

Draft LEP Amendment No. **94**

PLANNING PROPOSAL v.1

GATEWAY DETERMINATION

(Mooball Residential Development)

TSC File: PP10/0007

November 2012

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Introduction

Purpose

Tweed Shire Council (Council) received a request to prepare a Planning Proposal from Planit Consulting on behalf of Jefferson Lane Pty Ltd, the proponent of the request for Planning Proposal. The site encompasses Lot B in DP 419641, Lot 2 in DP 534493 and Lot 7 in DP 593200, located at 5861 and 5867 Tweed Valley Way, Mooball.

The proponent seeks to provide additional residential dwellings adjacent to the existing Mooball village, consequently expanding the village footprint. The rezoning will allow for the orderly expansion of the village by ensuring the development permits village uses, including low and medium density residential development and non-residential development normally associated with a village.

Council has made a number of resolutions regarding the rezoning of the site. On 21 April 2009, Council resolved that priority should be given to a rezoning of the Tweed Shire Local Environmental Plan 2000 (TSC LEP 2000) as follows:

RESOLVED that:

Council gives priority to the advancement of a rezoning of properties at 5861 and 5867 Tweed Valley Way, Mooball. Refer Attachment 1 - Copy of Council Report 21 April 2009.

The preparation of a Planning Proposal for Mooball was included in Council's Planning Reforms Work Program for the periods of 2011 to 2014, and 2012 to 2015. The Work Programs were adopted by Council on 20 July 2010, and 19 April 2011 respectively.

Part 1 Objectives and Intended Outcomes

Objectives

To facilitate a change in zoning from 1(a) Rural, to 2(d) Village, 5(a) Special Uses (Sewerage Treatment), 7(d) Environmental Protection (Scenic/Escarpment) and 7(l) Environmental Protection (Habitat) to enable the orderly residential expansion of the Mooball village.

Intended outcome

The proposal explains the intent and sets out the justification for a Local Environmental Plan (LEP) amendment enabling the expansion of the existing Mooball village residential footprint.

It is also noted that Council has formally exhibited the draft Tweed Local Environmental Plan 2010 (draft LEP 2010), consistent with the requirements and format of the Standard Template Local Environmental Plan (Standard Template LEP). Under the draft LEP, this proposal would translate to the draft RU5 Village, E3 Environmental Management and SP2 Infrastructure zones.

Given the current zoning of the site, to expand the Mooball village the rezoning of the rural lots is required. This will allow for the Mooball village to expand its residential footprint, enabling future economic growth.

Property details

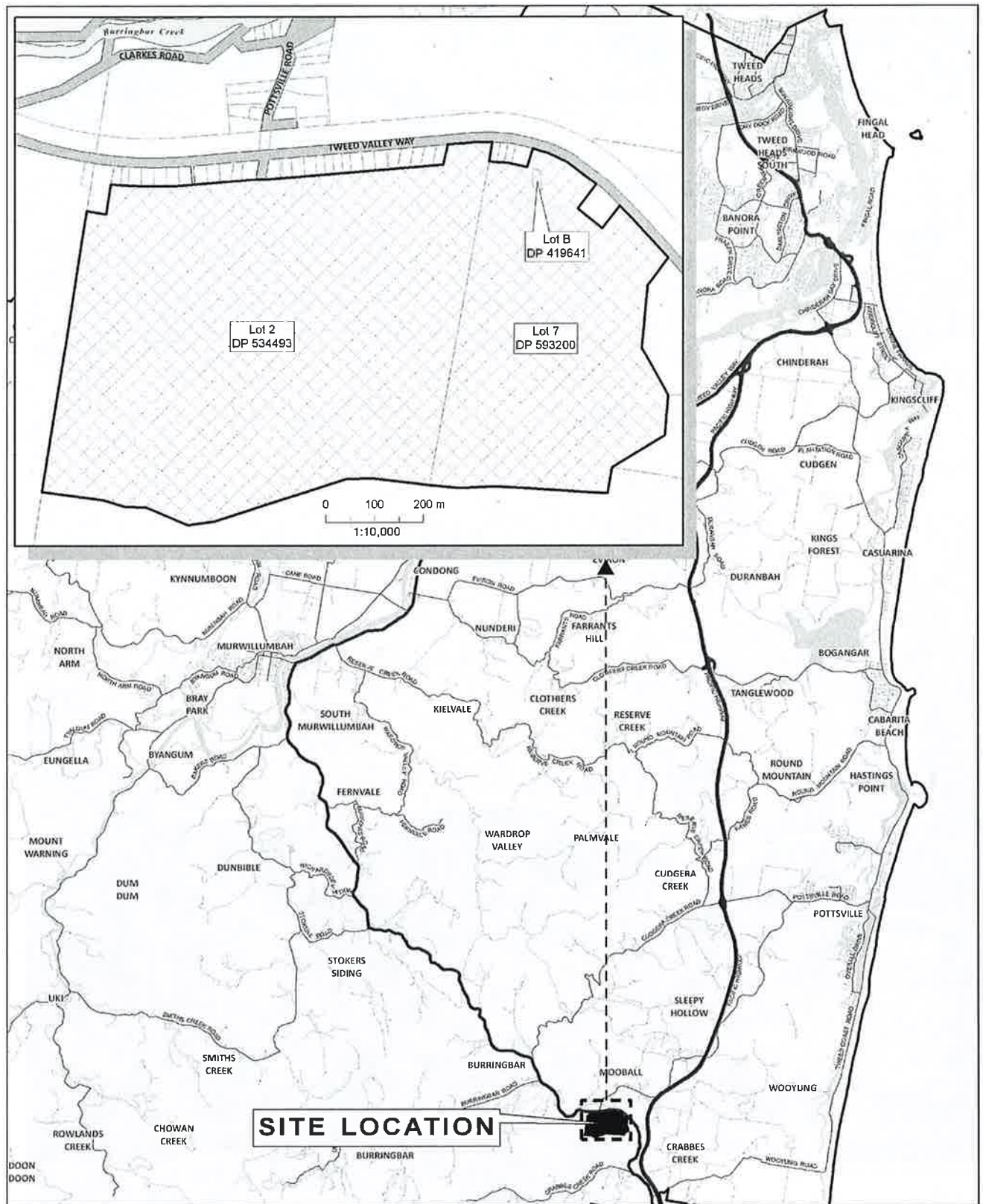
The site contains the following parcels of land: *Lot 2 DP 534493; No. 5867 Tweed Valley Way, Lot 7 DP 5932000 – MOOBALL and Lot B DP419641 – MOOBALL.*

The site has an area of approximately 78.6 hectares, and is located directly to the south of the existing Mooball township. The site currently accommodates two existing dwellings and a number of sheds, and has been historically used for agricultural purposes; however the site is not classified as 'prime agricultural land'.

Site context and setting

The site is located in Mooball, with access afforded from both the east and west along Tweed Valley Way. Interchanges with the Pacific Highway are situated approximately 8 minutes from the site (for southbound traffic, via Tweed Valley Way) or 12 minutes from the site (for northbound traffic, via Pottsville Road and Cudgera Creek Road). Within the immediate area is the village of Mooball, which contains a small number of residential properties and retail businesses. The village's residential properties front directly onto Tweed Valley Way, separating the site from this direct frontage. The majority of these properties are single storey, with a few two-storey residences. Pottsville Road intersects with Tweed Valley Way, which also has several residential properties situated adjacent to Pottsville Road.

Figure 1 illustrates the location of the site with regard to the surrounding area, whilst Figure 2 illustrates the existing areas of each



Locality Plan

Planning Proposal PP10/0007 -- Lot B DP 419641, Lot 2 DP 534493 and Lot 7 DP 593200
Tweed Valley Way, Mooball

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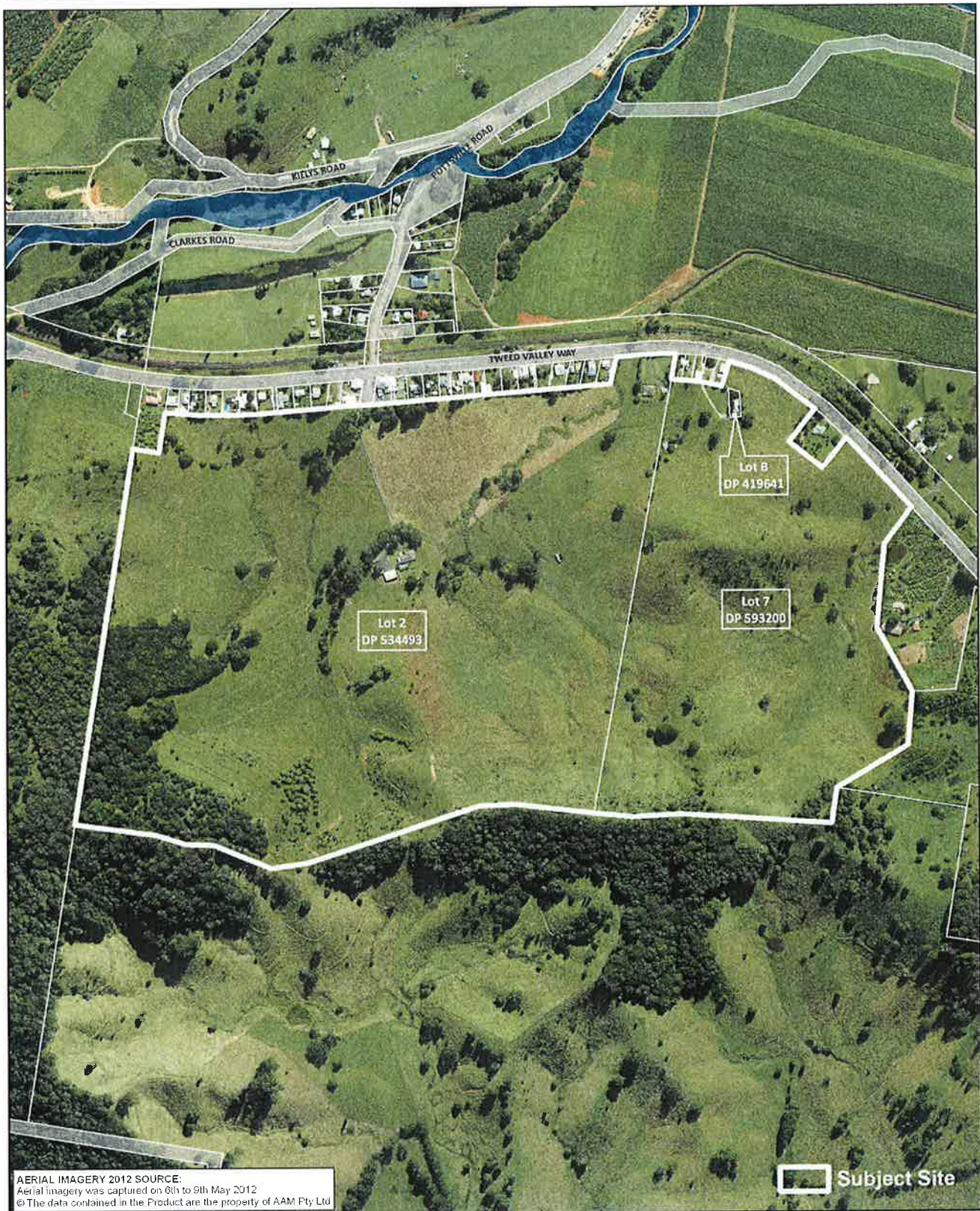
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Figure 1 Subject site locality plan



Aerial Photo - taken May 2012

Planning Proposal PP10/0007 -- Lot B DP 419641, Lot 2 DP 534493 and Lot 7 DP 593200
Tweed Valley Way, Mooball

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Figure 2 Subject site properties and land areas

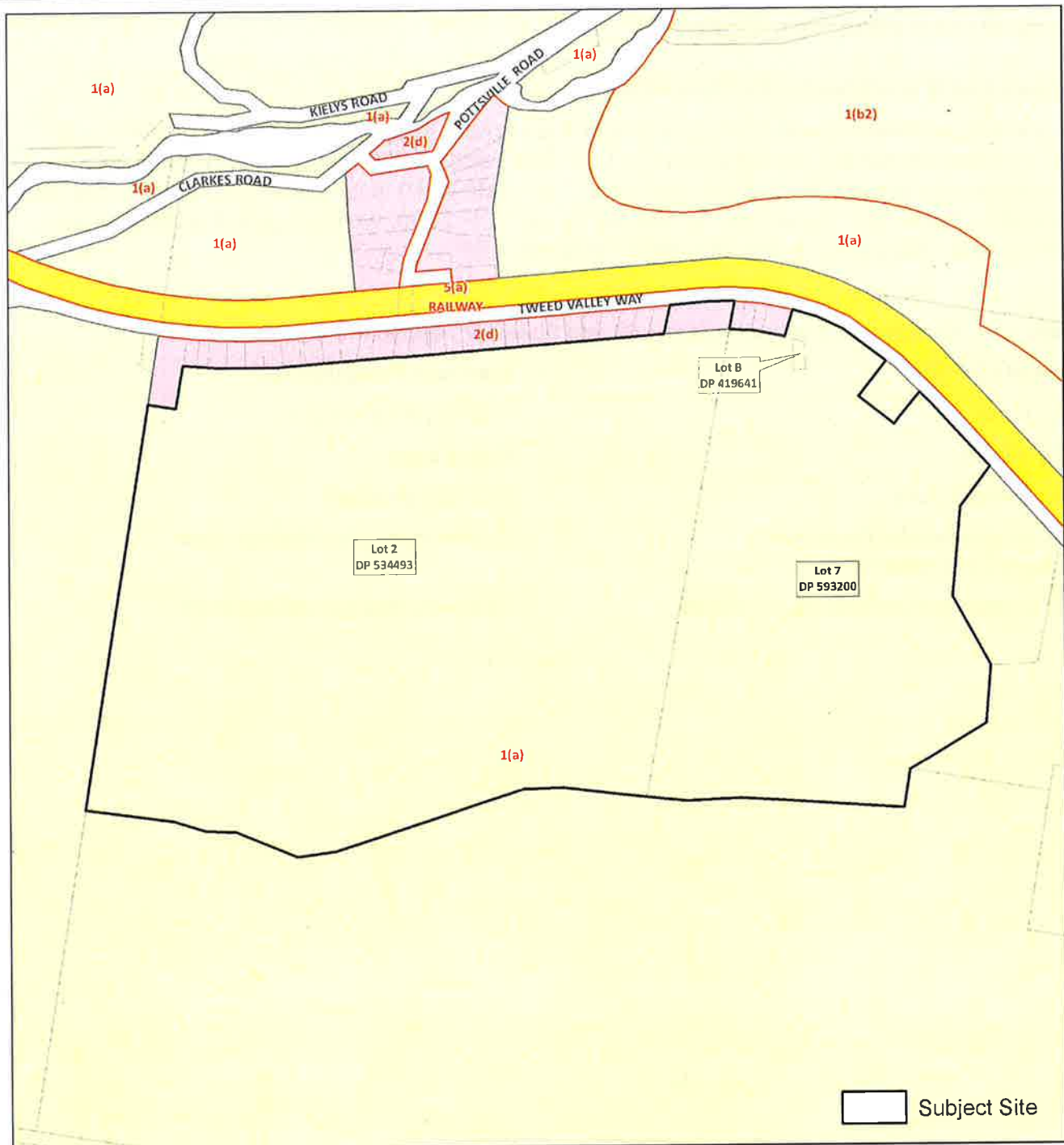
Zone Based Planning Controls

Tweed Local environmental Plan 2000

The site is currently zoned 1(a) Rural under the current TSC LEP 2000. A comparison of the key zonings for the site between the LEP 2000 and the Standard Instrument (local environmental plans) Order 2006 (Standard Template LEP) is contained in Table 1. Figure 3 illustrates the current zoning of the site within the LEP 2000, whilst Figure 4 illustrates the zoning when translated to the Standard Template LEP.

Table 1 Comparison between current LEP and Standard Template LEP

Tweed LEP 2000	Standard Template LEP
1(a) Rural	RU2 Rural Landscape
2(d) Village	RU5 Village
5(a) Special Uses	SP2 Infrastructure
7(d) Environmental Protection (Scenic/Escarpment)	E3 Environmental Management
7(l) Environmental Protection (Habitat)	E3 Environmental Management

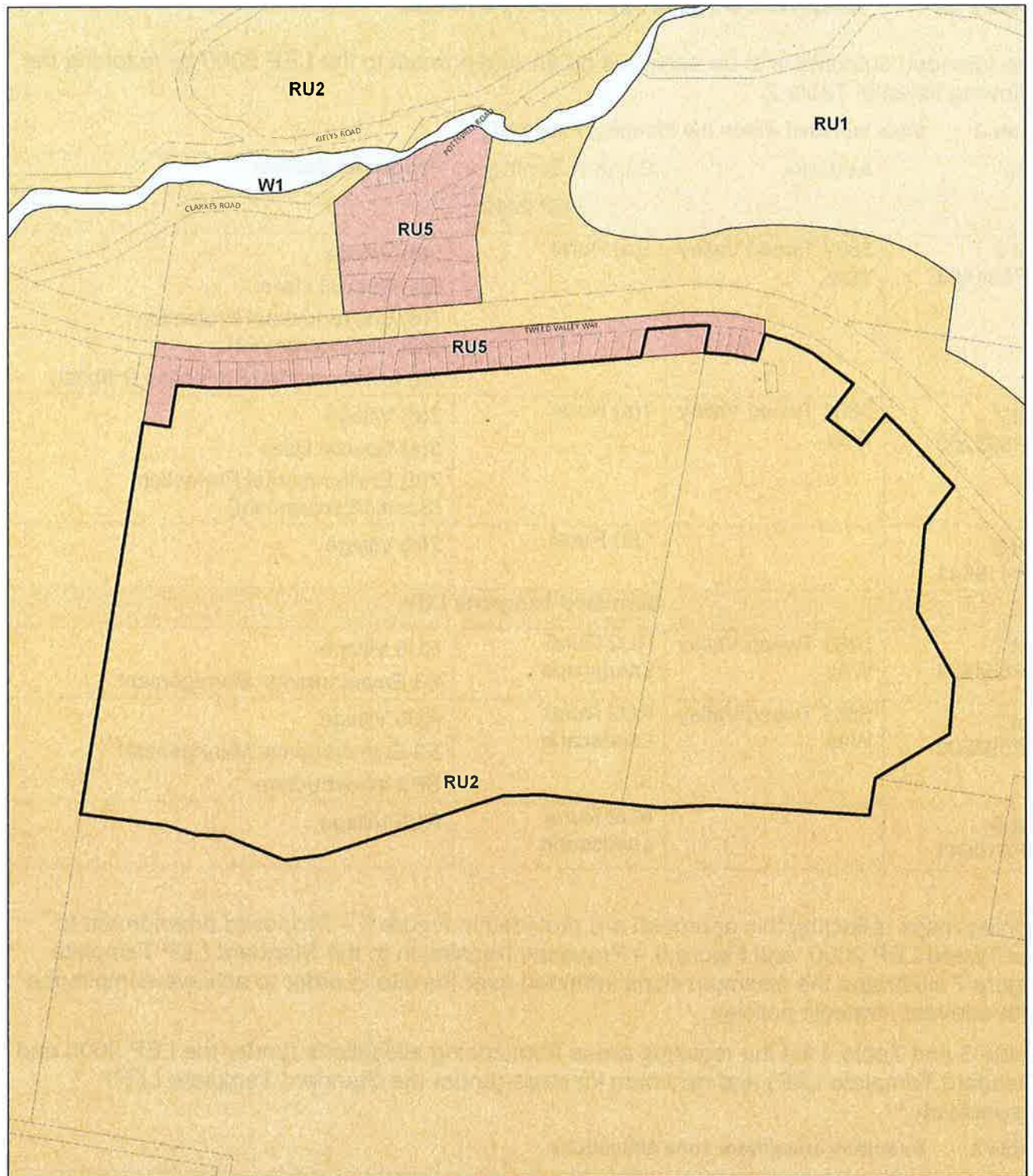


Tweed Local Environmental Plan 2000

Planning Proposal PP10/0007 -- Lot B DP 419641, Lot 2 DP 534493 and Lot 7 DP 593200
Tweed Valley Way, Mooball

ZONING RURAL 1(a) Rural 1(c) Rural living 1(b1) Agricultural Protection 1(b2) Agricultural Protection	RESIDENTIAL 2(a) Low Density Residential 2(b) Medium Density Residential 2(f) Tourism 2(c) Urban Expansion 2(d) Village 2(e) Residential Tourist	BUSINESS 3(a) Sub-Regional Business 3(b) General Business 3(c) Commerce & Trade 3(d) Waterfront Enterprise 3(e) Special Tourist (Jack Evans Boat Harbour)	INDUSTRIAL 4(a) Industrial SPECIAL USES 5(a) Special Uses OPEN SPACE 6(a) Open Space 6(b) Recreation	ENVIRONMENTAL PROTECTION 7(a) Environmental Protection (Wetlands and Littoral Rainforest) 7(d) Environmental Protection (Scenic / Escarpment) 7(f) Environmental Protection (Coastal Land) 7(g) Environmental Protection (Habitat)	NATIONAL PARKS & NATURE RESERVES 8(a) National Parks and Nature Reserves DEFER defer
ADDITIONAL CONTROLS Clause 37 (Transmission Line Corridor) Clause 38 (Future Roads)	Clause 41 (Heritage Conservation Area) Clause 52 (Existing and Future Dam Areas)	Clause 52 (Minimum Lot Sizes) Clause 52 (Stormwater and Fill)	Clause 53 (Schedule 3 Item) Clause 52 (Pottsville)		
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Figure 3 Current Tweed LEP 2000 Zoning



Draft Tweed Local Environmental Plan 2010
Planning Proposal PP10/0007 -- Lot B DP 419641, Lot 2 DP 534493 and Lot 7 DP 593200
Tweed Valley Way, Mooball

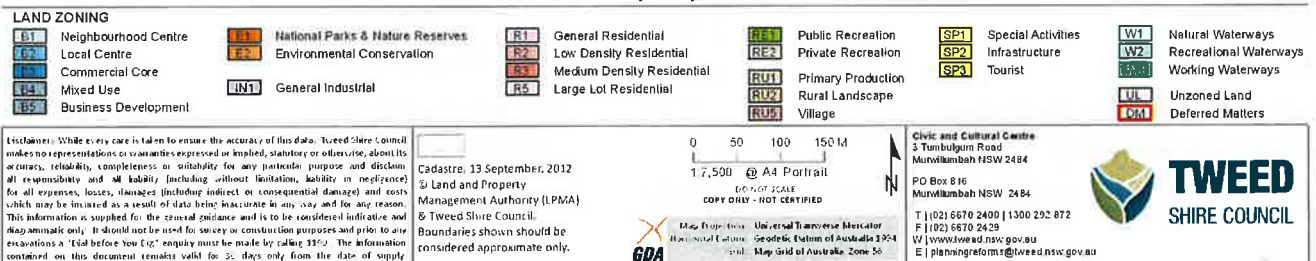


Figure 4 Current Tweed LEP 2000 Zoning Translations to the Standard LEP Zoning

Part 2 Explanation of Provisions

The intended outcome is to be achieved by an Amendment to the LEP 2000 by rezoning the following listed in Table 2.

Table 2 Sites included within the Planning Proposal

Site	Address	Current Zoning	Proposed Zoning
LEP 2000			
Lot 2 DP534493	5867 Tweed Valley Way	1(a) Rural	2(d) Village 5(a) Special Uses 7(d) Environmental Protection (Scenic/Escarpment) 7(l) Environmental Protection (Habitat)
Lot 7 DP593200	5861 Tweed Valley Way	1(a) Rural	2(d) Village 5(a) Special Uses 7(d) Environmental Protection (Scenic/Escarpment)
Lot B DP419641		1(a) Rural	2(d) Village
Standard Template LEP			
Lot 2 DP534493	5867 Tweed Valley Way	RU2 Rural Landscape	RU5 Village E3 Environmental Management
Lot 7 DP593200	5861 Tweed Valley Way	RU2 Rural Landscape	RU5 Village E3 Environmental Management SP2 Infrastructure
Lot B DP419641		RU2 Rural Landscape	RU5 Village

Zoning maps reflecting this approach are provided in Figure 5 – Proposed amendment to the Tweed LEP 2000, and Figure 6 – Proposed translation to the Standard LEP Template. Figure 7 illustrates the minimum sizes intended over the site in order to achieve compliance with relevant strategic policies.

Table 3 and Table 4 list the resulting areas from zoning allocations (under the LEP 2000 and Standard Template LEP) and minimum lot sizes (under the Standard Template LEP) respectively.

Table 3 Resulting areas from zone allocations

LEP 2000 zoning	Area (ha)	Standard Template LEP zoning	Area (ha)
2(d) Village	61.39	RU5 Village	61.39
5(a) Special Uses	2	SP2 Infrastructure	2
7(d) Environmental Protection (Scenic/Escarpment)	9.23	E3 Environmental Management	15.25
7(l) Environmental Protection (Habitat)	6.02		

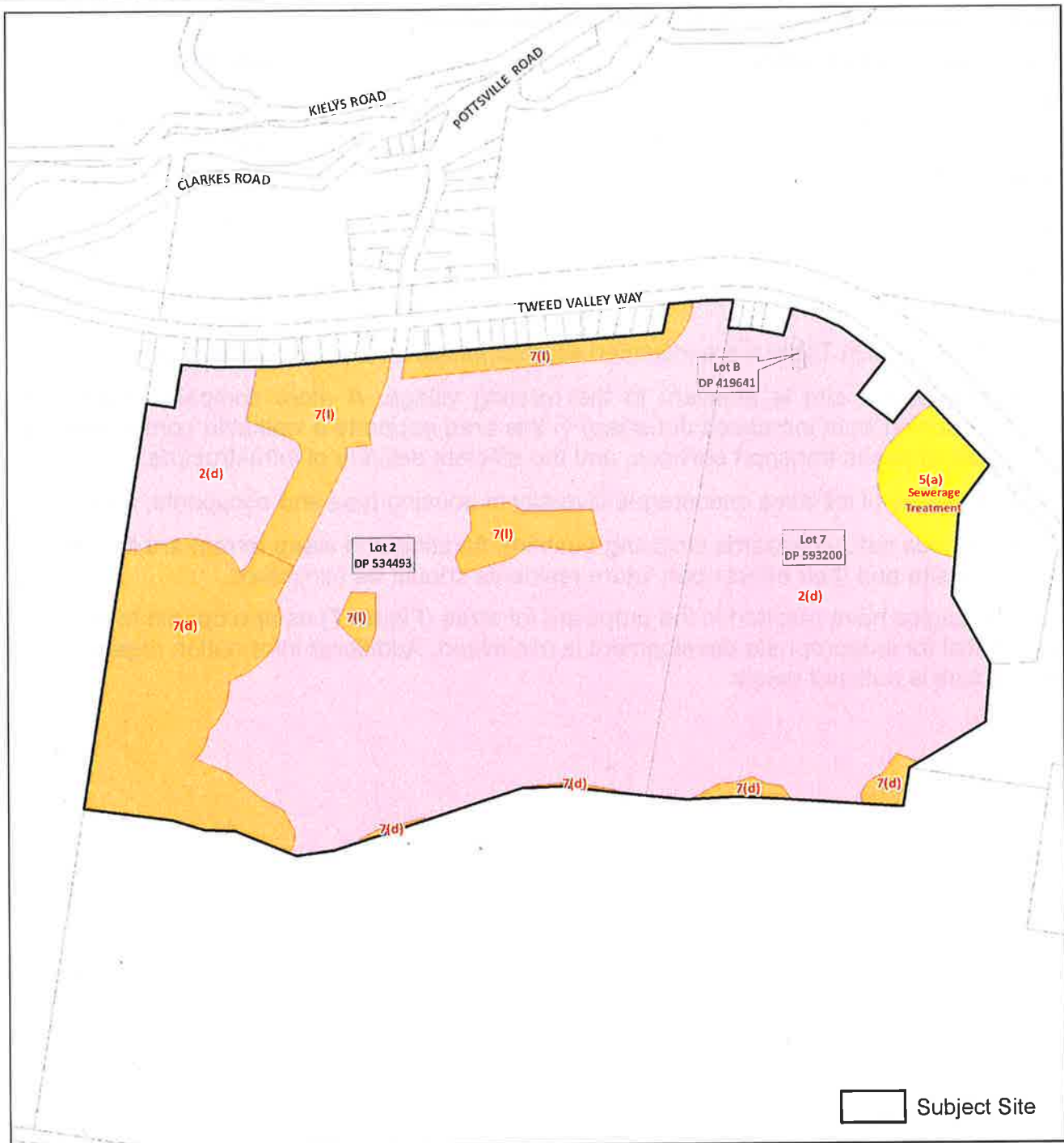
Table 4 Resulting areas from minimum lot size designations

Minimum lot size designation	Area (ha)
250 m ²	6.75
450 m ²	24.71
700 m ²	9.59
2 ha	21.64
40 ha	14.52

The lot sizes listed in Table 4 are identified as appropriate for the release area as:

- Part of the site is adjacent to the existing village. A more compact urban form (resulting from increased densities) in this area supports a walkable community, the use of public transport services, and the efficient delivery of infrastructure;
- A variety of lot sizes encourages diversity in housing type and occupants; and
- Various natural hazards including bushfire, flooding and steep terrain are located on the site and their effect upon future residents should be minimised.

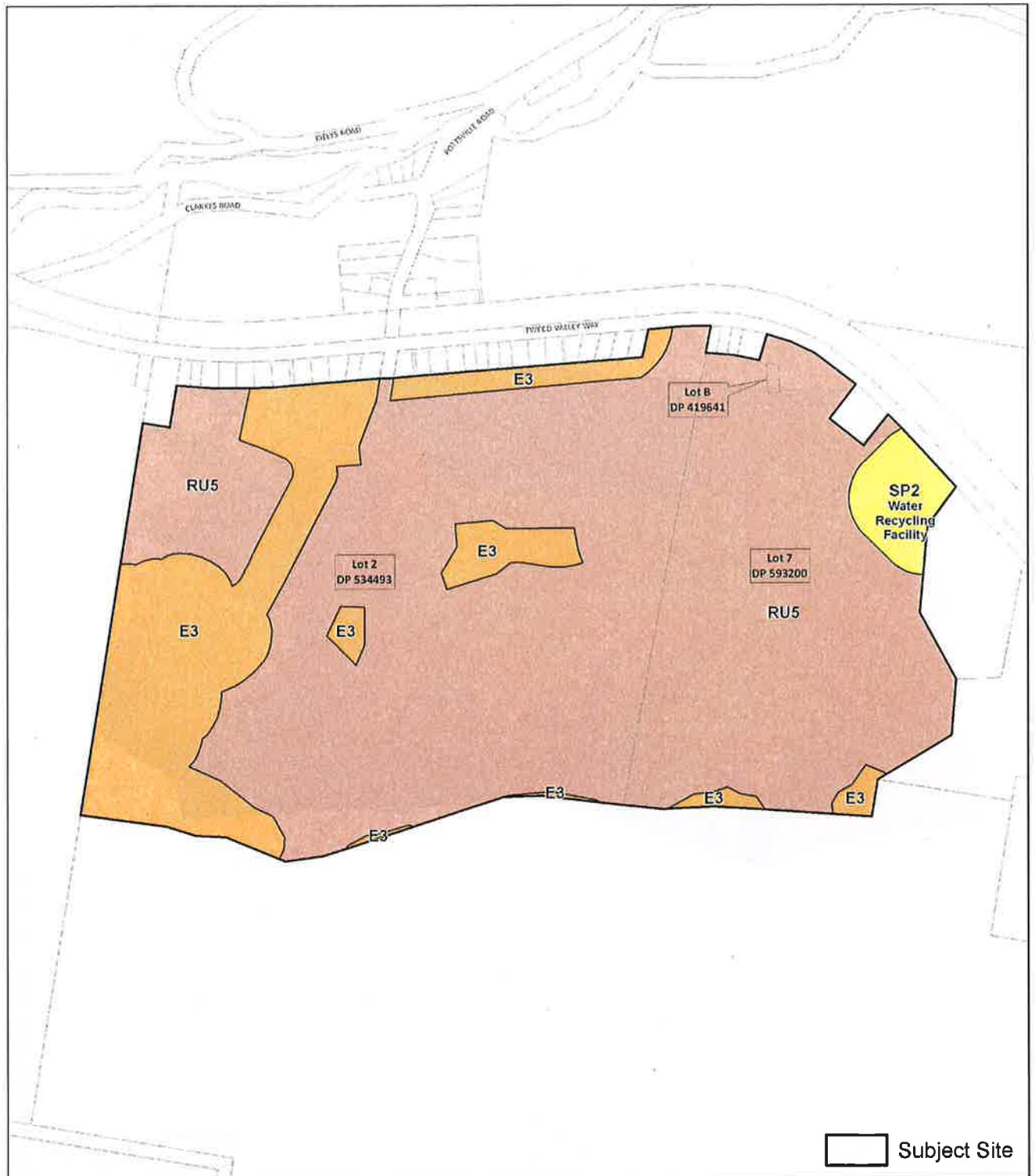
These principles have resulted in the proposed lot sizes (Figure 7) as appropriate to ensure the potential for inappropriate development is minimised. Additional information regarding these factors is outlined below.



PROPOSED AMENDMENT - Tweed Local Environmental Plan 2000
 Planning Proposal PP10/0007 -- Lot B DP 419641, Lot 2 DP 534493 and Lot 7 DP 593200
 Tweed Valley Way, Mooball

ZONING	RESIDENTIAL	BUSINESS	INDUSTRIAL	ENVIRONMENTAL PROTECTION	NATIONAL PARKS & NATURE RESERVES
RURAL 1(a) Rural 1(c) Rural Bring 1(b) Agricultural Protection 1(b2) Agricultural Protection	2(a) Low Density Residential 2(b) Medium Density Residential 2(f) Tourism 2(c) Urban Expansion 2(d) Village 2(e) Residential Tourist	3(a) Sub-Regional Business 3(b) General Business 3(c) Commerce & Trade 3(d) Waterfront Enterprise 3(e) Special Tourist (Jack Evans Boat Harbour)	4(a) Industrial SPECIAL USES 5(a) Special Uses OPEN SPACE 6(a) Open Space 6(b) Recreation	7(a) Environmental Protection (Wetlands and Littoral Rainforest) 7(d) Environmental Protection (Scenic / Escarpment) 7(f) Environmental Protection (Coastal Lands) 7(g) Environmental Protection (Habitat)	8(a) National Parks and Nature Reserves DEFER defer
ADDITIONAL CONTROLS Clause 37 (Transmission Line Corridor) Clause 38 (Future Roads)	Clause 41 (Heritage Conservation Area) Clause 52 (Existing and Future Dam Areas)	Clause 52 (Minimum Lot Sizes) Clause 52 (Stormwater and Fill)	Clause 53 (Schedule 3 Item) Clause 52 (Pottsville)	0 50 100 150 M 1:7,500 @ A4 Portrait COPY ONLY - NOT CERTIFIED GDA Universal Transverse Mercator Geoid: East of Australia 1994 Map Grid of Australia, Zone 56 Civic and Cultural Centre 3 Tumbilgin Road Murumbidgee NSW 2484 PO Box 616 Murumbidgee NSW 2484 T (02) 6670 2400 1300 292 872 F (02) 6670 2429 W www.tweed.nsw.gov.au E planning@tweed.nsw.gov.au	

Figure 5 Proposed amendment to the Tweed LEP 2000



PROPOSED AMENDMENT - Draft Tweed Local Environmental Plan 2010
 Planning Proposal PP10/0007 -- Lot B DP 419641, Lot 2 DP 534493 and Lot 7 DP 593200
 Tweed Valley Way, Mooball

LAND ZONING B1 Neighbourhood Centre B2 Local Centre B3 Commercial Core B4 Mixed Use B5 Business Development E1 National Parks & Nature Reserves E2 Environmental Conservation E3 Environmental Management G1 General Industrial I1 General Residential I2 Low Density Residential I3 Medium Density Residential I4 Large Lot Residential M1 Public Recreation M2 Private Recreation P1 Primary Production P2 Rural Landscape P3 Village S1 Special Activities S2 Infrastructure S3 Tourist W1 Natural Waterways W2 Recreational Waterways W3 Working Waterways U1 Unzoned Land DM Deferred Matters			
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Figure 6 Proposed translation to the Standard LEP Template



PROPOSED AMENDMENT - Draft Tweed Local Environmental Plan 2010
 Planning Proposal PP10/0007 -- Lot B DP 419641, Lot 2 DP 534493 and Lot 7 DP 593200
 Tweed Valley Way, Mooball

Minimum Lot Size

C	250 M2	AB	2 HA
G	450 M2	Z	40 HA
Q	700 M2		

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Figure 7 Proposed minimum lot sizes – Standard LEP Template

Part 3 Justification

Section A – Need for the Planning Proposal

There is a need for the Planning Proposal to allow for the rezoning from rural to residential. The population within the Council area is expected to grow to approximately 120,000 people by 2031 (Tweed Urban Land Release Strategy, 2009) resulting in a demand for approximately 1,350 ha of urban land. The rezoning will assist in meeting this demand for urban land.

Is the Planning Proposal a result of any strategic study or report?

Yes, the majority of the site is identified within the Tweed Urban Land Release Strategy 2009 (the TULR Strategy) as being 'potential urban area' (designated as Area 9). The TULR Strategy recognises Area 9 is mostly cleared and is mainly used for grazing, however bananas have, and are still, produced. The short-term timing for the rezoning of Area 9, under the TULR Strategy, assumes that 80% of the site will yield lots. Given the site of this Planning Proposal is similar in size to that of Area 9 as defined under the TULR Strategy, it can be assumed that the Planning Proposal will assist in meeting the required yield potential under the TULR Strategy.

The now superseded Tweed Strategic Plan 2004-2024 identified Mooball as being a high priority for possible expansion, which will be linked to the provision of improved infrastructure and services. The Community Strategic Plan 2011-2021 recognises this, however will 'establish planning controls that balance the need for urban growth against the protection of agriculture, village character and the environment' (Objective 3.3.1).

Currently, Mooball is not serviced by a reticulated water supply system. It is proposed to incorporate this into any future development applications, through a private water utility appropriately licensed under the provisions of the *Water Industry Competition Act 2006* and *Protection of the Environment Operations Act 1997*.

Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

Yes, as the current zoning of 1(a) Rural only allows dwelling houses or multi-dwelling housing if each is on an allotment of at least 40 hectares. This severely limits the potential for residential development to occur on the site.

While an enabling clause could be used as an alternative it would bring no additional benefit and would only add to the ambiguity in the zoning schedule. Although a valid option in some cases, it is not seen to be the preferred approach in this instance given the desirability of securing the long-term identification and use of the site for this purpose.

A change in zoning will further rationalise the urban zones in this locality, is consistent with Council strategic policy, and therefore is considered to be the most appropriate means of enabling the development of the land.

Is there a net community benefit?

The Department of Planning Guidelines (July 2009) include the following advice in relation to the net community benefit assessment:

The Assessment should only evaluate the external costs and benefits of the proposal (ie. the externalities).

Consideration must be given to changes that reflect a higher community benefit.

The proposal should be assessed against the matters specified in the justification. The Assessment should evaluate the proposal against a base case or base cases including retaining the existing zoning on the land.

The Draft Centres Policy includes guidance on conducting a Net Community Benefit Test that should be followed when assessing the net community benefit of a Planning Proposal. This guidance has been reproduced in the Department of Planning's Guidelines but adapted to suit all types of Planning Proposals.

Because of the difficulty in assigning values to certain costs and benefits associated with Planning Proposals, the Net Community Benefit Test will not be a purely quantitative test.

Table 5 identifies the key external costs and benefits of the Planning Proposal:

Table 5 External costs and benefits

External Costs and Benefits		
Element	Cost	Benefit
Change of land use and zoning	The rezoning of the site will result in the loss of approximately 80 hectares of land previously used for cattle grazing. The site also offers significant vistas across to the north and east.	The proposed rezoning to residential, environmental conservation, rural landscape and infrastructure will allow the orderly expansion of the Mooball village. The site has been identified previously as being suitable for residential development under the Tweed Urban Land Release Strategy 2009. The removal of the rural land from the site will not impact on the agricultural production capabilities of the area, as the site is not classified as 'prime agricultural land'. The proposed zoning plan also provides for various lot sizes, while protecting the visual amenity of the high escarpment towards the rear of the site.
Infrastructure	The current land use does not utilise existing urban infrastructure, and the proposal will require the construction of new roads and connections to sewer and water.	The proposal will result in more efficient use of existing urban infrastructure, and also the construction of a new Sewerage Treatment Plant which will service the development. An internal road network will allow for safe access throughout, and will require the construction of new connections to Tweed Valley Way, improving the safety of current access to the site. The enhancement of the open space and integration of pedestrian / cycleway paths through the site will provide access and amenity open space to surrounding residents.
Access	The residential development of the site will result in the loss of approximately 80 hectares of 1(a) Rural land.	The proposal will facilitate additional residential development and associated infrastructure, expanding the Mooball village footprint, and facilitate public recreation areas to be utilised by residents.

Assessment of Net Community Benefit as guided by the Department of Planning and Infrastructure's *Guide to Preparing Planning Proposals* (July 2009) and found in the NSW Government's publication *Draft Centres Policy – Planning for Retail and Commercial Development* is addressed in Table 4 below. While the Planning Proposal is not for commercial or retail development, nor located within an identified centre, it is considered suitable for assessment of this proposed residential development due to the generality of the criteria being utilised. The site is identified as being a short-term urban release area under the Tweed Shire Urban Land Release Strategy 2009 (known as Area 9).

Table 4 Assessment of Net Community Benefit

Criteria	Response
Will the LEP be compatible with agreed State and regional strategic direction for development in the area (eg land release, strategic corridors, development within 800 metres of a transit node)?	The Planning Proposal seeks to amend the LEP to allow appropriate expansion of the Mooball village. This aligns with the TULR Strategy, which identifies: • Mooball as a potential future greenfield development site. • Mooball as a small village, with a typical population range of 500-2,000 persons, and 50-750 dwellings. The Planning Proposal will reinforce the status of Mooball as a small village, through the provision of additional housing and subsequent increase in population. There is currently no transit node located near the site.
Is the LEP located in a global/regional city, strategic centre or corridor nominated within the Metropolitan Strategy or other regional/sub-regional strategy?	The site is located south of Tweed Heads, which is identified as a Major Regional Centre. Access is provided to Tweed Heads by the nearby Pacific Highway.
Is the LEP likely to create a precedent or create or change the expectations of the landowner or other landholders?	The proposed rezoning and subsequent LEP will not create a precedent within the area, given that Mooball has already been identified within the TULR Strategy as a future greenfield development site. Subsequently, as landowners have been aware of this for a period of time, the rezoning to allow for additional residential development should not create or change expectations of these landowners or neighbouring interests.
Have the cumulative effects of other spot rezoning proposals in the locality been considered? What was the outcome of these considerations?	No effects of spot rezoning within the locality have been considered, or are considered appropriate as the site has been identified (in part) as suitable for residential development by the TULR Strategy.
Will the LEP facilitate a permanent employment generating activity or result in a loss of employment lands?	The Planning Proposal has the potential to improve employment within Mooball and nearby Burringbar through the establishment of additional retail, commercial and non-residential uses arising from the expansion of the residential component of the village.
Will the LEP impact upon the supply of residential land and therefore housing supply and affordability?	The Planning Proposal seeks to increase the amount of residential land within the Mooball village area. This will assist in increasing housing supply and affordability, due to the number of lots and variety of lot areas that could result through the development.

Criteria	Response
Is the existing public infrastructure (roads, rail, utilities) capable of servicing the proposed site? Is there good pedestrian and cycling access? Is public transport currently available or is there infrastructure capacity to support future public transport?	Reticulated sewerage infrastructure will be required to service the development. This has been discussed between the proponent and Council, and will be considered during the development application stage, with a private water utility, appropriately licensed. Tweed Valley Way, which provides the main access points to the site, has sufficient capacity to service the site. Pedestrian and cycling paths are proposed for within the development, and there is an infrequent bus service connecting Mooball with Murwillumbah provided by Parsons Bus and Coach. The Planning Proposal is unlikely to raise any negative impacts on the performance of road capacity, and has the potential to increase the use of existing public transport servicing the area.
Will the proposal result in changes to the car distances travelled by customers, employees and suppliers? If so, what are the likely impacts in terms of greenhouse gas emissions, operating costs and road safety?	While Mooball does represent a longer drive to places of employment (relative to other localities within the Council area), the greenhouse gas emissions will be spread across a wider area, rather than being concentrated within a highly urbanised space, subsequently reducing the impact on health and environment in a constrained space. Mooball is currently serviced by limited public transport services. The release area could result in more localised employment opportunities, which would be likely to increase the demand for public transport services and subsequently enhance the viability of those services.
Are there significant Government investments in infrastructure or services in the area whose patronage will be affected by the proposal? If so, what is the expected impact?	The Pacific Highway has recently undergone an upgrade to increase its capacity in the area. It is not expected that the proposed residential development will have any major impacts upon the Pacific Highway.
Will the proposal impact on land that the Government has identified a need to protect (e.g. land with high biodiversity values) or have other environmental impacts? Is the land constrained by environmental factors such as flooding?	The Planning Proposal does not impact on land which is identified by State Government as being required to be protected. The northern boundary of the site is subject to flooding during severe weather events, as identified by Council's flood mapping. The south-western corner of the site has an area of Sclerophyll Open Forests on Bedrock Substrates present. Additional information on both issues is provided further on in this report.
Will the LEP be compatible/complementary with surrounding land uses? What is the impact on amenity in the location and wider community? Will the public domain improve?	The proposed amendments to the LEP will enable the orderly expansion of the Mooball village area. The amendments to include residential, environmental conservation, public recreation, rural landscape and infrastructure zonings is compatible with the surrounding land uses, due to the proposed low density nature of the development. The topography of the land will ensure that the visual amenity impacts such a development may have will be minimised, due to the high slopes and proposed road layout. The development also seeks to incorporate publically accessible parklands and recreation areas, providing additional community infrastructure, subsequently improving the public domain.
Will the proposal increase choice and competition by increasing the number of retail and commercial premises operating in the area?	The Planning Proposal has the potential to increase the number of retail and smaller commercial premises servicing Mooball and Burringbar as a result of the increase in population. This will allow for a greater range of shops for residents within the area.

Criteria	Response
If a stand-alone proposal and not a centre, does the proposal have the potential to develop into a centre in the future?	The Planning Proposal involves the expansion of the existing Mooball village footprint, and does not involve the creation of an additional centre.
What are the public interest reasons for preparing the draft plan? What are the implications of not proceeding at that time?	The expansion of the Mooball village will provide a variety of housing choice to persons who do not wish to live in an urban area. The development of the site will spread the required housing stock away from these denser residential areas, which is a requirement from the Department of Planning and Infrastructure to locate a greater proportion of new development away from the coast, under the TULR Strategy. The Strategy also identifies the Mooball area as being a short-term priority area for rezoning. Any delay on this will have flow-on effects to the provision of housing within the region.

Section B - Relationship to strategic planning framework

Is the Planning Proposal consistent with the objectives and actions contained within the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

The Far North Coast Regional Strategy 2006-2031 (FNCRS) is the overarching framework for the management of growth for the Tweed local government area (LGA).

The Regional Strategy identifies and promotes a settlement pattern that protects environmental values and natural resources while utilising and developing the existing network of major urban centres, reinforcing village character and requiring efficient use of existing services and major transport routes.

Among other things the FNCRS aims to manage the region's projected population growth sustainably and protect the unique environmental assets, cultural values and natural resources of the region. This is planned to occur through responsive future development that retains the regional identity and local character of the area and fosters opportunities for greater economic activity and diversification.

The site is not located in the identified Town and Village Growth Boundary of the Tweed region, rather is identified as 'Environmental Assets and Rural Land, National Parks and State Forest'. Of this, Rural Land is the most relevant to the site's current use.

Rezoning the site for residential development would assist in achieving the aims of the FNCRS, in particular through:

- Assisting in achieving the region's housing target of 51,000 dwellings (19,100 additional new dwellings in the Tweed area to 2031).
- Enabling development of a site which is unconstrained by coastal processes and does not have a high scenic or conservation value.
- The site is located west of the Pacific Highway and outside of the 'Coastal Area' and would assist in relieving some of the pressure of development on the coast.
- The rezoning would assist in encouraging growth in a non-coastal village without compromising environmental values or quality of life.

Incorporating zoning for environmental attributes within the Planning Proposal will assist in achieving the following aims of the strategy:

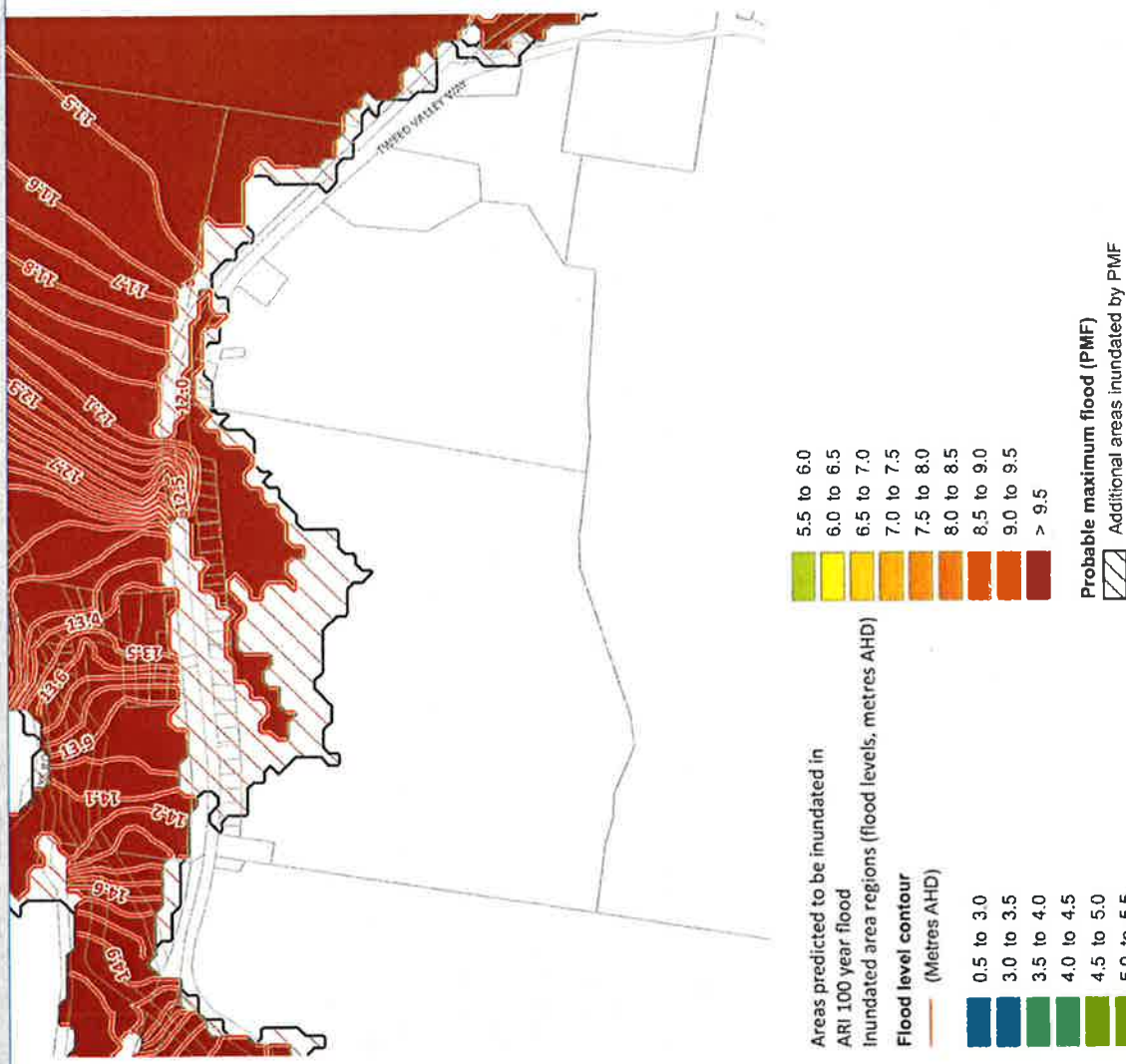
- Incorporating open space that is accessible to the public and provides opportunities for recreation, conservation, visual amenity and enhancement and social interaction.

Appendix A1 of the Regional Strategy contains Sustainability Criteria, which represent a clear, transparent list of matters that any new Planning Proposal is assessed against. Table 6 documents the Sustainability Criteria and how the Planning Proposal complies with the Criteria.

Table 6 Assessment against Far North Coast Regional Strategy sustainability criteria

Criteria	Measurable explanation of criteria	Response
1. Infrastructure Provision Mechanisms in place to ensure utilities, transport, open space and communication are provided in a timely and efficient way	- Development is consistent with the outcomes of the Far North Coast Regional Strategy, any subregional strategy, regional infrastructure plan and relevant section 117 direction/s. - The provision of infrastructure (utilities, transport, open space, and communications) is costed and economically feasible based on Government methodology for determining infrastructure development contributions. - Preparedness to enter into development agreement.	The proposal is consistent with the outcomes for infrastructure provision, with no additional State infrastructure provisions arising from this proposal. The site, being located adjacent to the Mooball village, benefits from access to existing infrastructure, including telecommunications and transport. At present Council does not have a sewerage system in Mooball which is capable of providing a service to the proposed development. Council is prepared to accept that the development could be serviced by a private water utility, appropriately licensed and regulated under the <i>Water Industry Competition Act 2006</i>. A privately constructed and operated system is proposed within the development proposal. The water supply is able to be supplied by Council's existing systems, however certain works will be requiring including provision of a high level reservoir or a larger main from the nearby Cowell Park Reservoir. Section 64 Development Charges will still apply. Applicable Section 94 contributions will be levied in accordance with Council's s94 plans.
2. Access Accessible transport options for efficient and sustainable travel between homes, jobs, services and recreation to be existing or provided	- Accessibility of the area by public transport and/or appropriate road access in terms of: - Location/land use – to existing networks and related activity centres. - Network – the area's potential to be serviced by economically efficient transport services. - Catchment – the area's ability to contain, or form part of the larger urban area which contains adequate transport services. Capacity for land use/ transport patterns to make a positive contribution to achievement of travel and vehicle use goals. - No net negative impact on performance of existing subregional road, bus, rail, ferry and freight network.	The site is situated adjacent to Tweed Valley Way, which provides access to Murwillumbah to the north-west, and the Pacific Highway to the east (subsequently providing access north and south to Tweed Heads and Byron Bay). Parsons Bus and Coach provide bus services connecting Mooball with Murwillumbah (616/618) and school bus services connecting Mooball with Murwillumbah and Pottsville on school days (616). The rezoning enables the Mooball village footprint to logically expand, and also bring the area closer to Burringbar by sharing of services, including public transport. The Tweed Valley Way is recognized as being able to cater for higher levels of traffic, and subsequently access to and from the site and surrounding areas will not be impacted. Given the site's location off the Pacific Highway, it is considered that the proposed development will not impact on the existing sub-regional transport networks.
3. Housing Diversity Provide a range of housing choices to ensure a broad	Contributes to the geographic market spread of housing supply, including any government targets established for aged, disabled or affordable housing.	The Standard Instrument LEP seeks a range of lot sizes that will enable housing choice for future residents; however given the built form character of Mooball it is anticipated that most residential development will be predominantly detached dwelling houses, with some potential for dual occupancy development.

Criteria	Measurable explanation of criteria	Response
population can be housed		
4. Employment Lands Provide regional/local employment opportunities to support the Far North Coast's expanding role in the wider regional and NSW economies	- Maintain or improve the existing level of sub-regional employment self-containment. - Meets subregional employment projections. - Employment-related land is provided in appropriately zoned areas.	The land release enables a range of land uses (including employment generating land uses) which are normally associated with a village to be permissible.
5. Avoidance of Risk Land use conflicts, and risk to human health and life, avoided	- No residential development within 1:100 floodplain. - Avoidance of physically constrained land, e.g. - High slope - Highly erodible. - Avoidance of land use conflicts with adjacent existing or future land use as planned under relevant subregional or regional strategy. - Where relevant available safe evacuation route (flood and bushfire).	The Planning Proposal seeks to rezone parts of the site currently zoned as 1(a) Rural and 2(d) Village to 2(d) Village (RU5 Village under the Standard Template LEP. Given the proposed rezoning, the following responses are provided to the issues of flooding, high slope and erodible land, bushfire, contaminated lands and acid sulphate soils. Flooding Tweed Development Control Plan 2007, Section A3 indicates the northern part of the site is affected by a probable maximum flood, under current conditions, with a flood level contour of 12 metres AHD in this area. Filling will be required in this area to raise residential development above the flood level contour. The impacts of filling and excavation work can be assessed at the development application stage.

Criteria	Measurable explanation of criteria	Response
		

Council's Climate Change Maps (Section A3 of the Tweed Development Control Plan 2007)

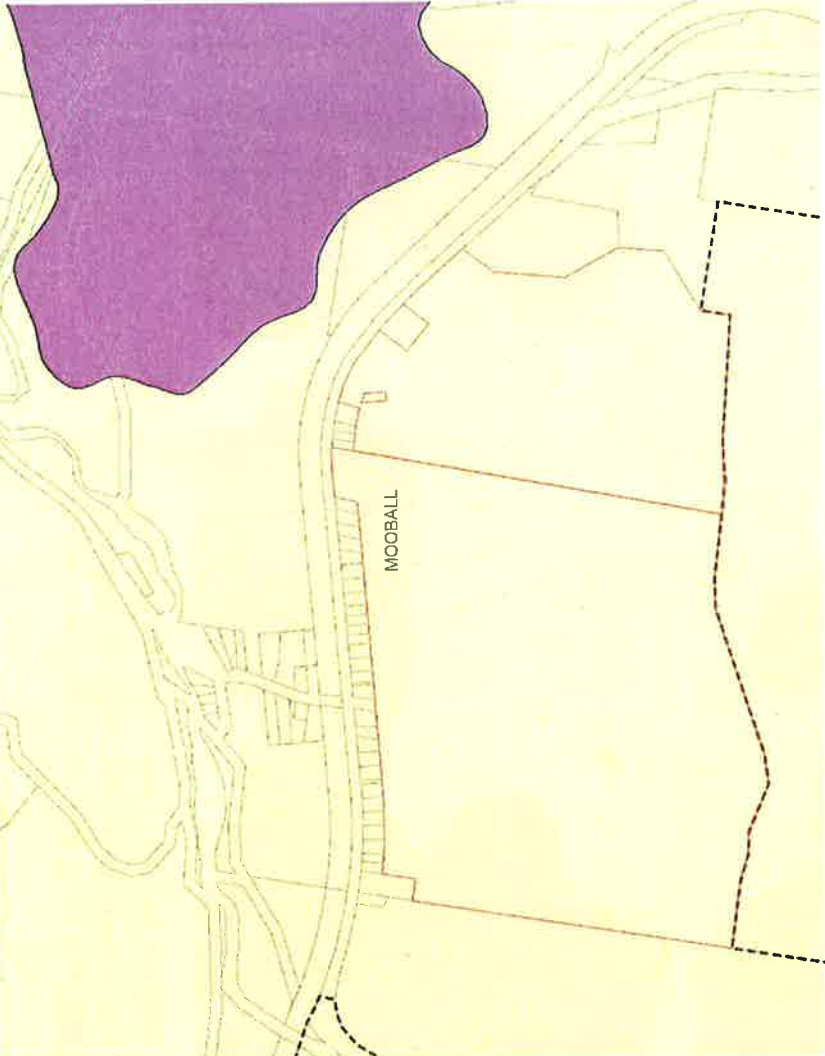
Criteria	Measurable explanation of criteria	Response
		indicate a flood level contour across the northern part of the site of 12.2 metres AHD. Areas predicted to be inundated in ARI 100 year flood (Incorporating Climate Change) 0.5 to 3.0 3.0 to 3.5 3.5 to 4.0 4.0 to 4.5 4.5 to 5.0 5.0 to 5.5 5.5 to 6.0 6.0 to 6.5 Inundated area regions (flood levels, metres AHD) 6.5 to 7.0 7.0 to 7.5 7.5 to 8.0 8.0 to 8.5 8.5 to 9.0 9.0 to 9.5 > 9.5 Probable maximum flood (PMF) Additional areas inundated by PMF Flood level contour (Metres AHD)

Criteria	Measurable explanation of criteria	Response
		High Slope and Erodible Land The Cardno Bowler Broadscale Stage 1 Geotechnical and Slope Stability Assessment report submitted in support of the request for a Planning Proposal states that "No significant geotechnical issues were noted that would preclude the site from being developed for its proposed usage. However, it must be noted that this assessment is based on very limited work over a large area and as such should be considered preliminary only and should be confirmed by a more detailed geotechnical investigation and assessment". The Standard Template LEP proposes minimum lot sizes over the site. The minimum lot sizes will assist in restricting development on the parts of the site with steeper slopes and reduce the level of landslide risk to future residents in parts of the site subject to steeper slopes. Further investigations are recommended at the development assessment stage.
		Bushfire hazard assessment The southern edge of the site, on the escarpment, is identified as being part of the 100 metre buffer zone, with an area of Vegetation Category 1 bushfire hazard identified in the south-western corner of the site. An application for a Bush Fire Safety Authority will be required at the development application stage under the <i>Rural Fires Act 1997</i>.

Criteria	Measurable explanation of criteria	Response
		

Contaminated Lands

The Precise Environmental Stage 1 Preliminary Site Assessment for contaminated lands, which was submitted in support of this Planning Proposal, identifies no broadscale contamination over the site, however there are traces of fuel and pesticides dating from the previous use of the site as cropland. Further detailed investigation of the contamination is recommended at the development application stage.

Criteria	Measurable explanation of criteria	Response
		Acid sulfate soils The subject land is identified as Class 5 on Council's Acid Sulphate Soils Planning Maps, and therefore there is a minimal chance of acid sulphate soils being present.  Class 1 Any Works Class 2 Works below the ground surface Class 3 Works below 1 metre below the natural ground surface Class 4 Works below 2 metres below the natural ground surface Class 5 Works within 500 metres of adjacent class 1, 2, 3 or 4 land
6. Natural Resources	Demand for water within infrastructure capacity to supply water and does not place unacceptable pressure	Water and sewer As previously mentioned, water and sewerage services can be augmented to service the

Criteria	Measurable explanation of criteria	Response
not exceeded / environmental footprint minimised	• Demonstrates most efficient / suitable use of land - Avoids identified significant agricultural land - Avoids productive resource lands – extractive industries, coal, gas and other mining, and quarrying. • Demand for energy does not place unacceptable pressure on infrastructure capacity to supply energy-requires demonstration of efficient and sustainable supply solution.	proposed development. Water supply can be provided from the existing Council network; however certain works will be required to ensure sufficient supply. Section 64 Development charges will apply. Regarding sewerage, as previously stated, this can be provided through a private water utility arrangement licensed and regulated under the <i>Water Industry Competition Act 2006</i>. Agricultural Land The site has a majority of its area identified as land suitable for grazing but not cultivation, with portions towards the western boundary classified as land suitable for bananas. The south-western corner of the site is identified as not being suitable for agriculture, with the northern boundary recognized as grazing land or land well suited to pasture improvement. Given the land is not being utilized to its full potential as agricultural land, it is considered suitable that the site be redeveloped to naturally expand the Mooball village residential footprint.

Criteria	Measurable explanation of criteria	Response
		 Arable land suitable for intensive cultivation Arable land suitable for regular cultivation of crops Bananas Grazing land or land well suited to pasture improvement Horticulture Land suitable for grazing but not cultivation Land unsuitable for agriculture National Parks, Nature Reserve and Recreation Areas State Forest Urban Water

Resource lands

The site does not contain any known productive resources.

Energy

Criteria	Measurable explanation of criteria	Response
		The site is not likely to result in an unacceptable impact of energy capacity/supply as it represents an expansion of the adjoining commercial and general business land uses. The required utilities and services may be expanded to service this proposal.
7. Environmental Protection Protect and enhance biodiversity, air quality, heritage, and waterway health	- Consistent with government-approved Regional Conservation Plan (if available). - Maintains or improves areas of regionally significant terrestrial and aquatic biodiversity (as mapped and agreed by DEC). This includes regionally significant vegetation communities, critical habitat, threatened species, populations, ecological communities and their habitats. - Maintain or improve existing environmental condition for water quality: - Consistent with community water quality objectives for recreational water use and river health (DEC and CMA). - Consistent with catchment and stormwater management planning (Catchment Management Authority and council). - Protects areas of Aboriginal cultural heritage value (as agreed by DEC).	Flora and fauna The south-western corner of the site has an area of Sclerophyll Open Forests on Bedrock Substrates present. The Preliminary Review of Terrestrial Flora and Fauna Values report by Planit Consulting (prepared as part of the request for Planning Proposal) identifies ecologically significant areas being generally restricted to the southern and western forested portions of the site, with individual remnant rainforest trees (including 'vulnerable' species) on the northern flat areas. The Planning Proposal identifies and protects these ecologically significant areas through the 7(l) Environmental Protection (Habitat) zoning. It is recommended that additional studies be completed before and during the development application stage.

Criteria	Measurable explanation of criteria	Response
		 MOOBALL - Estuarine Complexes - Foredune Complex - Heathlands - Highly Modified / Disturbed - Melaleuca and Swamp She-oak Forests - Miscellaneous Map Units - Rainforest and Riparian Communities - Sclerophyll Forests / Woodlands on Sand Substrates and Alluvium - Sclerophyll Open Forests on Bedrock Substrates - Sedgeland and Related Communities

Aboriginal and Cultural Heritage

A Cultural Heritage Assessment was undertaken by Everick Heritage Consultants, March

Criteria	Measurable explanation of criteria	Response
		2011. Two items identified on site (a boiler, and a historic road), are considered as having low historic heritage significance. The report finds that the site is situated within an area of low archaeological significance, and contains no features that make it particularly likely to contain Aboriginal objects. Due to these findings, it is stated that the potential impact of the proposed development on Aboriginal objects, and significant historic heritage items must be considered low. In summary, the results state the following: • No Aboriginal Objects or Places were identified within the site. • No areas were identified that were considered reasonably likely to contain Potential Archaeological Deposits (PADs). • Consultation with the Tweed Byron LALC identified no places of cultural (spiritual) significance. • No items of historic heritage significance were identified within the Project Area.
8. Quality and Equity in Services Quality health, education, legal, recreational, cultural and community development and other government services are accessible	• Available and accessible services. - Do adequate services exist? - Are they at capacity or is some capacity available? - Has Government planned and budgeted for further service provision? - Developer funding for required service upgrade/access is available.	The nearby town of Murwillumbah provides the majority of commercial, retail, health, educational, civic and community services to the area, and it is not proposed to expand these into the village of Mooball through this Planning Proposal. Developer funding will be made available to these services through the applicable Section 94 contributions. These services currently have sufficient capacity available to service the expected future population of Mooball, with upgrades to be implemented when required.

The Far North Coast Regional Strategy 2006 (FNCRS) provides a range of aims, outcomes and actions which guide development within the Tweed. The consistency of the proposal against the FNCRS aims, outcomes and actions when preparing an LEP is contained in Table 7:

Table 7 Assessment against Far North Coast Regional Strategy aims and actions

Assessment against the Far North Coast Regional Strategy Aims and Actions relating to the preparation of a local environmental plan	
Action	Assessment
Environment and Natural Resources	
Local environmental plans will protect and zone land with State or regional environmental, agricultural, vegetation, habitat, waterway, wetland or coastline values.	The site is currently not being utilised to its full capability as agricultural land, and has been identified as only being suitable for grazing but not cultivation. The site does not contain any land with State or regional environmental, vegetation, habitat, waterway, wetland or coastline values.
Local environmental plans will not zone land within the Environmental Assets and Rural Land area to permit urban purposes, other than rural residential development. Existing and future rural residential development will be located in this area, but not where it conflicts or coincides with the attributes or values listed above.	This Planning Proposal seeks to rezone part of the site within the Environmental Assets and Rural Land area, to an area consistent with that of the Town and Village Growth Boundary. It should be noted that the Tweed Urban Land Release Strategy, developed in response to the FNCRS, designates the site as 'Potential Urban Release Lands' to help the Tweed area provide an additional 19,100 dwellings by 2031. The Planning Proposal facilitates the provision of additional dwellings, in an area which is appropriate for such development.
Local environmental plans will identify and zone land of landscape value (including scenic and cultural landscapes) to protect those values.	The south western part of the site and areas along the southern boundary are identified as having scenic value to the area. The Planning Proposal protects those areas by rezoning them as 7(d) Environmental Protection (Scenic/Escarpment) under the LEP 2000, and E3 Environmental Management under the Standard Template LEP.
Local environmental plans will protect land identified as having extractive resources of regional significance (see Attachment 2).	The site does not contain areas of known extractive resources.
New development adjoining or adjacent to farmland, extractive resources, waterways, wetlands, and areas of high biodiversity value will incorporate buffers to avoid land use conflict.	The site is adjacent to farmland, in particular an existing banana plantation along the eastern boundary of the site. A Development Control Plan over the site, prepared subsequent to the Planning Proposal, is recommended as it will have the ability to implement setback or other buffer controls and mitigate land use conflicts. In addition, the zoning plans which determine lot sizes, will ensure sufficient buffer zones are incorporated maximise distances between conflicting land uses. There are no extractive resources, waterways, wetlands or areas of high biodiversity value adjacent to the site.
Local environmental plans will: include minimum subdivision standards for rural	The Planning Proposal rezones part of the site from a rural zoning to a village zoning, with various minimum lot sizes incorporated via a

Assessment against the Far North Coast Regional Strategy Aims and Actions relating to the preparation of a local environmental plan

Action	Assessment
and environment protection zones - include provisions to limit dwellings in the rural and environmental zones - not include provisions to permit concessional allotments.	Development Control Plan (to be prepared subsequent to the Planning Proposal). These lot sizes will range from 250 m² to 2 hectares and located in areas that reflect constraints affecting the site. Through the proposed lot sizes within the subsequent Development Control Plan, dwelling numbers will be limited in the parts of the site that are subject to particular site constraints.
Local environmental plans will include provisions to encourage habitat and corridor establishment in future zoning of Environmental Assets and Rural Land area.	The Planning Proposal includes environmental zones around areas identified as having environmentally significant habitat and/or species present.
Local environmental plans will include provisions to limit the creation of additional water rights on land fronting watercourses.	The Planning Proposal does not create additional water rights.
Local environmental plans will not rezone land within town water supply catchments and significant groundwater areas if this has the potential to reduce the quality and quantity of these assets.	The site does not fall within the town water supply catchment.
Rezoning of land for future development within the catchments of coastal lakes (as defined in Schedule 1 of State Environmental Planning Policy No. 71—Coastal Protection) will consider the recommendation of any Coastal Lake Sustainability Assessment which has been prepared.	The site does not fall within a coastal lake catchment and is not restricted by SEPP 71.
Subdivision and dwelling standard provisions in local environmental plans will reflect the objectives of the relevant zone and the Regional Strategy.	A Development Control Plan will be required subsequent to the Planning Proposal. Where appropriate the existing standards in Tweed Local Environmental Plan 2000 and Draft Tweed Local Environmental Plan 2010 will apply.
Cultural Heritage	
Councils are to ensure that Aboriginal cultural and community values are considered in the future planning and management of their local government area.	An Aboriginal Due Diligence Assessment has been undertaken by Everick Heritage Consultants (March 2011). The assessment concludes the project area is situated within an area of low archaeological significance, and contains no features that make it particularly likely to contain Aboriginal objects, and subsequently minimises the potential for Aboriginal cultural heritage values to exist on the site. The report makes recommendations for actions should any item or object be uncovered during works.
Councils and the Department of Planning will review the scope and quality of the existing statutory lists of heritage items and ensure that all places of significance are included in the heritage schedules of local environmental plans.	There are no listed heritage items on the subject land or within a 1.5 km radius of the project site.
The cultural heritage values of major regional centres and major towns that are to be the focus of urban renewal projects will be reviewed, with the aim of protecting cultural heritage.	Not applicable as there are no heritage listed items of local, regional or state significance on the subject land.
Natural Hazards	
In order to manage the risks associated with climate	Council Flood Maps indicate the majority of the

Assessment against the Far North Coast Regional Strategy Aims and Actions relating to the preparation of a local environmental plan

Action	Assessment
change, councils will undertake investigations of lands with the potential to be affected by sea level rise and inundation to ensure that risks to public and private assets are minimised.	site is located outside the modelled inundation area of an ARI 100 year flood; however some areas are affected, towards the northern boundary of the site. Filling of affected areas above the ARI 100 year flood level, combined with flood modelling to ensure no adverse impacts upon the site or adjoining areas will address this risk. This can be completed at the development application stage.
Local environmental plans will make provision for adequate setbacks in areas at risk from coastal erosion and/or ocean based inundation in accordance with Coastal Zone Management Plans. Until these plans are made by the Minister for Natural Resources, councils cannot zone land or approve new development or redevelopment in potential hazard areas, unless assessed within a risk assessment framework adopted by the council.	Not applicable as the site is not subject to coastal erosion.
Local environmental plans will zone waterways to reflect their environmental, recreational or cultural values.	Not applicable – no waterways are located within the site boundaries.
Local environmental plans will zone areas subject to high hazard to reflect the capabilities of the land.	Not applicable.
Settlement and Housing	
Local environmental plans, local growth management strategies and other statutory planning controls will align with the Regional Strategy's settlement network (as shown on the Housing Map) to contain the spread of urban development, efficiently utilise existing services and infrastructure, and protect areas of high conservation value.	The proposal will expand the existing village footprint of Mooball in line with Council's Urban Land Release Strategy.
Local environmental plans will ensure that all new development reinforces existing urban and rural centres, towns and villages.	The site is situated adjacent to the existing Mooball village, and subsequently reinforces the village identity.
A land release staging program will be developed to ensure the orderly release of new housing.	The development will follow a structure of housing release to suit the current market conditions.
Where development or a rezoning increases the need for State infrastructure, the Minister for Planning may require a contribution towards the provision of such infrastructure.	The State Infrastructure Strategy for NSW 2008-2018 (NSW Treasury) contains several investments for the Tweed area, including an upgraded electricity distribution centre, and the Banora Point Pacific Highway Interchange project. It is considered that the Planning Proposal will not increase the need for State infrastructure.
Councils will plan for a range of housing types of appropriate densities, location and suitability that are capable of adapting and responding to the ageing of the population.	The proposed zoning includes provisions for a range of lot sizes including areas of minimum lot sizes of 250m ² to 2 hectares. These lot sizes will ensure a range of housing types can be incorporated into the site. The range of lot sizes also provides varying degrees of density within the site, which will suit future adaptation to meet the needs of the ageing population.

Assessment against the Far North Coast Regional Strategy Aims and Actions relating to the preparation of a local environmental plan

Action	Assessment
Local government will consider a range of affordable housing strategies, including forms of low cost housing, suitable zonings and development controls to improve housing choice, and specific schemes. These strategies must be consistent with relevant State policies.	The Planning Proposal incorporates provisions that guide minimum lot sizes over the site, facilitating a range of housing choice to occur within the development.
Local environmental plans generally should locate major health and educational facilities in urban areas.	Not applicable – no major health or education facilities are proposed.
Local environmental plans cannot use the Transition Zone in the Standard Instrument (Local Environmental Plans) Order 2006 to identify land for future urban investigation purposes.	The proposal does not use any transition zone for future urban investigation.
Local environmental plans will maintain interurban breaks between existing and new settlements.	The proposal is a continuation of the existing Mooball village and preserves existing interurban breaks between villages.

Town and Village Growth Boundary

The Town and Village Growth Boundary is defined by the Town and Village Growth Boundary Map	The site is not located within the existing Town and Village Growth Boundary; however it is identified within the Tweed Urban Land Release Strategy as being 'potential urban release lands'. The Planning Proposal presents an orderly continuation of the existing Mooball village urban footprint.
No land in the Coastal Area will be released other than land identified within the Town and Village Growth Boundary or within an approved rural residential release strategy.	Not applicable – the site is not located within the Coastal Area.
Councils will prepare a Local Growth Management Strategy prior to zoning further land for urban, commercial and industrial uses in accordance with the Settlement Planning Guidelines.	The TULR Strategy was released in 2009, and identifies the land as being 'potential urban release lands' (Area 9). The short-term timing for the rezoning of Area 9, under this strategy, assumes that 80% of the site will yield lots. While the TULR Strategy is not a Local Growth Management Strategy, it provides strategic direction for future development within the Shire and this Planning Proposal implements this TULR Strategy. A future development control plan (DCP) will address issues affecting specific development controls over the site.
Councils will demonstrate through the Local Growth Management Strategy how dwelling targets (Table 1) for each local government area will be met in local environmental plans.	The rezoning of the site to allow for residential development will assist in meeting part of the 19,100 dwellings required to 2031 within the Tweed area.
Planning for urban land must be integrated with the supply of relevant infrastructure and transport provision.	The proposed development is situated adjacent to the Tweed Valley Way, which links the Pacific Highway from the south with Murwillumbah. As discussed previously, a privately funded sewerage treatment plant will be provided as part of the development of the site.
Any development proposed for greenfield sites in the non-coastal area that is located outside of the Town and Village Growth Boundary will be subject to satisfying the Sustainability Criteria (Attachment 1).	An assessment against the FNCRS Sustainability Criteria has been completed above.

Assessment against the Far North Coast Regional Strategy Aims and Actions relating to the preparation of a local environmental plan

Action	Assessment
Settlement Character and Design	
Councils should prepare desired character statements for their localities that include provisions (through a development control plan) to ensure that new development enhances the desired character.	A Development Control Plan is recommended for the site, and will be completed once the LEP is amended.
New development should be designed to respond to the subtropical climate of the Region through best practice in water and energy efficient design, and use of landscaping and building materials.	Any future development on the site will be subject to assessment under the Development Assessment process.
New development should be designed to reflect and enhance the natural, cultural, visual and built character and values of the local and regional landscape.	Any future development on the site will be subject to the Development Assessment process and the relevant legislative requirements under the Tweed Shire Council's LEP and DCP.
New and changing urban areas should provide access to natural features such as coastal foreshore and riparian land in a manner that is consistent with the maintenance of their ecological values.	Not applicable. The site is not located within a coastal foreshore or riparian land area.
New and changing settlement areas should incorporate open space that is accessible to the public, which provides opportunities for recreation, nature conservation, social interaction, and for visual enhancement and amenity.	The subject land will allow for the orderly expansion of the Mooball village. As part of the concept plan submitted as part of the request for Planning Proposal, there are various spaces for recreational purposes proposed, which are connected to pathways providing linkages throughout the site.
Local environmental plans will set building heights in urban areas that reflect the landscape character, function and hierarchy of the future settlement and visual and cultural amenity of its location.	Building height controls are expected to be consistent with the current LEP 2000 and draft LEP 2010.
Local environmental plans for areas subject to the NSW Coastal Policy (NSW Government 1997) will incorporate provisions to achieve the outcomes of the Coastal Policy in respect to overshadowing. Generally, development on urban land in Tweed Heads, Kingscliff, Byron Bay and Ballina will not result in the beach or adjoining open space being overshadowed before 3.00 p.m. midwinter (standard time) or 6.30 p.m. midsummer (daylight savings time). For other beaches or waterfront open space in the Region, development will not result in overshadowing before 4.00 p.m. midwinter or 7.00 p.m. midsummer (daylight saving time).	The subject land is not within the coastal zone and is therefore not subject to the NSW Coastal Policy.
Local environmental plans and development control plans (and subsequent land release development) will be consistent with the Settlement Planning Guidelines, and the Government's <i>Coastal Design Guidelines for NSW</i> (2003) as applicable.	The proposal is broadly consistent with the Settlement Planning Guidelines. As the site is not a coastal site, it is not considered necessary to comply with the Government's Coastal Design Guidelines.
Water and Energy Resources	
Councils are to complete Integrated Water Cycle Management Plans.	Council has an existing Integrated Water Cycle Management Plan in place. This plan is being reviewed in 2012 in accordance with Office of Water requirements.

Assessment against the Far North Coast Regional Strategy Aims and Actions relating to the preparation of a local environmental plan

Action	Assessment
Local environmental plans will recognise and protect the regional water supply system through appropriate planning provisions.	The site is not within a water supply catchment; therefore, this is not specific to this proposal.
In preparing local environmental plans councils will liaise with water and energy providers and make provision for any regional gas, water and electricity infrastructure corridors that may be required.	Appropriate consultation with other services will be undertaken with service providers during the consultation phase of the Planning Proposal and future stages of development. There are no known capacity constraints.
All future development is to apply water sensitive urban design principles, including the use of dual use reticulation systems in releases of adequate scale, and meet storm water management targets that support the environmental values of the catchments.	Water Sensitive Urban Design Principles will apply to any future development on the land to which this Planning Proposal applies.
Regional Transport	
Local environmental plans will provide for passenger interchanges in all major regional centres, major towns and towns. These interchanges will be well connected to pedestrian and cycle ways	Mooball is not identified as, nor expected to grow into, a major regional centre, major town or town. The area is recognised in strategic documents as a village.
Land use and transport planning must be integrated to minimise the need to travel, and to encourage energy and resource efficiency.	With the expansion of the Mooball village footprint, and the inclusion of local community facilities proposed within the development, the area can become self-sufficient in terms of basic services, subsequently reducing dependence on the larger population centres of Murwillumbah and Tweed Heads. The site is afforded access to the Pacific Highway via Tweed Valley Way, with the former allowing north and south transit to Tweed Heads and Byron Bay respectively.
Local environmental plans are to recognise and protect the regional transport network through appropriate planning provisions.	The proposal will not impact on the regional transport networks.
Implementation	
This Regional Strategy will be implemented primarily through local environmental plans, development control plans, the State Infrastructure Strategy and funds collected as development contributions.	This Planning Proposal is broadly consistent with the Housing and Settlement provisions of the FNCRS and the sustainability criteria contained in Attachment 1 of the Strategy.
The State Infrastructure Strategy 2006–07 to 2015–16 identifies infrastructure projects in the short to medium-term that (among other things) support population growth and demographic change in the Far North Coast. A list of projects from this Strategy is contained in Attachment 3 of the FNCRS.	There are no applicable infrastructure projects for Mooball identified in the State Infrastructure Strategy.
The Regional Strategy sets out the agreed position of the NSW Government on the future of the Far North Coast Region. The Regional Strategy is recognised by the State Infrastructure Strategy as a long term planning strategy to be used by State agencies and public trading enterprises to understand the future infrastructure needs of the Region.	The Planning Proposal is considered to be consistent with the relevant provisions of the Far North Coast Regional Strategy as discussed above.

Assessment against the Far North Coast Regional Strategy Aims and Actions relating to the preparation of a local environmental plan

Action	Assessment
Where development or rezoning increases the need for state infrastructure, the Minister for Planning may require a contribution towards the provision of such infrastructure.	There are no applicable state infrastructure items identified for Mooball.

Is the Planning Proposal consistent with the local Council's Community Strategic Plan, or other local strategic plan?

The Tweed Community Strategic Plan (TCSP) 2011-21 was adopted on 14 December 2010. The plan is based on 4 key themes, Civic Leadership, Supporting Community Life, Strengthening the Economy, Caring for the Environment.

This plan, prepared with extensive community consultation, provides the overarching framework and vision for the Tweed for the next 10 years.

The relevant objectives of the plan include:

Objective 1.5. Manage and plan for a balance between population growth, urban development and environmental protection and the retention of economically viable agricultural land.

Objective 2.2 Improve opportunities for housing choice.

Objective 3.3.1 Establish planning controls that balance the need for urban growth against the protection of agriculture, village character and the environment.

The Planning Proposal is consistent with the Community Strategic Plan as it seeks to balance urban growth and environmental and agricultural protection. The locality adjoins the established Mooball village footprint. Despite the site being zoned for rural uses, the site is presently not utilised for agricultural purposes. The Planning Proposal represents the natural expansion of the village footprint which will provide further housing choice within the region. A Development Control Plan is recommended following amendment of the LEP that buffers the agricultural land to the east of the site.

Is the Planning Proposal consistent with the applicable State Environmental Planning Policies (SEPPs)?

This site is not subject to the application of *SEPP 14 Coastal Wetlands*, *SEPP 26 Littoral Rainforest* or *SEPP 71 Coastal Protection*.

The Planning Proposal is of a scale and nature that will not trigger the application of *SEPP (Major Development) 2007*.

The SEPPs, discussed in Table 8, apply to the site:

Table 8 Assessment against State Environmental Planning Policies

State Environmental Planning Policy Assessment	
State Environmental Planning Policy	Comments / Assessment

State Environmental Planning Policy Assessment

State Environmental Planning Policy

Comments / Assessment

State Environmental Planning Policy (North Coast Regional Environmental Plan)

This Policy applies to the site and the following clauses are particularly relevant to this Planning Proposal:

Clause 12 – Development control – impact of development on agricultural activities

The Planning Proposal rezones rural land to a mixture of zones which permit residential development, resulting in the expansion of the existing Mooball village footprint.

An existing banana plantation is located adjacent to the eastern boundary of the site. A Development Control Plan is recommended subsequent to the LEP that implements appropriate setbacks to the boundary, minimising the impact of the proposed development on the adjacent agricultural land.

Clause 38 – Urban Release Strategy

The site is adjacent the Far North Coast Regional Strategy urban area of Mooball. Consistency with the Far North Coast Regional Strategy sustainability criteria is addressed above, and subsequently it is considered suitable that this proposal be supported, as the rezoning allows for the expansion of the Mooball village. Development codes within a Development Control Plan will ensure that the village identity of the area is maintained through the development assessment process.

Clause 43 – Development control – residential development

The Planning Proposal incorporates a variety of minimum lot sizes in response to the environmental constraints affecting the site, and the proximity of the northern part of the site to existing business and community infrastructure.

The existing road network has capacity to support the future development of the site to its full extent.

Clause 45 – Hazards

Of the listed hazards, the site has the potential for contaminated land and geological or soil instability. These findings are from preliminary investigations only, which indicate the potential for these hazards. Additional work is required to confirm the existence of these hazards. Council bushfire mapping indicates a bushfire hazard due to Category 1 Vegetation in the south-western corner of the site. A Development Control Plan is recommended to guide development sites on future lots to reduce the risk of impacts from these hazards.

Clause 45A – Flood liable land

The site contains an area along the northern boundary which is identified as flood prone by Council's mapping. The Planning Proposal seeks to rezone part of flood-affected area from rural to village, to allow for residential development over the site. It is anticipated earthworks will be required to raise affected parts of the site above relevant flood levels, along with flood modelling to ensure no impact upon existing or future residents and infrastructure. This can be undertaken at the development application stage.

State Environmental Planning Policy No. 44 – Koala Habitat

This SEPP aims to encourage the proper conservation and management of areas of natural vegetation that provide habitat for koalas. It requires the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat.

The site does not contain any mapped primary or secondary Koala habitat areas.

State Environmental Planning Policy Assessment	
State Environmental Planning Policy	Comments / Assessment
State Environmental Planning Policy No. 55 – Remediation of Land	This SEPP introduces planning controls for the remediation of contaminated land. The policy states that land must not be developed if contamination renders it unsuitable for a proposed use. If the land is unsuitable, remediation must take place before the land is developed. The site is also classified under Council's maps to contain Class 5 Acid Sulfate Soils. Subsequently, additional studies should occur as recommended in the Precise Site Assessment (Contamination) Report, as the studies done to date are purely preliminary. However, the report states that no residential criteria were exceeded for contaminants, and that further detailed investigation should not restrict or delay the Planning Proposal process, as broad scale contamination has not been detected.
State Environmental Planning Policy (Major Development) 2005	The Major Development SEPP applies to State significant projects and those to which Part 3A (now repealed) applied. The site is not affected by any Major Development criteria nor does the development proposed trigger any state significance.
State Environmental Planning Policy (Infrastructure) 2007 – Schedule 3	The SEPP for Infrastructure allows for greater flexibility in the location of infrastructure and service facilities along with providing consultation with the relevant public authorities during the assessment process. In this case, this SEPP is not applicable to this proposal.
State Environmental Planning Policy No. 71 – Coastal Protection	This SEPP aims to protect the NSW coast. The site is not located within the coastal zone, and is also not affected by the NSW Coastal Policy 1997.
State Environmental Planning Policy No. 60 – Exempt and Complying Development	This Policy does not apply to the Tweed local government area as listed in Schedule 1.
State Environmental Planning Policy (Rural Lands) 2008	This Policy applies to land which is zoned as rural land for the purpose of promoting the State's social, economic and environmental welfare. There is no mention of a prohibition on rezoning from rural land to a residential form. However, while land in a rural zone can be subdivided to create a smaller lot that is less than the minimum size permitted for that land for the purpose of primary production only, no dwellings are permitted to be situated on the smaller lot. It is considered that this Planning Proposal is not inconsistent with this SEPP. It should be noted that the Tweed Urban Land Release Strategy, developed in response to the FNCRS, designates the site as 'Potential Urban Release Lands' to help the Tweed area provide an additional 19,100 dwellings by 2031. The Planning Proposal facilitates the provision of additional dwellings, in an area which is appropriate for such development.

Is the Planning Proposal consistent with applicable Ministerial Directions (s117 Directions)?

Consistency with the s117 Directions is assessed in Table 6.

Table 9 Consistency with s17(2) Ministerial Directions

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
1. Employment and Resources			
1.1 Business and Industrial Zones	Applies when a relevant planning authority prepares a Planning Proposal that will affect land within an existing or proposed business or industrial zone (including the alteration of any existing business or industrial zone boundary).	This Planning Proposal does not affect business or industrial zones.	N/A
1.2 Rural Zones	Applies when a relevant planning authority prepares a Planning Proposal that will affect land within an existing or proposed rural zone (including the alteration of any existing rural zone boundary). Under this direction a Planning Proposal must: (a) not rezone land from a rural zone to a residential, business, industrial, village or tourist zone. (b) not contain provisions that will increase the permissible density of land within a rural zone (other than land within an existing town or village).	The Planning Proposal is inconsistent with this direction, however can be justified by the following: - The site is located directly adjacent to the identified existing urban footprint of Mooball within the Far North Coast Regional Strategy. Subsequently, the rezoning will produce a natural expansion of the Mooball village footprint. Development on this site will assist in achieving the required 19,100 additional new dwellings to 2031 within the Tweed area, as stated within the Strategy. - The site is also located within a 'Potential Urban Release Land' within the Tweed Urban Land Release Strategy, and is suitable for residential development. - The land has been clearly identified with this report and the original request for a planning proposal documentation. - The vast majority of the site is classified as agricultural land suitable for grazing but not cultivation, and bananas. The existing banana plantation (outside of the site) is to remain, however given the lack of agricultural merit the site has, redevelopment to expand the village footprint is highly suitable.	Inconsistent, but justified by a strategy, Tweed Urban Land Release Strategy (part (e))
1.3 Mining, Petroleum	Applies when a relevant planning authority prepares a	The proposal does not seek to allow for extractive industry within the area. However, the proposed rezoning of part of	Consistent

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
Production and Extractive Industries	Planning Proposal that would have the effect of: (a) prohibiting the mining of coal or other minerals, production of petroleum, or winning or obtaining of extractive materials, or (b) restricting the potential development of resources of coal, other minerals, petroleum or extractive materials which are of State or regional significance by permitting a land use that is likely to be incompatible with such development.	the site to 7(d) Scenic/Escarpment allows extractive industries with consent, subsequently not prohibiting the future potential for mining. Mining is subject to the controls of the SEPP Mining, Petroleum Production and Extractive Industries 2007.	
1.4 Oyster Aquaculture	Applies when a relevant planning authority prepares any Planning Proposal that proposes a change in land use which could result in: (a) adverse impacts on a Priority Oyster Aquaculture Area or a "current oyster aquaculture lease in the national parks estate"; or (b) incompatible use of land between oyster aquaculture in a Priority Oyster Aquaculture Area or a "current oyster aquaculture lease in the national parks estate" and other land uses.	This Planning Proposal does not impact on a Priority Oyster Aquaculture Area.	N/A
1.5 Rural Lands	Applies when: (a) a relevant planning authority prepares a Planning Proposal that will affect land within an existing or proposed rural or environment protection zone (including the alteration of any existing rural or environment protection zone boundary) or (b) a relevant planning authority prepares a Planning Proposal that changes the existing minimum lot size on land within a rural or environment protection zone. A Planning Proposal to which clauses (a) and (b) apply must be consistent with the Rural Planning Principles listed in <i>State Environmental Planning Policy (Rural Lands) 2008</i>.	The Planning Proposal seeks to rezone land from a rural zoning to a residential and environmental protection zone, to allow for the natural expansion of the Mooball village footprint. This rezoning is not inconsistent with the <i>State Environmental Planning Policy (Rural Lands) 2008</i>, which states that councils can exercise their functions relating to local environmental plans in accordance with the Rural Planning Principles. The TULR Strategy identifies the site as 'Potential Urban Release Lands' to help the Tweed area provide an additional 19,100 dwellings by 2031. The Planning Proposal facilitates the provision of additional dwellings, in an area which is appropriate for such development.	Inconsistent, but justified by the Tweed Urban Land Release Strategy.

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
	A Planning Proposal to which clause (b) applies must be consistent with the Rural Subdivision Principles listed in <i>State Environmental Planning Policy (Rural Lands) 2008</i> .	As previously identified above: - The site is located directly adjacent to the identified existing urban footprint of Mooball. Subsequently, the rezoning will produce a natural expansion of the Mooball village footprint. Development on this site will assist in achieving the required 19,100 additional new dwellings to 2031 within the Tweed area, as stated within the TULR Strategy. - The site is also located within a 'Potential Urban Release Land' within the Tweed Urban Land Release Strategy, and is suitable for residential development. Given the lack of agricultural importance the site has, redevelopment to expand the village footprint is appropriate.	
2. Environment and Heritage			
2.1 Environment Protection Zones	(4) A Planning Proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas. (5) A Planning Proposal that applies to land within an environment protection zone or land otherwise identified for environment protection purposes in a LEP must not reduce the environmental protection standards that apply to the land (including by modifying development standards that apply to the land). This requirement does not apply to a change to a development standard for minimum lot size for a dwelling in accordance with clause (5) of Direction 1.5 "Rural Lands".	Parts of the site are ecologically sensitive and are located in the 7(d) or 7(l) zones under the LEP 2000, or E3 zone under the Standard Template LEP.	Consistent
2.2 Coastal Protection	Direction applies when a relevant planning authority prepares a Planning Proposal that applies to land in the coastal zone.	This proposal is not located within the coastal zone.	N/A

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
2.3 Heritage Conservation	A Planning Proposal must contain provisions that facilitate the conservation of: (a) items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area, (b) Aboriginal objects or Aboriginal places that are protected under the <i>National Parks and Wildlife Act 1974</i>, and (c) Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people.	The site contains no identified heritage items under the current or draft LEP. The proposal is supported by an Aboriginal Cultural Heritage Due Diligence Assessment, provided in Attachment 6. This report finds: - no known Aboriginal objects or places were identified within the site; - the possibility of significant Aboriginal cultural heritage being located within the site can be eliminated; - there are no historic (non-indigenous) listed cultural heritage places within the site; - the site has seen complete ground disturbance, having previously been cleared and subject to sugar cane cultivation; and - the report provides cautionary recommendations for proceeding should Aboriginal cultural heritage relics be revealed during development.	Consistent
2.4 Recreation Vehicle Areas	A Planning Proposal must not enable land to be developed for the purpose of a recreation vehicle area (within the meaning of the <i>Recreation Vehicles Act 1983</i>): (a) where the land is within an environmental protection zone, (b) where the land comprises a beach or a dune adjacent to or adjoining a beach, (c) where the land is not within an area or zone referred to in paragraphs (4)(a) or (4)(b) unless the relevant planning authority has taken into consideration: (i) the provisions of the guidelines entitled <i>Guidelines for Selection, Establishment and</i>	The proposal does not enable land to be developed for the purpose of a recreation vehicle area.	Consistent

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
	<i>Maintenance of Recreation Vehicle Areas, Soil Conservation Service of New South Wales, September, 1985, and</i> (ii) the provisions of the guidelines entitled <i>Recreation Vehicles Act, 1983, Guidelines for Selection, Design, and Operation of Recreation Vehicle Areas, State Pollution Control Commission, September 1985.</i>		
3. Housing, Infrastructure and Urban Development			
3.1 Residential Zones	(3) This direction applies when a relevant planning authority prepares a Planning Proposal that will affect land within: (a) an existing or proposed residential zone (including the alteration of any existing residential zone boundary), (b) any other zone in which significant residential development is permitted or proposed to be permitted. (4) A Planning Proposal must include provisions that encourage the provision of housing that will: (a) broaden the choice of building types and locations available in the housing market, and (b) make more efficient use of existing infrastructure and services, and (c) reduce the consumption of land for housing and associated urban development on the urban fringe, and (d) be of good design. (5) A Planning Proposal must, in relation to land to which this direction applies: (a) contain a requirement that residential development is not permitted until land is	The Planning Proposal facilitates a variety of housing types in response to the opportunities and constraints affecting the site, through a minimum lot size plan under the Standard Template LEP. Smaller lot sizes are promoted adjacent to the existing Mooball village footprint, encouraging a greater proportion of housing adjacent to the existing village. The site's proximity to the existing Mooball village footprint enables the efficient use of infrastructure servicing the site. Residential design will be undertaken in accordance with relevant standards. Provision exists for innovative solutions for housing in the southern parts of the site where the slope is steeper. A Development Control Plan can provide additional guidance on design principles.	Consistent

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
	adequately serviced (or arrangements satisfactory to the council, or other appropriate authority, have been made to service it), and (b) not contain provisions which will reduce the permissible residential density of land.		
3.2 Caravan Parks and Manufactured Home Estates	Applies when a relevant planning authority prepares a Planning Proposal. (1) In identifying suitable zones, locations and provisions for caravan parks in a Planning Proposal, the relevant planning authority must: (a) retain provisions that permit development for the purposes of a caravan park to be carried out on land, and (b) retain the zonings of existing caravan parks, or in the case of a new principal LEP zone the land in accordance with an appropriate zone under the Standard Instrument (Local Environmental Plans) Order 2006 that would facilitate the retention of the existing caravan park. (2) In identifying suitable zones, locations and provisions for manufactured home estates (MHEs) in a Planning Proposal, the relevant planning authority must: (a) take into account the categories of land set out in Schedule 2 of SEPP 36 as to where MHEs should not be located, (b) take into account the principles listed in clause 9 of SEPP 36 (which relevant planning authorities are required to consider when assessing and determining the development and subdivision proposals), and (c) include provisions that the subdivision of	The Planning Proposal does not seek development for the purposes of a caravan park or manufacture homes estate nor does it impact upon any land that does permit development for the purposes of a caravan park or manufacture homes estate.	N/A

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
	MHEs by long term lease of up to 20 years or under the <i>Community Land Development Act 1989</i> be permissible with consent.		
3.3 Home Occupations	Planning proposals must permit home occupations to be carried out in dwelling houses without the need for development consent.	The rezoning of part of the site to 2(d) Village under the LEP 2000, or RU5 under the Standard Template LEP will enable home occupations without development consent.	Consistent
3.4 Integrating Land Use and Transport	Applies when a relevant planning authority prepares a Planning Proposal that will create, alter or remove a zone or a provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes. (3) A Planning Proposal must locate zones for urban purposes and include provisions that give effect to and are consistent with the aims, objectives and principles of: (a) <i>Improving Transport Choice – Guidelines for planning and development</i> (DUAP 2001), and (b) <i>The Right Place for Business and Services – Planning Policy</i> (DUAP 2001).	The development of the site for village purposes will result in an increase in population in the area. Mooball is serviced by an infrequent bus service operated by Parsons Buslines, connecting the village with Murwillumbah and Pottsville. The Planning Proposal does not propose any traffic generating business, as this will be assessed at the development application stage. Under SEPP (Infrastructure) 2007 any proposal is required to be referred to the RTA if it meets the requirements under Schedule 3. It is considered that due to the number of dwellings proposed within the development, the number of motor vehicles present will be greater than 200, which triggers consultation with Roads and Maritime Services.	Consistent
3.5 Development Near Licensed Aerodrome	Applies when a relevant planning authority prepares a Planning Proposal that will create, alter or remove a zone or a provision relating to land in the vicinity of a licensed aerodrome.	The Planning Proposal does not create, alter or remove a zone or provision relating to an airport.	N/A
3.6 Shooting ranges	This direction applies when a relevant planning authority prepares a Planning Proposal that will affect, create, alter or remove a zone or a provision relating to land adjacent to and/ or adjoining an existing shooting range.	The Planning Proposal does not create, alter or remove a zone or a provision relating to land adjacent to and/ or adjoining an existing shooting range.	N/A
4. Hazard and Risk			

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
4.1 Acid Sulphate Soils	Applies when a relevant planning authority prepares a Planning Proposal that will apply to land having a probability of containing acid sulphate soils as shown on the Acid Sulphate Soils Planning Maps. (4) The relevant planning authority must consider the Acid Sulphate Soils Planning Guidelines adopted by the Director-General of the Department of Planning (5) When a relevant planning authority is preparing a Planning Proposal to introduce provisions to regulate works in acid sulphate soils, those provisions must be consistent with: (a) the Acid Sulphate Soils Model LEP in the Acid Sulphate Soils Planning Guidelines adopted by the Director-General, or (b) such other provisions provided by the Director-General of the Department of Planning that are consistent with the Acid Sulphate Soils Planning Guidelines. (6) A relevant planning authority must not prepare a Planning Proposal that proposes an intensification of land uses on land identified as having a probability of containing acid sulphate soils on the Acid Sulphate Soils Planning Maps unless the relevant planning authority has considered an acid sulphate soils study assessing the appropriateness of the change of land use given the presence of acid sulphate soils. The relevant planning authority must provide a copy of any such study to the Director-General prior to undertaking community consultation in satisfaction of section 57 of the Act. (7) Where provisions referred to under paragraph (5) of this direction have not been introduced and the relevant planning authority is preparing a	The site is identified on the draft Tweed LEP 2010 Acid Sulphate Soils (ASS) map as containing Class 5 ASS, and therefore there is a low probability of the site containing Acid Sulphate Soils. This is supported by the submitted contaminated report by Precise Environmental supporting the Request for Planning Proposal, which states that while Council mapping indicates Class 5 ASS, the NSW Natural Resource Atlas database does not indicate the site is subject to ASS risk. It is considered appropriate that this issue be addressed with the correct reporting and identification processes at the development application phase for the future development of the site.	N/A

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
	Planning Proposal that proposes an intensification of land uses on land identified as having a probability of acid sulphate soils on the Acid Sulphate Soils Planning Maps, the Planning Proposal must contain provisions consistent with paragraph (5).		
4.2 Mine Subsidence and Unstable Land	Applies when a relevant planning authority prepares a Planning Proposal that permits development on land that: (a) is within a mine subsidence district, or (b) has been identified as unstable in a study, strategy or other assessment undertaken: (i) by or on behalf of the relevant planning authority, or (ii) by or on behalf of a public authority and provided to the relevant planning authority.	The Planning Proposal does not impact on any mine subsidence area.	N/A
4.3 Flood Prone Land	Applies when a relevant planning authority prepares a Planning Proposal that creates, removes or alters a zone or a provision that affects flood prone land. (4) A Planning Proposal must include provisions that give effect to and are consistent with the NSW Flood Prone Land Policy and the principles of the <i>Floodplain Development Manual 2005</i> (including the <i>Guideline on Development Controls on Low Flood Risk Areas</i>). (5) A Planning Proposal must not rezone land within the flood planning areas from Special Use, Special Purpose, Recreation, Rural or Environmental Protection Zones to a Residential, Business, Industrial, Special Use or Special Purpose Zone. (6) A Planning Proposal must not contain provisions that apply to the flood planning areas which:	The majority of the site is located outside of an ARI 100 year flood area, however the northern part of Lot 2 DP534493 is identified within Council's mapping as being subject to flooding under a Probable Maximum Flood (PMF). This northern area is also subject to flooding, with a flood contour level of 12.2m AHD. The inconsistency with the direction is justified as Section 1.5 of Council's 'Policy – Flood Risk Management', developed in accordance with the NSW Floodplain Development Manual, identifies that residents within flood-prone areas can relocate to flood free areas as a result of the natural topography of the site (refer to Table 1, Land Type 2a within the Policy), resulting in the Planning Proposal being acceptable for further consideration.	Inconsistent, but justified against a floodplain risk management plan

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
	(a) permit development in floodway areas, (b) permit development that will result in significant flood impacts to other properties, (c) permit a significant increase in the development of that land, (d) are likely to result in a substantially increased requirement for government spending on flood mitigation measures, infrastructure or services, or (e) permit development to be carried out without development consent except for the purposes of agriculture (not including dams, drainage canals, levees, buildings or structures in floodways or high hazard areas), roads or exempt development. (7) A Planning Proposal must not impose flood related development controls above the residential flood planning level for residential development on land, unless a relevant planning authority provides adequate justification for those controls to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General). (8) For the purposes of a Planning Proposal, a relevant planning authority must not determine a flood planning level that is inconsistent with the Floodplain Development Manual 2005 (including the <i>Guideline on Development Controls on Low Flood Risk Areas</i>) unless a relevant planning authority provides adequate justification for the proposed departure from that Manual to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General).		

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
4.4 Planning for Bushfire Protection	Applies when a relevant planning authority prepares a Planning Proposal that will affect, or is in proximity to land mapped as bushfire prone land. (9) In the preparation of a Planning Proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 56 of the Act, and prior to undertaking community consultation in satisfaction of section 57 of the Act, and take into account any comments so made, (10) A Planning Proposal must: (a) have regard to <i>Planning for Bushfire Protection 2006</i>, (b) introduce controls that avoid placing inappropriate developments in hazardous areas, and (c) ensure that bushfire hazard reduction is not prohibited within the APZ. (11) A Planning Proposal must, where development is proposed, comply with the following provisions, as appropriate: (a) provide an Asset Protection Zone (APZ) incorporating at a minimum: (i) an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and (ii) an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road,	A proportion of the site is identified as being subject to bushfires (along the southern boundary and south-western corner). These areas are proposed to be zoned as non-residential environmental areas due to the steep elevations present. This will act as a buffer zone between residential properties and the southern bushfire prone area. As the site is located in proximity to land mapped as bushfire prone land, it is recommended consultation with the Rural Fire Service be undertaken following receipt of a gateway determination.	Yes

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
	(b) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the Planning Proposal permit Special Fire Protection Purposes (as defined under section 100B of the <i>Rural Fires Act 1997</i>), the APZ provisions must be complied with, (c) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks, (d) contain provisions for adequate water supply for firefighting purposes, (e) minimise the perimeter of the area of land interfacing the hazard which may be developed, (f) introduce controls on the placement of combustible materials in the Inner Protection Area.		
5. Regional Planning			Consistent
5.1 Implementation of Regional Strategies	Planning proposals must be consistent with a regional strategy released by the Minister for Planning.	The site is identified as being located outside the urban growth boundary of the FNCRS, however is identified within the Tweed Urban Land Release Strategy 2009 (prepared in response to the FNCRS) as an area for future urban development (Area 9). This Planning Proposal includes an assessment against the sustainability criteria, indicating consistency with the FNCRS.	
5.2 Sydney Drinking Water Catchments	Applies when a relevant planning authority prepares a Planning Proposal that applies to the hydrological catchment.	The site is not within this catchment.	N/A

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
5.3 Farmland of State and Regional Significance on the NSW Far North Coast	Applies (to Tweed) when a relevant planning authority prepares a Planning Proposal for land mapped as: (a) State significant farmland, or (b) regionally significant farmland, or (c) significant non-contiguous farmland, on the set of four maps held in the Department of Planning and marked "Northern Rivers Farmland Protection Project, Final Map 2005 (Section 117(2) Direction)". A Planning Proposal must not: (a) rezone land identified as "State Significant Farmland" for urban or rural residential purposes. (b) rezone land identified as "Regionally Significant Farmland" for urban or rural residential purposes. (c) rezone land identified as "significant non-contiguous farmland" for urban or rural residential purposes.	The site does not contain land identified as state significant farmland, regionally significant farmland, or significant non-contiguous farmland.	N/A
5.4 Commercial and Retail Development along the Pacific Highway, North Coast	Applies when a relevant planning authority prepares a Planning Proposal for land in the vicinity of the existing and/or proposed alignment of the Pacific Highway.	This proposal is not within the alignment of the Pacific Highway, nor does it propose a highway service centre.	N/A
5.8 Second Sydney Airport: Badgerys Creek	Planning proposals must not contain provisions that enable the carrying out of development, either with or without development consent, which at the date of this direction, could hinder the potential for development of a Second Sydney Airport.	N/A. The site is not situated near any potential second Sydney Airport site.	N/A
6. Local Plan Making			
6.1 Approval and	A Planning Proposal must:	The Planning Proposal will not include provisions that	Consistent

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
Referral Requirements	(a) minimise the inclusion of provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority, and (b) not contain provisions requiring concurrence, consultation or referral of a Minister or public authority unless the relevant planning authority has obtained the approval of: (i) the appropriate Minister or public authority, and (ii) the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General), prior to undertaking community consultation in satisfaction of section 57 of the Act, and (c) not identify development as designated development unless the relevant planning authority: (i) can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the class of development is likely to have a significant impact on the environment, and (ii) has obtained the approval of the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) prior to undertaking community consultation in satisfaction of section 57 of the Act.	require; the concurrence, consultation or referral of development applications to a Minister or public authority.	
6.2 Reserving Land for Public Purposes	(4) A Planning Proposal must not create, alter or reduce existing zonings or reservations of land for public purposes without the approval of the relevant public authority and the Director-General	The Planning Proposal does not create, alter or reduce land reserved for a public purpose. There has been no request from the Minister or public authority to reserve land for a public purpose at this stage.	Yes

S117 Direction	Application	Relevance to this Planning Proposal	Consistency with direction
6.3 Site Specific Provisions	of the Department of Planning (or an officer of the Department nominated by the Director-General). Applies when a relevant planning authority prepares a Planning Proposal that will allow a particular development to be carried out. (4) A Planning Proposal that will amend another environmental planning instrument in order to allow a particular development proposal to be carried out must either: (a) allow that land use to be carried out in the zone the land is situated on, or (b) rezone the site to an existing zone already applying in the environmental planning instrument that allows that land use without imposing any development standards or requirements in addition to those already contained in that zone, or (c) allow that land use on the relevant land without imposing any development standards or requirements in addition to those already contained in the principal environmental planning instrument being amended. (5) A Planning Proposal must not contain or refer to drawings that show details of the development proposal.	The Planning Proposal seeks to zone the land appropriate to the land uses proposed and does not seek to include additional uses beyond what is permitted with the land use table.	Yes
7. Metropolitan Planning			
7.1 Implementation of the Metropolitan Strategy	This direction applies to Sydney metropolitan councils only.	N/A	N/A

Section C Environmental, Social and Economic Impact

Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats will be adversely affected as a result of the proposal?

Tweed Shire Council Vegetation Management Plan Mapping identifies various parts of the site, including in particular an area in the south-western corner of the site as being of ecological value. The Planning Proposal identifies that as an environmental management area. Subsequently, the subdivision plan will also identify this area and minimise the potential for development to occur with the ecologically sensitive area.

Are there any other likely environmental effects as a result of the Planning Proposal and how are they proposed to be managed?

- The north western part of the site zoned 7(l) Environmental Protection (Habitat) will include a road connecting the two adjacent areas zoned 2(d) Village.
- The parts of the site to be zoned 7(l) Environmental Protection (Habitat) will also include swales for stormwater conveyance, and stormwater treatment devices.

At the development application stage, further design will be required of road crossings and stormwater infrastructure to ensure those features do not cause any adverse impact upon the surrounding environment.

How has the Planning Proposal adequately addressed any social and economic effects?

The current population of Mooball is estimated at 170 persons, with the development once fully completed expected to increase the population to 1053 persons (up 883). At present the village contains mainly convenience services which have been declining since the Pacific Highway Tweed Valley Way bypass was opened.

The zonings proposed as part of the Planning Proposal have the capacity to accommodate small convenience facilities to complement the existing uses. Convenience facilities are identified within future development plans to allow for the strengthening of the existing services if they are implemented within the final subdivision plan. It should be noted that there are currently no specific plans for convenience facilities and they will be subject to further assessment at the development application stage.

Regionally, further services and facilities are provided in Burringbar, Murwillumbah, Brunswick Heads and Tweed Heads, including health, fire, child-care, educational and public recreation facilities. While the proposal does include internal recreation sites, larger and more formalised sites are provided in the nearby higher population centres. Subsequently, as the ultimate population of the expanded Mooball village is not expected to be that of Murwillumbah for example, it is considered suitable that the existing services be strengthened by the proposed additional community services to enhance the Mooball village.

Section D State and Commonwealth Interests

Is there adequate public infrastructure for the Planning Proposal?

Transport

The Tweed Valley Way, once acting as the Pacific Highway, runs directly through the Mooball village. Tweed Valley Way provides access to Murwillumbah to the north-west and by also using the Pacific Highway, Byron Bay in the south. Pottsville Road (which intersects with Tweed Valley Way at Mooball) and Cudgera Creek Road provides access to Tweed Heads via the Pacific Highway. The Pacific Highway has just undergone an upgrade to increase capacity, and it is not expected that this rezoning will impact significantly on this.

Water Supply

As mentioned previously, it has been discussed between the proponent and Council to utilise a private water utility to service the development.

Sewer

Once again, discussions between the proponent and Council have determined that a private utility is the most suitable way to service the proposed development. This comes about due to the new Council sewerage scheme not having the capacity to include the Mooball residential development.

Power

Sufficient capacity has been designed into the existing system to accommodate the proposed expansion of the village zone.

Telephone

Sufficient capacity has been designed into the existing system to accommodate the proposed additional lots to be created from the area to be rezoned village.

In summary, given the scale of the rezoning and the potential lot yield, it is considered that all existing public infrastructure has adequate capacity to meet the additional demands generated by the development.

What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?

Consultation with the relevant public authorities will be subject to any requirements stipulated in a Gateway determination notice.

Part 4 Community Consultation

Assessment of Consultation Requirement

The Gateway Determination will specify the community consultation that must be undertaken on this Planning Proposal. The consultation will be tailored to specific proposals generally on the basis of a 14 day exhibition period for Low Impact Planning Proposals and a 28 day exhibition period for all other Planning Proposals.

A 'Low Impact Planning Proposal' is defined in the Department's Guideline 'A guide to preparing local environmental plans' and means a Planning Proposal that, in the opinion of the person making the Gateway Determination:

- is consistent with the pattern of surrounding land use zones and/or land uses
- is consistent with the strategic planning framework
- presents no issues with regard to infrastructure servicing
- is not a principal LEP
- does not reclassify public land.

Having regard to the definition of Low Impact Planning Proposals in that the village land use pattern remains consistent with the established land use pattern (that is, a village area surrounded by a rural zoning), the strategic direction for Mooball (as articulated through regional and local strategic documents), and infrastructure can be made available to the site through a private water utility, it is considered reasonable that the Planning Proposal be defined as a Low Impact Planning Proposal.

Summary and Conclusions

The Planning Proposal involves an expansion of the existing Mooball village footprint, by rezoning 5861 and 5867 Tweed Valley Way, Mooball, from rural to village (with environmental and infrastructure zonings included), forming an expanded 'site'. The site is located directly adjacent to the existing village of Mooball. At a local level, the site is designated for rural purposes through the Draft LEP 2010.

The site is serviced by public transport and is accessed via Tweed Valley Way, which interchanges with the Pacific Highway. The Planning Proposal complies with the high level strategic provisions, and through the provision of detailed documentation at the Development Application stage, will have the ability to comply with detailed provisions pertaining to the site.

It is considered the Planning Proposal is consistent with the definition of a 'Low Impact Planning Proposal' which requires a 14 day exhibition period. The Planning Proposal will assist in the Tweed region meeting the housing requirements as defined within the Far North Coast Regional Strategy and as such an amendment to the LEP is recommended.

Attachment 1 – Copy of Council Resolution 21 April 2009

TWEED SHIRE COUNCIL MEETING TASK SHEET

User Instructions

If necessary to view the original Report, double-click on the 'Agenda Report' blue hyperlink above.

Action Item - COUNCIL MEETING

Action is required for Item as per the Council Resolution outlined below.

TITLE: [NOM] 5861 and 5867 Tweed Valley Way, Mooball

Cr P Youngblutt

Cr K Skinner

RESOLVED that Council gives priority to the advancement of a rezoning of properties at 5861 and 5867 Tweed Valley Way, Mooball.

The Motion was **Carried**

FOR VOTE - Cr P Youngblutt, Cr K Skinner, Cr B Longland, Cr W Polglase

AGAINST VOTE - Cr D Holdom, Cr K Milne, Cr J van Lieshout

Agenda Report

TITLE: [NOM] 5861 and 5867 Tweed Valley Way, Mooball

NOTICE OF MOTION:

Councillor P Youngblutt moves that Council gives priority to the advancement of a rezoning of properties at 5861 and 5867 Tweed Valley Way, Mooball.

Attachment 2 – Copy of Council Report 20 July 2010

TWEED SHIRE COUNCIL MEETING TASK SHEET

User Instructions

If necessary to view the original Report, double-click on the 'Agenda Report' blue hyperlink above.

Action Item - COUNCIL MEETING

Action is required for Item as per the Council Resolution outlined below.

TITLE: [PR-CM] Planning Reform Work Program

Cr D Holdom

Cr K Skinner

RESOLVED that:

1. Council endorses the Planning Reforms - Work Program 2010/2013 identified as Tables 1-3 in this report, and
2. Council advertises the fees and charges identified within Table 4 of this report relating to planning proposals in accordance with Section 610F of the Local Government Act, 1993.

The Motion was **Carried**

FOR VOTE - Cr P Youngblutt, Cr D Holdom, Cr K Skinner, Cr B Longland, Cr J van Lieshout, Cr W Polglase

AGAINST VOTE - Cr K Milne

Agenda Report**TITLE: [PR-CM] Planning Reform Work Program****ORIGIN:****Planning Reforms****FILE NO: GT1/LEP/2006 Pt10****SUMMARY OF REPORT:**

This report seeks Council's endorsement of the Planning Reforms work program 2010/2013 and associated amendments to Council's Fees and Charges 2010/2011.

This report was preceded by a Councillor workshop relating to the revision of the works program held on 8 June, which also included a presentation of issues on the Draft LEP 2010 by both Council officers and Department of Planning staff.

The report acknowledges the competing resource commitments and limitations that were raised at the June workshop and arising from Council's commitment to improving strategic land-use planning for the Tweed, as well as the need to allocate resourcing for shorter-term development through planning proposals originating from the private sector.

The report concludes that it is essential to maintain the works program, which was first adopted by Council on 16 June 2009, to assist with the ongoing resource allocation to key strategic projects, and for providing greater certainty in the timing and allocation of resources for accepting private planning proposals. It is an essential project management tool and assists staff in providing greater certainty through more accurate estimates of resource capability for any major developer in their preparation of commercial scheduling and planning for future projects and forecasts.

RECOMMENDATION:**That:**

- 1. Council endorses the Planning Reforms - Work Program 2010/2013 identified as Tables 1-3 in this report, and**
- 2. Council advertises the fees and charges identified within Table 4 of this report relating to planning proposals in accordance with Section 610F of the Local Government Act, 1993.**

REPORT:

As part of the on-going project management of Council's strategic land-use planning resources the Planning Reform Unit works program is reviewed annually and where appropriate revised to reflect and 'match' resource-to-commitment. The work program was first adopted by Council on 16 June 2009 and a mid-term status update was reported to the Council meeting of 20 October 2009.

Preceding this report a Councillor's workshop was held on 8 June 2010 to enable Council officers to provide an up-date on the work program and how project commitment targets were being met as well as providing an overview of the current funding allocation for existing and future projects; a copy of the workshop agenda is attached to this report for reference. In particular, Council officers discussed both the impact and on-going commitments to the Draft Tweed LEP 2010 and potential future funding options arising under the State Government's Planning Reform Funding Project.

Further funding was announced on 15 June 2010 by the Director-General of Planning, Mr Sam Haddad, under the NSW Government's 2010/11 budget, supporting \$2.9 million to assist in the delivery of new comprehensive LEPs; \$2 million to deliver planning policy to help create well-designed and vibrant communities around public transport, and \$2 million to review and update greenfield land release sequencing and policy, over a 2-year period.

Council officers will be seeking additional funding once the application and procedural arrangements have been finalised by the Department, for a range of projects to assist with delivering improved accessibility and lifestyle choice in the Tweed housing market, including rural residential investigation.

In the meantime, the revised works program has taken into account four key project constraining and opportunity factors:

- i. total PRU staff resources
- ii. committed resource allocation
- iii. existing funding & commitments
- iv. potential future funding

Based on those four elements and the feedback from the June Councillor's workshop the tables below provide a proposed work program for the period 2010-2013.

Table 1 Work Program (1 July – 30 June) 2010/2011 - Estimated Project Delivery

PROJECT CATEGORY	PROJECT TITLE	BUDGET ALLOCATION	STATUS ESTIMATE
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PROJECT CATEGORY	PROJECT TITLE	BUDGET ALLOCATION	STATUS ESTIMATE
High order strategic Plans	Draft Stage 1 LEP 2010	\$3,021	Continuation – 60% complete
	Draft Tweed Heads LEP	\$17,035	Continuation – 60% complete
	Review of Tweed DCP – “alignment” with new LEP	NIL	On hold – insufficient resources to undertake review – 0% complete. This may need to be deferred to the 2011/2012 program.
Locality Based Plans	Draft Tweed Heads “Cities Taskforce” Masterplan & DCP	Combined funding with Tweed Heads LEP	Continuation – 90% complete
	Draft South Tweed DCP	Per the above	Continuation – On hold pending completion of Tweed flood risk management strategy. Recommencement will be subject to staff resources but unlikely before early 2011.
	Draft Hastings Point Locality Plan and Development Control Plan.	\$9,911	Continuation – about 70% complete.
Development Control Plans	New Draft DCP – Tree Preservation Orders	NIL	Continuation – about 80% complete & waiting further advice from NRM.
	New Rural Tourism DCP	\$53,748	Conception stage – project to be outsourced and project managed. Current staff resourcing indicates that commencement unlikely before early 2011.
	Kingscliff Locality Plan	\$117,153	Following Pottsville, Hastings Point and Cabarita, Kingscliff is seen to be an important continuation of the Council’s coastal strategic urban planning – project is to be part-outsourced with bulk of project undertaken in-house. Based on current staff resources commencement unlikely before early 2011.
	Rural land-use strategy Local growth management strategy Affordable housing strategy Adaptable housing strategy		Projects subject to funding and additional staff resourcing. Funding may become available under the Department’s Planning Reform Funding early 2011. These projects would likely commence, subject to a funding / resource commitment, in the third quarter of 2011, and would form the basis of the Stage 2 LEP.
	New Telecommunications Infrastructure DCP	NIL	Preliminary draft prepared - Waiting instruction from Infrastructure Coordination

PROJECT CATEGORY	PROJECT TITLE	BUDGET ALLOCATION	STATUS ESTIMATE
			Committee.
	New Draft DCP - Biodiversity	NIL	Drafted by NRM – 40% complete
	New Draft DCP – Area E (Terranora)	NIL \$29,158 provided by landowners group related to their own Draft DCP for the purpose of peer review by Parson Brinkerhoff – Draft DCP was rejected now being prepared internally – no review required beyond public consultation.	Continuation – background studies and design work about 85% complete – project 50% complete..
	Draft DCP Brothels Code	NIL	Preliminary draft Plan prepared – project 60% complete – pending further assessment / instruction.
Draft LEPs (Major)	Draft LEP 69 – Seabreeze Estate (Stage 2 rezoning)	Rezoning applications (planning proposals) are subject to prescribed fees under the Council's Fees and Charges	With the DOP pending issue of s 65 for public exhibition – project 60% complete.
	Draft LEP 85 – Pottsville Industrial Lands	See above	Substantive issues assessment – project 40% complete.
	Residential rezoning – “Riva Vue Estate” Murwillumbah	See above	Stage 1 of 3 project commencement 10% complete.
	Residential rezoning – Marana Street, Bilambil Heights (Royal Terranora Resort)	See above	Stage 1 of 3 project commencement 10% complete.
	Enterprise Avenue, Tweed Heads South	See above	Stage 1 of 3 project commencement 10% complete.
	Boys Bay Garden World	See above	Stage 1 of 3 project commencement 10% complete
	Extension of Hundred Hills, West Murwillumbah (Stocklands)	See above	Review of preliminary planning proposal complete – waiting lodgement of revised planning proposal.
	Mooball Urban Release	See above	Council resolution to bring forward rezoning under TUELRs 2009* – pending receipt of planning proposal.
	Border Park Race Course	See above	Short-term release area – TUELRs 2009* - pending receipt of planning proposal.
Draft LEP (Minor)	Draft LEP 35 – Billabong caravan Park (expansion of existing site)	See above	On-hold waiting further assessment by Applicant – project 40% complete.

PROJECT CATEGORY	PROJECT TITLE	BUDGET ALLOCATION	STATUS ESTIMATE
Review of existing policy documents	NIL		Insufficient resources for existing policy review or up-date.
	TDCP – s A1 – Residential and Tourist Code	NIL	Continuation – review of Part A – project 10% complete moving into next stage of industry consultation.
	TDCP s A11 – Public Notification	NIL	Continuation - On-hold pending resource allocation.
Ongoing commitments	Implementation of the Tweed Urban and Employment Land Release Strategies	Reviews originating from external sources as subject to a prescribed fee of \$1000.00 + \$95 per hour after 4hrs	Consideration of proponent led amendments are subject to Council resolution.
	S 149 Certificates	NIL	Continued GIS resources provided to assist on matters of s.149 certificates.
	Cartography / GIS services	NIL	Council reports – all mapping Cadastre shift / maintenance Flood data & s.94 mapping General GIS mapping / assistance across organisation PRU project mapping & 3D rendering Data manager - LEP and related areas comprising bulk of Council's GIS data.
	NSW Government Land (Housing and Industrial) Monitor	NIL	Ongoing development of Monitoring system in accordance with DoP Monitoring Requirements.
	Development applications	NIL	Continuation of PRU resources provided to assist DAU/BAU with strategic planning, urban design and heritage conservation matters.
	Landowner requests of broader community significance	NIL	Currently one project - Investigation of potential planning proposal for a community titled (agriculture retention) development – preliminary investigation stage.

Note:

- *Tweed Urban and Employment Lands Strategy 2009.
- Total allocation of funding is \$200,868 comprising all available project funds (excluding \$29,158 provided by landowners of Area E and \$10,712 for the community based heritage study.
- The grant funding allocated to the preparation of a community based heritage study, which was prepared but which did not proceed was mainly expended with only \$10,712 remaining. Additional further funding would be required to undertake a community based heritage study.

Table 2 Work Program (1 July – 30 June) 2011/2012 - Estimated Project Delivery

PROJECT CATEGORY	PROJECT TITLE	STATUS ESTIMATE
High order strategic Plans	Draft Stage 1 LEP 2010	Gazettal anticipated prior to June 2011.
	Draft Tweed Heads LEP	Per the above.
	Review of Tweed DCP – “alignment” with new LEP	Project commencement by August.
Locality Based Plans	Draft Tweed Heads “Cities Taskforce” Masterplan & DCP	Completion anticipated prior to June 2011 with work commencing on Tweed Heads South component in concert with LEP by September.
	Draft South Tweed DCP	Per the above.
Development Control Plans	New Rural Tourism DCP	Completion expected by Feb 2012, subject to start-up date.
	Kingscliff Locality Plan	Completion expected by April 2012, subject to start-up date.
	Rural land-use strategy Local growth management strategy Affordable housing strategy Adaptable housing strategy	These projects would likely commence, subject to a funding / resource commitment, in the third quarter of 2011; on that basis completion of all projects, except rural lands strategy, could be expected by June 2012.
	New Telecommunications Infrastructure DCP	Anticipated completion by June 2011 or indefinite deferral.
	New DCP Pottsville Industrial Land	Requirement of rezoning and subject to gazettal – anticipated start-up from September – Proponent funded.
	New DCP Seabreeze Estate	Requirement of rezoning and subject to gazettal – anticipated start-up from July – Proponent funded.
	New DCP “Riva Vue Estate” Murwillumbah	Requirement of rezoning and subject to gazettal – anticipated start-up from September – Proponent funded.
	New DCP Enterprise Avenue, Tweed Heads South	Requirement of rezoning and subject to gazettal – anticipated start-up from September – Proponent funded.
	New DCP “Boyds Bay Garden World”	Requirement of rezoning and subject to gazettal – anticipated start-up from September – Proponent funded.
	New DCP “Marana Street, Bilambil Heights (Royal Terranora Resort)”	Requirement of rezoning and subject to gazettal – anticipated start-up from September – Proponent funded.
	New DCP “Border Park Race Course”	Requirement of rezoning and subject to gazettal – Proponent funded.
	New DCP “Mooball Urban Release”	Requirement of rezoning and subject to gazettal – Proponent funded.
Draft LEPs (Major)	Draft LEP 69 – Seabreeze Estate (Stage 2 rezoning)	

PROJECT CATEGORY	PROJECT TITLE	STATUS ESTIMATE
	Draft LEP 85 – Pottsville Industrial Lands	Projects scheduled to be completed prior to 2012/2013 programming. Rollovers are expected based on anecdotal evidence of past rezoning assessments, but are not determinable at the time of preparing the works programme.
	Residential rezoning – “Riva Vue Estate” Murwillumbah	
	Residential rezoning – Marana Street, Bilambil Heights (Royal Terranora Resort)	
	Enterprise Avenue, Tweed Heads South	
	Boyds Bay Garden World	
	Extension of Hundred Hills, West Murwillumbah (Stocklands)	
	Mooball Urban Release	Subject to receipt of planning proposal and project start-up.
	Border Park Race Course	Per the above.
Draft LEP (Minor)	Draft LEP 35 – Billabong caravan Park (expansion of existing site)	Completion by June 2011 otherwise identified for termination.
Review of existing policy documents	NIL.	Insufficient resources for existing policy review or up-date.
	TDCP s A11 – Public Notification	Continuation – Project re-start by September.
Ongoing commitments	Implementation of the Tweed Urban and Employment Land Release Strategies	Consideration of proponent led amendments is subject to Council resolution.
	S 149 Certificates	Continued GIS resources provided to assist on matters of s.149 certificates.
	Cartography / GIS services	Council reports – all mapping Cadastre shift / maintenance Flood data & s.94 mapping General GIS mapping / assistance across organisation PRU project mapping & 3D rendering Data manager - LEP and related areas comprising bulk of Council's GIS data.
	NSW Government Land (Housing and Industrial) Monitor	Ongoing development of Monitoring system in accordance with DoP Monitoring Requirements.
	Development applications	Continuation of PRU resources provided to assist DAU/BAU with strategic planning, urban design and heritage conservation matters.
	Landowner requests of broader community significance	TBA.

Table 3 Work Program (1 July – 30 June) 2012/2013 - Estimated Project Delivery

PROJECT CATEGORY	PROJECT TITLE	STATUS ESTIMATE
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PROJECT CATEGORY	PROJECT TITLE	STATUS ESTIMATE
High order strategic Plans	Draft Stage 2 LEP 2012	Project start-up.
	Review of Tweed DCP – “alignment” with new LEP	Completion by July, subject to start-up.
Locality Based Plans	Draft Tweed Heads “Cities Taskforce” Masterplan & DCP	Completion on Tweed Heads South component by February.
	Draft South Tweed DCP	Per the above.
Development Control Plans		
	Rural land-use strategy Local growth management strategy Affordable housing strategy Adaptable housing strategy	These projects would likely commence, subject to a funding / resource commitment, in the third quarter of 2011; on that basis completion of all projects, except rural lands strategy, could be expected by June 2012. Projects subject to detailed timeline assessment but expected rollover of some projects.
	New DCP Pottsville Industrial Land	Completion by Sept.
	New DCP Seabreeze Estate	Completion by July
	New DCP “Riva Vue Estate” Murwillumbah	Completion July-Sept
	New DCP Enterprise Avenue, Tweed Heads South	Completion July-Oct.
	New DCP “Boyd’s Bay Garden World”	Completion by August.
	New DCP “Marana Street, Bilambil Heights (Royal Terranora Resort)”	Completion July-Oct.
	New DCP “Border Park Race Course”	Completion – TBA.
	New DCP “Mooball Urban Release”	Completion – TBA.
Draft LEPs (Major)		
	Draft LEP 85 – Pottsville Industrial Lands	Per the above.
	Residential rezoning – “Riva Vue Estate” Murwillumbah	Anticipated completion by August.
	Residential rezoning – Marana Street, Bilambil Heights (Royal Terranora Resort)	Per the above.
	Enterprise Avenue, Tweed Heads South	Per the above.
	Boyd’s Bay Garden World	Per the above.
	Extension of Hundred Hills, West Murwillumbah (Stocklands)	Per the above.
	Mooball Urban Release	Subject to receipt of planning proposal and

PROJECT CATEGORY	PROJECT TITLE	STATUS ESTIMATE
		project start-up.
	Border Park Race Course	Per the above.
Draft LEP (Minor)		
Review of existing policy documents	NIL.	Limited review to be determined on basis of availability of resources.
	TDCP s A11 – Public Notification	Completion by March.
Ongoing commitments	Implementation of the Tweed Urban and Employment Land Release Strategies	Consideration of proponent led amendments are subject to Council resolution.
	S 149 Certificates	Continued GIS resources provided to assist on matters of s.149 certificates.
	Cartography / GIS services	Council reports – all mapping Cadastre shift / maintenance Flood data & s.94 mapping General GIS mapping / assistance across organisation PRU project mapping & 3D rendering Data manager - LEP and related areas comprising bulk of Council's GIS data.
	NSW Government Land (Housing and Industrial) Monitor	Ongoing development of Monitoring system in accordance with DoP Monitoring Requirements.
	Development applications	Continuation of PRU resources provided to assist DAU/BAU with strategic planning, urban design and heritage conservation matters.
	Landowner requests of broader community significance	TBA.

Based on the projected body of work commitments and priorities illustrated in the proposed work program it is evident that the Planning Reform Unit's staff base is not sufficient to undertake the following projects as previously indicated:

- Draft LEP 76 – Heritage
- Draft Tyalgum Locality Plan
- Fingal Locality Plan
- Chinderah Locality Plan
- Chillingham Locality Plan
- Mooball Locality Plan
- DCP Employment lands (Business Parks)
- DCP (Master-planning principals)
- DCP (Urban Design)
- DCP Densification and Re-development (urban infill)
- DCP Landscaping
- DCP Heritage DCP

These projects will need to be reprioritised on later reviews of the works program and scheduling of some projects may commence in 2013, with the lesser probability of an earlier commencement should one or more planning proposals fail to proceed.

Murwillumbah LPDCP – Deferred (South Precinct)

During the drafting of the Murwillumbah locality based DCP it became clear that certain areas, most notably south Murwillumbah in and around Prospero Street, are subject to flood inundation and in accordance with Council's flood policy cannot have their development intensity up-lifted through rezoning.

Council officers are of the view that the planning work should be commenced as a priority once the Tweed Risk Flood Management Strategy is finalised and provides greater certainty on potential planning outcomes.

The project is not identified in the work program because there is no certainty as to when the Strategy will be adopted or what the ultimate conclusions will be.

Additional staffing to fulfil the planning policy maintenance program and to commence additional strategically important projects, including those identified above, would comprise at minimum one additional urban designer, two strategic planners and a full-time junior planner (12 month rotation), above the Unit's current funded positions.

Potential Impact Associated with the Proposed Work Program

The work program is limited by several factors as highlighted above. Ultimately there will always be a limit on capacity and correspondingly on the body of work commitments.

Tweed Council is currently performing very well and making good progress with its new strategic planning within the confines of its current strategic planning resources. In the context of the development pressure on the Council for the release of further greenfield sites and the demand for greater environmental protection and preservation Council is not making the same level of progress as it could, particularly in the areas of maintaining and reviewing the currency and relevance of its existing land-use policies and in the formulation of new policies, such as those listed above.

The impact of the current capacity and programming is that policy will likely continue to lag behind development pressures and demands than it otherwise should, that is, it will largely remain reactive and outdated opposed to proactive and current. This will impact on the ability to provide certainty to the development industry and may have a detrimental impact on both the delivery of projects (housing and employment) and the end cost of the product (dwelling-houses, residential lots, commercial office space and the like) to the market.

To assist in minimising those impacts discussed above and consistent with the work program strategy presented to Council in 2009 the number of privately proposed planning proposals on the work program has been significantly increased. These new proposals were previously deferred for up to three years to enable Council to implement the new standard instrument LEP, which was initially predicted to take 6-12 months but that has so far taken over three years, however the latency potential and demand in those proposals now requires action and progress so that new development can continue to maintain appropriate levels and diversity in the Tweed's residential housing market in particular and not least to keep downward pressure on cost (affordability).

The necessity to process planning proposals as a means of project control is not seen to be outweighed by the need to undertake key strategic planning policy, like those listed above, as there is a perceived parity, as such there are no foreseeable strategies for expediting the commencement of some of the identified strategic projects. Council officers will nonetheless endeavour to progress the work priorities expeditiously so as to limit the commencement of those key projects.

Planning Proposal Related Fees & Charges – Need for Additional Fees

Planning Reforms has adopted a new approach to the management and processing of planning proposals, which were introduced as part of the legislative amendments to the Part 3 (Plan Making) of the Environmental Planning and Assessment Act 1979, which took effect on 1 July 2009.

The new process requirement, which has been made very clear to all proponents of planning proposals and which is consistent with the intent of the legislative amendments, is essentially aimed at streamlining LEP amendments with the intent of reducing the time and costs involved. This is achieved in several ways most notably by the requirement to limit the information particular and pertinent to the specific proposal, and the deferral of expensive investigative and detailed studies, where practical, to Stage 2, which will then proceed a resolution of the Council to amend the LEP. Refer Figure 1 – Revised Process for Stage 1 Planning Proposals below.

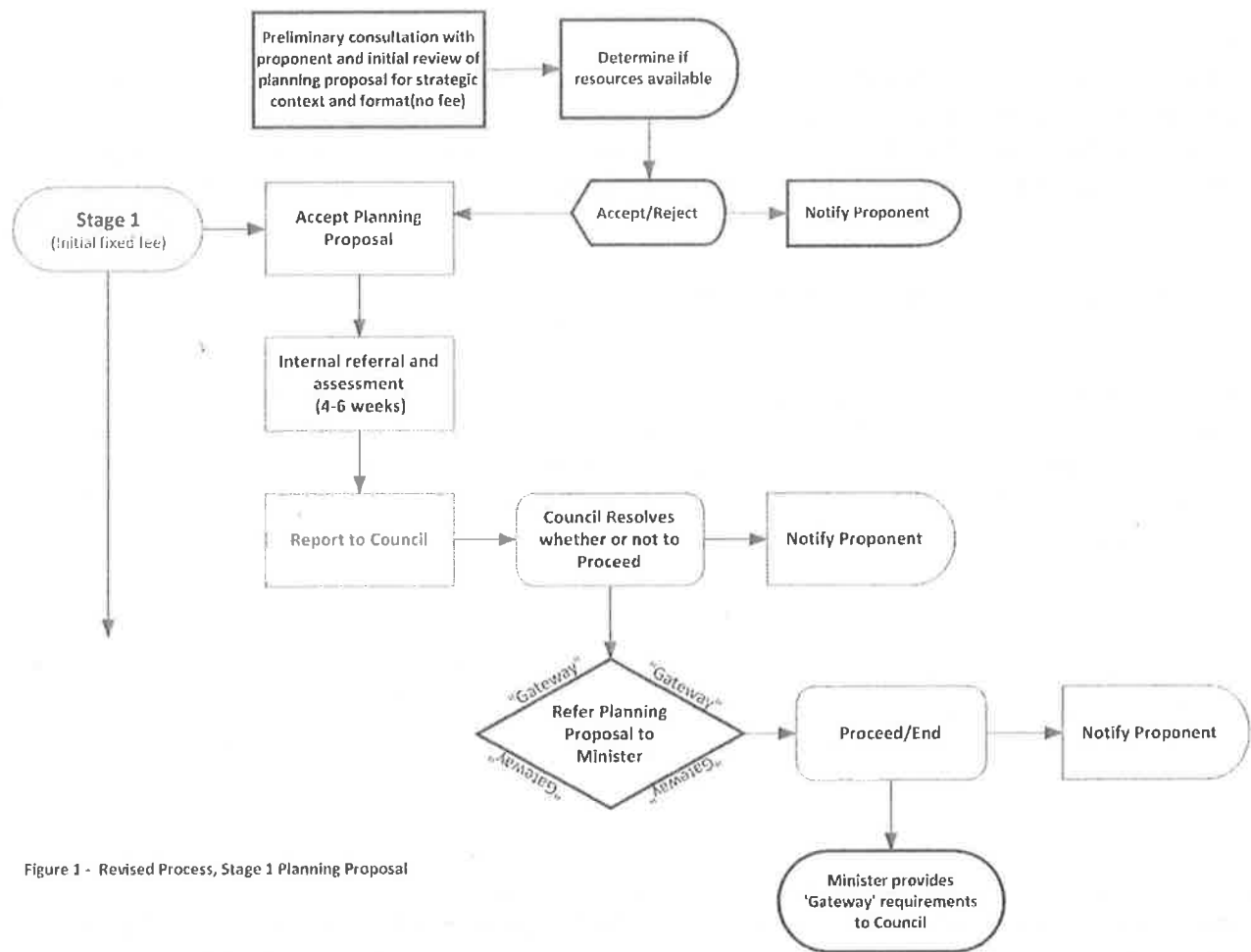


Figure 1 - Revised Process, Stage 1 Planning Proposal

This new process places far greater emphasis on two important commitments. Firstly, on the part of the Council, it requires an efficient process with the commitment to turn initial assessment and reporting around within a reasonable timeframe. Council officers have committed to a 4-6 week assessment timeframe with immediate reporting to the next available Council meeting. The second commitment is on the proponent, which essentially requires a proper evaluation of the proposal and identification and articulation of the substantive and importantly the critical issues.

To enable the new planning proposal process to work, and ultimately to enable consideration of the proposals at all, the acceptance of planning proposals is contingent on both parties meeting their respective commitment. This means that the proponent is to take greater responsibility for identifying the potential issues, scoping the likely impact of those issues, which may include prior consultation with Council officers or any number of other agencies, and responding to those issues in a planning proposal sufficiently for Council to determine if the proposal has merit and is suitable to proceed.

The greater responsibility on the parties in the identification of critical issues is highlighted in the new process requirements, illustrated in Figure 1 above, which removes the ability of a proponent to rely on Council staff for the identification of issues and relevant policy considerations. This marks a significant shift away from earlier practices of extensive and often protracted requests for additional information and subsequent ancillary meetings, instead, as stated above, it places greater emphasis on the pre-application processes.

The new process not only assists Council staff in their determination of a proposals strategic justification but it represents the only short-term solution to managing private planning proposals. In the most basic terms the new process is premised on the assessment and recommendation of the proposal as submitted, save for some minor clarification.

This process naturally has its advantages and disadvantages.

In favour of the process, planning proposals will be accepted and processed where it may otherwise have not been possible because of insufficient resourcing. It also provides a more expedient process for securing resolution from the Council about whether a particular amendment is supported. This in-turn should provide greater certainty and is more responsive to the private sector's needs, particularly with respect to investment in the particular project.

The process does however require a far greater commitment in the preparation of the planning proposal by the proponent, which is arguably something that should exist in any event. The benefit for a proponent for that commitment is essentially the reward of expediency, which in commercial terms is likely to be quite significant or advantageous.

A notable limitation with the process is likely to be those occasions where an issue is genuinely not revealed either by omission or oversight, opposed to any sort wrongdoing or inattention, and in which case there is likely to be an adverse consequence. The consequence is in essence a 'penalty' which has the effect of manifesting in two distinct forms depending on which party it befalls. If the proponent was to wear the cost penalty it is likely to accrue in an adverse resolution against proposal and the cessation or 'not-proceeding' with it, whereas, if the Council wears the penalty it will take the form of a cost infringement which would most likely arise through the reassessment of additional information (hence additional staff resources).

It is the inability to recoup the cost of any additional assessment undertaken by the Council that gives rise to the need for an amendment to the Fees and Charges Schedule.

The proposed amendment will ensure that any additional cost burden will remain to be borne by the proponent. This will ensure that the amendments to the Fees and Charges initially adopted by Council in April 2009, which are premised on full cost recovery, will remain in-tact.

The following table highlights Council's current fees and charges and the proposed amendments highlighted in **bold**. These should encourage the proponent to take greatly responsibility and accountably in preparing a planning proposal, as well as, serving to limit Council's liability for any additional cost.

Table 4 – Proposed Associated Rezoning Fees & Charges 2010/2011 (in **BOLD**)

Rezoning Fees			
	Stage 1	Stage 2	Stage 3
Anomaly (no increase in the developable capacity of the land)	\$1,030	\$1,545	\$1,030
Minor rezoning (no significant increase in developable capacity of the land and s. 72J applications or schedule 3 amendments)	\$1,600	\$3,500	\$2,000
All others	\$3,500	\$7,000 + \$115 per hour beyond 60hrs	\$5,500 + \$115 per hour beyond 40hrs
Council appointed and managed consultancy	An Applicant may elect to have an application processes by an external consultancy. The cost is to be determined by a Council Tender invitation and submission process and agreed to by applicant + 20% administration fee.		
Preparation of Local Environmental Study (where required)	Cost in addition to rezoning application processing and is to be determined by a Council Tender invitation and submission process and agreed to by applicant + 30% administration fee.		
Reassessment of the same issue or a new issue not previously identified or sufficiently detailed in a planning proposal arising after the assessment of the proposal by the relevant Unit or Division of Council is subject to the prescribed assessment fee.	Assessment of additional supporting information is \$115 per hour, per staff member, plus an administrative fee of \$55.		
Council reporting required in consequence of consideration of additional information is subject to the prescribed fee.	The fee for preparing a Council report arising from reassessment of a planning proposal is \$300.		
Written correspondence associated with a planning proposal is subject to the prescribed administration fee.	The administration fee associated with written correspondence is \$25		

The fees in Table 4 above are consistent with the basic principle that the community, through Council, should not be accountable for the cost of processing planning proposals of a commercial nature through the betterment or up-lifting of changes to the Tweed LEP in favour of identified parcel(s) of land, that is, cost recovery for services rendered.

CONCLUSION:

As discussed in this report there are limitations on the capacity of Council's strategic planning resources with a corresponding need to ensure that the work program is reflective of, not necessarily constrained, by its ability to undertake key priority projects.

By 'priority' this reports relies on the underlying premise that all of the strategic policies identified are to varying degrees a priority of the Council, but acknowledging that when the projects are juxtaposed there will typically be those that have some sort of 'edge' or 'advantage' over another, which places them ahead, generating in effect a queue headed by the those projects better representing or referred to as the 'priority' projects.

The proposed work program 2010/2013 has been designed in the light of the need to match the resources with the projects that are likely to yield the most benefit. These projects comprise two distinctive types; those generated by the Council and those generated externally. Both have their place and are equally relevant to the management and growth of the Tweed. The work program aims to balance the resource allocation to accommodate the priority elements arising from both areas. This has resulted with an increase in the number of commercially driven planning proposals and the reduction or deferral of several strategic land-use policies.

This realignment of priorities and resource allocation is seen to be justified on the basis that without greater stimulus and investment in the private sector through housing and employment generating development any number of adverse impacts will potentially materialise. They may include upward pressure on the cost of housing, missed opportunities for employment, and a furthering of the social economic divide, which for many Tweed families will mean that they will need to relocate elsewhere or their children will have limited opportunity to work and live in the Tweed and within established family and community networks.

At the same time, the strategic planning projects selected for inclusion in the work program are those seen to provide the most benefit in assisting and playing their role in ensuring a better and more secure future for the present and future residents of the Tweed and the protection of its environment.

The proposed amendments to the Fees and Charges are seen to be minimal to the overall efficiency and cost associated with commercial planning proposals, but, essential to ensuring that the Council's strategic planning resources are not unduly restricted or impacted by proponents who fail to achieve their commitment to the process.

LEGAL/RESOURCE/FINANCIAL IMPLICATIONS:

Forward budget estimates may arise from Council's endorsement of the Planning Reforms work program as key strategic projects are taken up.

POLICY IMPLICATIONS:

This report seeks a clear direction and prioritisation of Council's strategic planning program and the associated Fees and Charges relating to associated costs of planning proposals.

UNDER SEPARATE COVER/FURTHER INFORMATION:

To view any **"non confidential"** attachments listed below, access the meetings link on Council's website www.tweed.nsw.gov.au (from 8.00pm Wednesday the week before the meeting) or visit Council's offices at Tweed Heads or Murwillumbah (from 8.00am Thursday the week before the meeting) or Council's libraries (from 10.00am Thursday the week of the meeting).

1. Councillor Workshop Agenda Paper presented by the Coordinator Planning Reform 8 June 2010 (ECM 18828736)
-

Attachment 3 – Copy of Council Report 19 April 2011

TWEED SHIRE COUNCIL MEETING TASK SHEET

User Instructions

If necessary to view the original Report, double-click on the 'Agenda Report' blue hyperlink above.

Action Item - COUNCIL MEETING

Action is required for Item as per the Council Resolution outlined below.

TITLE: [PR-CM] Planning Reform Work Program - 2011/2014

Cr W Polglase

Cr P Youngblutt

RESOLVED that Council endorses the attached Planning Reforms Works Program subject to the inclusion of the Mooball Planning Proposal and enacting DCP being included as an immediate term priority subject to the payment of relevant fees by the proponent for the processing of the proposal by an independent consultant in accord with Council's previous resolutions.

The Motion was **Carried**

FOR VOTE - Cr P Youngblutt, Cr W Polglase, Cr D Holdom, Cr B Longland, Cr J van Lieshout, Cr K Skinner

AGAINST VOTE - Cr K Milne

TITLE: [PR-CM] Planning Reform Work Program - 2011/2014

ORIGIN:

Planning Reforms

FILE NO: GT1/LEP/2006 Pt10

SUMMARY OF REPORT:

This report seeks Council's endorsement of the Planning Reforms work program 2011/2014.

This report was preceded by a Councillor Workshop relating to the revision of the works program held on 10 March 2011.

The report acknowledges the competing resource commitments and limitations that were raised at the March workshop and arising from Council's commitment to improving strategic land-use planning for the Tweed, as well as the need to allocate resourcing for shorter-term development through planning proposals originating from the private sector.

The report concludes that it is essential to maintain a balanced works program to assist with the ongoing resource allocation to key strategic projects, and for providing greater certainty in the timing and allocation of resources for accepting private planning proposals. It is an essential project management tool and assists staff in providing greater certainty through more accurate estimates of resource capability for any major developer in their preparation of commercial scheduling and planning for future projects and forecasts.

RECOMMENDATION:

That Council endorses the Planning Reforms - Work Program 2011/2014 identified as Tables 1-3 in this report.

REPORT:

Background

As part of the on-going project management of Council's strategic land-use planning resources the Planning Reforms Unit works program is reviewed annually and where appropriate revised to reflect and 'match' resource-to-commitment. The work program was first adopted by Council on 16 June 2009 and readopted on 20 July 2010, with a mid-term status update reported in October 2009.

Preceding this report a Councillor's workshop was held on 10 March 2011 to enable Council officers to provide an up-date on the work program and how project commitment targets were being met as well as providing an overview of current funding allocations and shortfalls for existing and future projects.

On 15 June 2010 the Director-General of the Department of Planning, Mr Sam Haddad, under the NSW Government's Planning Reform (Round 7) Projects, announced additional funding opportunities for local councils aimed at supporting; \$2.9 million to assist in the delivery of new comprehensive LEPs; \$2 million to deliver planning policy to help create well-designed and vibrant communities around public transport, and \$2 million to review and update greenfield land release sequencing and policy, over a 2-year period.

Council staff made application under the Round 7 Funding for several key projects and provided an update on those applications, which resulted in the award of conditional grants totalling \$153,000; at the March Workshop. This is discussed in greater detail below.

State Government Funding

Applications were made on the 11 October 2010 under Round 7 of the State Government's Planning Reform Fund for several projects:

1. Tweed Rural Land Strategy \$170,000
2. Agricultural Land Protection Guidelines \$42,000
3. Draft LEP 2010 – Extension Officer \$105,000
4. Local Growth Management Strategy \$105,000
5. Kingscliff Locality Plan \$94,500
6. Housing Affordability Strategy \$73,500

Council received notice dated 17 March 2011 that none of the above project applications under Round 7 were successful.

On 14 October 2010, an application under the State Government's Planning Acceleration fund was also made for the Draft LEP 2010 – Extension Officer in the amount of \$105,000.

The acceleration fund was targeted for that purpose; to accelerate the completion of standard instrument LEPs across the State and consequently the funding criteria was very narrow.

Council received notice dated 24 February 2011 that funding for two projects totalling \$153,000 had been approved. This comprised:

1. Draft LEP 2010 – Extension Officer, referred to as “Planner” in the amount of \$28,000; and,
2. A “Rural Land Strategy & Agricultural Land Protection Guidelines” (deferred) in the amount of \$125,000.

The terms of grant funding under the Acceleration Fund are quite restrictive and access to the recoupment of funds ceases in June 2012. Based on the current Agreement provided by the Department the timeframes allowed for completion for both projects is unreasonable.

Council staff will need to negotiate with the Department for more acceptable terms based on timeframes that can reasonably be met. However, it should be noted that unless the Department can extend the funding period beyond June 2012 it is unlikely that the funding for the rural land strategy and agricultural land protection guidelines will be recoverable, as the funding agreement is based on progress payments in arrears.

The Work Program

The revised works program has taken into account four key project constraining and opportunity factors:

- i. Total PRU staff resources;
- ii. Committed resource allocation;
- iii. Existing funding & commitments; and,
- iv. Potential future funding.

Based on those four elements and the feedback from the March Councillors' workshop the Tables below provide a proposed work program for the period 2011-2014.

Table 1 Work Program (1 July – 30 June) 2011/2012 - Estimated Project Delivery

Planning proposals		Strategic Studies		General Tasks	
	Total		Total		Total
PP10-0003 Riva Vue	●●	Area E DCP	●●	Briefing notes, workshops & presentations	●●
DLEP 35 - 106 Dry Dock	●●	Brothel DCP	●●	Public / Industry Consultation	●●
PP10-0005 Hundred Hills	●●	Seabreeze DCP	●●	General Corro, GIS & s149 support	●●
DLEP 85 Pottsville Employment	●●	CBHS	●●	Student / University Programs assistance	●●
PP10- 0002 Marana Street	●●	DCP A1	●●	Strategic Responses (internal & external)	●●
PP10-0001 Boyds Bay	●●	FNCRS Review	●●	Part 3A Review / comments	●●
DA100737 s72J BP Chinderah	●●	Small lots policy	●●	Grant & Funding Applications	●●
DLEP 2010	●●	Tweed City DCP	●●	NSW Housing Monitor / SEPP Compliance GIS	●●
DLEP 2009	●●	*Review of TUELRs	●●	DDCP - Interdivisional assistance	●●
Black Rocks (deed)	●●	Aboriginal Cultural Study	●●	Meetings / Committees / workshops / Seminars	●●
		Tyalgum Locality Plan	●●		
		Rural Villages Locality Plan	●●		
				Total ALL Task	30.6
Parked		Work Program Items		Total Resource Allocation 2011/2012	
PP10-0007 Mooball	●●	Tweed DCP Review	●●	106.4%	
PP10-0004 Enterprise Ave	●●	Rural Tourism DCP	●●	(Estimated Maximum)	
Lot 129/130 Elrond Drv	●●	Kingscliff Locality Plan	●●	Resource Commitment by Project Area	
PP10-0006 225 Terranora Rd	●●	DCP A11 Notification Review	●●		
		LGMS	●●		
Facilitating Planning Proposal		Facilitating DCP (Rezoning)			
Hastings Point LDCP	●●	Pottsville Employment Land	●●		
Pottsville LDCP	●●	Marana Street	●●		
Cabarita LDCP	●●	Riva Vue Estate	●●		
		Boyds Bay Garden World	●●		
		Mooball	●●		
Planning Proposal (notified)		Other			
Pottsville LPMA	●●	DCP Veg Protection	●●		
Hastings Point (Sth) LPMA	●●	Review of Cabarita DCP	●●		
West Murbah Release Area 6	●●		●●		
Border Park Raceway	●●		●●		
Tweed City Shopping Centre	●●		●●		

Rating Schedule

Current Projects (fully resourced in-house)	●●
Current Projects (moderate resources / under contract)	●●
Project Pending / finalising (minor resources)	●●
Not proceeding at this stage / Future Project	●●

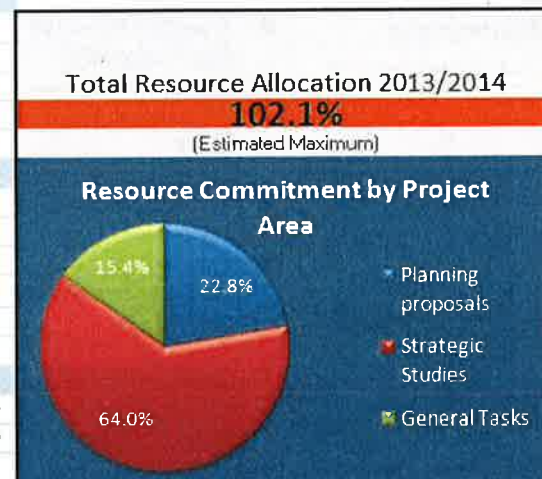
Table 2 Work Program (1 July – 30 June) 2012/2013 - Estimated Project Delivery

Planning proposals		Strategic Studies		General Tasks		
	Total	9.7		Total	9.6	
CBHS LEP Component	●		Aboriginal Cultural Study	●	Briefing notes, workshops & presentations	●
DLEP 85 Pottsville Employment	●		CBHS	●	Public / Industry Consultation	●
DA100737 s72J BP Chinderah	●		Rural Villages Locality Plan	●	General Corro, GIS & s149 support	●
DLEP 2010	●		Scenic Landscape Study	●	Student / University Programs assistance	●
PP10-0007 Mooball	●		Rural Lands Study	●	Strategic Responses (internal & external)	●
Lot 129/130 Elrond Drv	●		Chinderah Locality Plan	●	Part 3A Review / comments	●
PP10-0006 225 Terranora Rd	●		DCP A1 (Part B & C) Review	●	Grant & Funding Applications	●
Tweed City S/Centre	●		Heritage DCP	●	NSW Housing Monitor / SEPP Compliance GIS	●
Pottsville LPMA	●		Landscaping DCP	●	DDCP - Interdivisional assistance	●
Hastings Point (Sth) LPMA	●		Business Park DCP	●	Meetings / Committees / workshops / Seminars	●
West Murbah Release Area 6	●					
				Total ALL Task 29.3		
Parked		Work Program Items		Total Resource Allocation 2012/2013 101.2% (Estimated Maximum) Resource Commitment by Project Area 46.5% 39.4% 15.4% Planning proposals Strategic Studies General Tasks		
PP10-0004 Enterprise Ave	●		Tweed DCP Review (14)			●
			Rural Tourism DCP			●
			Kingscliff Locality Plan			●
			DCP A11 Notification Review			●
			LGMS	●		
Facilitating Planning Proposal		Facilitating DCP (Rezoning)				
Hastings Point LDCP	●		Pottsville Employment Land	●		
Pottsville LDCP	●		Marana Street	●		
Cabarita LDCP	●		Riva Vue Estate	●		
			Boyd's Bay Garden World	●		
			Mooball	●		
Planning Proposal (notified)		Other				
Border Park Raceway	●		DCP Veg Protection	●		
			Review of Cabarita DCP	●		

Rating Schedule	
Current Projects (fully resourced in-house)	●
Current Projects (moderate resources / under contract)	●
Project Pending / finalising (minor resources)	●
Not proceeding at this stage / Future Project	●

Table 3 Work Program (1 July – 30 June) 2013/2014 - Estimated Project Delivery

Planning proposals		Strategic Studies		General Tasks	
Total	4.8	Total	15.6	Total	10
CBHS LEP Component	🟡	Aboriginal Cultural Study	🟢	Briefing notes, workshops & presentations	🟢
DLEP 85 Pottsville Employment	🟡	CBHS	🟡	Public / Industry Consultation	🟢
		Rural Villages Locality Plan	🟢	General Corro, GIS & s149 support	🟢
		Scenic Landscape Study	🟡	Student / University Programs assistance	🟢
PP10-0007 Mooball	🟡	Rural Lands Study	🟡	Strategic Responses (internal & external)	🟢
Lot 129/130 Elrond Drv	🟡	Chinderah Locality Plan	🟢	Part 3A Review / comments	🟢
PP10-0006 225 Terranora Rd	🟡	DCP A1 (Part B & C) Review	🟢	Grant & Funding Applications	🟢
		Heritage DCP	🟢	NSW Housing Monitor / SEPP Compliance GIS	🟢
Pottsville LPMA	🟡	Landscaping DCP	🟡	DDCP - Interdivisional assistance	🟢
Hastings Point (Sth) LPMA	🟢	Business Park DCP	🟢	Meetings / Committees / workshops / Seminars	🟢
West Murbah Release Area 6	🟡	(TBA)	🟡		
				Total ALL Task 30.4	
Parked		Work Program Items		Total Resource Allocation 2013/2014 102.1% (Estimated Maximum) Resource Commitment by Project Area 15.4% 22.8% 64.0% Planning proposals Strategic Studies General Tasks	
PP10-0004 Enterprise Ave	🟢	Tweed DCP Review (4/4)	🟢		
		Rural Tourism DCP	🟡		
		Kingscliff Locality Plan	🟡		
		DCP A11 Notification Review	🟢		
		LGMS	🟡		
Facilitating Planning Proposal		Facilitating DCP (Rezoning)			
Hastings Point LDCP	🟡	Pottsville Employment Land	🟡		
Pottsville LDCP	🟡	Marana Street	🟡		
Cabarita LDCP	🟡	Riva Vue Estate	🟡		
		Boyd's Bay Garden World	🟡		
Planning Proposal (notified)		Mooball	🟢		
Border Park Raceway	🟢				
(TBA)	●	Other			
		(TBA)	●		
		(TBA)	●		



Rating Schedule	
Current Projects (fully resourced in-house)	●
Current Projects (moderate resources / under contract)	●
Project Pending / finalising (minor resources)	●
Not proceeding at this stage / Future Project	●

Based on the projected body of work commitments and priorities illustrated in the proposed work program it is evident that the Planning Reforms Unit's staff base is not sufficient to undertake a number of projects, particularly planning proposal requests, in the short term. There are also several key projects that will require a funding allocation prior to them being commenced.

The following table is aimed at assisting Councillors with their consideration of any funding allocation requests that be made in the preparation of the Council's annual Operational Plan and Budget processes.

Table 4 Projects Requiring a Funding Commitment

Project Name	Funding (Estimate)	Commitment	Project Start-up	Allocation Period

Project Name	Funding (Estimate)	Commitment	Project Start-up	Allocation Period
DCP A1 (Parts B & C) Review	\$5,000		2012/2013	2011/2012
Heritage DCP	\$15,000		2012/2013	2011/2012
Rural Land Strategy	\$150,000		2012/2013	2011/2012
Scenic Landscape Protection Strategy & DCP	\$60,000		2013/2014	2012/2013
Kingscliff Locality Plan	\$50,000		2013/2014	2012/2013
Rural Tourism DCP	\$30,000		2013/2014	2012/2013
Chinderah Locality Plan	\$20,000		2013/14	2012/2013
Landscaping DCP	\$25,000		2013/14	2012/2013

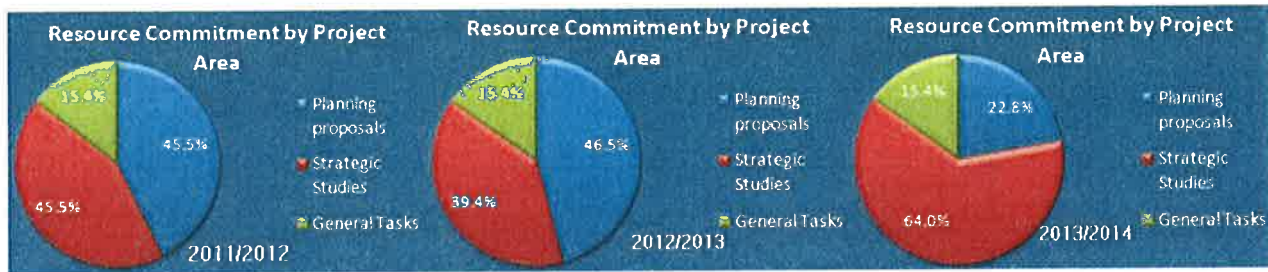
These projects will need to be reprioritised on later reviews of the works program and scheduling of some projects may commence in 2013, with the lesser probability of an earlier commencement should one or more planning proposals fail to proceed.

Balance Public - Private Interests

The work program is limited by several factors as highlighted above. Ultimately there will always be a limit on capacity and correspondingly on the body of work commitments.

Tweed Council is currently performing very well and making good progress with its new strategic planning within the confines of its current strategic planning resources. In the context of the development pressure on the Council for the release of further greenfield sites and the demand for greater environmental protection and preservation Council could be making better progress if a maintenance program put in place for reviewing the currency and relevance of its existing land-use policies, as well as, preparation new policies. This issue was raised and the March Councillors' workshop and based on feedback received the works program has been designed to strike a balance between current commitments to private originating planning projects and Council's strategic projects, with the view to increasing resource allocation to the latter over time.

This is highlighted in the pie graphs which show a fairly even distribution over the first two period with a significant shift toward Council's planning in the last period. It is worth noting that in the second period that although the percentage figure is higher for 'planning proposals' than it is for 'strategic projects' that there are several DCPs grouped in that category, which are strategic policy documents notwithstanding that they are generated by a private planning proposal.



Benefits v Impacts with the Proposed Work Program

The longer term impact of not shifting the focus of the current capacity and programming toward greater maintenance of the Council's strategic planning framework is that policy will likely continue to lag behind development pressures and demands than it otherwise should. That is, it will largely remain reactive and outdated opposed to proactive and current; decisions makers will be directed by development pressure and the respective desires of the developer opposed to guided by a robust strategy framework.

This will impact not only the ability to provide certainty to the development industry but it may detrimentally compromise achievement of the best use of land in key delivery areas including; supply of lower cost and diverse housing, employment generating development, and a reduction on development pressure / release of further large Greenfield development, as well as, protection of agricultural and environmental protection land.

To assist in minimising those impacts discussed above and consistent with the work program strategy first presented to Council in 2009, the number of privately proposed planning proposals on the work program has been progressively increased in the short term and will be tapered off by 2013/2014 to enable a greater percentage of the Council's resources to be allocated on strategic policy maintenance and preparation.

By 2013/2014 there would be an adequate supply of urban zoned land, supported by an appropriate strategic policy framework, to accommodate population and employment growth for at least 10 years. In the intervening period the additional focus on strategic planning would turn attention to both developing a planning framework required for the time horizon beyond 2020, as well as ensuring that the current policies are updated to reflect changing circumstances. This will lay the foundation ultimately for longer-term forward planning, which would include the rezoning of identified new Greenfield development sites toward the end of that period.

CONCLUSION:

As discussed in this report there are limitations on the capacity of Council's strategic planning resources with a corresponding need to ensure that the work program is reflective of, not necessarily constrained, by its ability to undertake key priority projects.

By 'priority' this reports relies on the underlying premise that all of the strategic policies identified are to varying degrees a priority of the Council, but acknowledging that when the

projects are juxtaposed there will typically be those that have some sort of 'edge' or 'advantage' over another, which places them ahead, generating in effect a queue headed by the those projects better representing or referred to as the 'priority' projects.

The proposed work program 2011/2014 has been designed in the light of the need to match the resources with the projects that are likely to yield the most benefit. These projects comprise two distinctive types; those generated by the Council and those generated externally. Both have their place and are equally relevant to the management and growth of the Tweed. The work program aims to balance the resource allocation to accommodate the priority elements arising from both areas. This has resulted with an increase in the number of commercially driven planning proposals and the reduction or deferral of several strategic land-use policies in the first period combined with a reversal of that plan through 2012/2014.

This realignment of priorities and resource allocation is seen to be justified on the basis that without greater stimulus and investment in the private sector through housing and employment generating development any number of adverse impacts will potentially materialise. They may include upward pressure on the cost of housing, missed opportunities for employment, and a furthering of the social economic divide, which for many Tweed families will mean that they will need to relocate elsewhere or their children will have limited opportunity to work and live in the Tweed and within established family and community networks.

At the same time, the strategic planning projects selected for inclusion in the work program are those seen to provide the most benefit in assisting and playing their role in ensuring a better and more secure future for the present and future residents of the Tweed and the protection of its environment.

Although some Council projects are subject to funding, as indicated in Table 4 above, the proposed work program is reflective of the Planning Reforms Unit resource capacity, the need for a balanced approach to managing public/private projects in the short-term, and the views expressed at the Councillor workshop of March 2011.

The proposed work program is suitable for adoption.

LEGAL/RESOURCE/FINANCIAL IMPLICATIONS:

Forward budget estimates may arise from Council's endorsement of the Planning Reforms work program as key strategic projects are taken up.

POLICY IMPLICATIONS:

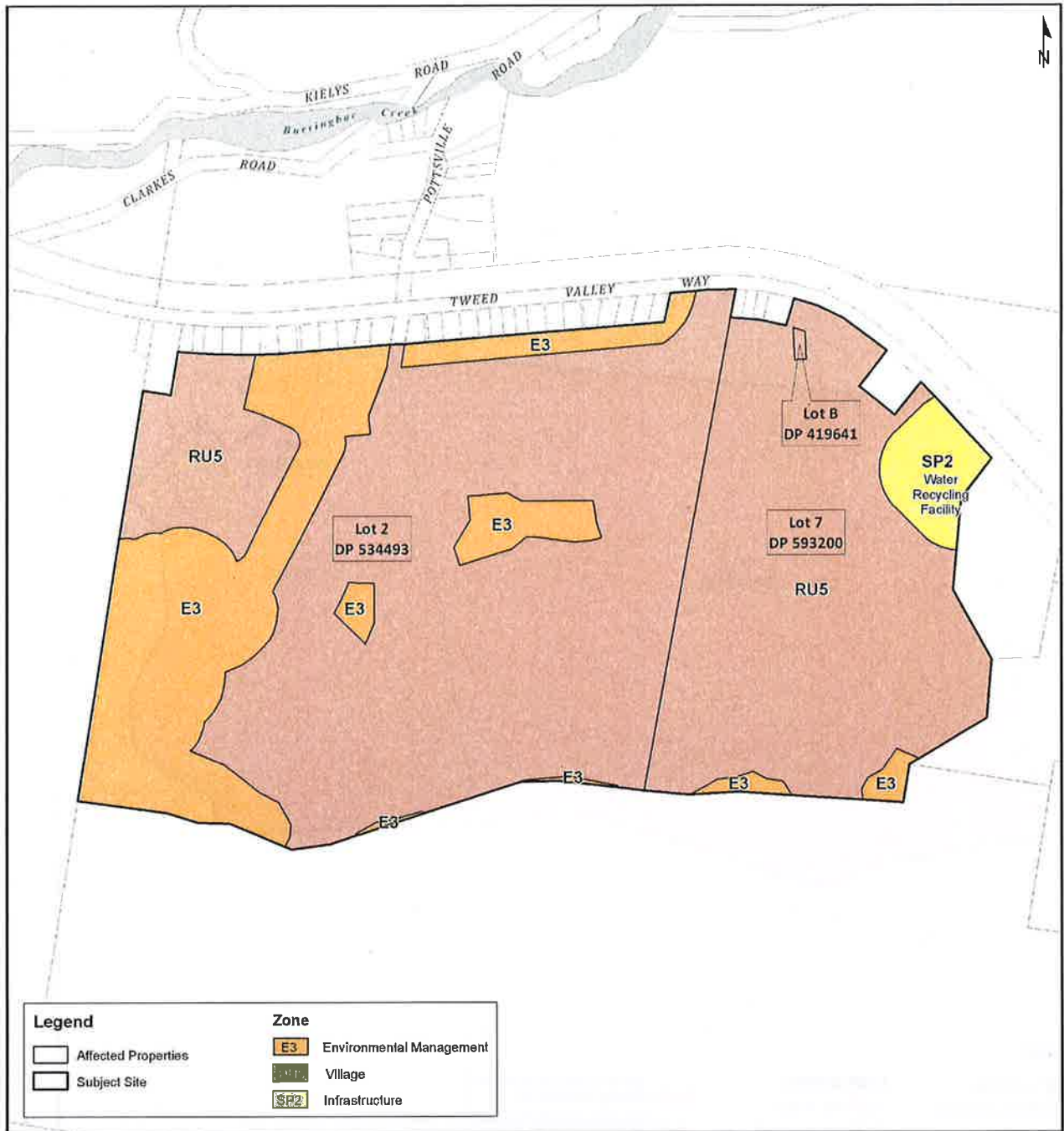
This report seeks a clear direction and prioritisation of Council's strategic planning program and the associated Fees and Charges relating to associated costs of planning proposals.

UNDER SEPARATE COVER/FURTHER INFORMATION:

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Nil.

Attachment 4 – Proposed amendment to the LEP 2000



SCALE: 1:7,500

LOCALITY: MOOBALL

PARISH: MOOBALL

COUNTY: ROUS

SHEET: 1 of 2

ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979

TWEED

DRAFT LOCAL ENVIRONMENTAL PLAN 2000 AMENDMENT No.94 IN ACCORDANCE WITH STANDARD INSTRUMENT ORDER 2006

DRAWN BY: J. Batchelor DATE: 12/09/2012

SUPERVISING DRAFTER:

PLANNING OFFICER: J. TOWNSEND

COUNCIL FILE No: PP10/0007

DEPT. FILE No:

GOVT. GAZETTE OF:

STATEMENT OF RELATIONSHIP WITH OTHER PLANS

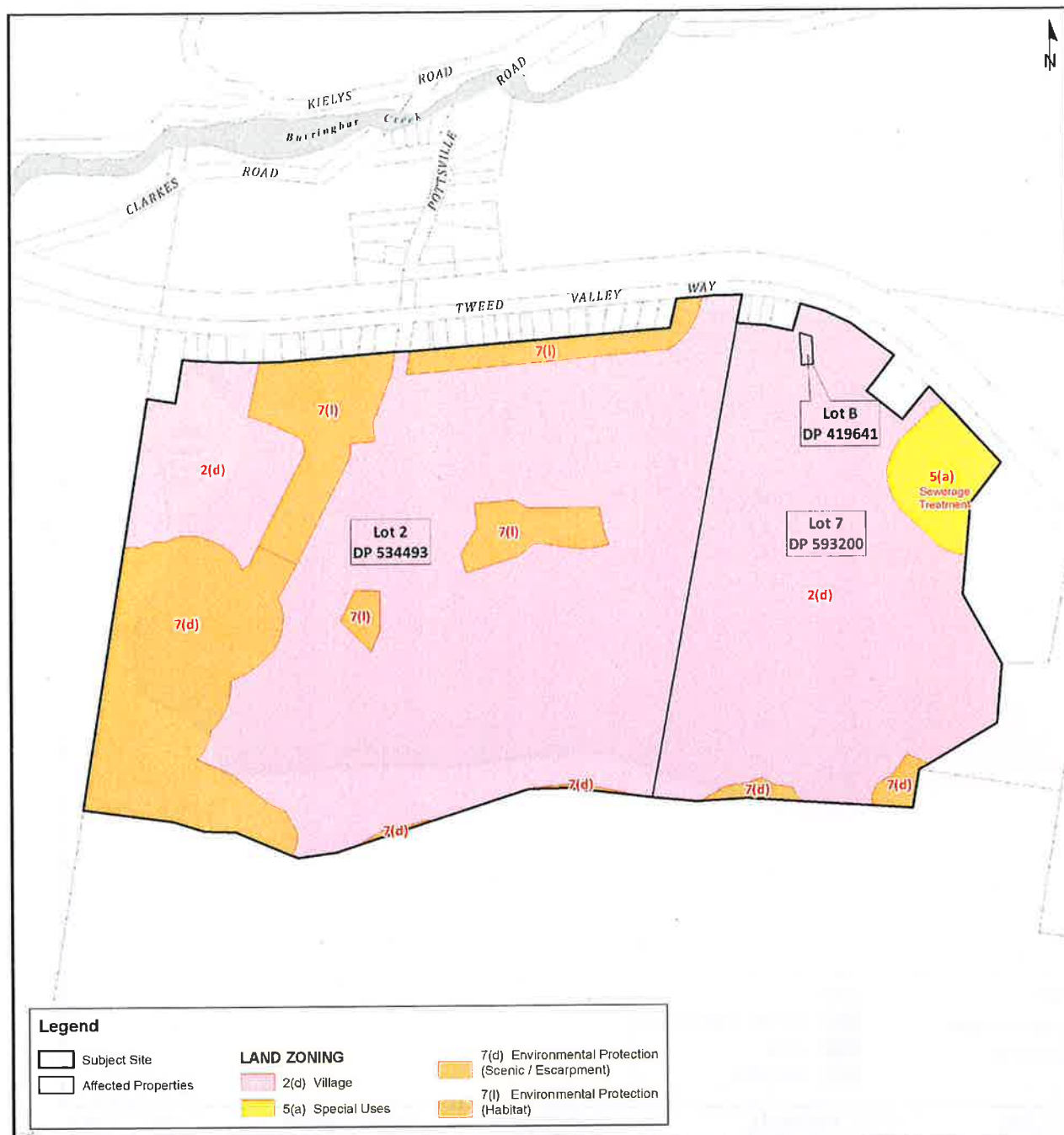
AMENDS: TWEED LOCAL ENVIRONMENTAL PLAN 2000

CERTIFIED IN ACCORDANCE WITH
THE ENVIRONMENTAL PLANNING &
ASSESSMENT ACT 1979 & REGULATIONS

GENERAL MANAGER

DATE

Attachment 5 – Proposed translation to the Standard LEP Template



SCALE: 1:7,500

LOCALITY: MOOBALL

PARISH: MOOBALL

COUNTY: ROUS

SHEET: 1 of 1

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

TWEED

LOCAL ENVIRONMENTAL PLAN 2000 (AMENDMENT No 94)

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PLANNING OFFICER: J. TOWNSEND

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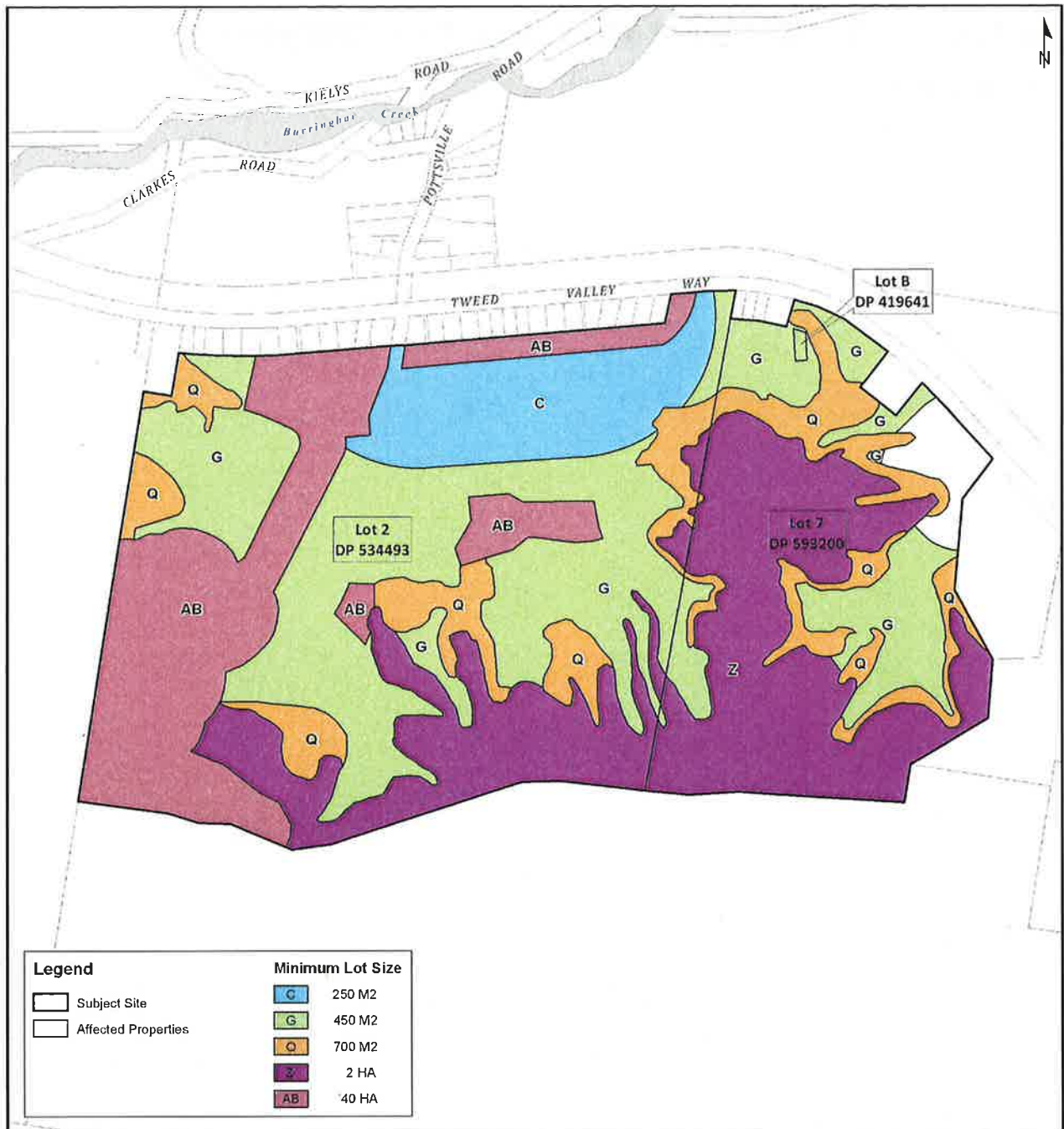
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AMENDS: TWEED LOCAL ENVIRONMENTAL PLAN 2000

CERTIFIED IN ACCORDANCE WITH
THE ENVIRONMENTAL PLANNING &
ASSESSMENT ACT 1979 & REGULATIONS

GENERAL MANAGER

DATE



SCALE: 1:7,500

LOCALITY: MOOBALL

PARISH: MOOBALL

COUNTY: ROUS

SHEET: 2 of 2

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DRAWN BY: J.Batchelor SUPERVISING DRAFTER: PLANNING OFFICER: J. TOWNSEND COUNCIL FILE No: PP10/0007 DEPT. FILE No: GOVT. GAZETTE OF:	DATE: 12/09/2012 STATEMENT OF RELATIONSHIP WITH OTHER PLANS AMENDS: TWEED LOCAL ENVIRONMENTAL PLAN 2000 CERTIFIED IN ACCORDANCE WITH THE ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1976 & REGULATIONS GENERAL MANAGER DATE

Attachment 6 – Cultural Heritage Due Diligence Assessment

EVERICK

Heritage Consultants Pty Ltd

ABN 78102206682

March 2011

CULTURAL HERITAGE ASSESSMENT

TWEED VALLEY WAY
MOOBALL, NSW



REPORT PREPARED FOR
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THE MOOBALL RESIDENTIAL TRUST

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Innovative Heritage Solutions



Report Reference:

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EXECUTIVE SUMMARY

The following is a cultural heritage assessment of Indigenous and non-Indigenous cultural heritage for a proposed Rezoning Application for land at Mooball in the Tweed Shire Local Government Area. The land subject to assessment is identified as Lot 7 on Plan 593200 and Lot 2 on Plan 534493 ('Project Area') situated on Tweed Valley Way.

This assessment has been commissioned by Jefferson Lane Pty Ltd ATF the Mooball Residential Trust. It involved a literature review, heritage register searches, consultation with the Aboriginal community and a field inspection. The methods used in this assessment conform with the Department of Environment, Climate Change and Water's ('DECCW') *Code of Practice for Archaeological Conduct in New South Wales* (2010) ('Code of Practice'), a checklist for which is included as Appendix B.

As part of a desktop study, Everick undertook searches of the relevant Aboriginal and historic heritage registers. A search of applicable historic heritage registers did not identify any items of cultural heritage significance within close proximity to the proposed Project Area. A search was conducted on 18 October 2010, of the DECCW Aboriginal Heritage Information Management System ('AHIMS'), which identified twenty two recorded sites for the broader search area. None 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 survey for historic and Aboriginal cultural heritage was carried out by the Consultant and Mr Cyril Scott, Sites Officer for the Tweed Byron LALC, on 20 October 2010. The written responses of the Tweed Byron LALC will is included as Appendix A of this report.

The Tweed LALC were asked to provide written feedback on the contents and recommendations in this report. A draft copy of this report was provided to the AAC and the Tweed Byron LALC for comment. The AAC commented on the results of the survey to Tim Robins from Everick Heritage during the AAC meeting held in Tweed Heads on the 4 May 2012 and a second meeting held on the 1st June, 2012.

At these meetings, the AAC supported the recommendations made by the Tweed Byron LALC, as described in the correspondence shown in Appendix A. The AAC did not put forward any further recommendations or call for further actions, other than to support the LALC recommendations.



Results

- No Aboriginal Objects or Places were identified within the Project Area.
- No areas were identified that were considered reasonably likely to contain Potential Archaeological Deposits (PADs).
- Consultation with the Tweed Byron LALC identified no places of cultural (spiritual) significance.
- No items of historic heritage significance were identified within the Project Area.

Recommendations: Indigenous Cultural Heritage

The following recommendations are based upon the desktop review, the results of the field assessment and consultation with the Tweed Byron Local Aboriginal Land Council ('Tweed Byron LALC').

Recommendation 1: Aboriginal Human Remains

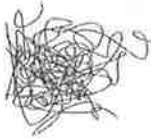
It is recommended that if human remains are located at any stage during earthworks within the Project Area, all works must halt in the immediate area to prevent any further impacts to the remains. The Site should be cordoned off and the remains themselves should be left untouched. The nearest police station, the Tweed Byron Local Aboriginal Land Council ('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.

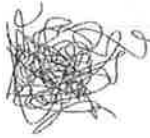
Recommendation 4: Conservation Principles

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.

Recommendations: Historic Cultural Heritage

Recommendation 1: Historic Cemetery adjacent to

It is recommended that the location of the historic cemetery to the south of the Project Area be definitively identified. Care should be taken when planning for the Project that this area is not harmed in any way. Should there be even a small risk of inadvertent harm during construction works, a temporary fence should be erected around those parts of the Cemetery considered to be at risk.



Should the cemetery be in close proximity (within 50 m) of the Project Area, it should be marked on all relevant development plans. Contractors should be advised of its existence and that it must be protected.



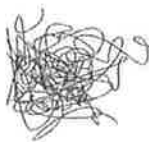
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DEFINITIONS

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.

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

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

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

DECCW means the New South Wales Department of Environment, Climate Change and Water.

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

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

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

NCREP 1988 means the *North Coast Regional Environmental Plan 1988*.

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



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

Project Area means the land subject to this assessment identified as Lot 7 on Plan 593200 and Lot 2 on Plan 534493.

Proposed Works means all activities associated with construction and landscaping within the Project Area (Figures 3 and 4), including activities undertaken by subsequent landholders.

Proponent means Jefferson Lane Pty Ltd ATF the Mooball Residential Trust and all employees and contractors of the Proponent.

The Project means the proposed Rezoning of Lot 7 on Plan 593200 and Lot 2 on Plan 534493, Tweed Valley Way, Mooball, NSW.

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



1. INTRODUCTION

1.1 Purpose of the Archaeological Investigation

The following report is an assessment of Indigenous and non-Indigenous cultural heritage relating to the proposed rezoning of a property at Mooball, NSW (the Project). The land subject to assessment is identified as Lot 7 on Plan 593200 and Lot 2 on Plan 534493 ('Project Area') situated on the Tweed Valley Way at Mooball. The intent of the investigation was to identify any archaeological or cultural heritage constraints to the eventual use of the Project Area for residential purposes.

1.2 Proponent & Project Brief

Everick Heritage Consultants (The Consultant) was commissioned by Adam Smith of Planit Consulting, on behalf of Jefferson Lane Pty Ltd ATF the Mooball Residential Trust (the 'Proponent'), to undertake this assessment. The brief for this project was to undertake a heritage assessment of suitable standard to be submitted as a stand alone report in support of a Rezoning Application to the Tweed Shire Council. In accordance with the relevant administrative and legislative standards for New South Wales (see Section 2 below), the methods employed in this assessment included:

- (a) Consultation with the Tweed Byron LALC;
- (b) searches of applicable heritage registers;
- (c) a review of ethnographic and historic resources relevant to the region;
- (d) a review of previous archaeological assessments from the region;
- (e) a review of historic aerial photography;
- (f) archaeological survey of the Project Area;
- (g) assessments of archaeological significance and impact; and
- (h) report on findings and recommended management strategies.



1.3 Defining the Project Area

The Project Area is situated within the Tweed Shire Council local government area, immediately south of the settlement of Mooball (Figure 1). The area subject to this assessment includes all of Lot 7 on Plan 593200 and Lot 2 on Plan 534493 (Figure 2). The land is bounded by Tweed Valley Way and residential allotments on the north and east. Larger rural allotments bound the Project Area to the west and south. The Project Area is approximately 80 ha in area.

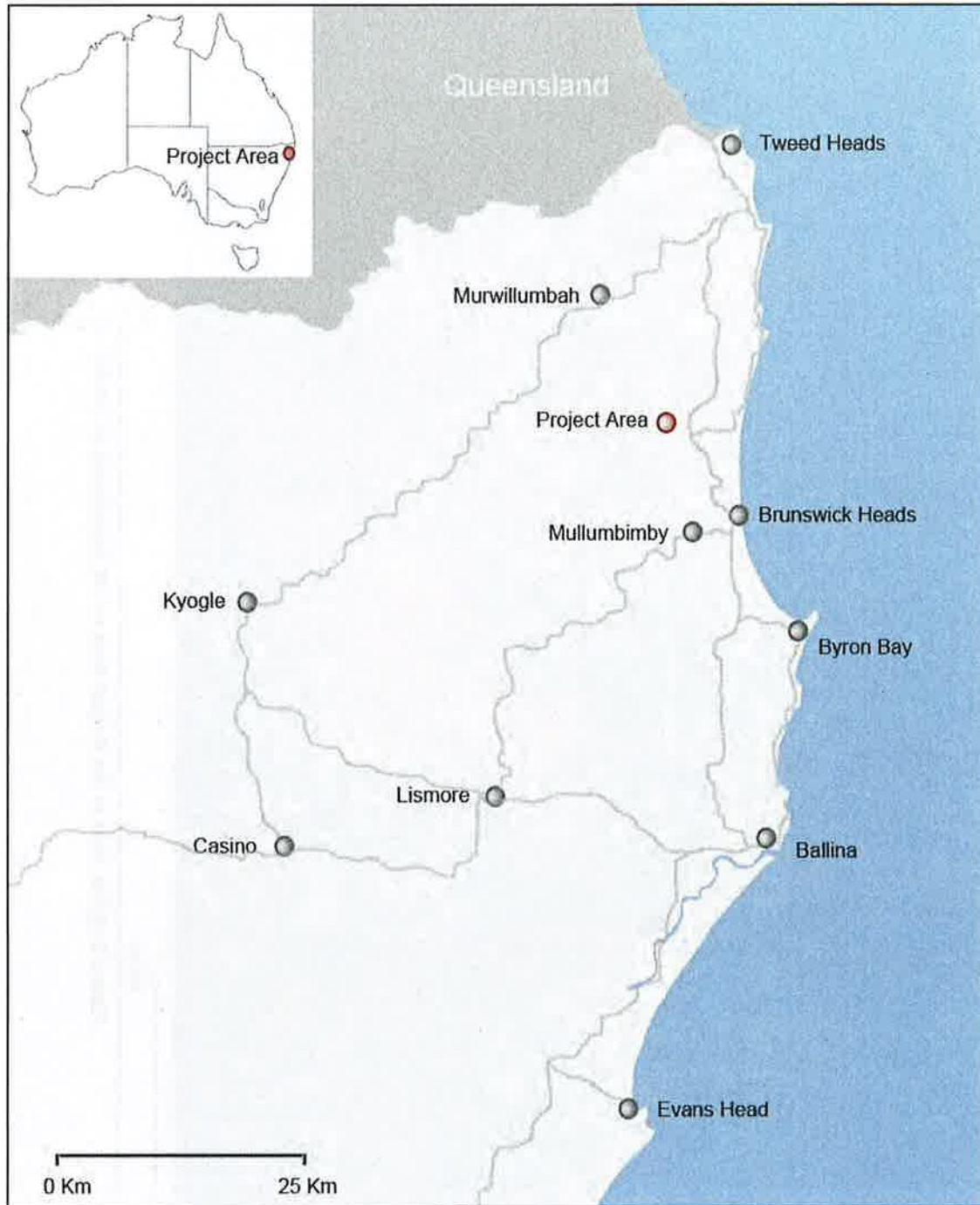
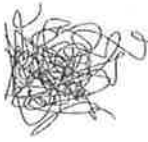


Figure 1: Project Area General Locality



Figure 2: Aerial View of the Project Area (NSW Department of Lands)



1.4 Report Authorship

The site survey was undertaken by qualified archaeologist Adrian Piper, assisted by Cyril Scott, Sites Officer of the Tweed Byron Local Aboriginal Land Council ('Tweed Byron LALC'). The desktop study was undertaken by archaeologists Adrian Piper, Tim Robins and Helene Tomkins. This report was written by Adrian Piper, assisted by Tim Robins and Helene Tomkins.

2. LEGISLATIVE AND PLANNING CONTEXT

The following legislation provides the context for cultural heritage in NSW: the *National Parks and Wildlife Act 1974* (NSW), the *Environmental Planning and Assessment Act 1979* (NSW) and the *Heritage Act 1977* (NSW). The Commonwealth also has a role in the protection of nationally significant cultural heritage through the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth), *The Protection of Movable Cultural Heritage Act 1986* (Cth) and the *Historic Shipwrecks Act 1976* (Cth).

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

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



2.1 *The National Parks and Wildlife Act 1974 (NSW) and the National Parks and Wildlife Regulations 2009 (NSW)*

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

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

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

The new amendments also significantly strengthen the penalty provisions. The issue of intent to harm Aboriginal cultural heritage has been formally addressed by separating it from inadvertent harm. The penalty for individuals who inadvertently harm Aboriginal Objects has been set at up to \$55,000, while for corporations it is \$220,000. Also introduced is the concept of ‘*circumstances of aggravation*’ which allows for harsher penalties (up to \$110,000) for individuals who inadvertently harm Aboriginal heritage in the course of undertaking a commercial activity or have a record for committing similar offences. For those who knowingly harm Aboriginal cultural heritage, the penalty will rise substantially. The maximum penalty will be set at \$275,000 or one year imprisonment for individuals, while for corporations it will rise to \$1,100,000.



Where a land user has or is likely to undertake activities that will harm Aboriginal Objects, the Director General (DECCW) has a range of enforcement provisions open to the office, 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) ('Archaeological Code of Practice') (see Appendix B).
- (d) Acting in accordance with an Aboriginal Heritage Impact Permit (AHIP).

2.1.1 '*Low Impact Activities*'

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

- (a) Maintenance – For example on existing roads and tracks, or on existing utilities such as underground power cables and sewage lines.
- (b) Farming and Land Management – for land previously disturbed, activities such as cropping, grazing, bores, fencing, erosion control etc.*
- (c) Removal of dead or dying vegetation - only if there is minimal ground disturbance.
- (d) Environmental rehabilitation – weed removal, bush regeneration.



- (e) Development in accordance with a Development Certificate issued under the EPA Act 1979 (provided the land is previously disturbed).*
- (f) Downhole logging, sampling and coring using hand held equipment.
- (g) Geochemical surveying, seismic surveying, costeaning or drilling.*

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

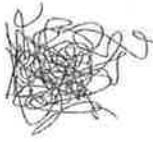
2.1.2 Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South

Wales (2010)

The Due Diligence Code has been applied in Section 6.2 of this assessment. It operates by posing a series of questions for land uses before they commence development. These questions are based around assessing previous ground disturbance. An activity will generally be unlikely to harm Aboriginal Objects where it:

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

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



2.2. 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) (ICCR) as of 12 April 2010. The ACHCR provide an acceptable framework for conducting Aboriginal community consultation in preparation for Aboriginal Heritage Impact Permits. Proponents are also required to follow the ACHCR where undertaking a 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.

2.3 The Heritage Act 1977 (NSW)

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

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

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



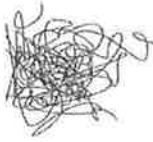
2.4 The Tweed Shire Local Environmental Plan 2000

The Tweed Shire LEP 2000 provides statutory protection for items already listed as being of heritage significance (Schedule 2) and items that fall under the ambit of the *Heritage Act 1977* (NSW) and are Aboriginal Objects under the *National Parks and Wildlife Act 1974* (NSW). It ensures that essential best practise 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
- d) which does not adversely affect its heritage significance, or
- e) moving a relic, or excavating land for the purpose of discovering, exposing or moving a relic, or
- f) erecting a building on, or subdividing, land on which a heritage item is located or which is within a heritage conservation area.

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



2.5 The North Coast Regional Environmental Plan 1988

The *North Coast Regional Environmental Plan 1988* ('NCREP 1988') recognises the importance of regionally significant heritage items and places to the State of NSW. It 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 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. It also involves referral to the NSW Heritage Council, regardless of whether the item is on the NSW Heritage Register.

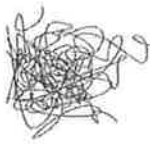
2.6 The NSW Heritage Manual

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



The NSW Heritage Manual contains a set of 7 assessment criteria that act as a guide to assessing significance. They are discussed in detail in the significance assessment in Section 8 of this report:

- **Criterion (a):** An item is important in the course, or pattern, of NSW's cultural or natural history (or the cultural or natural history of the local area);
- **Criterion (b):** An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the cultural or natural history of the local area);
- **Criterion (c):** An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);
- **Criterion (d):** An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons;
- **Criterion (e):** An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);
- **Criterion (f):** An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area); and
- **Criterion (g):** An item is important in demonstrating the principal characteristics of a class of NSW's
 - cultural or natural places; or
 - cultural or natural environments.



3. DESCRIPTION OF DEVELOPMENT PROPOSAL

As this assessment relates to a rezoning application, precise construction details within the Project Area are unknown. However, it is proposed that a mixture of residential lots and open space / parkland will be created, with a series of 'acreage' style lots being located along the southern boundary (Figure 3). The fringe of vegetation along the south west boundary of the Project Area will be preserved. The engineering plans have yet to be finalised, and at the time of undertaking this assessment the amount of benching, cut or fill required for the development is unknown.

For the purposes of this assessment, it has been assumed that all of the Project Area may be the subject of significant surface and subsurface ground disturbance. However, it should also be noted that a large portion of the site will be subject to fill, which will likely have little if any impact on cultural material in those areas.



Figure 3: Project Site Development Plan (Planit Consulting July 2010)



4. HERITAGE REGISTERS: ABORIGINAL AND HISTORIC HERITAGE

4.1 The DECCW Aboriginal Heritage Information Management System

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

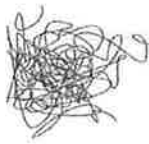
A search was conducted on the 12th October 2010 of the DECCW Aboriginal Heritage Information Management System (AHIMS service number 32722) over 25 km² focusing on Mooball, NSW. The search identified 27 registered Aboriginal sites within the search area (Figure 4). None of the sites are within 3.5 km of the Project Area. All are located within the Yelgun / Wooyung region, approximately 3.5 km – 5 km to the south east. This is an area that is known to be of high regional cultural significance. It contains a number of ceremonial sites, including the regionally significant Wooyung Bora Ground. A culturally scarred tree is identified north of the Project Area west of Pottsville, however, a recent arborists opinion has cast doubts on the cultural origins of the tree (Everick 2010).

All of the registered sites are located within 3 km of the coast. This bias can partly be explained by the propensity for residential development in this region to be located close to the coast. Residential subdivisions often trigger the need for heritage assessment.

The majority of sites within the search area (20) were recorded as open campsites containing either an isolated artefact or artefact scatter. An additional two sites contained shell and artefact material, and were recorded as middens. A further two sites were recorded as containing shell only, while the remaining three are culturally modified trees.



Figure 4: AHIMS Search Results



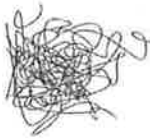
4.2 Other Heritage Registers

The following heritage registers were accessed on 22 November 2010 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** (Australian Heritage Council): Contains no places listings in close proximity to Mooball.
- **Commonwealth Heritage List** (Australian Heritage Council): Contains no place listings within the Tweed LGA.
- **Register of the National Estate** (Australian Heritage Council): Contains no places listings in close proximity to Mooball.
- **The State Heritage Register** (NSW Heritage Office): Contains no places listings in close proximity to Mooball.
- **Tweed Shire Local Environment Plan 2000:** Contains one listed item in the Mooball region, the Hoskin Wildlife Refuge on Wabba Road, Mooball. The refuge is located approximately 1.5 km north of the Project Area, and is unlikely to be affected by the Project.

4.3 Synthesis of Archaeology and Ethnohistory

The Aboriginal people of the Tweed Coast were part of a larger linguistic group, the Bundjalung, which spoke a range of dialects in the area between the Clarence and Logan Rivers extending west to Tenterfield. Dialect groups and sub clans composed of interlinked family groups occupied distinct areas within the wider Bundjalung association. Land belonged to individual clans whose territorial boundaries had been established in mythology



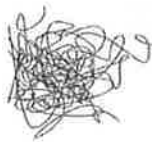
(Creamer and Godwin 1984). The Project Area is within the territory of the Minjungbal people, with the Kalibal/Widjabal to the west and the Arakwal to the south (Tindale 1974; Crowley 1978). The Minjungbal occupied the coastal plain and river valleys from a short distance north of Byron Bay to Southport and west to the coastal ranges. Curr provides some evidence for this model suggesting that dialects between the Albert River and Tweed River were closely related (Curr 1887:321). Tindale recognised a similar common language group extending between Byron Bay and Southport and west to Murwillumbah, which he called Minjanbal (Tindale 1940:191).

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

4.3.1 Territories and Movement

From the few eye witness sources available for the North Coast we can suggest that contact between elements of the coastal clans was frequent and may have involved relatively large numbers. Bray records that the coastal Coodjinburra '...used to mix very much with the Ballina Richmond River Blacks' (Bray 1901:9). However it may have been a way of life that rapidly disappeared under the impacts of disease and restrictions on Aboriginal groups by 'authorities' on the movement of Aboriginal people. A review of sightings of Aboriginal coastal groups in Coleman's review of ethno historical sources led her to a conclusion that in the initial stages of European contact, observers of coastal groups describe, '...consistently high, semi sedentary local populations on the coast with a highly sophisticated organic material culture which vanished almost overnight with European contact' (Coleman 1982:7).

Population numbers on the coastal plain were high, possibly reflecting the wide variety and high productivity of coastal ecologies. Ainsworth (1922) is the most detailed of early sources for the coastal plain and estuary, writing specifically of the Aboriginal people of east and west Ballina. Ainsworth (1922:43) recorded '...In 1847 there were between 400 and 500 in the native tribes belonging to East and West Ballina'. Uniake an observer on John Oxley's ship 'Mermaid' estimated 200 men armed with spears observed the ship from Fingal Head following a



brief exploration of the lower Tweed River (Uniacke 1825:40). Bray observed in the 1860s, 600 camped on the Wollumbin plain near Murwillumbah. Pierce estimates that if on the basis that the 200 men observed by Oxley's expedition were drawn from coastal

clans between the Brunswick and the Tweed Rivers, the population density between the rivers and inland for some miles was '...of about three per square mile...' (Pierce 1971:13). Population estimates by eye witnesses of Aboriginal numbers for the coastal regions immediately after European settlement are highly likely to be underestimates of pre contact numbers due to the impacts of diseases particularly small pox that spread throughout coastal groups prior to official settlement.

Contact between local clans and more distant groups took place for the purposes of exchange, intermarriage, armed conflict and during times of seasonally abundant food supply. A number of models have been proposed to account for the systematic use of the hunter gatherer environment of northern New South Wales and southern Queensland. Movement took place within territories in response to the availability of food supplies and across group territories for purposes of ceremonial occasions and tribal conflicts in addition to exploiting the seasonal abundance of particular food sources. However, it has been suggested that movement in the coastal river valleys does not seem to have been caused by food shortages as such, but rather to take advantage of different food types (Belshaw 1978:75). McBryde (1974 and 1976) argues for a seasonal movement of people between the coast in summer exploiting marine foods and hunting inland in winter.

On the ethno-historical evidence McBryde suggested that some seasonal movement was usual and that the basic subsistence economy of hunting, fishing and gathering was neither static, nor completely migratory, but characterised by movement between the coast and the foothills (McBryde 1974:337). A number of early references refer to seasonal movement on a limited scale including Ainsworth (1922) on the Richmond River and Dawson (1935) and McFarlane on the Clarence River. Bray (1923) states that the Lismore 'tribe' used to go to Ballina at the mouth of the river. Sullivan (1964:20) recorded that inland groups were allowed to come to the Tweed coast for a time. The archaeological evidence for movement in the coastal river valleys is less conclusive (McBryde 1974:338).

Movement within a clan territory in response to local conditions or availability of different food sources also occurred. Aborigines at Byron Bay often shifted camps but seldom moved far from a flying fox camp (Sullivan 1964). Bundock noted that on the upper Richmond flying fox were taken more easily in wet weather (Bundock 1898:4-5). Davey on the Tweed suggests that movement may have been frequent (Davey 1948). Moehead recorded that near Lismore the Richmond Aborigines, '...camped on the river flats until the rain set in and would then retire to the hills' (Moehead nd:1).



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

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

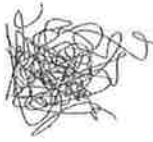
An exception to normal movement practices across tribal boundaries was that documented by Petrie (1975) and Bundock (1898). Bundock recorded the movement of the upper Richmond River Aborigines in the Wyangarie area to the Bunya Mountain, '... every third year or so ... under a sort of 'Truce of God'... for the blacks went through each other territories unharmed' (Bundock 1898). These gatherings occurred every fourth year, attracting groups to their own traditionally defined camping areas and served to promote trade and strengthen kinship networks across a vast area of western Queensland, south-east Queensland, and north-east N.S.W.

4.3.2 Economy

According to Ainsworth (1922:43-44) the coastal Minjungbal (Tindale 1974) or Minjanbal (Crowley 1978) people relied on '... fish and oysters and the varied products of the chase...' He refers to the spearing of salmon on the beaches and the netting of estuarine fish by means of '... a "tow-row"-a finely meshed net attached to a stick of bamboo bent in the shape of a bow ...' He is not specific about which estuarine fish were caught by this method, although an excavation of a North Creek shell midden at Ballina did indicate the exploitation of flathead and bream (Bailey 1975:55).

Ainsworth places an emphasis on the consumption of oyster to the exclusion of other estuarine, coastal rock platform and open shore molluscs, all of which are recorded in local shell middens (Bailey 1975; Campbell 1982; Hughes 1991). Modern research supports Ainsworth's assessment as to the prominence of oyster at least for certain periods, in the diet of the Ballina group to the extent that this species comprises the greatest volume of estuarine shellfish represented in Aboriginal middens (Hughes 1991).

Terrestrial animal foods mentioned by Ainsworth (1922:43) include pademelons, wallabies, bandicoots, and iguanas. He reports that flying foxes provided a source of food and were easily brought down with the boomerang



and pademelon stick. Bundock also records the hunting of flying fox '... by going into the camps where they sleep during the day, when it is raining heavily, as they will not fly...' (Bundock 1898).

At Byron Bay flying fox were so prolific and reliable that the natives, though often shifting camp, seldom went far away on account of this source of food supply (Anon. n.d., b:1 in Sullivan 1978:107). Ethnohistorical records are largely directed towards descriptions of hunting techniques which employed large groups of people and obvious types of technology requiring demonstrable physical skills: the use of spears, clubs, boomerangs, the 'tow-row' (net) etc. The role of plant foods in the local economy is often understated or overlooked entirely. Certainly, vegetable foods are given no particular prominence in Ainsworth's recollections at Ballina. He refers to yams obtainable in the scrubs, and to bread made from

nuts which grew on the coastal headland (Ainsworth 1922:43). McFarlane (1934) writing of the Clarence River placed greater emphasis on the role of vegetable foods '... the woods supply much variety in the shape of fruit or berries but every description of vegetable contributed to the digestive requirements of the collector of food necessities...'

In the Tweed/Brunswick coastal zone the rhizome of the Bungwahl Fern (*Blechnum indicum*) provided the major component of the vegetable diet. Thomas Pamphlett a shipwrecked convict observed that in the Moreton Bay region, '...fern root was a daily part of the diet and carried in bundles when the tribe moved. Women and children spent the bulk of the day procuring fern root...a part of which they gave the men in exchange for fish...' (Uniacke 1843:58).

The most detailed analysis of material culture of the North Coast has been that undertaken by McBryde (1978). The region of the Tweed, Richmond and Clarence Rivers would seem to form a distinct unit. This is particularly so in the case of fishing technology. The multi-pronged fishing spear and the shellfish hook are both absent from this region. Fish were caught in nets or speared in the shallows (McBryde 1978:187). Spears were single pointed fire hardened weapons (Dawson 1935:22), of both a lighter and heavier variety (Byrne 1946:3). Neither the woomera nor the spear throwing stick were used in this region (Dawson *ibid*). The range of materials is considered wider than central Australian tribes with fewer all purpose items, few composite tools and a number of specialised ones. This may reflect a more sedentary

life style in a rich environment requiring fewer specialised tools (McBryde 1978:187). The stone tool element in the material culture was small and unspecialised. The archaeological evidence suggests changes to a simpler stone technology took place only centuries before European settlement. The stone tools in use immediately prior to European settlement, '... show little typological sophistication and did not demand highly skilled craftsmanship' (McBryde 1978:198).



4.3.3 Archaeological Context: Prehistory

Coastal sites in northern N.S.W. date to within the Holocene period. Published sources indicate that the earliest of these is a shell midden at the base of Sexton Hill on the lower Tweed River where an occupation phase was dated between 4,700 BP and 4,200 BP (Appleton 1993:34). At Ballina a shell midden on Chickiba Creek was found to have accumulated between 1,750 BP and c.100 BP (Bailey 1975:52). Shell samples from the Angels Beach area are dated between 800 BP and 530 BP, with one sample at 900-1,000 BP (Rich 1994:195). Stone artefacts were assessed on technological grounds to date to within the past 2,000 years (Rich 1994:161). Bailey's basal date of 1,750 BP suggests that the modern resource-rich environment may not have been productive enough at an earlier time to support any more than small groups. In contrast, the Tweed River estuarine site was in use some 3,000 years earlier than this (Appleton 1993).

Beach foreshore sites investigated to date have been associated with more recent phases of occupation. Fore dune sites typically take the form of narrow bands of pipi shell, or surface scatters of pipi and stone artefacts. Pipi horizons at South Ballina and Broadwater have dated to 260 years BP and 200 years BP respectively (McBryde 1982:77). A more substantial pipi midden (AHIMS: #04-06-0061) investigated on the beach foreshore at Byron Bay had been used between approximately 1,000 and 400 years BP. The 80 cm deep midden deposit was overwhelmingly dominated by pipi shell, with minor inclusions of periwinkle, limpet, sand snail, oyster and cartrut. Bream was the most abundant vertebrate species. Although in lower quantities relative to bream, a broad range of fauna was represented in the midden, including other types of fish, tortoise, macropods, bandicoot, possums, rodents, birds and reptiles. The midden's stone assemblage was characterized by primary flaking debitage which reflected the poor knapping quality of the raw materials used. All of these materials are believed to have been collected from intertidal pebble beds adjacent to the site (Collins 1994).

The most extensive archaeological investigation of sites on Pleistocene sand substrate has been that conducted by Rich (1994) at what is now known as Angels Beach Estate, Ballina. This study resulted in the recovery of 40,000 shells and shell fragments, bone fragments, a piece of ochre and 9,000 stone artefacts. Rich's investigation at Angels Beach Estate produced results, which are largely in accord with those from other studies in the Lennox Head-Ballina area, revealing an assemblage of unmodified flakes, backed blades, cores, hammerstone, uni- and bifacially faked pebble tools, manufactured chiefly on chalcedony, chert and acid volcanic beach/river pebbles. Bone and shell fragments indicated exploitation of estuarine shellfish and terrestrial animals in addition to fish. Rich concluded that evidence for the spatial distribution of intra-site activities, specifically meat



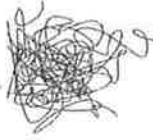
butchering and tool manufacturing, suggested that the sites were not the product of itinerant or random occupation, but of repeated occupation by groups larger than a single family unit (Rich 1994:204). Radiocarbon determinations for shell samples revealed an occupation phase dating between c. 100 BP and 530 BP. On technological grounds, stone working events were dated to within the last 2,000 years (Rich 1994:9).

4.4 Previous Archaeological Assessments

Few assessments have sampled the low hills, ridges and spurs that form the headwaters of coastal streams such as the Cudgera, Sheens, Burringbar, Crabbes and Billinudgel Creeks. The following review of previous archaeological assessments refers to sections or whole reports that assess the coastal hills landform units and parts of the alluvial upper creek valley plains.

Navin (1990) assessed an extensive area of coastal landscapes in relation to the Ocean Shores development, c 7km south east of Mooball village. The flat and level areas of the major ridge lines were considered the most archaeologically sensitive of the hills and ridges landform unit. Six sites were recorded; one midden and five artefact scatters. The sites are on lower spurs adjacent to wetlands of Marshalls Ridge in the Jones Road reserve, considered to be an access route to the Wooyung bora ground/ceremonial area (Navin 1990:27) The sites are low (<20) to medium (>20) density artefact scatters comprising stone flakes, flaked pieces, cores and fragmented pipi at three sites. The medium density artefact scatter consisted of 54 stone artefacts over 40 m with a small (2 m x 2 m) concentration of cockle shell. The midden site is a low density scatter of fragmented pipi shell and one stone flake (ibid: 28, 29).

Collins (1993) assessed what is now known as the Koala Beach Estate at north Pottsville. Landforms were an extensive area of coastal hills, remnant barrier dunes and drained lowlands. Of the eight sites recorded five artefact scatters and one isolated artefact were associated with a low spur and saddle ridgeline landform context. Four open campsites (#04-02-72 to #04-02-75) and four isolated artefacts (#04-02-117 to #04-02-120) were recorded. Of the 42 stone artefacts recorded 23 were classed as flaked pieces, 18 flakes and one core. The materials were predominantly chalcedony/agate with siltstone, fine grained volcanics, chert and quartz (Collins 1993:26). Collins observed it was likely that use of the area centered on exploitation of multi resources including terrestrial fauna and both fresh and marine aquatic foods. Collins concluded, with supporting statements made by Lilley (1984) and Piper (1976:173) that '... although no seasonal indicators were evident, that the low ridges



and spurs of the coastal foothills complexes may have been used by small summer foraging groups who camped along the lower ridgelines to escape the inundation of less elevated areas during the wet season' (Collins 1993:31). The report concluded that due to their surface only contexts the sites were not archaeologically significant (Collins 1993:32). An adjoining 3.4 ha of the Cudgera Creek floodplain to the south of the Collins study was assessed by Lamb (2004). No sites were found.

Davies (1994) assessed the route of the proposed Pacific Highway motorway between Chinderah and Billinudgel. The route passes immediately to the east of the Project Area. No sites were found in the ridge unit. This was attributed to disturbance and poor visibility conditions.

Mills (1998) conducted an assessment of 8.7 km between western Brunswick Heads and Billinudgel. Within the ridge and spur lines unit, two isolated artefacts were found on hill crests. Four potential archaeological deposits were proposed on a ridgeline cut by deep ephemeral creeks north of Billinudgel (Mills 1998:26-28). Two non-Indigenous heritage sites of a tree stump with platform holds and a 60 m section of wooden slip rail fencing were identified (ibid:34, 35).

Piper (1999) assessed 95 ha of floodplain and low hills at west Pottsville. Approximately 40% of the area comprised the hills and slopes landform unit. One site (AHIMS#04-2-0123) was found: an artefact scatter of four stone artefacts being a core, flake and two microflakes. The site was located in a highly disturbed context on a low spur projecting onto the Cudgera Creek flood plain.

Cotter (2002) conducted an archaeological assessment of c. 6 ha of low coastal hills forming the southern boundary to the Yelgun Creek flood plain. No archaeological relics were found. This was considered to be a function of disturbance through quarrying activity and minimal surface visibility (Cotter 2002:26).

Piper (2002) reassessed parts of areas at north Ocean Shores and Yelgun previously assessed by Navin. The archaeological assessment was designed to evaluate the condition and contents of sites previously recorded in the Marshalls Ridge complex and to record new sites in relation to uses of agricultural land owned by Greenfields Mountain Pty Ltd. Of the five artefact scatters recorded by Navin within the area reviewed by Piper, no evidence of Aboriginal artefacts was found at four sites. One site still contained two stone artefacts. All of the five sites are located on the ridge crest on or immediate to the Jones Road reserve (Piper 2002:41, 42). Additional sites were recorded on slopes falling to the Yelgun flood plain: one isolated artefact and an artefact scatter (AHIMS#04-02-0115) containing a range of tools that indicated a permanent campsite rather than a transient location (ibid: 49).



Fox (2003) identified eight axes collected by a property owner on a ridgeline at Crabbes Creek immediately south of the Project area. The artefacts were collected over 500 sq m on level ground eroded by cattle (Fox 2003:50). The site does not appear on the DECCW AHIMS.

Everick Heritage Consultants (2008) conducted a cultural heritage assessment over 10 ha at west Pottsville. A scarred tree originally thought to be of Indigenous origin was later found to be of insufficient age according to an arborist's report.

Everick Heritage Consultants (2009) conducted an archaeological assessment over c 1.4km of ridgecrests for use as fire trails in the Condong Range c 2.5 km north west of Mooball. The area was highly disturbed due to previous forestry logging, no Indigenous sites were found.

Fox (2010) has identified four PADS (Potential Archaeological Deposits)-three 'caves' at Upper Burringbar and one at creek level. One 'cave' contains occupation deposit, a number of stone axes have also been identified at two locations in the Burringbar Creek valley (Ian Fox pers com 2010).

The total range of confirmed Aboriginal sites from the above reports comprises: one (1) midden, twelve (12) artefact scatters, five (5) isolated artefacts and two (2) non-Indigenous sites. These sites are located from reports assessing the coastal hills landform unit adjacent to the middle and upper alluvial plains between Pottsville in the north and north Ocean Shores in the south.

4.5 Aboriginal Sites and Features (range and nature)

From the review of previous archaeological assessments in the locality it is apparent that the ridgelines linking the headwaters of the coastal creeks and spurs terminating at the valley flats can be archaeologically and therefore culturally sensitive particularly level sections of ridgelines and rock shelters. The Project area contains neither of the features identified as potentially archaeologically/culturally sensitive although the southern boundary adjoins a ridgeline. The following types of sites are assessed for their potential to remain within the Project area.



4.5.1 Isolated artefacts

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

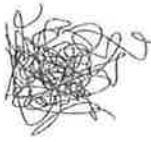
4.5.2 Open Campsites / Artefact Scatters

They consist of scatters of stone artefacts and possibly bone and hearths. Their exposure to the elements means that evidence of food resources used on the site (with the exception of shellfish) is usually lacking. They invariably consist of low or high density scatters of primary and secondary flakes in addition to the types of artefacts found as isolated finds. Open campsites are invariably found in elevated positions adjacent to creeks, wetlands and level sections of ridgelines. An open campsite containing a large component of shell refuse may be described as a midden. Open campsites may contain burials when located on sand strata.

4.5.3 Middens

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

Middens may be composed of deep compacted debris reflecting consistent use over long periods of time, or thin scatters of shell which reflect use on a single occasion by a small group, perhaps in transit or gathering food away from a large campsite. All recorded middens have been located in elevated positions beside estuarine waterways or on elevated sand substrates close to wetlands. The dominant species found in estuarine middens is oyster, while locations away from the waterways contain pipi or combinations of estuarine, open beach and rock platform species.



The Project area is within range of beach foreshore and estuarine conditions therefore a potential for middens exists. However none have been detected in this landscape/environmental context that is beyond the immediate coastal zone unless in closed sites within rock shelters in the headwaters of the coastal creeks.

4.5.4 Quarry Sites

A stone quarry in this general locality may occur where a source of opaline silica exists, as reported at Tintenbar (Collins 1996:31) or other siliceous types of stone occur (e.g. chert, chalcedony and silcrete). To date the only confirmed quarry sites recorded in the broad coastal zone between Ballina and the Qld border are on the Tweed Coast where greywacke outcrops have been excavated at several locations (Piper 1976:94). As there are no suitable rock outcrops or known sources of siliceous material in the Project Area the potential for quarry sites to be found is low. While basalt is known as a raw material source for stone artefacts, it has not been known to be found in a quarried situation, but rather a case of specific collection of isolated, suitable pebbles.

4.5.5 Scarred Trees

The majority of scarred trees on the North Coast of NSW result from the removal of bark for use as covering, shields, containers or canoes. No doubt, as an outcome of widespread intensive land clearing and natural causes, only one scarred tree has been discovered in the wider study locality. This tree (Bel- 1, N.P.W.S. registration number unknown) carries a single oval scar around 1m long and 30cm wide and standing on a flat adjacent to wetland bordering Belongil Creek at Byron Bay. The tree species has not been reported (Envirosciences 1994). There are no trees of sufficient age within the Project Area therefore no potential exists for scarred trees.



4.5.6 Burial Sites

In the Tweed/Brunswick there are oral accounts of burials on hill tops marked with stone cairns either singly or in triangular formation. There are also oral accounts of burials in cliff lines and overhangs in the headwaters of the Tweed River. Human skeletal materials may occur in soils, but are almost invariably found interred within soft sediments such as sand or shell midden deposits. Human burials are known to have been disturbed at several locations in the lower Tweed by sand mining and development works. However unless disturbed, usually by mechanical means, surveys of this kind are unlikely to detect them. The high acidic nature of the soils in the Project area and the additional impact of land clearing, banana cultivation and road making make it highly unlikely a human burial could remain intact.

4.5.7 Ceremonial Sites

There is little potential for the Project Area to contain ceremonial sites in the order of Bora grounds, which contain raised features in the form of earth or stone mounds. Surviving Bora grounds in this coastal region are without exception found in sand based ground. There is a reference to a ceremonial event having taken place in 1847 at Tintenbar on the Emigrant Creek flats attended by up to 300 Aborigines. This confirms the use of rainforested areas for both ceremonial and economic purposes (Collins 1996:13). Given the 'completeness' of clearing since approximately the early twentieth century, there is little possibility of stone or earth structures that would indicate ceremonial grounds although former sites may be known to the Aboriginal community.

4.5.8 Mythological Sites

A mythological site is reported in the *Tweed Daily* to the east of the Project area on the Mooball Pottsville Road. The location is the site of 'Burring' (fighting boomerang) in the Burringbar Creek (Ian Fox pers com 2010).

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



upper Tweed is a jurraveel for cunjevoi, (Byrne 1984:11) a rainforest food plant used by Aboriginal people in this region.

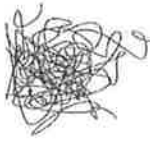
Collins recorded an 'increase centre' (djurebil) for the sand goanna on the coastline to the north of Black Head Ballina, its influence spread along the coastline and inland as far as North Creek (Collins 1993:27). A stone arrangement (Site # 04-4-32) near Bangalow may have had mythological associations. However the feature is man made, therefore not a natural mythological site (Collins 1996).

4.6 Predictive Models

Models to describe possible patterns of settlement and movement in the region vary. One suggests that groups ranged between the sea coast and foothills of the coastal ranges on a seasonal basis (McBryde 1974). Early sources support this view to some extent as there are records describing the movement of inland groups of the Clarence River to the coast during winter (McFarlane 1934; Dawson 1935:25). A second model suggests that movement of coastal people was not frequent, and that semi sedentary groups moved north and south within the coastal plain rather than to the upper rivers (Coleman 1982).

The model is based on reports of numbers of small villages composed of dome shaped weatherproof huts between the mid- NSW coast and Moreton Bay. Flinders described a small group of huts in the vicinity of Yamba in 1799, and Perry described two villages on the banks of the lower Clarence in 1839 (McBryde 1974:9). Similar sightings were reported by Rous on the Richmond (McBryde 1974), Oxley on the Tweed (Piper 1976) and in Moreton Bay (Hall 1982). The 'solid' construction methods described for these huts seem to suggest occupation for periods of months at a base camp rather than a constant wide-ranging pattern of low-level land use. Godwin (1999) argues that neither of the above 'models' is supported by the archaeological record and that local conditions dictated exploitation strategies on the north coast of NSW.

The resources of sub-tropical rainforest were used extensively in the technology of the Richmond, which is heavily dependent on wood and bark fibre (McBryde 1978:197). McBryde's sources refer to shields (McFarlane 1934; Dawson 1935), single point fire-hardened spears, three types of boomerang (Dawson 1935), clubs-nulla nulla and pademelon sticks, bark and palm leaf bags, wooden water vessels, possum rugs, cane and shell necklaces and stone knives (Bundock 1898). Bark was used for containers and shelter. Stone axes are referred to by Dawson (1935:22) and Byrne (1946:2). Fishing nets and rope was made from twine spun from the flame tree



Vegetation: is open forest (wet sclerophyll) in pre European conditions now cleared grassed slopes and regenerating grassed slopes on former banana land.

5.3.2 Valley Flats Landform Unit

Geology: is Deep Quaternary alluvium-clay, silt sand and gravel derived from the surrounding metamorphic hills (Morand 1996:112).

Soils: The soil landscape is classified as a 'Crabbes Creek' (cr) type location, an alluvial landscape (Morand 1996:112). Upper level (>200cm) soil materials are brown alluvial clays and clay loams (Morand 1996:112).

Vegetation: is cleared closed forest (rainforest) in pre European conditions, present vegetation consists of closed sod grassland of improved pastures.

5.4 Land Use History

Historic aerial photographs of the Project Area were reviewed to ascertain the level of past ground disturbance. This information is used to assist in developing a predictive model for potential cultural heritage site locations. Aerial photographs from 1962, 1970, 1991 and 2000 were reviewed as part of this assessment (Appendix C).

The 1962 aerial photograph of the Project Area shows that it has been largely cleared, with the majority of the lands being used as open pasture. Only small portions of the site contain trees, although most of these are likely regrowth. The steep slopes in the south have been cleared, and have likely been subject to erosion in many parts. There is also a large portion on the southern boundary that was being used for banana plantations. Three small watercourses can be seen draining in a general south to north direction. In 1962, there were also several dwellings in the north east of the Project Area, with a single dwelling in the centre of the property.

The 1970 aerial photograph shows little change. A large dam is present in the north-west portion of the Project Area. Parts of the stand of trees in the eastern half of the Project Area have also been cleared.



1991 sees evidence of the introduction of what appears to be banana plantations into the south western portion of the Project Area. This would have had a catastrophic impact on any Aboriginal objects were they located in this area. The repeated working of these steep slopes would have rendered this area as having very little archaeological value. Other evidence of smaller areas of cropping can be seen in the north-western and north-eastern portions of the Project Area. The large stand of trees that was evident near the centre of the Project Area has been cleared and is now under cultivation of some kind.

The 2000 aerial photograph shows an extension of the plantations / cultivation in the western half of the Project Area. By this stage, approximately 30% of the Project Area is under crop of some kind, primarily banana plantation.

Conclusions: The Project Area has a history of moderate to extensive ground disturbances since European settlement. Initial clearing activities were unlikely to have caused significant ground disturbance, as they appear to have been undertaken prior to the advent of mechanical clearing methods commonly used from the late 1940's onward. Unfortunately, the steep slopes of the many parts of the Project Area would have been subject to extensive erosion in many parts. Cultivation has caused significant ground disturbance over approximately 30% - 50% of the Project Area. Only a portion of land near the south western boundary appears to have escaped significant disturbance. It is understood this area is to be the subject of environmental protection under the Project plans.

6. PREDICTIONS

6.1 A Predictive Model: Aboriginal Cultural Heritage

The following discussion presents a summary of the archaeological, ethnographic and land use information provided above.

From the desktop review, there is a low potential association between the Project Area and Aboriginal cultural heritage. While the Project Area may have contained important food and organic (wood, fibre, weaving materials, cane) material resources, the physical evidence of access to these resources is unlikely to have remained. There is no possibility that cultural materials of organic materials such as wood, fibre or cordage would survive nor is there any possibility that above ground earth mound or stone arrangements could remain 'in situ'. The Project area



as a choice of burial sites can only be known to the traditional occupants. The survivability and 'detectability' of a burial is considered unlikely for the valley flats and former banana land but cannot be ruled out on the slopes used only for dairying/grazing.

A background scatter of stone artefact materials from resource gathering activities by groups primarily occupying/exploiting the Burringbar Creek floodplain and using the ridgelines that separate the Crabbes Creek and Burringbar Creek systems as transit corridors is probable.

The 'detectability' of scattered materials if they exist will be impeded by past and continuing soil movement. Exposed soils in this environment are prone to shallow slumping, sheet erosion particularly on banana lands (Morand 1996:55). This would apply to approximately one third of the Project area which has been used for that purpose. The remainder of the property appears to have been less or not affected by erosion processes. However the generally steep terrain and dense forest would seem an unlikely campsite option.

Most active erosional activity would have taken place during and immediately after forest clearing and surface stone clearing prior to grass cover becoming established. The longer this process took to complete the greater probability that cultural materials would be dispersed.

Very low levels (<5%) of surface exposure due to heavy grass cover are the norm for field assessors in this situation unless land use practices have left exposed soils. So much so that while there is a fair 'body' of ethnographic literature describing the use of rainforest/wet sclerophyll as a resource, for access routes and ceremonial purposes the archaeological evidence is confined to a small number of stone waste flakes, single artefacts and a possible stone arrangement.

6.2 Aboriginal Cultural Heritage Due Diligence Assessment

It is possible at this stage to assess the proposed development activities against the DECCW Due Diligence Code. Almost the entire Project Area has seen extensive ground disturbance within the meaning of the Due Diligence Code. This would have occurred primarily through erosion and land use practice such as banana cultivation and



grazing (see discussion in Section 5 above). The one area that appears not to have been subject to significant ground disturbance is to be dedicated to environmental protection.

The proposed project activities are unlikely to cause additional disturbance to any Aboriginal Objects, should they be located within the Project Area.

6.3 A Predictive Model: Historic Cultural Heritage

The desk top assessment identified only one item of historic heritage interest: a section of a road through the Project Area with historical associations to early road transport between Murwillumbah and Brunswick Heads. The road is visible in the western section of the 1962 aerial photograph (Appendix D). This section is known to some local residents as the 'old coach road'. The route passes from the north-west corner, skirts the lower slopes and exists at the south-eastern end joining the old Pacific Highway in the vicinity of a gazetted General Cemetery.

The historical Parish mapping (Figure 5) indicates that in 1889 the road/track is the main road between Burringbar/Murwillumbah and south to Crabbes Creek/Brunswick Heads. The road roughly follows the line of lower slopes on the creek flats. At the northern end of what became Mooball village, the road intersects with a track leading to the top of the ridge separating Crabbes Creek and Burringbar Creek. It then enters the Burringbar valley at an unknown point. Mooball Station is shown a short distance south of the Crabbes Creek Road turnoff.

The 1905, 1909 and 1914 mapping provides additional information about the former road through the Project Area and a General Cemetery to the east.

1904 Map 1 (Figures 6 and 7): The general cemetery is shown adjacent to (but outside of) the eastern boundary of the Project Area. An inset showing the cemetery plan is shown in Figure 7. The road is shown as a constructed road one link wide.

1909 Map 1 (Figure 8): The road is closed and a new route opened closer to the railway line on what became the Pacific Highway.

1914 Map 1: The old road is again shown closed, the Pacific Highway is constructed. The 'backtracks' from Mooball to Burringbar and Crabbes Creek are closed.

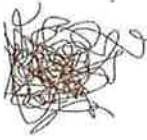
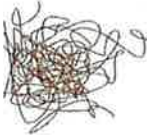


Figure 5: Mooball Parish Map c. 1889 showing Project Area (Purple/Blue) Burringbah/Brunswick Heads Road and the Railway Line.



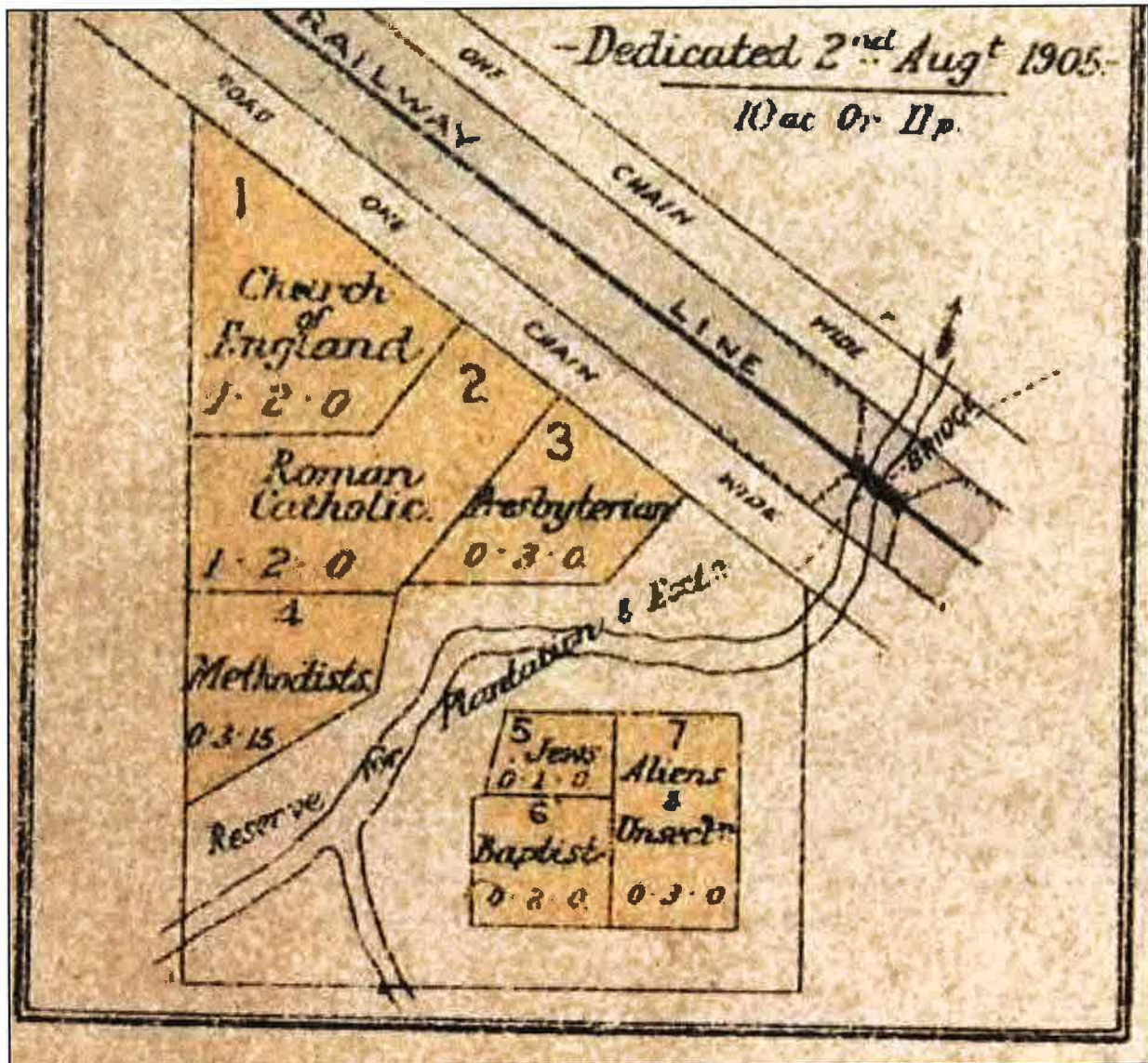


Figure 7: Mooball Parish Map 1904 insert showing Mooball Cemetery Plan.

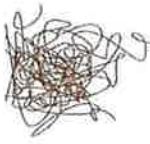
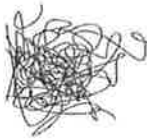


Figure 8: Mooball 1909 Parish Map 1 showing a closed road through the Project Area

7. FIELD METHODS

7.1 Aboriginal Participation

The Project Area is within the area administered for cultural heritage purposes by the Tweed Byron Local Aboriginal Land Council ('Tweed Byron LALC'). The Land Council nominated Sites Offer Cyril Scott to participate in the survey of the Project Area.



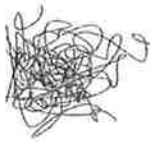
7.2 Survey Methods & Constraints

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

The area of survey is two distinct landforms: the alluvial valley flats adjoining Mooball Village and hill slopes from a narrow ridgeline separating tributaries of Crabbes Creek and Burringbar Creek. The valley flats were for search purposes 'ruled out' due to a heavy grass cover rendering surface exposure and surface visibility as nil. For the purpose of conducting survey and reporting, the hill slopes are divided into areas defined by stream lines. Within the broad survey units obvious differences are only in terms of the degree of slope and previous land use. On the former banana lands, erosion features due to the vehicle track network and sheet wash slopes between the 'tracks' dictated the lines of search in a reasonably systematic manner. The track network crosses the face of the slopes creating a series of evenly spaced terraces that are connected at each end by an up/down track. It was possible using the series of terraces to sample a high proportion of the landform.

In areas not former banana lands, the eastern third of the property, the only option available was a 'spot check' search of all possible exposed soils. These are cattle pads, eroded vehicle cuttings, a creek bed and eroded dam banks.

The field inspection was conducted on foot by the consultant and the Sites Officer of the Tweed Byron LALC on the 20th October 2010. Photographs were taken as a record of general features and conditions, to indicate the degree of surface visibility and the content of any sites found. Notes are made of the degree of surface visibility, the area of visibility, ground cover, land uses and any other relevant features. An over-view of surface conditions and site detection conditions is given in Sections 7.3. An indication of areas searched and areas of surface visibility is given in Tables 1 - 7.

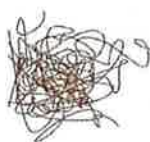


7.3 Survey Coverage

Survey units are indicated (Figure 9). They are broadly the landform elements identified under topography as Area 1 Flood Plain and Area 2 Hill Slopes. Area 1 is considered as a single landform element due to an almost complete lack of surface exposure and surface visibility. Area 2 is divided into 6 units (2A-2F) divided were possible at stream channels. As the surface features of slope, surface visibility and erosion features are so similar between upper and lower slopes within each unit, for survey coverage purposes they are not divided into smaller units e.g. upper, middle and lower slopes. The following broadly indicates the conditions for survey coverage within Area 1 and Area 2.



Figure 9: Project Area Survey Units



Area 1 Floodplain-flats (Figure 10 and Table 1) Slope <3%, heavily grassed. Area of surface exposure: c 1%. Type: cattle pads. Surface visibility 80%.

Table 1: Area 1 Flood Plain

LANDFORM ELEMENT	AREA (ha)	EXPOSURE %	AREA OF EXPOSURE (ha)	VISIBILITY %	AREA FOR SITE DETECTION (ha)	% of LF FOR SITE DETECTION	SITES FOUND
FLATS	20.5	< 2	0.4	80	0.3	1.6	0

Area 2A Slopes (Table 2) Slope: moderate c 20%, grassed. Area of surface exposure: c 5 %. Type: vehicle track cuttings. Surface visibility 90%. Disturbance: highly disturbed- banana cultivation, probably no original surface.

Table 2: Area 2A Hill Slopes

LANDFORM ELEMENT	AREA (ha)	EXPOSURE %	AREA OF EXPOSURE (ha)	VISIBILITY %	AREA FOR SITE DETECTION (ha)	% of LF FOR SITE DETECTION	SITES FOUND
SLOPES	6.3	5	0.3	90	0.27	4.2	0

Area 2B Slopes (Figure 11 Table 3) Slope: moderate/steep c 20-40%, grassed. Area of surface exposure: c 5 %. Type: cross and down slope vehicle tracks and cuttings (c7), sheet wash on lower slopes. Surface visibility 80%. Disturbance: highly disturbed- banana cultivation, probably no original surface.

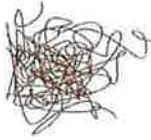


Table 3: Areas 2B Hill Slopes

LANDFORM ELEMENT	AREA (ha)	EXPOSURE %	AREA OF EXPOSURE (ha)	VISIBILITY %	AREA FOR SITE DETECTION (ha)	% of LF FOR SITE DETECTION	SITES FOUND
SLOPES	7.8	5	0.3	70	0.2	3.5	0

Area 2C Slopes (Figures 11, 12, 14, and 16; Table 4) Slope: moderate/steep c 20 - 40%, grassed. Area of surface exposure: c 5 %. Type: cross and down slope vehicle tracks and cuttings. Surface visibility 90%. Disturbance: highly disturbed- banana cultivation, probably no original surface.

Table 4: Area 2C Hill Slopes

LANDFORM ELEMENT	AREA (ha)	EXPOSURE %	AREA OF EXPOSURE (ha)	VISIBILITY %	AREA FOR SITE DETECTION (ha)	% of LF FOR SITE DETECTION	SITES FOUND
SLOPES	7.4	5	0.3	90	0.3	4.5	0

Area 2D Slopes (Figures 10, 14 and 15; Table 5) Slope: moderate/steep c 20-40%, grassed. Area of surface exposure: c. 3 %. Type: cross and down slope vehicle tracks and cuttings on upper slope. Surface visibility 90%. Disturbance: highly disturbed- banana cultivation on upper and middle slopes probably little original surface.

Table 5: Area 2D Hill Slopes

LANDFORM ELEMENT	AREA (ha)	EXPOSURE %	AREA OF EXPOSURE	VISIBILITY %	AREA FOR SITE DETECTION (ha)	% of LF FOR SITE	SITES FOUND
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			(ha)			DETECTION	
SLOPES	4.5	3	0.1	90	0.1	2.7	0

Area 2E Slopes (Figures 12, 13, 17 and 18; Table 6) Slope: moderate/steep c 20-70%, grassed. Area of surface exposure: c <2%. Type: cattle pads Surface visibility 90%. Disturbance: small area of banana cultivation on lower slope only.

Table 6: Area 2E Hill Slopes

LANDFORM ELEMENT	AREA (ha)	EXPOSURE %	AREA OF EXPOSURE (ha)	VISIBILITY %	AREA FOR SITE DETECTION (ha)	% of LF FOR SITE DETECTION	SITES FOUND
SLOPES	6.8	5	0.3	90	0.3	4.5	0

Area 2F Slopes (Figure 20; Table 7) Slope: moderate/steep c 20-70% includes small flat to a dam, grassed. Area of surface exposure: c <2%. Type: cattle pads, dam excavations, eroded wheel tracks Surface visibility 90%. Disturbance: minimal disturbance, grazing only.

Table 7: Area 2F Hill Slopes

LANDFORM ELEMENT	AREA (ha)	EXPOSURE %	AREA OF EXPOSURE (ha)	VISIBILITY %	AREA FOR SITE DETECTION (ha)	% of LF FOR SITE DETECTION	SITES FOUND
SLOPES	23	2	0.4	90	0.4	1.8	0

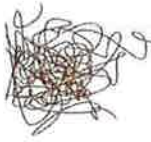


Figure 10: View south east over Area 1



Figure 11: View south to Areas 2B and 2C



Figure 12: View south-east to upper slopes of Areas 2C, 2D and 2E



Figure 13: View south over Area 1 to Area 2E

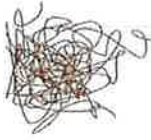


Figure 14: View north east to Area 2C



Figure 15: View north-east over middle and lower slopes of Area 2C



Figure 16: View south-east over the upper slopes and former banana plantation lands of Areas 2C and 2D



Figure 17: View north east over the middle and lower slopes of Areas 2D and 2E



Figure 18: View north over Area 2E



Figure 19: View south over typical banana plantation slopes



Figure 20: View south-east over upper slopes of Area 2F

8. RESULTS

8.1 Aboriginal Cultural Heritage

There were no Aboriginal objects identified as a result of the field inspection. There were no areas that were considered likely to contain Potential Archaeological Deposits ('PADs').

8.2 Historic Cultural Heritage

The survey identified two items of heritage interest, a former steam boiler (Figures 21 and 22) and the former road discussed in the predictive model in Section 6.3 above (Figure 23). The steam boiler is located on the property on the lower slopes used as a water holding tank filled from a nearby spring and gravity feed to a home on the old Pacific Highway. Everick was informed by the property owner that the origin of the boiler was the Condong Sugar Mill. The Condong Sugar Mill is located north of the Murwillumbah on the Tweed River, and commenced operations in the 1880s (NSW Sugar 2010).

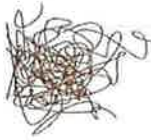


Figure 21: View of Steam Boiler



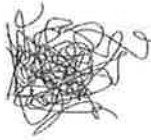
Figure 22: View of Steam Boiler



The route of the historic road was inspected in order to ascertain if it was still evident within the landscape and whether there were any features that may hold historic heritage significance. Upon inspection, the road was clearly visible in many parts. Figure 23 provides an example of where the road had been cut into the hillside. However, the inspection identified no examples of high technical achievement or innovation such as culverts, over revetments, bridges or paving. There were no features that stood out as having particular heritage value other than the roads age.



Figure 23: View north-west over a section of the historic road



9. ANALYSIS AND DISCUSSION

9.1 Aboriginal Cultural Heritage

The desktop review of previous archaeological reports and personal communication with researcher Ian Fox indicated that a range of Aboriginal sites is known in the Mooball, Burringbar and Crabbes Creek areas, though relatively few in number. These included a mythological site. None of these sites are within the Project Area. The field inspection found no evidence of archaeological materials, nor information that any other type of Indigenous cultural heritage was within the Project Area. The view of the Tweed Byron LALC as to the cultural heritage significance of the Project Area is included as Appendix A. The Tweed Byron LALC supports the recommendations in this report.

As the greater part of the Project Area are slopes ranging between gentle and very steep, there are few level areas that may appear attractive as campsite options. The remainder are valley flats which in traditional and into European times were very low lying and possibly inundated at regular intervals. The selected route of an original track/road that skirted the lower slopes rather than a direct north to south route across the flats suggests that flats were regularly waterlogged and probably densely vegetated. They would seem highly unlikely campsite locations. To date in terrain and soil landscapes such as this, archaeological evidence of Aboriginal occupation has been found on ridgelines and rock shelters/caves. None of these features occur in the Project Area.

Due to the importance of rainforest/wet sclerophyll forest as a source of food and material resources (Section 4) to the traditional occupants, it must be conceded that at least a low level or background scatter of artefactual materials (stone artefacts) may have been discarded in the Project Area while procuring those resources. It is certain that forest clearing and the surface clearing of stone would have destroyed such sites as scarred or carved trees, stone arrangements. These culturally destructive impacts together with natural erosion processes would probably scatter surviving stone materials from their original locations had they existed, thus diminishing their archaeological but not necessarily their cultural significance.

The impact of banana cultivation over the greater part of Areas 2A - 2C upon any archaeology it may have contained would be highly destructive. The creation of terracing for road access to the plantation required the excavation of large volumes of surface and sub surface soils that are spread down slope. It is reasonable to conclude that in the former banana lands it is unlikely that there are any original land surface or immediate sub surface horizons that could conceal archaeological materials.



The effectiveness of the field assessment was hampered by limited areas possible to inspect ranging between virtually nil on the valley flats to approximately 5% on parts (Areas 2A - 2E) of the slopes. This is a result of heavy grass cover throughout due to recent rains. Surface visibility in those areas of surface visibility was generally high, between 60%-100%. While survey coverage against the total area is low for the reasons stated above we believe that the results reflect a low or a lack of Indigenous cultural heritage.

9.2 Historic Cultural Heritage

Two items of historic interest were identified during the assessment: a Steam Boiler from the Condong Sugar Mill and an early road linking Mooball with Murwillumbah and Brunswick Heads. An assessment of their significance is provided in Section 10.2 below. The likelihood of unidentified significant historic heritage items remaining within the Project Area is considered low. The research identified no features relating to significant historic themes of the region.

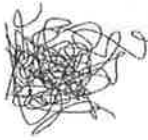
A now disused cemetery is thought to be located approximately 100 m south of the Project Area. This place is likely to be of local heritage significance. Although there would seem little risk to this place from the Project, planners should note its existence to ensure impacts are avoided.

10. SCIENTIFIC VALUES AND SIGNIFICANCE ASSESSMENT

10.1 Aboriginal Cultural Heritage

10.1.1 Principles of This Significance Assessment

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



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

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

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

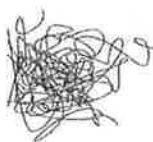
Complexity: A site may demonstrate a range of human behaviours and/or past climate and environmental changes (Pearson and Sullivan 1995:148).

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

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

10.1.2 Limitations

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



The assessment of archaeological significance is a highly subjective activity, and depends much on the values of the researcher(s) involved. In this assessment, we have looked to categorise that Project Area into areas of 'High', 'Moderate – High', 'Moderate', 'Low – Moderate', 'Low' and 'No/Nil' archaeological significance. The values we have used are not precise. They exemplify arbitrary distinctions that are necessary for ease of demonstrating the scientific value of the Project Area as a whole. These categories represent a relative continuum of significance, which is demonstrated by the diagram in Figure 5. The intention of Figure 5 is to show examples of the values used in this assessment. Of course, it is quite possible that even a single artefact may be of high archaeological significance, where it can be demonstrated that the artefact exhibits one or more of the criteria above.

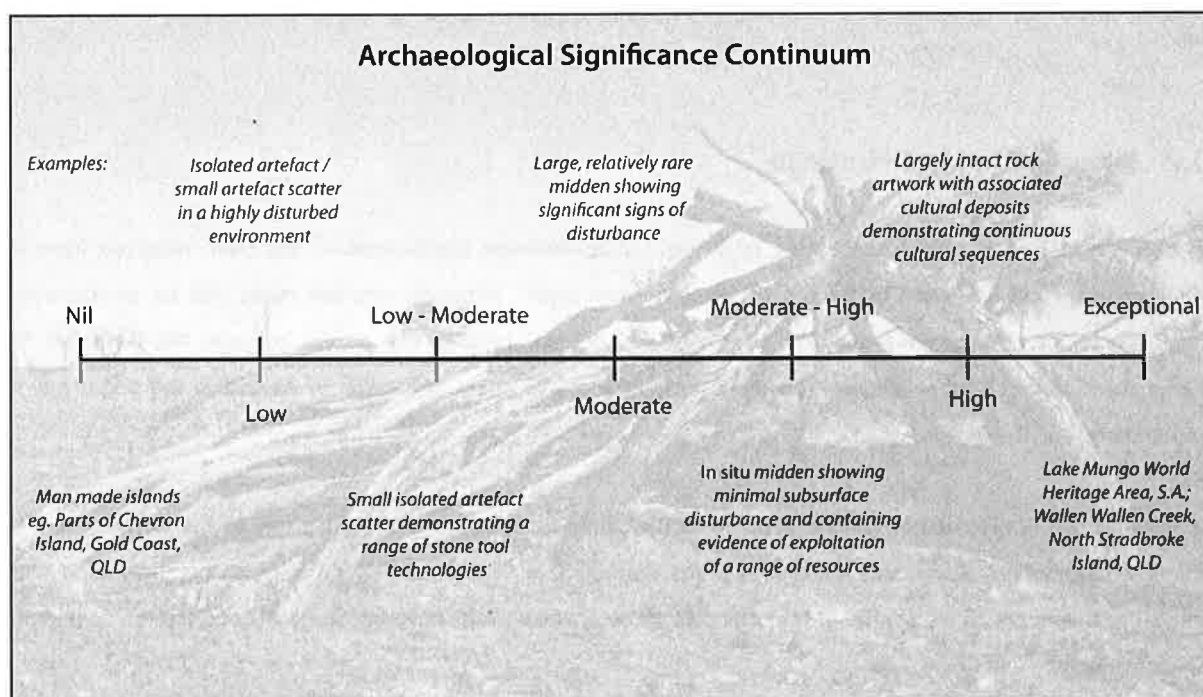


Figure 24: Archaeological Significance Continuum applied in this assessment

10.1.3 Aboriginal Cultural Heritage Statement of Significance

The Project Area is situated within an area of Low archaeological significance. The area has no features that make it particularly likely to contain Aboriginal Objects. The Project Area would be unlikely to be a suitable campsite location. It is anticipated that if the area is to contain Aboriginal Objects, they would be limited to isolated



artefacts, or what is commonly known as a 'background scatter'. In addition the Project Area has been highly disturbed, and any Aboriginal Objects located within the project Area are unlikely to remain *in situ*. For these reasons reason, the Project Area has little potential to add to our understanding of past lifeways of Indigenous peoples in the region.

Aboriginal connection to the land is generally strong, and although there are unlikely to be Aboriginal Objects within the Project Area, this should not be taken as an indication that they area is not significant for cultural reasons. However, there are no geographic features (eg. rock overhangs, resource areas and sand ridges) that make any parts of the Project Area likely to hold special cultural significance to local Aboriginal groups. Discussions with the Tweed Byron LALC have not identified any areas of *particular* cultural or spiritual significance within the Project Area.

10.2 Historic Cultural Heritage

The boiler located within the Project Area is of low historic heritage significance. It has been removed from its original context, and has been adapted for use as a water tank. Although adaptive reuse can be an important historic theme for rural communities, the nature of this adaptation does not appear to meet the threshold for heritage significance. Further research on the significance of the boiler in relation to its use in the sugar mill is being undertaken.

The historic road is also of low historic heritage value. While it undoubtedly played a role in the development of Mooball / Burringbah, it was not a major regional thoroughfare. The road has no aspects demonstrating high technical achievement or innovation. It is not known to be linked to regionally important historic figures or periods of development.

11. IMPACT ASSESSMENT

11.1 Indigenous Cultural Heritage Impact Assessment

The Project will likely result in the destruction of any Aboriginal sites within the residential allotments of the Project Area that are not subject to fill. Earth works may result in additional disturbance to other parts of the Project Area,



including the planned roadways. Earthworks within the Public Space / Parkland may also result in the destruction of Aboriginal objects were they to be located within those areas. However, as discussed in the significance assessment above, the likelihood of Aboriginal Objects being located within the Project Area is low. The potential impact of the Project on Aboriginal Objects must also be considered minimal.

11.2 Non – Indigenous (Historic) Cultural Heritage Impact Assessment

The Project is unlikely to impact on any significant historic heritage items.

The two items of heritage interest, the Condong Sugar Mill Steam Boiler and the historic road will be removed as a result of the development.

12. RECOMMENDATIONS

Aboriginal Cultural Heritage

The following recommendations are based upon the desktop review, the results of the field assessment and consultation with the Tweed Byron Local Aboriginal Land Council ('Tweed Byron LALC').

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 Local Aboriginal Land Council ('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:

- (1) work in the surrounding area is to stop immediately;
- (2) 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;
- (3) an appropriately qualified archaeological consultant is to be engaged to identify the material; and
- (4) 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

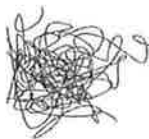
It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, DECCW and the Aboriginal Community.

Historic Cultural Heritage

Recommendation 1: Historic Cemetery adjacent to

It is recommended that the location of the historic cemetery to the south of the Project Area be definitively identified. Care should be taken when planning for the Project that this area is not harmed in any way. Should there be even a small risk of inadvertent harm during construction works, a temporary fence should be erected around those parts of the Cemetery considered to be at risk.

Should the cemetery be in close proximity (within 50 m) of the Project Area, it should be marked on all relevant development plans. Contractors should be advised of its existence and that it must be protected.



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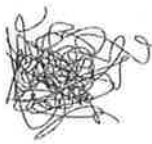
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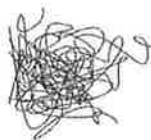
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REQUIREMENTS MET		Yes	No	N/A
Requirement 4: Predict the nature and distribution of evidence				
	Requirement 4a – The Predictive model:			
•	integrates the distribution of known sites, landscape units interpreted in terms of their archaeological potential	✓		
•	characterises the patterning of material traces, evidenced in the ethnohistorical review	✓		
•	considers the distribution of natural resources, and the probable land-use strategies	✓		
•	considers the spatial and temporal relationships of sites	✓		
•	identifies what sorts of material traces are predicted to be present, and in what densities	✓		
•	makes inferences about past Aboriginal occupation of the landscape based on the evidence collected	✓		
	Requirement 4b – The Predictive model results:			
•	present statements of archaeological potential about areas that can be verified using archaeological methodologies	✓		
Requirement 5: Archaeological survey				
	Requirement 5a – The Survey sampling strategy:	✓		
•	includes all landforms that will potentially be impacted	✓		
•	places a proportional emphasis on those landforms deemed to have archaeological potential	✓		
•	describes how sampling relates to the footprint that is proposed to be impacted by the development	✓		
•	clearly states when a full coverage survey will be undertaken and justify when it is not	✓		
•	is documented in the Archaeological Report as set out in Requirement 11	✓		
	Requirement 5b – The archaeological survey has:	✓		
•	surveyed an area, on foot, for the purposes of discovering Aboriginal objects	✓		
•	been conducted in accordance with the sampling strategy above	✓		
•	been carried out using accurately defined and named survey units (see Requirement 5c)	✓		
•	included representative photographs of survey units and landforms where informative			
	Requirement 5b – The archaeological survey has:			
•	recorded landform and general soil information (see Requirement 2) for each survey unit	✓		
•	recorded the land surface and vegetation conditions encountered during the survey	✓		
•	recorded any Aboriginal objects (including those already on AHIMS) observed during the survey	✓		
•	recorded survey coverage – see Requirement 9	✓		
•	been used to calculate survey effectiveness – see Requirement 10, and	✓		
•	been accurately mapped and presented visually at an appropriate scale	✓		
•	been documented and summarised in the Archaeological Report as set out in Requirement 11	✓		
	Requirement 5c – The archaeological survey units recorded include:	✓		
•	the beginning and end points of transects or boundaries of survey units as otherwise defined	✓		
•	the beginning, length, and end points of transects using a handheld GPS receiver			✓
•	the spacing between survey personnel			✓
•	the beginning and end of transects, or survey unit boundaries	✓		
Requirement 6: Site definition has been described using the following criteria:				
•	the spatial extent of the visible objects, or direct evidence of their location			✓
•	obvious physical boundaries where present, e.g. mound sites and middens, a ceremonial ground			✓
•	identification by the Aboriginal community on the basis of cultural information			✓
Requirement 7: Site recording				
	Requirement 7a – Information to be recorded			

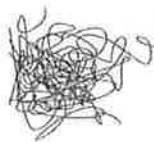


REQUIREMENTS MET		Yes	No	N/A
•	Site recording provides the information required to complete the current AHIMS Site Recording Form			✓
•	when applicable used the appropriate AHIMS Feature Recording Form			✓
•	identifies the site boundaries and indicate how they have been determined			✓
•	provides an accurate site plan, using professional judgement to determine appropriate scale and precision			✓
Requirement 7b – Scales for photography				
•	All photographs include an appropriate graded metric scale			✓
Requirement 8: Location information and geographic reporting				
Requirement 8a – Geospatial information recorded using a GPS receiver includes:				
•	the location of objects and sites			✓
•	the location of survey units (both location and area of survey units)	✓		
•	the location of landscape units (Requirement 2)	✓		
•	the location of test excavation units (Section 3.1)			✓
•	the location of other relevant features.	✓		
Requirement 8b – Datum and grid coordinates are:				
•	reported as grid coordinates using the Map Grid of Australia 1994 (MGA94) cartesian coordinate system			✓
•	checked and confirmed using a 1:25,000-scale topographic map (or the next best available scale)	✓		
Requirement 9: Record survey coverage data				
When recording survey coverage data:		✓		
•	visibility and exposure are independently described for each survey unit	✓		
•	visibility has been determined and recorded to the nearest 10%	✓		
•	exposure has been described in terms of the natural erosion processes and / or contributing processes	✓		
•	exposure has been estimated to the nearest 10% of the surface area of the survey	✓		
•	obtrusiveness of above-surface archaeological features and vegetation is described	✓		
•	coverage appropriately quantified by describing any sampling procedures	✓		
Requirement 10: Analyse survey coverage				
•	The survey results are presented in table format (see examples) or include justification for other format	✓		
•	The survey results include a summary of effectiveness of the survey for each landform unit & whole of subject area	✓		
Requirement 11 – Archaeological Report content and format				
General formatting compliance:		✓		
•	All pages must be numbered	✓		
•	All sections and sub-sections must be sequentially numbered	✓		
•	All tables, charts, plates, figures and appendices must be sequentially numbered	✓		
•	Headers or footers with a short project name should be included	✓		
•	Cover and title page complies with requirements	✓		
•	Report contents complies with requirements	✓		



APPENDIX C: AHIMS SEARCH RESULTS

Site ID	Site Name	Easting	Northing	Context / Type	Features
04-2-0110	Yelgun 2	550320	6848680	open site	artefact
04-2-0114	Yelgun Flat 1	550550	6849250	open site	artefact
04-2-0052	N.O.S. 13, North Ocean Shores	552000	6848500	open site	artefact
04-2-0054	N.O.S. 15	551640	6849760	open site	artefact
04-2-0055	N.O.S. 16, North Ocean Shores	552350	6849850	open site	artefact
04-2-0056	N.O.S. 17, North Ocean Shores	552370	6850050	open site	artefact
04-2-0096	N.O.S. 23	551600	6849800	open camp site	artefact
04-2-0097	N.O.S. 24	550600	6849600	open camp site	artefact
04-2-0116	Artefact Scatter	551640	6849760	open site	artefact
04-2-0121	GMY1	550400	6849850	open site	artefact
04-2-0122	GMY2	552430	6849950	open site	artefact
04-2-0135	JW-OS-1 (PAD 4)	551190	6847580	PAD	artefact
04-2-0136	JW-OS-2 (PAD 5)	551120	6847700	PAD	artefact
04-2-0137	JW-OS-3 (PAD 6)	550620	6847990	PAD	artefact
04-2-0138	JW-OS-4	551000	6848130	PAD	artefact
04-2-0167	Yelgun 3	550893	6850095	open site	artefact
04-2-0168	Yelgun 4	551946	6850057	open site	artefact
04-2-0051	N.O.S. 12	552090	6848890	midden	earth mound, shell, artefact
04-2-0060	N.O.S. 20	552750	6848880	midden	earth mound, shell, artefact
04-2-0173	Kudgerie Avenue 1	551970	6858410	open site	modified tree; artefact
04-2-0050	N.O.S. 11, North Ocean Shores	552350	6848200	open site	modified tree
04-2-0115	Yelgun Flat 1	550550	6849250	PAD	open camp site



APPENDIX D: HISTORICAL AERIAL PHOTOGRAPHY



Figure 25: 1962 Aerial Photograph of the Project Area

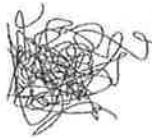


Figure 26: 1970 Aerial Photograph of the Project Area



Figure 27: 1991 Aerial Photograph of the Project Area



Figure 28: 2000 Aerial Photograph of the Project Area