

PRELIMINARY (DUE DILIGENCE) CULTURAL HERITAGE ASSESSMENT



Lot 332 DP 1158142,
MURWILLUMBAH, NSW



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EXECUTIVE SUMMARY

The following is a preliminary (Due Diligence) cultural heritage assessment of Indigenous and non-Indigenous cultural heritage at the Riva Vue Residential Estate at Murwillumbah, New South Wales. The Project Area is identified as Lot 332 DP1158142. The purpose of this assessment is to apply the first stages of the Department of Environment, Climate Change and Water ('DECCW') *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (2010).

As part of a desktop study, Everick undertook searches of the relevant heritage registers. A search of applicable historic heritage registers did not identify any items of cultural heritage significance within the Project Area. A search was conducted on 3 February 2011, of the DECCW Aboriginal Heritage Information Management System ('AHIMS'). No sites were recorded within the Project Area. There are no Indigenous places within the Project Area listed in other heritage registers.

The Project Area is within the area administered for Aboriginal cultural heritage purposes by the Tweed Byron Local Aboriginal Land Council ('Tweed Byron LALC'). A copy of this report has been forwarded to the Tweed Byron LALC for comment, and will be appended as Appendix C of this report if and when it is received.

Results:

- No known Aboriginal objects or places were identified within the Project Area (Sections 3).
- The Project Area has seen complete ground disturbance. The entire site has been cleared and is either the subject of substantial earthworks or has been under sugar cane cultivation.
- The possibility of significant Aboriginal cultural heritage being located within the Project Area can be eliminated.
- There are no historic (non-Indigenous) listed cultural heritage places within the Project Area.
- In accordance with the Due Diligence Code of Practice, no further cultural heritage assessment is recommended prior to the project commencing.



Recommendations:

The following recommendations are cautionary in nature. Whilst it is considered unlikely that they will be required, they should be noted and adhered to, as they relate to managing the legal obligations of the Proponent that will continue to apply in relation to cultural heritage.

Recommendation 1: 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 Byron LALC and the DECCW Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the DECCW should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations.

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

Recommendation 2: Aboriginal Cultural Material

It is recommended that 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 is to be consulted in a manner as outlined in the DECCW guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).



Recommendation 3: Notifying the DECCW

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 DECCW. Any management outcomes for the site will be included in the information provided to the AHIMS.

Recommendation 4: Conservation Principles

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



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1. INTRODUCTION

1.1 Scope of this Assessment

The following is a preliminary (Due Diligence) cultural heritage assessment as to Indigenous and historic (non-Indigenous) cultural heritage attributes of Lot 332 DP1158142. The assessment has been commissioned by Newland Developers Pty Ltd ('the Proponent') in support of a rezoning application to the Tweed Shire Council. It focuses on identifying past European land uses that may have impacted on the potential for significant Aboriginal cultural heritage to be located within the proposed development site. This analysis has been structured to meet the requirements of the Department of Environment, Climate Change and Water ('DECCW') *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (2010) ('Due Diligence Code').

The methods used for this assessment involved:

- (a) a search of relevant historic and Aboriginal heritage registers;
- (b) a review of historic aerial photography;
- (c) a review of past geophysical studies of the Project Area and surrounds;
- (d) consultation with the Tweed Byron Local Aboriginal Land Council ('Tweed Byron LALC'); and
- (e) a review of previous archaeological/cultural heritage reports relevant to the Project Area.

1.2 Description of Project Area and Proposed Works

The Project Area for this assessment is identified as all of Lot 332 DP1158142 (Figure 1), and is approximately 9.95 ha (Tweed Shire Council Mapping 2009). The Project Area is situated within the Tweed Shire LGA. It comprises four distinct parcels of land, each situated within the Riva Vue Estate. For ease of description in this report, each of the parcels has been given a number. The numbering runs from west to east. The parcels are split by Rous Riva Way, with the northern parcel also being adjacent to the Rous River.



Figure 1: The Project Area (Tweed Shire Council 2009)



The Project Area is situated partially on a low lying floodplain, Parcel 1 (c. 2 m AHD) adjacent to the Rous River, and partially on higher footslopes to the south-east, Parcels 2,3 and 4, (originally up to 30 m AHD). Soil landscapes are 'tw'- marine plain of deep Quaternary alluvium sediments (Parcel 1) and an erosional ('bia') landscape, metamorphics of the Neranleigh-Fernvale Group for Parcels 2-4 (Morand 1996: 138 & 53). The Rous River is within 200 m of all parts of the Project Area, while another small ephemeral watercourse would have once drained from south to north through the northern portion of Parcel 1

Original vegetation, Parcel 1, would have comprised lowland riverine rainforest with main species being hoop pine (*Araucaria cunninghamii*), strangling fig (*Ficus watkinsiana*) and pepperberry tree (*Cryptocarya obovate*) (Morand 1996:138) and open forest wet sclerophyll on Parcels 2-4 (Morand 1996: 53).

Following European settlement, all original vegetation has been removed from the Project Area, and the soils have been highly modified.

The current proposal is to have the Project Area rezoned in preparation for a residential development. As this report is provided in support of a rezoning application, any detailed development plans are unavailable at present. Generally, residential development may involve stripping of topsoil, levelling, cut, fill and excavations for footings and services, all of which have the potential to harm significant Aboriginal heritage should it be located within the Project Area. For the purposes of this assessment, it has been assumed that the Project Activities may involve significant subsurface ground disturbance over all of the Project Area.

1.3 Legislative and Planning Context

In relation to cultural heritage, the proposed works primarily fall within the ambit of the *National Parks and Wildlife Act 1974* (NSW) and the *Heritage Act 1977* (NSW). The consent authorities will be the Tweed Shire Council and, where a referral agency is required, the DECCW. The DECCW will also be involved where the Project will impact on identified cultural heritage.

As part of their planning requirements, the Tweed Shire Council has requested an assessment of the proposed development activities against the Due Diligence Code. A discussion of the Code is provided in Section 1.3.2 below. However, the methods for this assessment are best understood by first understanding the context provided by the *National Parks and Wildlife Act 1974* (NSW).



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

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

An Aboriginal Place is an area of particular significance to Aboriginal people which has been *declared* an Aboriginal Place by the Minister. The drafting of this legislation reflects the traditional focus on Objects, rather than on areas of significance such as story places and ceremonial grounds. However, a gradual shift in cultural heritage management practices is occurring towards recognising the value of identifying the significance of areas to Indigenous peoples beyond their physical attributes.

With the introduction of the *National Parks and Wildlife Amendment Act 2010 (NSW)* the former offence provisions under Section 86 of ‘disturbing’, ‘moving’, ‘removing’ or ‘taking possession’ of Aboriginal Objects or Places have been replaced by the new offence of ‘harming or desecrating’. The definition of ‘harm’ is ‘destroying, defacing or damaging an Object’. Importantly in the context of the management recommendations in this assessment, harm to an Object that is ‘trivial or negligible’ will not constitute an offence.

The new amendments also significantly strengthen the penalty provisions. The issue of intent to harm Aboriginal cultural heritage has been formally addresses 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 (DECCW) 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 defence provisions for unintentionally harming Aboriginal Objects:

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

1.3.2 *The Due Diligence Code*

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.

The Due Diligence Code defines 'Disturbed Land' as having been the subject of a human activity that has changed the land's 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 the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks."



1.3.3 The ACHCR (2010)

The DECCW has recently published the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010) ('ACHCR'). These requirements replaced the former *Interim Community Consultation Requirements for Applicants* (2004) 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 Part 3A Major Project, a Project that is likely to impact on cultural heritage and where required by Council. The proposed development is of low likelihood of impacting significant Aboriginal cultural heritage and the ACHCR has not been followed for this assessment.

1.3.4 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).



1.3.5 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. ABORIGINAL COMMUNITY CONSULTATION

As this is a due diligence assessment, Everick has limited community consultation to the Tweed Byron LALC only. Consultation is not a formal requirement of the Due Diligence Code. However, it is advisable where it is believed that such consultation may inform the decision making process when applying the Due Diligence Code (2010:3).



A copy of this assessment has also been provided to the Tweed Byron LALC for comment. Their comments will be attached as Appendix C if and when they are received.

3. DESKTOP REVIEW

3.1 Historic Aerial Photography: Disturbance Analysis

Aerial photographs from 1962, 1987, 1996, 2004, 2009 and 2011 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 B.

The aerial photograph from 1962 shows the Project Area prior as having been partially cleared (Figure 3). The northern half of Parcel 1 has been cleared and is being used for what appears to be a mix of cultivation and grazing. A large man made drain has been constructed running from south-west to north-east, draining into the Rous River. The southern half of Parcel 1 retains what is potentially a stand of remnant vegetation. This stand of trees runs in two bands along a small ridgeline, and extends into Parcel 2. Parcels 3 and 4 appear to have been extensively cleared and are used for grazing of livestock.

The 1987 aerial photograph shows most of Parcel 1 and 2 having been cleared of original vegetation (Figure 4). Approximately 70% of Parcel 1 and 50 % of Parcel 4 are now under sugar cane. The introduction of sugar cane farms would have had a catastrophic impact on any Aboriginal objects within these areas at least to tillage depth. This owes largely to the repeated annual tilling / ploughing of the land. The remainder of the Project Area is being used for grazing. A number of new tracks and fences have been constructed across the Project Area, causing additional disturbance.

By 1996, there has been an extension of the areas under sugar cane in Parcel 1 (Figure 5). Parcel 3 is now almost entirely under sugar cane. Additional clearing has also been undertaken, so that only a few small stands of trees remain. Little change is evident between the 1996 and 2004 aerial photographs (Figure 6). However, of note is that approximately half of the Project Area has been under sugar cane for over fifteen years.

The 2009 aerial photograph shows how the highest parts of the Project Area have been cleared and then excavated, shaved or levelled (Figure 1). This analysis is supported by the Gilbert and Sutherland study in 2004 (see below).



Summary: when the modern aerial photograph is compared with those on the historic record, it is apparent that the entire site has seen significant ground disturbance within the meaning of the Due Diligence Code. Most of the site has seen such disturbance on more than one occasion.

3.2 Other Resources

A geophysical study of the Project Area was undertaken by Gilbert and Sutherland in 2004. The study included:

- (a) Acid sulphate soils assessment;
- (b) A stormwater management plan;
- (c) Erosion and Sediment Control Plan; and
- (d) Preliminary site contamination assessment.

The report provided a detailed description of the Project Area environment and soils prior to the earth works that occurred on the site between 2005 and 2011. This information is consistent with the analysis in Sections 1.2 and 3.1 above.

3.3 Heritage Register Searches

The following heritage registers were accessed on 20 March 2011 documenting Aboriginal and historic places within the Tweed Shire LGA:

- **The World Heritage List:** Contains one place, the Gondwana Rainforest, which is not within close proximity to the Project Area.
- **The National Heritage List and Commonwealth Heritage List** (Australian Heritage Council): Contains no places listings in close proximity to Mooball.
- **Register of the National Estate** (Australian Heritage Council): Contains 17 listings in the Murwillumbah region. None are within 1000 m of the Project Area.
- **The State Heritage Register** (NSW Heritage Office): Section 1 contains one item within the Murwillumbah region, being the Railway Station and Yard, on the opposite side of the Tweed River to the Project Area. Section 2 contains listings from the Tweed Shire Local Heritage Register (see below).
- **Tweed Shire Local Environment Plan 2000:** Contains nine places in the Murwillumbah region, many of them duplicates of the Register of the National Estate listings. None are within close proximity to the Project Area.



A search was lodged with the DECCW on 1 March 2011 over 25 km² of the Murwillumbah Area, centering on the Project Area. No listed heritage sites were identified within the Project Area. Figure 2 below shows the locations of the identified sites within 5 km of the Project Area. Appendix A contains a summary of each of the sites.



Figure 2: DECCW AHIMS Aboriginal Sites in vicinity of Project Area (Google Earth 2011)



4. PREVIOUS ARCHAEOLOGICAL/CULTURAL HERITAGE ASSESSMENTS

2003: Piper, with the assistance of the Tweed Byron LALC Sites Officer, conducted an archaeological assessment of all of the current lands described as the project area. a potential for cultural materials was considered probable in the light of the writings of Joshua Bray a settler on the opposite bank of the Rous river in the 1860's, who wrote of hundreds of aborigines living in the area. on one occasion he stated "...i have seen six hundred camped in this plain..." (Bray 1901:9). The assessment identified a single stone artefact (DECCW # 04-1-0072) on floodplain between parcel 4 and the Rous River. No sites of significant indigenous or historic cultural heritage were found.

1996: Piper and the Tweed Byron LALC sites officers conducted archaeological assessments of a parcel of land adjoining the Murwillumbah sewage works on the Rous River and immediately north of the Project Area. No sites of significant indigenous or historic cultural heritage were found.

5. DUE DILIGENCE ASSESSMENT

As discussed in Section 1.3.2 above, the Due Diligence Code recommends a staged analysis of cultural and archaeological factors. The information below documents the analysis of the Project Area when compared against these guidelines.

5.1 Step 1: Will the activity disturb the ground surface?

Yes. Refer to Section 1.2 for a full description of the project activities.

5.2 Step 2a: Search of AHIMS Database

There are no registered Aboriginal cultural heritage sites within the Project Area (Figure 2). The nearest site is # 04-1-0072 an artefact c.125 metres to the west of Parcel 4 of the Project Area on the eastern side of the Rous River.



5.3 Step 2b: Is the activity in an undisturbed area likely to contain Aboriginal cultural heritage?

Having regard to:

- (a) the nature of Aboriginal occupation in the region;
- (b) the Project Area's proximity to resources; and
- (c) the Project Area's soils and topography,

it was determined that the Project Area was likely to contain Aboriginal Objects prior to European settlement. The small ridgeline running in a north south direction through Parcels 1 and 2 is considered particularly likely to have contained evidence of Aboriginal occupation prior to European settlement. Unfortunately, the disturbance analysis in this report demonstrates that the impact of clearing, grazing, cultivation (particularly for sugar cane) and mechanical excavation would have been catastrophic for any Aboriginal Objects located within the Project Area.

The possibility of isolated stone artefacts discarded at random or lost cannot be ruled out entirely. However, having regard to the definition of disturbed ground provided in Section 1.3.2, the disturbance analysis in Section 3.1 and the results of the site inspection Section 4 above, it is apparent that all of the Project Area has been disturbed.

5.4 Additional Steps

In relation to the Due Diligence Code, the following steps have not been undertaken as part of this assessment:

- (a) Determining if the activity can be avoided.
- (b) A desktop cultural heritage / archaeological assessment.
- (c) A detailed archaeological survey.
- (d) Further investigations and impact assessment.



6. RECOMMENDATIONS

The following recommendations are based upon the desktop review, the results of the field assessment and consultation with the Tweed Byron LALC. In accordance with the Due Diligence Code, no further cultural heritage assessment is recommended for the Project.

The following recommendations are cautionary in nature. Whilst it is considered unlikely that they will be required, they should be noted and adhered to, as they relate to managing the legal obligations of the Proponent that will continue to apply in relation to cultural heritage.

6.1 Aboriginal Cultural Heritage

Recommendation 1: 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 Byron LALC and the DECCW Regional Office, Coffs Harbour are to be notified as soon as possible. If the remains are found to be of Aboriginal origin and the police do not wish to investigate the Site for criminal activities, the Aboriginal community and the DECCW should be consulted as to how the remains should be dealt with. Work may only resume after agreement is reached between all notified parties, provided it is in accordance with all parties' statutory obligations.

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

Recommendation 2: Aboriginal Cultural Material

It is recommended that 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 is to be consulted in a manner as outlined in the DECCW guidelines: *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (2010).

Recommendation 3: Notifying the DECCW

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 DECCW. Any management outcomes for the site will be included in the information provided to the AHIMS.

Recommendation 4: Conservation Principles

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

6.2 Historic Cultural Heritage

There are no further actions or recommendations warranted.



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APPENDIX A: AHIMS SITE DESCRIPTIONS

<i>Site No.</i>	<i>Site Name</i>	<i>Site Description</i>	<i>Easting</i>	<i>Northing</i>
04-1-0077	Restricted Access to Site details	Open Site		
04-1-0072	Rous River 1, BMP-05-0159	Artefact	537220	6866720
04-1-0135	Restricted Access to Site details	Closed Site		
04-1-0140	Restricted Access to Site details	Open Site		
04-1-0071	Byangum 1, BMP-05-0158	Artefact	535300	6863250



APPENDIX B: HISTORIC AERIAL PHOTOGRAPHY



Figure 3: 1962 aerial photograph of the Project Area (Tweed Shire Council)



Figure 4: 1987 aerial photograph of the Project Area (Tweed Shire Council)



Figure 5: 1996 aerial photograph of the Project Area (Tweed Shire Council)



Figure 6: 2004 aerial photograph of the Project Area (Tweed Shire Council 2004)



Figure 7: 2011 Aerial Photograph of the Project Area (Google 2011)