, at various stages, has been interpreted throughout the report. Information has been given in good faith, and some has been withheld, for very sound cultural reasons. The withheld information has recently been discussed (by the knowledge holders of that information) when we became aware that the crest of the ridgeline, the cultural site, was to be significantly modified, by being totally removed. We were not aware that the crest of the ridgeline was to be modified during the original site survey.

As registered Aboriginal stakeholders of the neighbouring Kirkwood Road project, we worked closely with Tweed Shire Council to ensure the crest of the ridgeline was not damaged, in fact the alignment was moved to accommodate the cultural site and a batter has stabilised the side of the hill. For the River Heights development, we had anticipated that all steps would be taken to protect the crest of the ridgeline and any other identified areas, after a thorough Cultural Heritage Assessment satisfied us that no other Aboriginal places/objects would be impacted.

Executive Summary:

Page 2. *No Aboriginal objects or Places were identified within the Project area.*

I suspect that this statement is made based on the definition of a Declared Aboriginal Place under the Act, otherwise, it is at odds with comments that follow in the first two paragraphs in the *Statement of Heritage Significance*.

Page 3. *Statement of Heritage Significance – Omission*

The last sentence in the second paragraph fails to recognise the importance of the landscape features to present day descendants. In part, this is due to the level of disclosure the knowledge holders must abide by, but we have consistently stated the project areas connectedness to other features, and this is recognised here and there on page 3 & 27. In addition, there are resources that I have collected from the project area ridgeline over the years, up until recently, when it became a construction site. White ochre resources have also been collected from the other side of the ridgeline and shared between community members, so the area retains its importance to our community to the present day.



Statement of Heritage Impact: Page 4.

I am at odds with all of the comments made in this section and as an Aboriginal stakeholder for the project, I feel that additional investigation needs to be carried out. I am aware that the Aboriginal monitors tried in vain to draw to the Archaeologists attention to a number of stone arrangements, after they were exposed by clearing. However, the monitors were encouraged to stay on task with the excavation work. We have a series of photographs and we believe the stone arrangements warrant further investigation. The monitors also felt that not enough excavation work was carried out on the crest of the ridgeline near the Cultural site. This raises more questions for me. Was this because the archaeologists recognise it as a Registered Cultural site? If not, one would think that the AHIPs would have included excavations in that area.

On page 28 (Consultation Process) it states *"It was also agreed that excavations would cover the ridgeline in order to retrieve any cultural material that might be on the ridge."* I am not confident this was carried out, to our satisfaction.

Whilst page 28 also says that *"Aboriginal participants expressed confidence in the survey methods and proposed excavation methods,"* it is extremely difficult for us to understand exactly where the test pits will be, by looking at it on a small map at a meeting, that is why we rely heavily on the Aboriginal monitors opinions and advice, when they are on site.

Recommendations: The statement addressing the recommendations implies that they were developed *'in consultation with the Aboriginal stakeholders and the Tweed Byron LALC'* and this is not the case.

Recommendation 1: Removal of AHIMS Site - Opposed

4.2 Consultation Process Page 27

As previously stated, our community were not aware of the extent of the proposed modification to the ridgeline. *'a cut into the hill at River Heights'* proposed at the beginning of the consultation, is quite different to what is now proposed.

Page 28 & 30. *'Seven stone axes'* I am not aware of anyone stating that seven stone axes were discovered, rather, I was advised that seven cultural objects were located, and I believe three of them were axes.

4.4 Summary of Consultation Process Page 30.

Whilst it is believed that sufficient consultation has occurred, it is clear that more is needed. Some people are coming forward now that they realise the crest of the ridgeline will be totally removed. They have not had their say to this point. This could be due in part, through them not seeing the advertisements in the newspaper or the fact that they are not members of the Shire's Aboriginal Advisory Committee (AAC). The AAC has become a convenient consultation process but should not be to the exclusion of other consultation. It appears to be incumbent upon the registered stakeholders to ensure that anyone else with particular knowledge comes forward, and this is not fair. This is a burden that I have had to bear, once I realised the entire top of the ridgeline was to be removed.

The statement *'Generally, the Aboriginal Stakeholders do not support the development'* is not entirely correct. We have consistently objected to the modification/removal of the crest of the ridgeline.

Error page 35, should read *'burial ground on south bank of Terranora Inlet at Philp Parade'*.