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Tweed Sand Plant, Cudgen NSW

Aboriginal Cultural Heritage Assessment

Prepared for Hanson Construction Materials Pty Ltd

Everick Heritage Pty Ltd



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Executive Summary

Everick Heritage (the 'Consultant') was commissioned by Hanson Construction Materials Pty Ltd (the 'Proponent') to undertake an Aboriginal Cultural Heritage Assessment ('ACHA') in support of proposed expansion of the current Tweed Sand Plant on lands designated as Lot 1 DP1250570, Lot 2 DP1192506, Lot 3 DP1243752, Lot 494 DP720450, Lot 22 DP1082435, Lot 23 DP1077509, Lot 51 DP1166990, Lot 50 DP1056966, and Lot 51 DP1056966 (the 'Project Area') located at Altona Rd, Cudgen NSW. The assessment has been commissioned to satisfy the provisions of the Tweed Local Environment Plan ('LEP') and state planning requirements with respect to the potential of the Proposed Works to impact on Aboriginal heritage.

In accordance with the relevant administrative and legislative standards for NSW (see Section 2), the methods employed in this assessment included:

- a search of relevant heritage registers;
- a review of environmental resources for the region;
- a review of relevant archaeological and ethnographic studies for the region;
- a site inspection to be conducted with representatives of the Tweed Byron Local Aboriginal Land Council ('LALC');
- assessments of archaeological and cultural heritage significance; and

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- report on findings and recommended management strategies.

Results

As a result of the desktop study, field inspection and Aboriginal community consultation, the following was determined.

- No Aboriginal objects were identified during the site inspection and the Project Area was determined to have been subject to significant historical ground disturbance.
- No linear dune features with a greater potential to contain Pleistocene or subsurface Aboriginal cultural materials were identified within the Project Area.
- One (1) Indigenous cultural heritage site is mapped within the Project Area. This site was a low-density stone artefact scatter (#04-2-0109). The site was subject to a Consent to Destroy, (2000) the contents removed to the Care and Control of the Tweed Byron Local Aboriginal Land Council. This site is now mapped within the Tweed Sand Plant extraction pond.
- The hills beyond the southern extent of the Project Area (Lot 1 DP1250570) have been designated by the Tweed Shire Council Aboriginal Cultural Heritage Management Plan as having the potential to contain subsurface deposits of 'significant' Aboriginal heritage. Spur lines and hills are present in the volcanic basalt soils of the Cudgen Duranbah hills to the east and southeast of the Project Area. It is possible that Aboriginal sites would be found in this context. However, while it is known that the Cudgen hills were a source of red ochre for Aboriginal people, Aboriginal occupation sites or resource sites have not been found in these hills.

No Aboriginal sites were identified during the site inspection.

Conclusions

Having consideration for the outcomes of the survey it is reasonable to conclude that the proposed expansion of the Hanson Tweed Sand Plant will not impact on Aboriginal objects. As such the additional community consultation and archaeological investigation will not be required.

Recommendations

Recommendation 1: Aboriginal Objects Find Procedure

It is recommended that if suspected Aboriginal material has been uncovered because 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;
- d) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the Heritage NSW guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010); and
- e) should the works be deemed to have harmed the Aboriginal objects Heritage NSW should be notified immediately via the EPA Enviro Hotline.

Recommendation 2: Aboriginal Human Remains

Although it is unlikely that Aboriginal Human Remains will be located at any stage during earthworks within the Project Area, should this event arise it is recommended that all works must halt in the immediate area to prevent any further impacts to the remains. The site should be cordoned off and the remains themselves should be left untouched. The nearest Police Station (Kingscliff), the Tweed Byron LALC and the Heritage NSW Regional Office (Coffs Harbour) are all to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the Heritage NSW 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.

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



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Definitions

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

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

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

ACHA means Aboriginal Cultural Heritage Assessment.

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

AGD means Australian Geodetic Datum.

AHIMS means Aboriginal Heritage Information Management System.

AHIP means Aboriginal Heritage Impact Permit.

CoPAI means the *Code of Practice for Archaeological Investigation in New South Wales* (Heritage NSW 2010).

DCP means a Development Control Plan.

DECCW means the Department of Environment, Climate Change, and Water (NSW) (now Heritage NSW).

Due Diligence Code means the Due Diligence Code for the *Protection of Aboriginal Objects in NSW* (Heritage NSW 2010).

EPA means NSW Environment Protection Authority.

GDA means Geocentric Datum of Australia.

GSV means Ground Surface Visibility.

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HTM means the high tide mark.

LALC means the Local Aboriginal Land Council.

LGA means Local Government Area.

LEP means Local Environment Plan.

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

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

NSW means New South Wales.

PAD means Potential Archaeological Deposit.

Project Area means Lot 1 DP1250570, Lot 2 DP1192506, Lot 3 DP1243752, Lot 494 DP720450, Lot 22 DP1082435, Lot 23 DP1077509, Lot 51 DP1166990, Lot 50 DP1056966, and Lot 51 DP1056966 located on Altona Rd, Cudgen NSW.

Proposed Works means the proposed expansion of the Tweed Sand Plant at Cudgen NSW.

Proponent means Hanson Construction Materials and all associated employees, contractors and subcontractors of the same.

RAP means Registered Aboriginal Party.

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

TSC means Tweed Shire Council.

TSCACHMP means the Tweed Shire Council Aboriginal Cultural Heritage Management Plan.

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1. INTRODUCTION

1.1. Proponent, Project Brief & Methodology

Everick Heritage (the 'Consultant') was commissioned by Hanson Construction Materials (the 'Proponent') to undertake an Aboriginal Cultural Heritage Assessment ('ACHA') in support of proposed expansion of the current Tweed Sand Plant (the 'Proposed Works') on lands designated as Lot 1 DP1250570, Lot 2 DP1192506, Lot 3 DP1243752, Lot 494 DP720450, Lot 22 DP1082435, Lot 23 DP1077509, Lot 51 DP1166990, Lot 50 DP1056966, and Lot 51 DP1056966 (the 'Project Area') located on Altona Road, Cudgen NSW. The assessment has been commissioned to satisfy the provisions of the Tweed Local Environment Plan ('LEP') and state planning requirements with respect to the potential of the Proposed Works to impact on Aboriginal heritage.

In accordance with the relevant administrative and legislative standards for NSW (see Section 2), the methods employed in this assessment included:

- a search of relevant heritage registers;
- a review of environmental resources for the region;
- a review of relevant archaeological and ethnographic studies for the region;
- a site inspection to be conducted with representatives of the Tweed Byron Local Aboriginal Land Council ('LALC');
- assessments of archaeological and cultural heritage significance; and
- report on findings and recommended management strategies.

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

1.2. Objective of the Aboriginal Cultural Heritage Assessment

The objectives of the ACHA are to identify:

- the potential for Aboriginal sites in the Project Area;
- the extent and nature of Aboriginal sites in the Project Area, should they exist;
- the significance of these sites to the Aboriginal and wider community;

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- to determine the likelihood that any potential impacts to Aboriginal sites can be managed through the planning process, in particular, through development consent conditions; and
- provide recommendations on the requirement for additional community consultation and archaeological investigation, in addition to standard procedures for the management of Aboriginal heritage.

1.3. Defining the Project Area and Proposed Works

The Project Area is defined as comprising Lot 1 DP1250570, Lot 2 DP1192506, Lot 3 DP1243752, Lot 494 DP720450, Lot 22 DP1082435, Lot 23 DP1077509, Lot 51 DP1166990, Lot 50 DP1056966, and Lot 51 DP1056966 (the 'Project Area') located on Altona Road, Cudgen NSW (Figure 1). The Project Area consists approximately 3043498m² of land utilised for the following works (see Figure 2 and Figure 3):

- Extracting and processing up to 500,000 tonnes of sand annually for 30 years;
- Transportation of material off site via public roads; and
- Progressive rehabilitation of the environment at the site.

1.4. Report Authorship

This report was written by Principal Consultant Tim Hill, Senior Archaeologist Adrian Piper, Archaeologist Matt Finlayson, and Graduate Archaeologist Alex Dent of Everick Heritage Pty Ltd. The site inspection was conducted by Senior Archaeologist Adrian Piper and consultation with the Tweed Byron LALC was undertaken by Principal Archaeologist (Northern New South Wales) Tim Hill. Final review was completed by Tim Hill.

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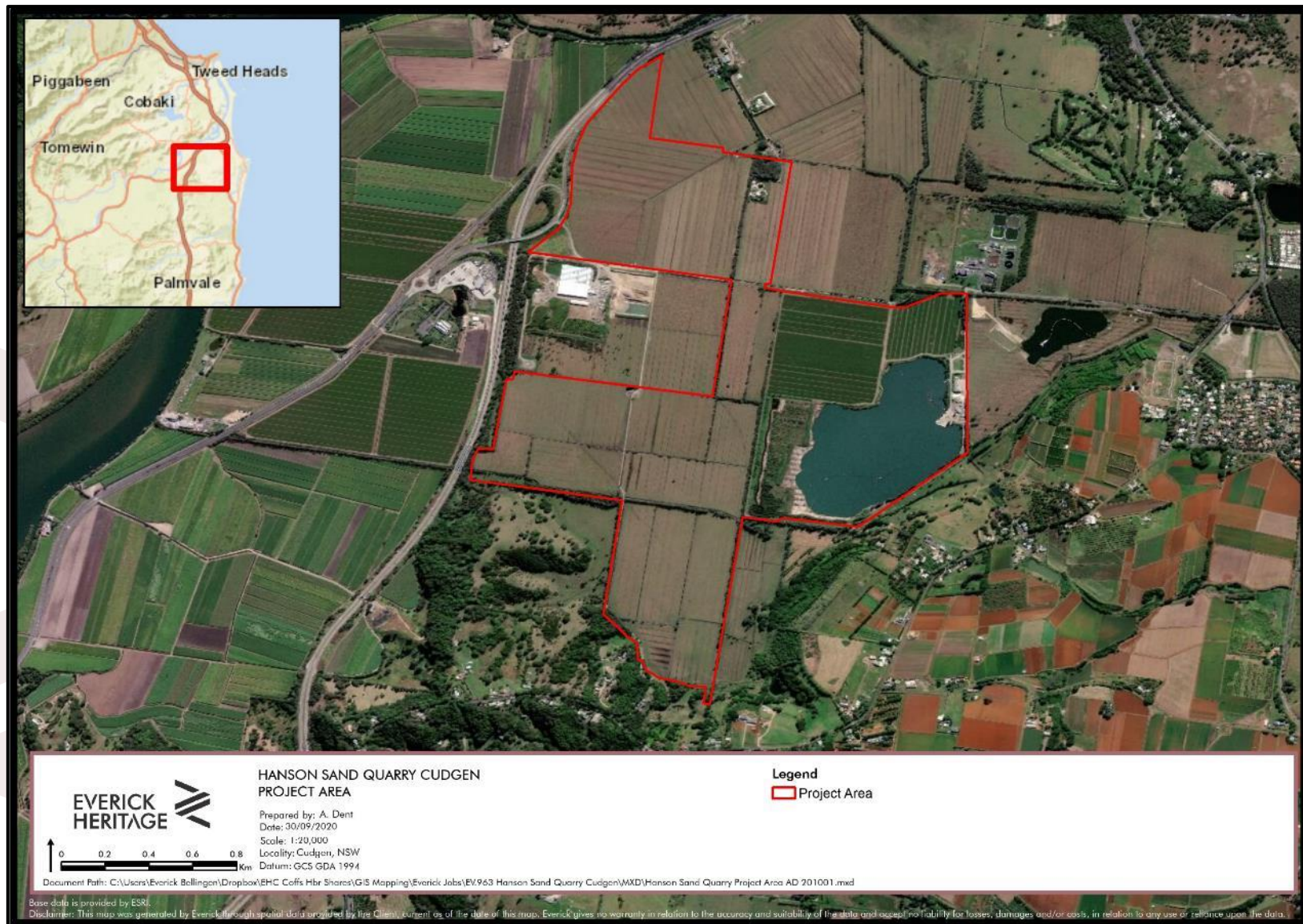


Figure 1: Project Area.

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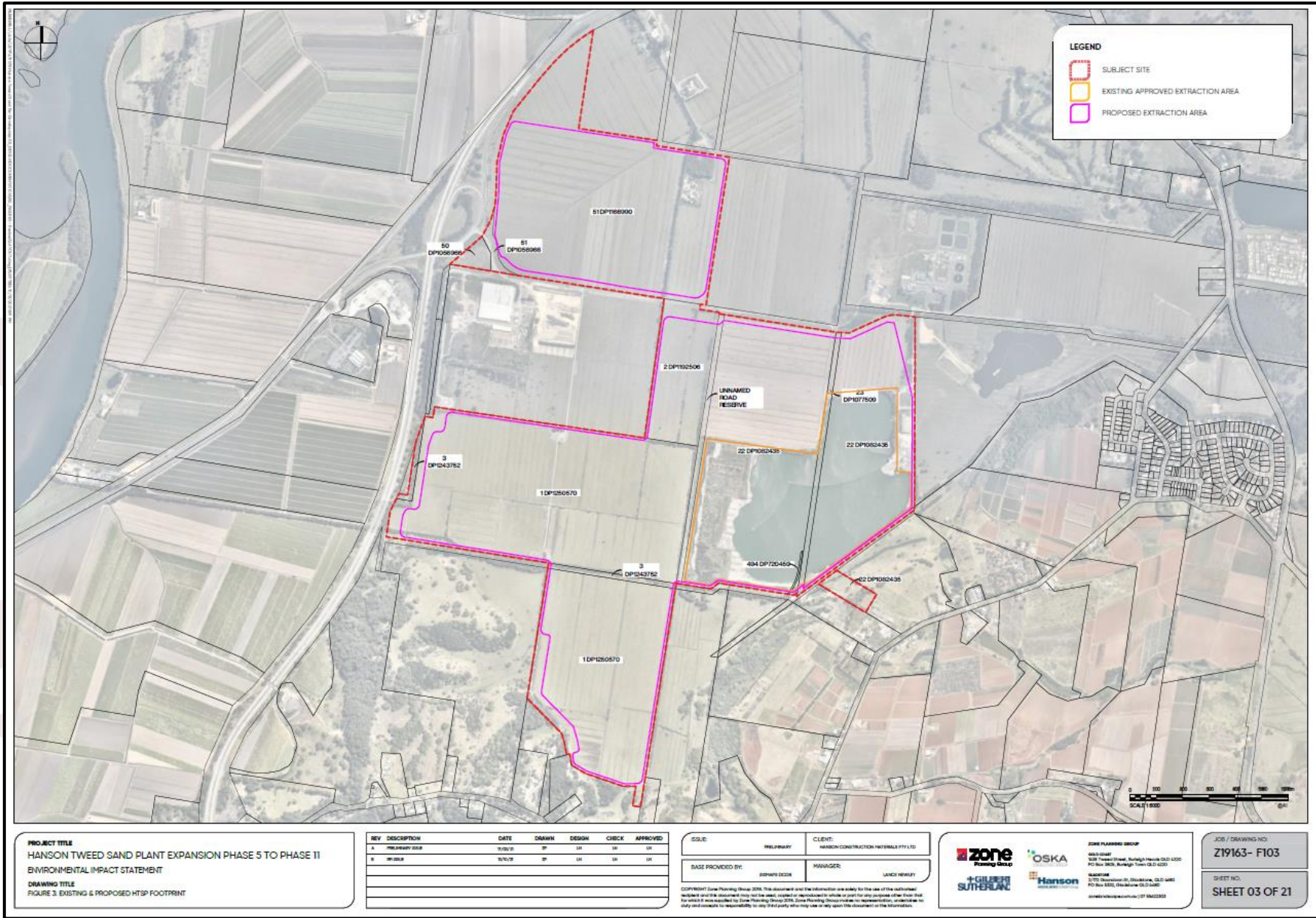


Figure 2: General site plan.

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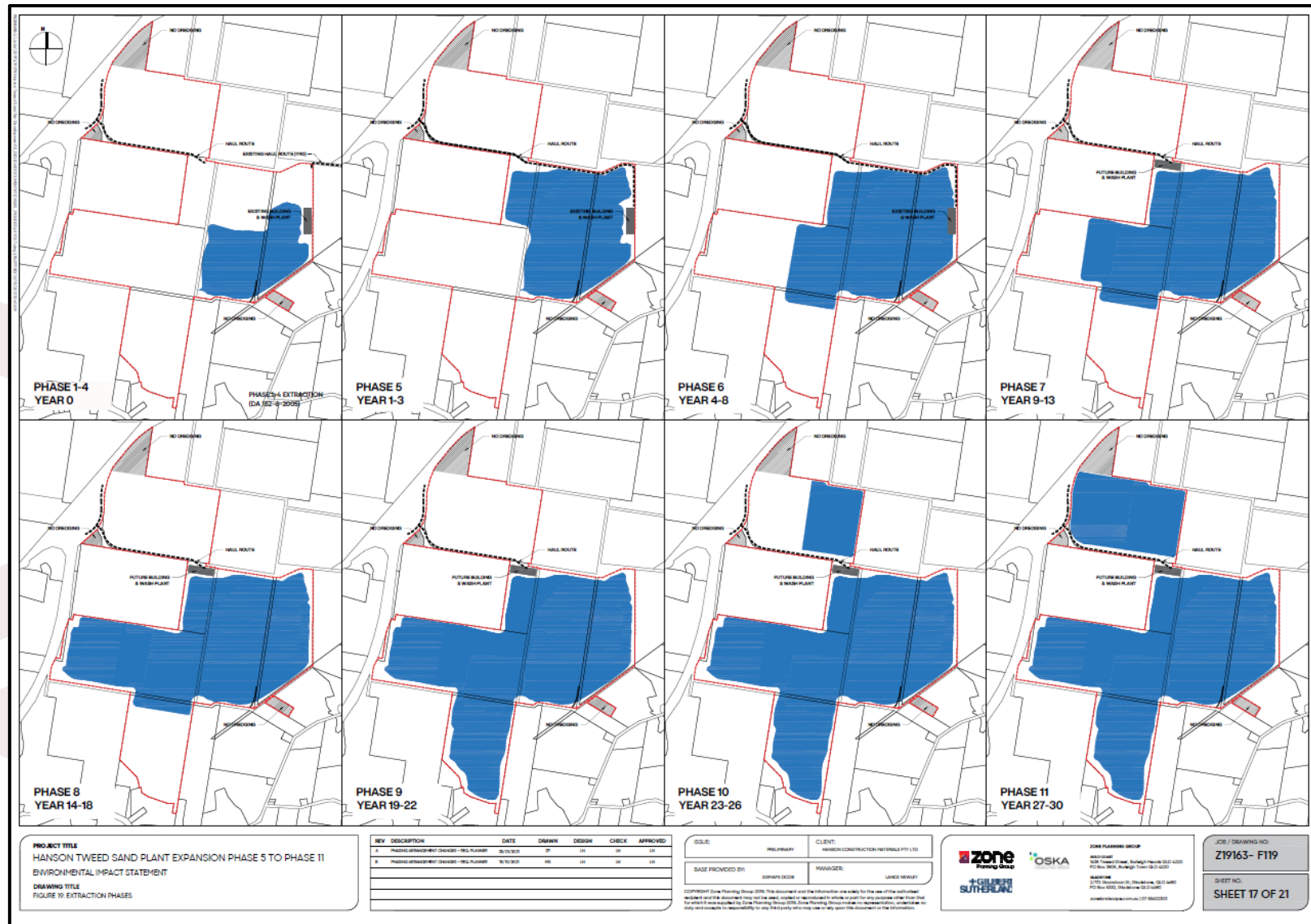


Figure 3: Concept development phasing plan.

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2. LEGISLATIVE AND PLANNING CONTEXT

The primary State legislation concerning cultural heritage in NSW are the NPW Act and the Council Local Environment Plans ('LEP') and Development Control Plans ('DCP'). 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 the State and local legislation are most relevant. Approval from the Heritage NSW will be required should the Project impact on Aboriginal Objects. The information below lists the legislative and policy framework within which this assessment is set.

2.1. The National Parks and Wildlife Act 1974 (NSW) and the National Parks and Wildlife Regulation 2009 (NSW)

The 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. 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 penalty for individuals who inadvertently harm Aboriginal objects is up to \$55,000, while for corporations it is up to \$220,000. Also introduced is the concept of 'circumstances of aggravation' which allows for harsher penalties for individuals (up to \$110,000) who inadvertently harm Aboriginal objects in the course of undertaking a commercial activity or have a record for committing similar offences. For those who knowingly harm Aboriginal objects, the penalty is greater at \$275,000 or one-year imprisonment for individuals or \$1,100,000 for corporations.

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Where a land user has or is likely to undertake activities that will harm Aboriginal objects, the Director General of the Department of Planning, Industry and Environment ('DPI&E') has a range of enforcement powers, including stop work orders, interim protection orders and remediation orders. The amended *National Parks and Wildlife Regulations 2009* (NSW) ('NPW Regulations') also allow for a number of penalties in support of these provisions. The NPW Act also now includes a range of defence provisions for unintentionally harming Aboriginal objects:

Undertaking activities that are prescribed as 'Low Impact'.

- a) Acting in accordance with the new Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (DEECW 2010) ('Due Diligence Code').
- b) Using a consulting archaeologist who correctly applies the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DEECW 2010) ('CoPAI').
- c) Acting in accordance with an Aboriginal Heritage Impact Permit ('AHIP').

2.2. Due Diligence Code of Practice for the Protection of Aboriginal Objects 2010

The Due Diligence Code operates by posing a series of questions for land users before they commence development. These questions are based around assessing the potential to impact Aboriginal sites and 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.

The Due Diligence Code is supported by the CoPAI, which provides guidelines on archaeological investigation, reporting and sets out the minimum requirements for compliance with AHIPs and the permanent storage of Aboriginal Objects.

2.3. The Tweed Local Environmental Plan 2014

The Tweed Shire Local Environment Plan ('LEP') 2014 provides statutory protection for items already listed as being of heritage significance (Schedule 5), that is items that fall under the ambit of the *Heritage Act*

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1977 (NSW) and Aboriginal Objects under the *National Parks and Wildlife Act 1974* (NSW). It aims to ensure best practice components of the heritage decision making process are followed.

For listed heritage items, or building, work, relic or tree and heritage conservation Area, the following action can only be carried out with the consent of the Tweed Shire Council ('TSC'):

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

In addition, Council may not grant development consent without considering the effect the proposed development will have on the heritage significance of a heritage item or heritage conservation area concerned.

With regard to Aboriginal heritage significance (Part 5.10.8) the consent authority must, before granting consent under this clause to the carrying out of development in a place of Aboriginal heritage significance:

- a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place, and
- b) notify the local Aboriginal communities (in such way as it thinks appropriate) about the application and take into consideration any response received within 28 days after the notice is sent.

The *Tweed Shire Aboriginal Cultural Heritage Management Plan* (2018) builds on the current heritage legislation "through a clearer language, practices and rules to assist the wider community with an understanding of the sensitivity and occurrence of Aboriginal cultural heritage. It provides clear pathways for ensuring that individuals have the right tools and information at their disposal to meet their obligations under the law and to enable cultural heritage to be properly managed. The pathways in this Plan have

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been tailored to suit the level of assessment that may be required based on whether Aboriginal cultural heritage (ACH) is known or predicted as well as its sensitivity”.



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3. ABORIGINAL COMMUNITY CONSULTATION

3.1. Traditional Owner Knowledge

The Aboriginal community is the primary determinant of the significance of their cultural heritage. Members of the Aboriginal community have been consulted about the Project Area, and will continue to be consulted, regarding 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 region. Everick Heritage recognises that there may be Traditional Owner knowledge associated with the region that may have to be treated in a confidential manner.

3.2. Consultation with the Aboriginal stakeholders

Mr. Maurice Gannon, Conservation Planning Officer of the Tweed Byron LALC was notified of the assessment by email on 8 September 2020.

A site inspection was undertaken with the following on 30 September 2020;

- Warren Phillips Sites Officer Tweed Byron LALC; and
- Maurice Gannon Conservation Planning Officer Tweed Byron LALC.

Both representatives are very familiar with Aboriginal sites and places in the Tweed Shire and experienced in the identification of Aboriginal sites.

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4. PROJECT AREA ENVIRONMENT AND LANDSCAPE

4.1. Topography and Hydrology

The Project Area is located on the floodplain of the Tweed River in the northwest (Figure 4). The Project Area lies inland from the Kingscliff Beach foredune, which forms part of the transgressive sand coastal barrier east of the Tweed River. Topography is approximately 1-2 m above sea level and has no relief or slope. There are many agricultural drainage channels in and around the Project Area, as well as small lakes, both intermittent and perennial. The lake within the Project Area is currently used for sand extraction by dredging.

4.2. Soils Landscapes (Morand 1996)

The Project Area is mapped as being mostly of the 'Tweed' soil landscape with 'Tweed Variant b' present to the eastern side of the Project Area (Morand 1996, Table 1 Figure 5). The difference between the two soil profiles is the accumulation of deep topsoils on the Tweed Variant B soil landscape. The 'Burringbar' soil landscape is also present in the southern portion of the Project Area but is outside the area of Proposed Works (Morand 1996).

Table 1: Soil Landscape Descriptions:

Soil Landscape	Description	Vegetation model
Tweed (Morand 1996:144)	<p>Landscape—extensive marine plain of lower Tweed catchment consisting of deep Quaternary alluvium and estuarine sediments. Local relief < 1 m; elevation 0–3 m; slopes < 3%. Totally cleared closed-forest (rainforest) now predominantly sugar cane.</p> <p>Landscape Variant—twb—moderately well-drained Prairie Soils overlying barrier sands.</p> <p>Soils—deep (> 200 cm), poorly drained Brown Alluvial Clays on levees; deep (> 200 cm), poorly drained Humic Gleys on backplain.</p>	<p>Completely cleared closed-forest (lowland riverine rainforest). Stotts Island Nature Reserve still supports undisturbed native vegetation. The main species include hoop pine (<i>Araucaria cunninghamii</i>), strangling fig (<i>Ficus watkinsiana</i>), white booyong (<i>Argyrodendron trifoliolatum</i>), giant stinger (<i>Dendrocnide excelsa</i>) and pepperberry tree (<i>Cryptocarya obovata</i>).</p> <p>Poorly drained areas support communities of bangalow palm (<i>Archontophoenix cunninghamiana</i>) and giant water gum (<i>Syzygium francisii</i>).</p> <p>Within swamp areas broad-leaved paperbark (<i>Melaleuca quinquenervia</i>) and swamp oak (<i>Casuarina glauca</i>) dominated.</p>

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Soil Landscape	Description	Vegetation model
		Present vegetation generally consists of sugar cane crops—there is scant evidence of the original rainforest communities.



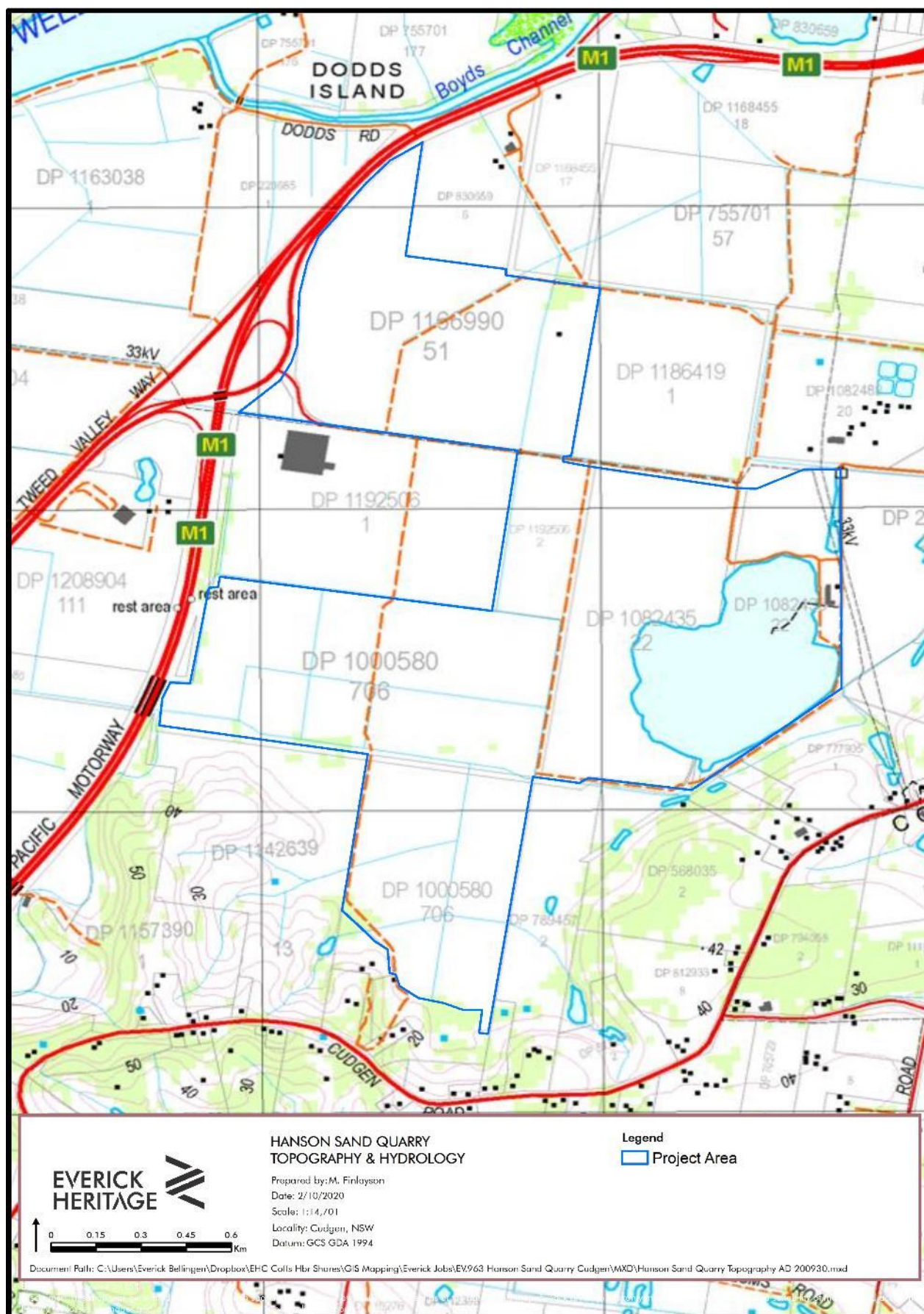


Figure 4: Topographic map of Project Area.

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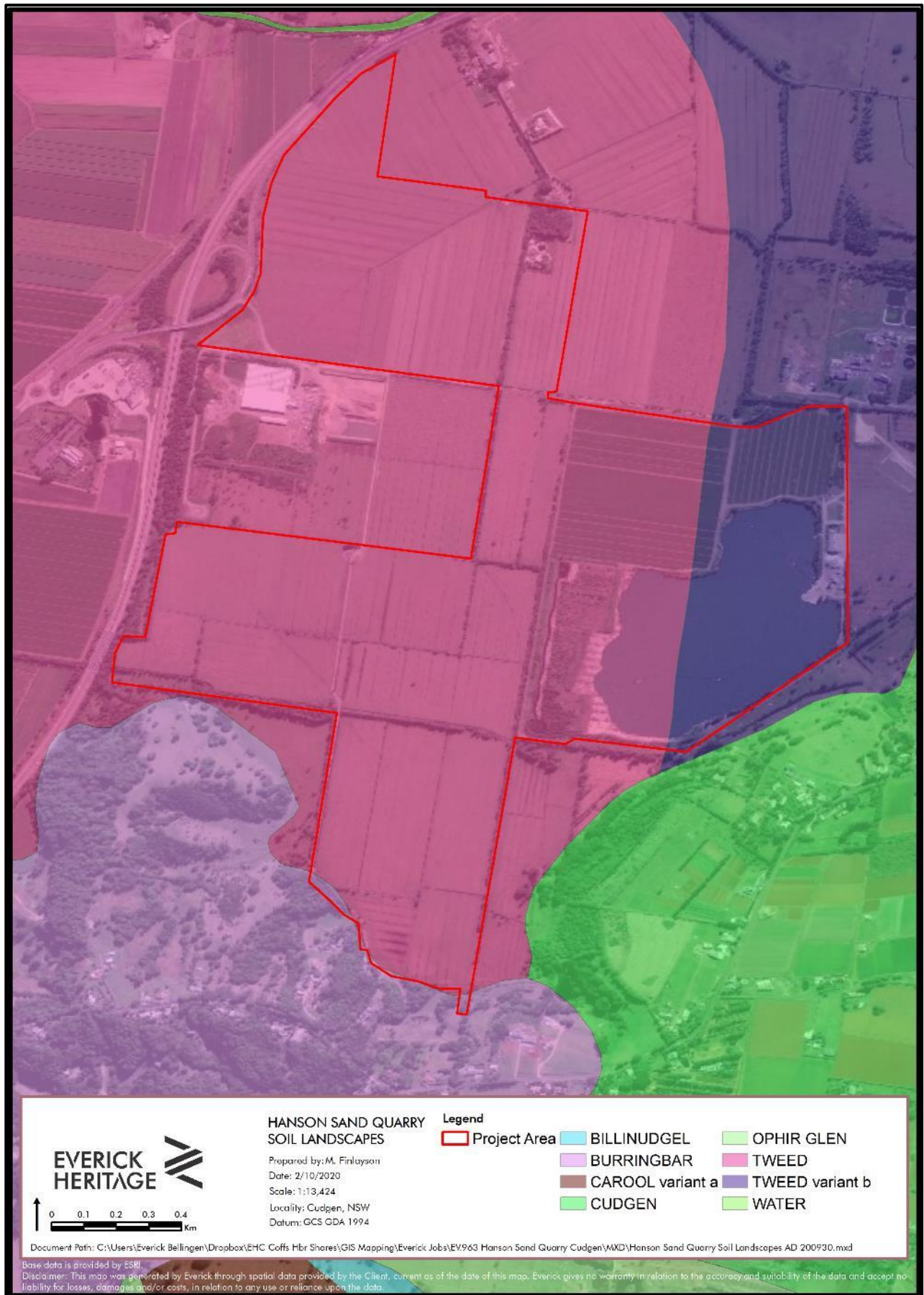


Figure 5: Location of soil landscapes (Source Morand 1996).

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4.3. Land Use and Disturbance History

The *Due Diligence Code* (Heritage NSW 2010) provides the following definition of 'disturbed land';

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

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

- initial vegetation clearing;
- European farming practices including agricultural drainage;
- cattle grazing;
- sand extraction; and
- cultivation of sugar cane and tea-tree.

By any measure of disturbance, the proposed expansion area of the Tweed Sand Plant is highly if not totally disturbed. The terrain bears no resemblance to its pre-European state where original soil profiles have been mixed and low rises that may have existed have been levelled for broad scale cultivation. It is unlikely that there are any intact soil profiles within the plough zone which can be estimated at approximately 30-40cm. The destructive impacts to Aboriginal sites of clearing/logging and long-term cultivation may well destroy the original structure or integrity of an Aboriginal archaeological site, however the contents of the site particularly stone artefacts will be retained albeit in a horizontal or vertically displaced condition.

5. SYNTHESIS OF PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS AND ETHNOHISTORY

5.1. Heritage Register Searches

5.1.1. Aboriginal Heritage Information Management System

Care should be taken when using the AHIMS database to reach conclusions about site prevalence or distribution. There may be errors with the AHIMS data particular when data is recalibrated between AGD and GDA mapping. A lack of sites in a given area should not be seen as evidence that the area was not occupied by Aboriginal people. It may simply be an indication that it has not been surveyed for cultural heritage or that the survey was undertaken in areas or at times of poor ground surface visibility. There may also be errors with AHIMS data as to site locations.

An 'Extensive' search (Appendix A) of the AHIMS Database was conducted on 10 February 2020 (Service ID No: 482940) for the area between -28.2704, 153.5218 to -28.2458, 153.5608 with a 1000 m buffer (Table 2, Figure 6). The search indicates 23 Aboriginal sites within the search area, of which 12 have restrictions upon them. The Cudgen Burial Site (#04-2-0100) has been classified on AHIMS as "not a site" (Appendix A). It is also noted that only four (4) of the registered sites have been recorded using the GDA coordinate system, with the other sites being mapped to the nearest grid point. The Crescent Street 1 site (#04-2-0109) has been mapped to be within the Project Area, however, this point has not been recorded in GDA and is considered inaccurate as it was originally recorded under the AGD datum.

It should be noted that AHIMS 04-02-0109 was subject to an application for Consent to Destroy prior to sand extraction at the site's location. The site was a low-density scatter of stone artefacts. The contents of the site were removed under the terms of the Consent, to the Care and Control of the Tweed Byron LALC. The site location is now within the northern area of the sand extraction pond. It is the practice under the AHIMS to retain the locations of registered Aboriginal sites within the AHIMS even though evidence of the site may not be extant.

Table 2: AHIMS search results (AHIMS ID#482490).

Site ID	Site name	Easting	Northing	Site features
04-2-0100	Cudgen Burial Ground	554200	6875100	Burial : -
04-2-0006	Terranora 19, BMP-05-0161	552800	6876200	Shell : -, Artefact : -, Burial : -

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Site ID	Site name	Easting	Northing	Site features
04-2-0007	Terranora 3, BMP-05-0162	553230	6876230	Shell : -, Artefact : -
04-1-0021	Chinderah, BMP-05-0156	555400	6875000	Shell : -, Artefact : -
04-2-0018	Terranora 6, BMP-05-0166	553750	6876200	Artefact : -
04-2-0020	Restriction Applied			
04-2-0021	Restriction Applied			
04-2-0022	Restriction Applied			
04-2-0023	Restriction Applied			
04-2-0024	Restriction Applied			
04-2-0025	Restriction Applied			
04-2-0026	Restriction Applied			
04-2-0027	Restriction Applied			
04-2-0028	Restriction Applied			
04-2-0030	Restriction Applied			
04-2-0035	Restriction Applied			
04-2-0064	Minjunbul Memorial	553700	6876200	Shell : -, Artefact : -, Burial : 1
04-2-0109	Crescent St 1	553420	6873370	Artefact : -
04-2-0157	Restriction Applied			
04-2-0209	Dodd's Island Tweed ACH Artefacts	552046	6875549	Artefact : -
04-2-0234	Wommin Bay Road Tweed ACH Shell Midden	555251	6876273	Shell : -
04-2-0235	Phillip Street 1 Tweed ACH Shell Midden	554907	6876431	Shell : -
04-2-0249	Chinderah (Non Aboriginal Site)	553929	6875799	Shell : 1000

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Figure 6: AHIMS sites within 1000 m of the Project Area

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5.1.2. Other Heritage Registers: Indigenous & Historic Cultural Heritage

The following heritage registers were accessed on 29 September 2020 for Indigenous and historic places within the Tweed Shire LGA:

- Tweed Shire Council Aboriginal Cultural Heritage Management Plan ('TSCACHMP') indicates an area (yellow) within the Project Area is an '*Aboriginal Place of Heritage Significance*', comprising the extraction pond in the eastern portion of Lot 22 DP1082435 (see Figure 7). This applies to the Crescent Street 1 Aboriginal site (#04-2-0109). Additionally, the southern extent of the Project Area (Lot 1 DP1250570) adjoins an area (blue) of hill slopes estimated as '*Predictive Aboriginal Cultural Heritage*.'
- Register of the National Estate (Australian Heritage Council): contains no places within proximity to the Project Area.
- The State Heritage Register (NSW Heritage Office): Contains no places within proximity to the Project Area.
- Tweed Shire LEP 2014: Contains three (3) Items of historic heritage significance near the Project Area, being the Chinderah Cemetery, Dry Stone Walls, and War Memorial cenotaph (Table 3, Figure 8).
- The World Heritage List: Contains no places within proximity to the Project Area.
- Commonwealth Heritage List (Australian Heritage Council): Contains no places within proximity to the Project Area.
- The National Heritage List (Australian Heritage Council): Contains no places within proximity to the Project Area.

Table 3: Tweed LEP items in proximity to the Project Area.

Item Number	Item Name	Address	Significance
I13	Chinderah Cemetery	Tweed Coast Road	Local
I22	Dry Stone Walls	463 Cudgen Road, 501 Cudgen Road	Local
I23	War memorial cenotaph and public school rolls	11 Collier Street	Local

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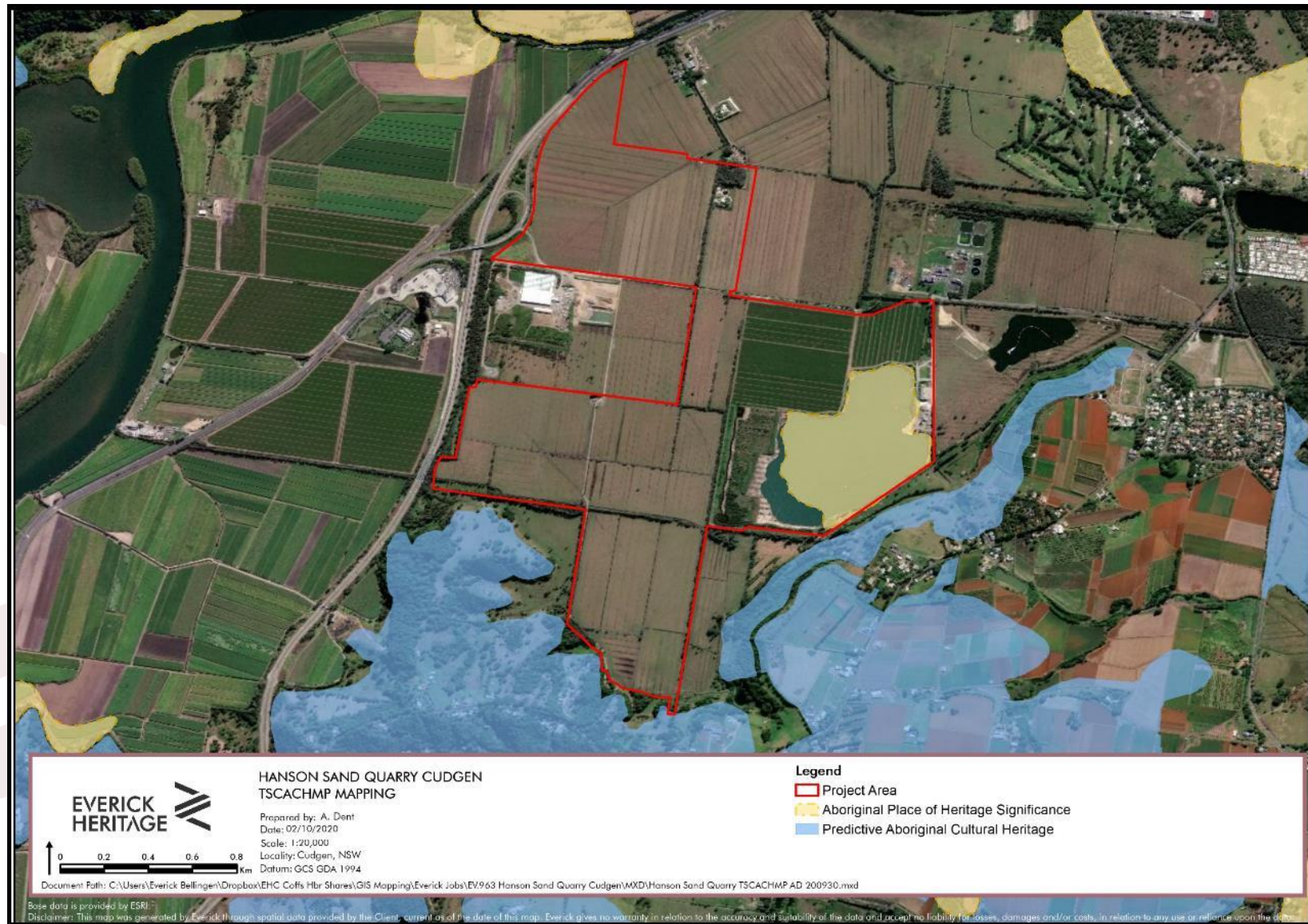


Figure 7: TSCACHMP Mapping.

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Figure 8: Tweed LEP Heritage Map.

5.2. Ethnohistorical Summary

There is considerable diversity of opinion as to Aboriginal tribal names and boundaries for the Tweed and coast region. There is a consensus the Tweed Aboriginal groups were part of a larger linguistic group, the Bundjalung, which included a range of closely linked dialects in the area between the Upper Clarence extending west to Tenterfield, Warwick and Beaudesert joining the coast at about Beenleigh. Sharpe posits that Crowley put forward his grouping of Bundjalung dialects with commendable caution (Sharpe 1985: 113). Linguistically Sharpe suggests "...a time depth for the cultural differences of less than 500 years..." (Sharpe 1985: 103-104).

Crowley (1978) in Sharpe (1985) proposes that the Aboriginal dialect of the Tweed area is known as Minyangbal, a coastal Bundjalung dialect spoken between approximately halfway to the Brunswick River and north into the Gold Coast. Tindale recognised a similar common language group extending between Byron Bay and Southport and west to Murwillumbah, which he called Minjanbal (Tindale 1974: 191). This dialect group includes the Yugambah and Nundawal to the north. To the west, the Galibal occupied the Richmond River. To the northwest are the Yugembah of the Albert River and the Ngarahgwah of the Coomera River (Crowley 1978).

Fox quoting the recollections of Ned Harper an early cedar getter resident of the Tweed for many years '...identifies the name for the traditional people along the North Arm of the Tweed River as the Tul-gi-gin tribe..' The Tul-gi-gin people were one of three groups of the Tweed Valley. Their country probably included the Cobaki and Terranora Broadwaters and connected sub-catchments, as the northern boundary is believed to have been Tallebudgera Creek and inland to the Springbrook plateau.

The southern boundary was the Tweed River inland to Tumbulgum and along the northern bank of the Rous River to the Border Range and Springbrook escarpments. This circumscribes a comparatively narrow stretch of country, from the coast to the inland ranges that was occupied by a distinctive Aboriginal group, who according to Ned Harper, were of both impressive physical stature and aggressive manner (Fox 2006: 7).

Bray writing of his personal observations of the disbursement of the Tweed 'tribes' in the 1860s states that a probable coastal horde or clan group the Coodjimburra '... 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 Coodjimburra on Cudgera Creek at Hastings Point (Keats 1988:15, 30). They also place the southern boundary of the Minyanbul dialect group at Cudgera Creek merging with the Arakwal to the south.

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5.3. Previous Assessments in the Greater Kingscliff/Chinderah Locality

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 Project Area. This contributes to the assessment of archaeological potential and significance of the proposed Development Area.*” (CoPAL: 6).

At Wommin Bay north Kingscliff, an archaeological assessment conducted by Hall (1991) over fore dunes of Holocene age and inner barrier Pleistocene dunes identified two (2) low density shell midden sites and concluded that Aboriginal cultural materials were concealed over a wider area. A cultural heritage assessment at south Kingscliff in relation to works at the Cudgen Creek Bridge found no evidence of archaeological sites (Piper and Robins 2006). Further west, an assessment completed by Everick (2014) of the Chinderah Services Centre also found no evidence of Aboriginal Objects or Places within the assessment area which was entirely disturbed through European land use practices.

Floodplain sites in the vicinity of Chinderah village have been found to be estuarine middens or open campsites. These have been located in the area of Chinderah village. The area contains low dunes of Pleistocene and Holocene age overlapping alluvial soils at varying distances from the coastline. Davies (1992) in following the course of Chinderah Road (Tweed Coast Road) did not locate any Aboriginal sites. Part of this route includes a 3 km length of low Pleistocene age sand rise, on which the Cudgen Aboriginal Islander Cemetery is located.

In 1994 Piper conducted an assessment of the south bank of the Tweed River at Chinderah as part of a study which included the banks and foreshores of the river upstream to Murwillumbah. Three middens were located on the riverbank, two of which (Cudgen 1 and Cudgen 2) were typically estuarine in character containing a predominance of oyster and lesser quantities of cockle and whelk. Each was heavily disturbed and eroding rapidly into the narrow channel on which they are located. Cudgen 1 was a low-density deposit 3 - 4 m² in area and approximately 5 cm in depth. Cudgen 2 extended for approximately 25 metres along the inland shore of Dodds Island. The material was loosely compacted due possibly to boat wash and appeared to be mixed with a natural shell bed and sand beneath the deposit.

The third midden, Chinderah 3 is a shell and artefact deposit of an unknown extent. It is located on the original riverbank some 400 metres east of the present river walls. An exposure of shell of approximately 40 m² was visible in a vegetable garden at the corner of Waugh Street and the old Pacific Highway. The shell consisted of a mix of beach pipi and estuarine oyster, cockle and whelk. Artefactual material consisted of chert and chalcedony flaked pieces, hammer stones and a small stone piece with the appearance of grinding grooves. The site may contain undisturbed subsurface deposit and therefore may have moderate to high scientific and Aboriginal cultural significance.

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A number of assessments by Piper and the Tweed Byron LALC (Piper: 2001, 2003a, 2003b, 2005, 2006) have assessed the bulk of floodplain bound by Chinderah, Kingscliff, Chinderah Road (Tweed Coast Road) and the Cudgen hills without locating any evidence of Aboriginal sites. In addition, an 84ha area of floodplain proposed for sand extraction adjoining the Piper (2000) assessment at Cudgen found no archaeological sites (Piper 2005).

Various parcels of the Gales Landholdings at West Kingscliff/Chinderah have been assessed for Aboriginal cultural heritage by field inspection in association with the Tweed Byron LALC. No Aboriginal Cultural Heritage was found as a result of the following assessments:

- Piper 2001: Pt Lot 4 DP 727425 and Lots 26C/26D DP 10715.
- Piper 2003: Lots 11, 12 and 13 DP 871753 and smaller lots to north-east.
- Piper 2005: Lot 2 DP 216705 and Part Lot 2 DP 611021 (now Lot 21 DP 1082482).

Each of the above assessments was over level floodplain previously cultivated and drained for sugar cane cultivation, also containing areas of melaleuca swamp/wetlands. An exception to the otherwise level terrain is a remnant area of hind dune on the western fringe of Pearl Street Kingscliff residential. While poor surface visibility limited the effectiveness of the field surveys, the low lying and highly disturbed nature of the lands were considered to preclude the likelihood of significant Aboriginal sites. A cautionary approach was recommended in the event that Aboriginal objects were discovered during earthworks.

The current Hanson's Sand Plant Project Area was subject to an Aboriginal archaeological assessment by Piper (2000) of 8.3 ha of floodplain. The assessment located an artefact scatter/open campsite (AHIMS #04-2-0109). The site consisted of a low-density (3.6 artefacts/hectare) scatter of 30 stone artefacts. These consisted mainly of flaked pieces (41%), scrapers (4%), cores (8%), modified flakes (12%) and unmodified primary flakes (29%). Chert and chalcedony comprised 62% of the stone types used with 7% - 10% of agate, jasper, quartz and quartzite. The site was a level ploughed paddock previously used for sugar cane and tea tree cultivation. (Piper 2000:29-30). It was considered the site did have a 'uniqueness' from the perspective that it was the only artefact scatter recorded on the alluvial soils of the floodplain as opposed to the slightly elevated sand rises which merge with the floodplain soils of the west Kingscliff dune-fields to the east of the current Project Area. The high probability the site had been highly disturbed and therefore of limited scientific value led to a recommendation that a Consent to Destroy be sought from the Director General National Parks and Wildlife Service. A subsequent study of the adjoining parcel to the west, over 79.0 ha found no further evidence of Aboriginal cultural materials (Piper 2003b).

Davies 2004 assessed 70ha of floodplain adjoining the Hanson Tweed Sand Plant Project Area to the west. The Predictive Model proposed a low archaeological potential and adds "...although rich in resources, the nature of the topography (i.e. low-lying and subject to inundation) precludes suitable campsites..." (Davies 2004:36). No archaeological or other Aboriginal cultural heritage was found. The

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assessment also included 6km of pipeline through the West Kingscliff dune plain to the ocean, again no Aboriginal cultural heritage was found.

5.4. Aboriginal Sites Predictive Model

On the basis of the review of previous archaeological assessments, AHIMS reviews and other heritage database site listings, there is a potential for Aboriginal archaeological objects or sites to be located within the Cudgen/Chinderah area. To our present knowledge 'surviving' Aboriginal sites are concentrated in sand-based contexts in the Chinderah village area and the banks of estuarine waterways, these sites are largely shell middens.

In the flood plain context of alluvial silt-based soils, to date, only one Aboriginal archaeological site has been located. Many previous Aboriginal cultural heritage assessments over floodplain contexts in this locality, have concluded that Aboriginal sites are unlikely to be found and in the unlikely event that Aboriginal stone artefacts could be located, they would be limited to single isolated artefacts or the remains of artefact scatters representative of what archaeologists call 'background scatters' of which as the term implies there is no scientific means of predicting.

Given the prior land uses and the long-term high levels of disturbance through total clearing, drainage works and cultivation, there is a very low potential for significant Aboriginal archaeological sites or objects to be found. There is the possibility for isolated finds including lithics or shell material, as well as low density artefact scatters. Spur lines and hills are present in the volcanic basalt soils of the Cudgen Duranbah hills to the east and southeast of the Project Area; thus, it is possible that Aboriginal sites would be found in this context. However, while it is known that the Cudgen hills were a source of red ochre for Aboriginal people, Aboriginal occupation sites or resource sites have not been found in these hills. For the above reasons, the archaeological potential of the floodplain of Project Area is assessed to be low.

6. FIELD SURVEY: ABORIGINAL CULTURAL HERITAGE

6.1. Survey Team

A site inspection was undertaken by the following on 30 September 2020;

- Senior Archaeologist Adrian Piper (Everick Heritage);
- Sites Officer Warren Phillips (Tweed Byron LALC); and
- Conservation Planning Officer Maurice Gannon (Tweed Byron LALC).

The site survey centred upon Lot 22 DP1082435 due to restricted access to other portions of the Project Area (Figure 9). In terms of the expansion of the Project this equates to Phase 6 and 4 years (Figure 2).

Lot 22 DP 1082435 is currently used for the Tweed Sand plant and also to cultivate tea-trees (Figure 10, Figure 11) in the future expansion area. The clear spacing between rows of tea tree allowed for a high degree of ground surface visibility (Figure 12). The current tea-tree cultivation and existing Tweed Sand extraction area also add to the cumulative modern disturbance within the Project Area.

A note of caution. When conducting Aboriginal cultural assessments in coastal landforms in the vicinity of sand extraction industries and or commercial oyster leases care needs to be exercised that by product or waste from normal modern commercial practice is not confused with similar shell 'waste' from traditional Aboriginal gathering practices, which when accumulated repetitively over time are termed 'middens'.

Aboriginal shell accumulations in estuarine situations are characterised mainly by: a narrow range of edible species particularly oyster, to lesser amounts of cockle and whelk; a limited edible size range; layering or stratigraphic formation; stone artefacts, bone, ash/charcoal; human remains; rounded mounds and linear banks above the high tide mark ('HTM').

By product from sand dredging operations can be characterised by: low proportions of oyster relative to cockle and whelk; a wide range of non-edible shell species; a wide range of micro species, marine snail spp.; high proportions of sediments, gravels, corals and pumice.

It is the practice in the Hanson Tweed Sand Plant Project Area to use dredged shell tailings from the wash plant for their compaction quality as track/road base and bunds (Figure 12 and 13). Therefore, large quantities of shell tailings were observed in sections of the perimeter tracks of the tea tree cultivations and occasional shell fragments within the tea tree rows carried by tractor treads. It was agreed with the Tweed Byron LALC representatives that none of the observed shell debris was indicative of Aboriginal cultural activities.

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6.2. Survey Strategy and Conditions

The survey was restricted to Lot 22 DP1082435 as access was not available on the residual land parcels.

The archaeological or scientific aim of the Aboriginal cultural heritage survey was to locate physical evidence of Aboriginal occupation, the evidence of which is most commonly stone artefact scatters; individual (isolated) artefacts; shell debris and in clear ground situations traces of bone (human and animal) and ash-stained earth that might represent fireplaces.

Based on a predictive model from the review of previous studies and the results of the AHIMS search, the archaeological field assessment would target the landforms and erosion features which were considered to have increased archaeological potential for Aboriginal sites. However, there is no differentiation between landform or erosion features that may indicate a greater or lesser potential for Aboriginal cultural sites or objects. Conditions are open with high degrees of surface visibility in the order of 90% and high proportions of clear ground possible to inspect on the order of 80%.

Therefore, a total coverage was undertaken by systematically walking rows with a visual sweep of two rows either side, by each of the three team members. The assessment also aimed to establish if there are sites or areas of an intangible or non-archaeological nature significant to the Aboriginal community. This was achieved through consultation with Tweed Byron LALC and guided by the Tweed ACHMP.

6.3. Assessment Methods

The assessment methods aimed to inspect exposed ground surfaces as conditions would allow; to record any archaeological material found and assess its significance; and assess the potential for concealed Aboriginal archaeological sites within the areas impacted by the proposed expansion to sand extraction. Photographs were taken as a record of general features and conditions and to document the degree of surface visibility. Notes were made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features. A Samsung tablet using the Avenza mapping application (GDA 94 datum) was used to record locations of Aboriginal sites found, the extent of survey coverage except where fence lines, google and topographic mapping provided clear reference points. Mapping and plans used in this assessment were provided by the Proponent and represent the level of information provided to Everick Heritage Pty Ltd.

6.4. Ground Surface Visibility

An assessment of the constraints to site detection is made to assist in formulating a view as to the effectiveness of the field inspection to locate Aboriginal sites and cultural materials. It also assists in determining the likelihood of concealed sites through understanding site-specific impacts including

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European land uses and natural processes may have had on the 'survivability' of Aboriginal sites in the Project Area.

The constraints to site detection are almost always most influenced by post European settlement land uses and in some areas by natural erosion processes. The area of surface exposure and the degree of surface visibility within exposed surfaces are usually the product of 'recent' land uses e.g. ploughing, road construction, natural erosion and accelerated (manmade) erosion (McDonald et al 1990:92). In this case there were no ground constraints to Aboriginal site detection that would impede the effectiveness of a surface survey to detect Aboriginal objects.

Ground Surface Visibility ('GSV') is a measure of how much ground surface can be seen at the time of an archaeological survey. It is usually worked out as a percentage (%) of the overall Project Area, although it can also be worked out as a range when GSV changes dramatically within the Project Areas. For this assessment, GSV was worked out by assessing a 1 m x 1 m area and inferring how much ground surface was seen within that. This gave a percentage of GSV within the square, which was extrapolated to a survey unit, so long as the ground conditions did not fundamentally change.

Table 4 presents information on the extent to which survey data provides sufficient evidence for an evaluation of the distribution of archaeological materials across the Project Area. The evaluation of survey coverage provides a measure of the potential for each of the landform elements to reveal archaeological evidence. The calculations do not provide an exact percentage of area but a reasonable estimate of ground available for sampling. This procedure is in accordance with the Due Diligence Code.

As conditions were so uniform the Survey Area is assessed as one landform, floodplain. Figure 9 indicates the survey tracks of one team member in yellow. Any intermediate areas not indicated in yellow were tracked by two other members of the survey team. The high % of surface exposure and visibility have resulted in an Effective Coverage of 76%, a very high proportion on which to draw conclusions as to an absence of Aboriginal cultural heritage with a high degree of confidence.

Table 4: Survey Coverage estimate.

Survey unit	Landform	Survey Area (m2)	Visibility (%)	Exposure (%)	Effective Coverage Area (m ²)	Effective Coverage (%)
1	Floodplain	316000	95	80	240160	76

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Figure 9: Project Area survey tracks.

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Figure 10: Current tea-tree cultivation, view north.



Figure 11: View west across Project Area.

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Figure 12: Typical ground cover in Project Area.



Figure 13: Typical dredged shell tailings found in tracks and bunds.

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Figure 14: Sand dredged shell tailings along perimeter track.

7. RESULTS OF DESKTOP ASSESSMENT

7.1. Aboriginal Heritage

As a result of the desktop study, field inspection and Aboriginal community consultation, the following was determined.

- No Aboriginal objects were identified during the site inspection and the Project Area was determined to have been subject to significant historical ground disturbance.
- No linear dune features with a greater potential to contain Pleistocene or subsurface Aboriginal cultural materials were identified within the Project Area.
- One (1) Indigenous cultural heritage site is mapped within the Project Area. This site was a low-density stone artefact scatter (#04-2-0109). The site was subject to a Consent to Destroy, (2000) the contents removed to the Care and Control of the Tweed Byron Local Aboriginal Land Council. This site is now mapped within the Tweed Sand Plant extraction pond.
- The hills beyond the southern extent of the Project Area (Lot 1 DP1250570) have been designated by the TSCACHMP as having the potential to contain subsurface deposits of 'significant' Aboriginal heritage. Spur lines and hills comprise the volcanic basalt soils of the Cudgen Duranbah hills to the east and southeast of the Project Area; thus, it is possible that Aboriginal sites would be found in this context. However, while it is known that the Cudgen hills were a source of red ochre for Aboriginal people, Aboriginal occupation sites or resource sites have not been found in these hills.

Having consideration for the outcomes of the survey it is reasonable to conclude that the proposed expansion of the Hanson Tweed Sand Plant will not impact on Aboriginal objects. As such the additional community consultation and archaeological investigation will not be required.

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RECOMMENDATIONS ABORIGINAL CULTURAL HERITAGE

The Consultant is of the opinion that the Proposed expansion of the Hanson Tweed Sand Plant is unlikely to harm Aboriginal objects. As such the following recommendations are provided for the mitigation of impacts to possible Aboriginal cultural heritage.

Recommendation 1: Aboriginal Objects Find Procedure

It is recommended that if suspected Aboriginal material has been uncovered because 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;
- d) if the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the Heritage NSW guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DEECW 2010); and
- e) should the works be deemed to have harmed the Aboriginal objects Heritage NSW should be notified immediately via the EPA Enviro Hotline.

Given the proximity of the Project Area to known sites of cultural value it is recommended that the Tweed Byron LALC are engaged to support the implementation of the Aboriginal Object Find Procedure.

Recommendation 2: Aboriginal Human Remains

Although it is unlikely that Aboriginal Human Remains will be located at any stage during earthworks within the Project Area, should this event arise it is recommended that all works must halt in the immediate area to prevent any further impacts to the remains. The site should be cordoned off and the remains themselves should be left untouched. The nearest Police Station (Kingscliff), the Tweed Byron LALC and the Heritage NSW Regional Office (Coffs Harbour) are all to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the Heritage NSW 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.

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



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APPENDIX A: AHIMS EXTENSIVE SEARCH RESULTS (#482940)



Office of
Environment
& Heritage

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : EV963

Client Service ID : 482940

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
04-2-0100	Cudgen Burial Ground	AGD	56	554200	6875100	Open site	Not a Site	Burial : -	Burial/s,Not an Aboriginal Site	
	<u>Contact</u>	<u>Recorders</u>	ASRSYS					<u>Permits</u>		
04-2-0006	Terranora 19, BMP-05-0161	AGD	56	552800	6876200	Open site	Valid	Shell : -, Artefact : -, Burial : -	Burial/s,Midden	52,611,731,128 2
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	F Whitehouse,Mr.Ian Fox					<u>Permits</u>		
04-2-0007	Terranora 3, BMP-05-0162	AGD	56	553230	6876230	Open site	Valid	Shell : -, Artefact : -	Midden	611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-1-0021	Chinderah, BMP-05-0156	AGD	56	555400	6875000	Open site	Valid	Shell : -, Artefact : -	Midden	
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Isabel McBryde,Mr.Ian Fox					<u>Permits</u>		
04-2-0018	Terranora 6, BMP-05-0166	AGD	56	553750	6876200	Open site	Valid	Artefact : -	Open Camp Site	611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0020	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0021	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0022	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0023	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0024	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0025	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0026	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611,100165
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0027	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0028	Restriction applied. Please contact ahims@environment.nsw.gov.au.					Open site	Valid			611
	<u>Contact</u> Tweed Byron LALC	<u>Recorders</u>	E.J Statham,Mr.Ian Fox					<u>Permits</u>		

Report generated by AHIMS Web Service on 10/02/2020 for Robbie Mazlin for the following area at Lat. Long From : -28.2704, 153.5218 - Lat. Long To : -28.2458, 153.5608 with a Buffer of 1000 meters. Additional Info : Site location. Number of Aboriginal sites and Aboriginal objects found is 23

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Environment
& Heritage

AHIMS Web Services (AWS) Extensive search - Site list report

Your Ref/PO Number : EV963

Client Service ID : 482940

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
04-2-0030	Restriction applied. Please contact ahims@environment.nsw.gov.au. <u>Contact</u> Tweed Byron LALC					Open site	Valid			611
		<u>Recorders</u>	Mr.Adrian Piper,Mr.Ian Fox					<u>Permits</u>		
04-2-0035	Restriction applied. Please contact ahims@environment.nsw.gov.au. <u>Contact</u> Tweed Byron LALC					Open site	Valid			
		<u>Recorders</u>	J Gonda,Mr.Ian Fox					<u>Permits</u>		
04-2-0064	Minjumbul Memorial	AGD	56	553700	6876200	Open site	Valid	Shell : -, Artefact : -, Burial : 1	Midden	2139
	<u>Contact</u>	<u>Recorders</u>	S Davies,Davies Heritage Consultants Pty Ltd					<u>Permits</u>		
04-2-0109	Crescent St 1	AGD	56	553420	6873370	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Rebecca Edwards-Booth					<u>Permits</u>		
04-2-0157	Restriction applied. Please contact ahims@environment.nsw.gov.au. <u>Contact</u> Searle					Open site	Valid			
		<u>Recorders</u>	Mr.Ian Fox					<u>Permits</u>		
04-2-0209	Dodd's Island Tweed ACH Artefacts	GDA	56	552046	6875549	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Ian Fox					<u>Permits</u>		
04-2-0234	Wommin Bay Road Tweed ACH Shell Midden	GDA	56	555251	6876273	Open site	Valid	Shell : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Ian Fox					<u>Permits</u>		
04-2-0235	Phillip Street 1 Tweed ACH Shell Midden	GDA	56	554907	6876431	Open site	Valid	Shell : -		
	<u>Contact</u>	<u>Recorders</u>	Mr.Ian Fox					<u>Permits</u>		
04-2-0249	Chinderah (Non Aboriginal Site)	GDA	56	553929	6875799	Open site	Valid	Shell : 1000		
	<u>Contact</u>	<u>Recorders</u>	Mrs.Christine Thomson					<u>Permits</u>		

Report generated by AHIMS Web Service on 10/02/2020 for Robbie Mazlin for the following area at Lat, Long From : -28.2704, 153.5218 - Lat, Long To : -28.2458, 153.5608 with a Buffer of 1000 meters. Additional Info : Site location. Number of Aboriginal sites and Aboriginal objects found is 23

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APPENDIX B: CONSULTATION WITH TWEED BYRON LALC

From: Tim Hill
Sent: Tuesday, 8 September 2020 7:58 AM
To: Sites <sites@tblalc.com>
Cc: Adrian Piper <adripip@onthenet.com.au>
Subject: FW: Hanson Quarry

Hi Maurice/ Adrian

Please see attached;

- request for a site inspection;
- a concept plan/ phasing plan;
- Survey area plan; and
- AHIMS extensive search.

Can you both find a good time in the next 2 weeks to undertake the site inspection, and I will make arrangements for the site access etc.

Ta

Tim Hill
BA (Hons)
Principal (Coffs Harbour)
Ph: (02) 6655 0225
Mob: 0422 309 822